
TAHOE CITY PUBLIC UTILITY DISTRICT

Risk-Based Sewer System Management Plan

LAKE TAHOE BASIN, CALIFORNIA

Revised May 2014

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ACRONYMS AND ABBREVIATIONS

ABS	Acrylonitrile-Butadiene-Styrene
ACP	Asbestos Cement Pipe
BMP	Best Management Practices
BWPC	Bureau of Water Pollution Control
BWQP	Bureau of Water Quality Planning
CCTV	Closed Circuit Television
CI	Cast Iron Pipe
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CMOM	Federal Capacity, Management, Operation & Maintenance
Corps	US Army Corps of Engineers
DCSID	Douglas County Sewer Improvement District, No. 1
DIP	Ductile Iron Pipe
Districts	Lake Tahoe Basin Wastewater Sewer Districts
EIP	Environmental Improvement Program
EPA	U.S. Environmental Protection Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishments
GIS	Geographical Information System
I&I	Inflow and Infiltration
IVGID	Incline Village General Improvement District
KGID	Kingsbury General Improvement District
KPI	Key Performance Indicators
MACP	Manhole Assessment and Certification Program
MOU	Memorandum of Understanding
MRP	Monitoring and Reporting Program
NAC	Nevada Administrative Code

NASSCO	National Association of Sewer Service Companies
NDEP	Nevada Department of Environmental Protection
NTPUD	North Tahoe Public Utility District
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
Ordinance	Rules, Regulations, Rates and Charges Governing the Use, Operation, and Management of the District Sewer System Facilities
PACP	Pipeline Assessment and Certification Program
Partnership	Lake Tahoe Basin Wastewater Infrastructure Partnership
PVC	Polyvinyl Chloride Pipe
RHGID	Round Hill General Improvement District
RWQCB	Regional Water Quality Control Board
SECAP	System Evaluation and Capacity Assurance Plan
SSMP	Sanitary Sewer Management Plan
SSO	Sanitary Sewer Overflow
STPUD	South Tahoe Public Utility District
SWRCB	California State Water Resources Control Board
Tariff	District's Sewer Service Tariff
TCPUD	Tahoe City Public Utility District
TDD	Tahoe-Douglas District
TMDL	Total Maximum Daily Load
TRPA	Tahoe Regional Planning Agency
TTSA	Tahoe Truckee Sanitation Agency
WDR	Waste Discharge Requirement
WWTP	Wastewater Treatment Plant

INTRODUCTION

BACKGROUND

The Lake Tahoe region has experienced environmental degradation for the past 100 years, most notably in the lake's water clarity and the health of the Tahoe Basin's forest lands. The Lake's water clarity, used as an indicator of water quality, has become the primary measure of the Basin's environmental health. To reverse this degradation, the Environmental Improvement Program (EIP) was initiated in 1997. The EIP is a 20-year capital improvement program involving multiple federal, state, local, academic, and private entities. The objective of the EIP is to meet environmental standards (or thresholds) established for the Lake Tahoe region.

During the last decade, restoration of the Lake Tahoe Basin has progressed, in part, through implementation of the EIP. However, aging sewer infrastructure in the Tahoe Basin also poses potentially serious consequences from sewer overflows or facility failure. In the Lake Tahoe Basin, environmental contamination from sewer system or pipeline failure could have detrimental ecological, public health and economic impacts on Lake Tahoe and the surrounding community, and could compromise portions of the environmental gains achieved through EIP efforts to date.

The Tahoe Regional Planning Agency (TRPA) is the primary architect of the EIP with individual project funding provided by the federal government, the States of Nevada and California, local and regional agencies and private stakeholders.

REGULATORY SETTING AND POLICY DEVELOPMENT

The Lake Tahoe Basin includes a complex permitting system, with multi-agency and overlapping agency jurisdictions, an active public, a limited project field execution season, and ultimately a limited program implementation horizon.

In 2003, the US Army Corps of Engineers (Corps) prepared the Lake Tahoe Basin Framework Study Wastewater Collection System Overflow/Release Reduction Evaluation (Overflow/Release Reduction Evaluation), which included a discussion of permitting requirements and regulatory framework at the Federal, State and local levels as they relate to the repair, rehabilitation and replacement of wastewater collection system facilities. The purpose of that discussion was to describe the regulatory changes that have occurred since 2003; specifically the departure from the Federal Capacity, Management, Operation & Maintenance (CMOM) regulation which was then being developed by the U.S. Environmental Protection Agency (EPA) toward possible State organized and enforced regulations. Although the Federal CMOM regulation is now defunct, many states, including California, have begun developing their own CMOM-type regulations. Nevada has not developed a similar regulation and, therefore, the

requirements regarding the control of sewage spills from sewer collection facilities, as well as the management, operation and maintenance of the facilities, varies between California and Nevada. More recent discussions with State of Nevada Department of Environmental Protection (NDEP) indicate that they have not and do not intend to develop their own CMOM-type regulation in the near future unless they are given formal direction to do so by the EPA. NDEP has instead decided to develop specific requirements on a case-by-case basis when wastewater collection systems have shown a repeated and prolonged pattern of poor performance.

The California State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (WDR), Order No. 2006-0003-DWQ, on May 2, 2006 for all publicly owned sanitary sewer collection system utilities in California with more than one mile of sewer pipe. The WDR is similar in content to the EPA's CMOM regulation; it contains requirements for monitoring and reporting sanitary sewer overflows (SSOs), and developing and implementing Sewer System Management Plans (SSMPs). The SSMP consists of a document which addresses how a wastewater collection system conducts business management, funding, design, operations, maintenance, and emergency response. Additionally, the SSMP must contain a fats, oil and grease (FOG) control program. As part of the SSMP, a utility must also implement a hydraulic capacity evaluation and establish design criteria, and develop a short and long term Capital Improvements Program (CIP) addressing hydraulic and structural deficiencies, prioritization, alternative analysis, and scheduling. Subsequent changes to the WDR include revised Monitoring and Reporting Program requirements. SWRCB Order No. WQ 2013-0058-EXEC (Revised MRP) was adopted in August of 2013. A copy of this Revised MRP can be found in Exhibit 6-1.

Regulations at the State of California level are addressed in the Lahontan Basin Plan. The Lahontan Basin Plan addresses the need for the Lahontan Regional Water Quality Control Board (RWQCB) to "fully utilize its regulatory authority" to ensure the quality of Lake Tahoe's sewer systems. The Lahontan RWQCB works to achieve these mandates through implementation of Total Maximum Daily Load (TMDL) standards, waste discharge permit requirements and stormwater management plans.

Water quality protection in the state of Nevada is carried out by NDEP's Bureau of Water Quality Planning (BWQP) and the Bureau of Water Pollution Control (BWPC). The BWQP is collaborating with Lahontan in the development of TMDL standards for the Basin that will be adopted by both state environmental agencies; and conducts water quality monitoring in Nevada Tahoe streams.

At the regional level, TRPA ordinances require that sewer districts in the Basin implement plans for detecting and correcting sewage exfiltration problems within their collection and transport facilities. Each Tahoe sewer district has a Memorandum of Understanding with TRPA that establishes best management practices associated with sewer infrastructure repair and

replacement. TRPA is currently updating its 20-year master plan called the Regional Plan. The Regional Plan update is proposed to include policy language requiring wastewater infrastructure districts in the Tahoe Basin to prepare and adaptively update a risk based SSMP to achieve the overarching goal of zero system overflows. This risk based SSMP addresses the need of the Regional Plan update for a risk based approach to wastewater system management and supports the EIP in protecting and improving the environmental help of the Lake Tahoe watershed.

LAKE TAHOE WASTEWATER INFRASTRUCTURE PARTNERSHIP

The 2003 Overflow/Release Reduction Evaluation recommended that a Basin-wide approach to a comprehensive capital improvement program (CIP) be created for the replacement or rehabilitation of the sewer facilities located in the Lake Tahoe Basin. In response, the eight sewer districts operating in the Tahoe basin, together with the Corps, formed the Wastewater Infrastructure Partnership (Partnership) to develop and implement tools and processes designed to support a programmatic approach to wastewater rehabilitation in the Basin.

The eight districts operating wastewater infrastructure within the Lake Tahoe Basin include:

- South Tahoe Public Utility District (STPUD)
- Tahoe City Public Utility District (TCPUD)
- North Tahoe Public Utility District (NTPUD)
- Incline Village General Improvement District (IVGID)
- Douglas County Sewer Improvement District No.1 (DCSID)
- Kingsbury General Improvement District (KGID)
- Tahoe-Douglas District (TDD)
- Round Hill General Improvement District (RHGID)

DEVELOPMENT OF RISK-BASED SSMPs

Though each has its own distinct service area within the Basin, these districts recognize that 1) individual actions by each district affect the Basin as a whole, and 2) there are benefits of collaboration among the districts to maintain the environmental quality of the whole Lake Tahoe Basin. As such, many of the Partnership districts are working collaboratively to prepare a common framework for development of individual Risk-Based SSMPs.

The Risk-Based SSMPs will generally be consistent with respective State- and federally-mandated plans and include a sewer cleaning program, a sewer inspection methodology and frequency, a capital replacement and rehabilitation program, and customer outreach and rate

management in accordance with asset management principles and generally accepted industry practice. This Risk-Based SSMP has been specifically developed by and for TCPUD (District).

1.0 RISK-BASED SSMP GOALS

The District has made a commitment to properly fund, manage, operate, and maintain all parts of the sewage collection system owned and/or operated by the District. District staff and/or contractors responsible for the operation and maintenance of the sewage collection system will possess the appropriate level of knowledge, skills, and abilities.

The District's goals are to:

- Properly manage, operate, and maintain all parts of the wastewater collection system
- Provide adequate capacity to convey peak flows
- Minimize the frequency of SSOs
- Mitigate impacts of SSOs
- Justify appropriate funding levels to support the program objectives
- Meet all applicable regulatory notification and reporting requirements

2.0 RISK-BASED SSMP ORGANIZATION

Tony Laliotis has been designated as the individual with overall responsibility for the implementation of the District's Risk-Based SSMP. The names and telephone numbers for the management, administrative, and maintenance staff responsible for implementing specific measures of the Risk-Based SSMP are provided in Table 2-1 as of January 2012.

Table 2-1. District Risk-Based SSMP Contact Information

Name	District Title	District Department	SSMP Element	Telephone Number
Cindy Gustafson	General Manager	Governance and Support Services	Legal Authority	(530) 583-3796 x326
Tony Laliotis	Director of Utilities	Utilities	All Elements	(530) 583-3796 x353
Dan Lewis	Utilities Superintendent	Utilities	O&M Program, Overflow Emergency Response Plan	(530) 583-3796 x330
Matt Homolka	District Engineer	Engineering	System Evaluation and Capacity Assurance Design and Performance Provisions	(530) 583-3796 x342
Coral Taylor	Technical Services Supervisor	Technical Services	Design and Performance Provisions FOG Control Program	(530) 583-3796 x328
Barbara Smith	Construction Inspector I	Technical Services	Design and Performance Provisions FOG Control Program	(530) 583-3796 x 321
Phillip Tapia	Construction Inspector II	Technical Services	Design and Performance Provisions FOG Control Program	(530) 583-3796 x 346

Figure 2-1 is an organizational chart showing the staff members responsible for Risk-Based SSMP-related procedures.

In the event of an SSO, the District will use the chain of communications shown in

Figure 2-2 initiate response efforts and notify the appropriate agencies. Reporting of SSO's will follow the procedure as outlined in Figure 2-3. All SSO response activities will be performed in accordance with Section 6 of this document.

Figure 2-1. District Organizational Chart

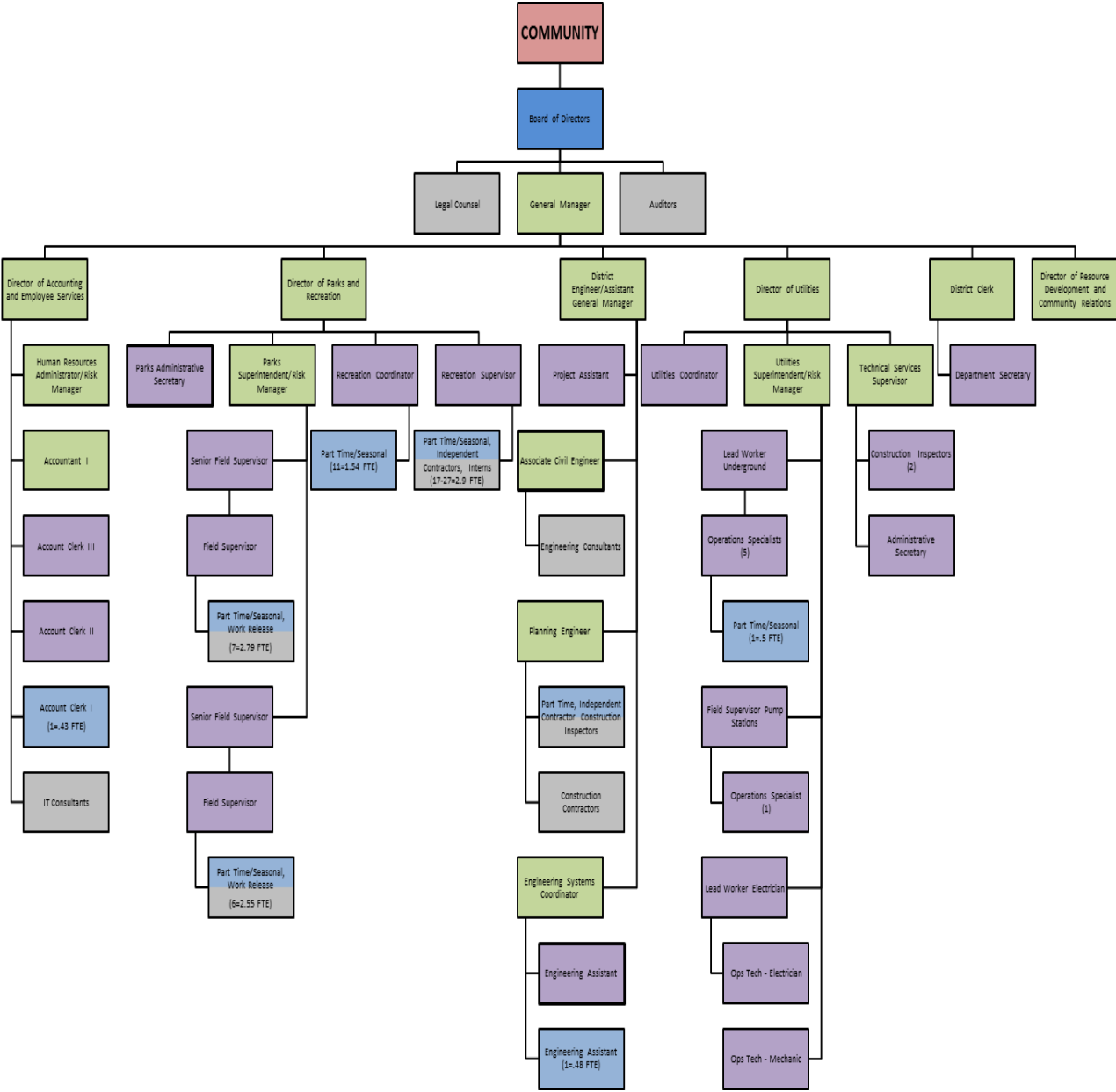


Figure 2-2. District Chain of Communications for Reporting SSOs

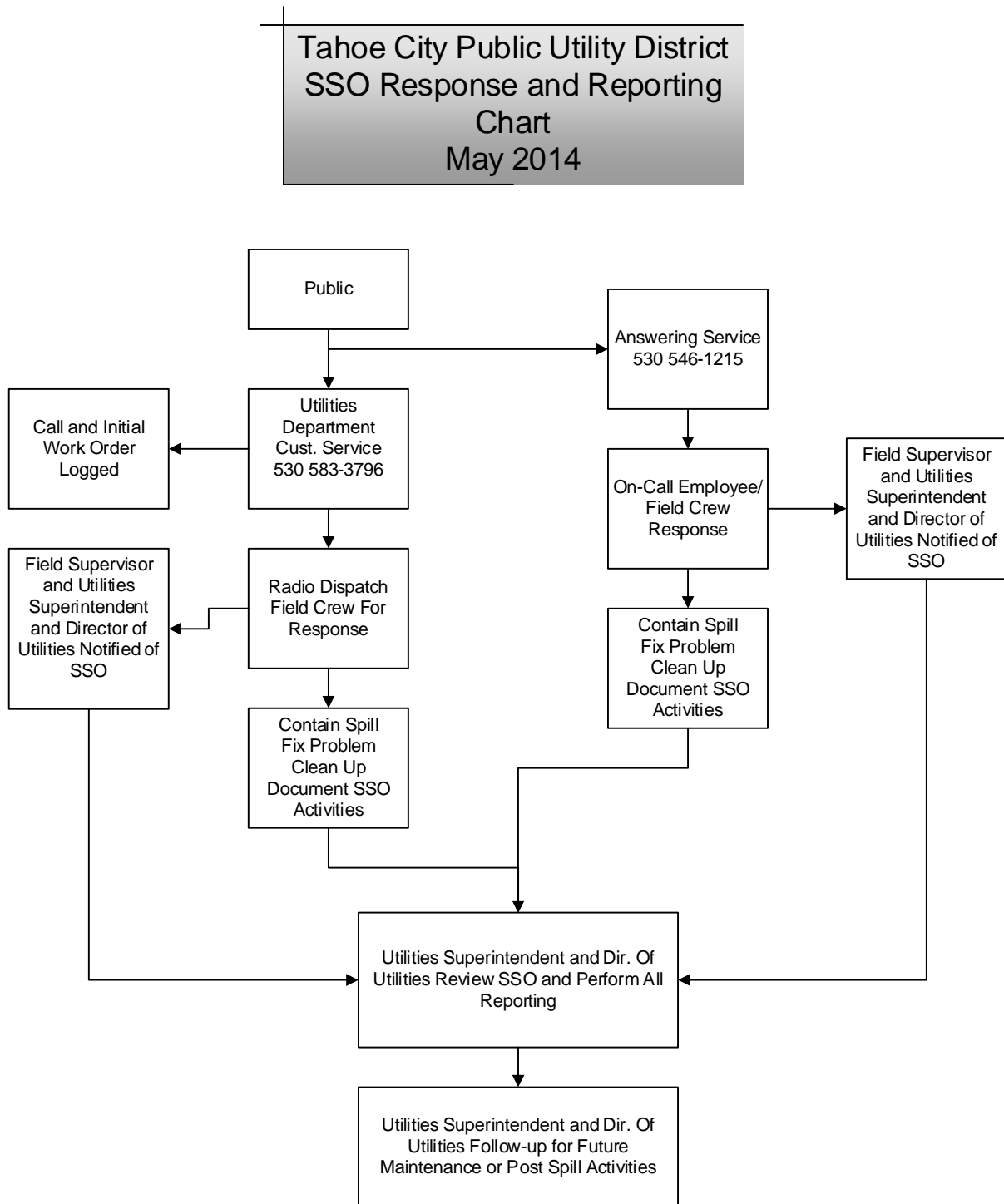
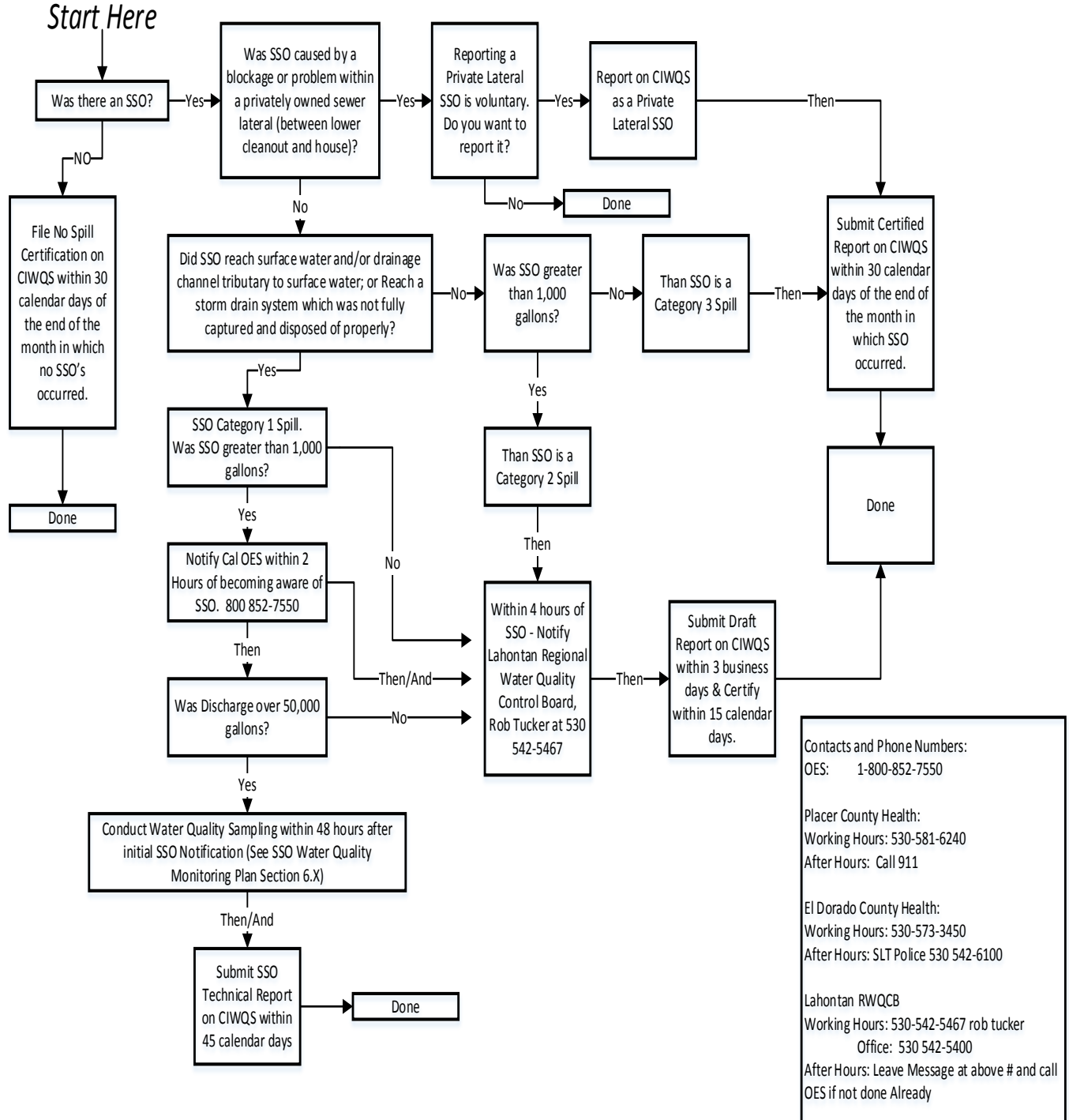


Figure 2-3 SSO Reporting Requirement Flow Chart

SSO Reporting Requirements Flow Chart
(per WDR MRP Order 2013-0058-EXEC)



3.0 LEGAL AUTHORITY

This chapter summarizes the authority of the District, through sewer use ordinances to implement the provisions of the Risk-Based SSMP to:

- Prevent illicit discharges into the sanitary sewer system;
- Require proper design and construction of new and rehabilitated sewers and connections;
- Ensure access for maintenance, inspection, or repairs for all portions of lateral connections owned by the District;
- Limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages in the sanitary sewer system; and
- Enforce any violation of the District's sewer ordinances.

3.1 RESPONSIBLE PARTY

Applicable ordinances pertinent to the sanitary sewer system for the District are outlined in the Rules, Regulations, Rates and Charges Governing the Use, Operation, and Management of the District Sewer System Facilities (Ordinance). According to the Ordinance, the General Manager is responsible for administering, implementing, and enforcing the provisions outlined in the Ordinance which are applicable to the sewer system.

3.2 PROVISIONS OF ORDINANCE

The purpose of the Ordinance is to clearly outline the requirements and guidelines applicable to sanitary facility construction and maintenance within the District Boundaries. The Ordinance also establishes charges for services and provides a method for the collection of charges. A list of the contents in the Tahoe District Public Utility District (TCPUD) Ordinance can be found in Exhibit 3-1. A copy of the Ordinance is attached as Exhibit 7-1. The following provisions from the Ordinance are specific to the Risk-Based SSMP:

Section 1 – Administration

1.02.8 Violations: In order to protect the health, safety and welfare of the community, any person found to be violating any provision of this Ordinance shall be served by the District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. Upon failure of a person to cease or prevent further violations, and at the direction of the Board of Directors, the General Manager shall exercise his or her authority to disconnect the premises from the system.

In the event such violation results in a public hazard or menace, the General Manager may enter upon the premises without notice and do such things and expend such sums as may be necessary to abate such hazard. The Owner shall be responsible for the costs associated with the work performed. Any person violating any of the provisions of this Ordinance shall become liable to the District for any expense, loss or damage occasioned the District by reason of such violation.

If a violation occurs on any premises and such violation continues beyond the time limit prescribed, such premises shall be subject to disconnection from the District sewer system upon seven (7) days written notice by first class mail addressed to the Owner. Disconnect and reconnect fees in accordance with Section 10.10 shall apply.

Section 3 – Duties, Rights and Responsibilities

3.02.2 Right of Entry: Authorized representatives of the District are permitted to make limited, reasonable inspections, at reasonable times, of any grounds, building or residence served to the extent necessary to ensure compliance with this Ordinance or amendments. The Owner shall be given the opportunity to accompany the District on all inspections.

Section 5 – Specifications for Sewer Connection: Materials and Methods of Construction

Section 5 of the Ordinance covers the specifications for sewer design and construction. The details of this section will be covered in Element 5 – Design and Performance Provisions of this Risk-Based SSMP.

Section 7 – Discharges into Sewer System

7.03.1 Discharge Prohibitions: Disposal of residential, septic tank, cesspool, holding tank wastes or other discharges into the District sewer system is prohibited. Permission may be given in case of extenuating circumstances when the District deems it necessary to allow disposal of said materials. Construction site or other discharges shall be accomplished in conformance with the requirements of Exhibit 7.01.

7.03.4 Miscellaneous Discharges Prohibited: No person shall discharge or cause to be discharged to the District sewer system any of the following waste, water, effluent or substances or materials:

- a. Toxic or Poisonous Waste - Water or waste containing toxic or poisonous solids, liquids or gases in sufficient quantity either singly or by interaction with other wastes or waters to injure or interfere with the sewage treatment process, constitutes a hazard to humans or animals, creates a public nuisance, or creates any hazard in the receiving waters of the sewage treatment plant, including but not limited to cyanides in excess of two (2) mg/l as Cn in the wastes as discharged.

- b. Potential to Harm Sewers, People or Property** - Such wastes that appear likely in the opinion of the General Manager to be capable of harming either the sewers, sewage treatment process or equipment or have an adverse affect thereon, or can otherwise endanger life, limb or public property or constitute a nuisance, giving consideration to such factors as quantity of such waste in relation to flows and velocities, materials of construction of sewers, the sewage treatment process, capacity of sewer lines and plant, degree of treatability and other pertinent factors.
- c. Temperature Consideration** - Any liquid or vapor having a temperature higher than 150 degrees F.
- d. No Fats, Wax, Grease, or Oils** - Any water or waste containing fats, wax, grease or oils, whether emulsified or not, or substances that may solidify or become viscous at temperatures between thirty-two (32) degrees and one hundred fifty (150) degrees F, in excess of (400) mg/l, in accordance with Section 8.00.
- e. Flammable or Explosive Liquid or Gas** - Gasoline, benzene, naphtha, fuel, oil, or other flammable or explosive liquid or solid or gas.
- f. Unshredded Garbage** - For residential services, any garbage that has not been properly shredded to such a degree that each particle can be carried freely under the flow condition normally prevailing in the sewer. Garbage disposals may not be connected to the sewer collection system in commercial food service establishments.
- g. Suspended Solids** - Any water or waste containing suspended solids of such character and quantity that unusual attention or expense is required to handle the water or waste at the sewage treatment plant.
- h. Solid or Viscous Substances Adversely Impacting Operations**
Ash, cinder, sand, mud, rock, straw, shaving, metal, glass, rag, feather, tar, plastic, wood, paunch manure, or other solid or viscous substance that could obstruct the sewer flow or cause interference with or damage to the proper operation of the sewer system and treatment facilities.
- i. Corrosive Properties or pH Values** - Any water or waste having a pH value lower than 5.5 or higher than 9.0 or other corrosive properties capable of causing damage or hazard to persons or property or the proper operation of the sewer system and treatment facilities.
- j. Public Nuisance** - Any noxious or malodorous gas or substance capable of creating a public nuisance.

- k. Objectionable Waters or Wastes - Any waters or wastes containing iron, chromium, copper, zinc or similar objectionable or toxic substance, or wastes exerting an excessive chlorine requirement, and such degree that any such material in the composite sewage exceeds the limits established by the District therefore.
- l. Radioactive - Any radioactive materials.
- m. Loading Impact - Any unusual biological oxygen demand, chemical oxygen demand, or chlorine demand in such quantities as to constitute a significant load on District sewer system or regional treatment facilities.
- n. Substances Not Amenable to Treatment - Other waters or wastes containing substances that are not amenable to treatment by the treatment processes employed at the regional plant or are amenable to treatment only to such degree that the regional treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

Section 3 – Fats,Oils and Grease Control

Section 8 of the Ordinance covers the control of FOG in the District’s wastewater collection system. The details of this section will be covered in Element 7 – FOG Control Program of this Risk-Based SSMP.

List of Exhibits

Exhibit 3-1. TCPUD Ordinance TOC

4.0 OPERATION AND MAINTENANCE PROGRAM

This element of the Risk-Based SSMP discusses the District's documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system. As part of its good management practices, the District will:

- Maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, and pressure pipes.
- Allocate adequate resources for the operation, maintenance, and repair of its collection system.
- Prioritize its preventative maintenance activities and establish a routine preventative operation and maintenance schedule, through a computerized maintenance management system (CMMS).
- Describe routine preventative 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 program has a system to document scheduled and conducted activities, such as work orders.
- Identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them. The program includes regular visual and Closed-Circuit Television (CCTV) inspections of manholes and sewer pipes, and a system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement is focused on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. The rehabilitation and replacement plan includes a capital improvement plan that addresses proper management and protection of the infrastructure assets.
- Develop a schedule for implementing the short-and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.
- Maintain an inventory of contingency equipment, parts and materials to handle emergencies and to minimize equipment/facility downtime.
- Provide training on a regular basis for its staff in collection system operation, maintenance, and monitoring.

4.1 DESCRIPTION OF EXISTING FACILITIES

The District's sanitary sewer collection system consists of approximately 150 miles of sewer pipe, 2,349 manholes, and 21 lift stations, see Exhibit 4-1. The predominant pipe materials are

asbestos cement, vitrified clay, cast iron, reinforced concrete, and Polyvinyl Chloride (PVC). The details of these lift stations are outlined in Exhibit 4-1. A map of the sewer service area and approximate locations of lift stations is shown as Exhibit 4-2.

The District has completed input and mapping of all sewer collection facilities in a Geographical Information System (GIS) base mapping program. The GIS provides both mapping and asset management components and is available to all employees.

4.2 PREVENTATIVE OPERATIONS AND MAINTENANCE

Gravity Pipelines

The District's pipeline preventative operation and maintenance program consists of a system-wide cleaning program, an accelerated (frequent) cleaning program, a CCTV program and a repair or rehabilitation program. The cleaning and CCTV program are tracked in the District's GIS. Since 2012, reports are produced showing when gravity lines were cleaned or televised, the condition found during these operations, and whether or not corrective action is needed. For each cleaning, crews are required to document their findings in an electronic sewer cleaning log which links directly to the GIS. Reports are produced and crew findings are periodically reviewed by the supervisor to determine whether the cleaning frequency should be modified. Examples of this process can be found in Exhibit 4-3.

Pipes that are considered to be in good condition with no history of maintenance related issues are maintained on the system-wide cleaning program. These pipes are scheduled to be cleaned once every two years. Pipes that have a history of maintenance issues are placed on the District's accelerated cleaning program. Pipes on this program are cleaned once monthly, quarterly or semi annually. An example of this work plan is included in Exhibit 4-4. Annual reports for line cleaning and CCTV from 2012 on are maintained in the Director of Utilities' office.

Lift Stations

The District maintains their lift stations in house. Each lift station has a maintenance work plan and schedule documented in the CMMS. An example of this work plan is included in Exhibit 4-4.

4.3 REHABILITATION AND REPLACEMENT PLAN

Condition Assessment and Inspection

Gravity Pipelines

Repair and replacement projects are typically the result of observed deficiencies in the sanitary sewer system. The District uses CCTV to assess gravity sewer pipe deficiencies and has adopted

the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) standards to perform these assessments. The District also regularly inspects the condition of manholes in the system. Pipeline inspections are scheduled in the District's CMMS every five years. The results of these inspections have been documented in a database since 1997. All CCTV work completed since 2010 is now stored in an electronic database as part of the District's GIS/Asset Management system providing simple and quick access to TV records.

Lift stations

As part of the preventative maintenance program, the District's crews visually assess the condition of assets within each lift station. Based on these assessments, crews will make recommendations for asset repair, rehabilitation, replacement, or a more formal condition assessment. Currently the District has budgeted for a more extensive condition assessment project to assess their lift stations and force mains as part of their capital plan in 2014 and 2015.

Force Mains

The District performs regular visual inspections along the force main alignment as part of their lift station maintenance program to check for signs of leakage or other potential problems. Currently the District has budgeted for a more extensive condition assessment project to assess their lift stations and force mains as part of their capital plan in 2014 and 2015.

Repair and Replacement Decision Process

Currently, minor repair and replacement decisions for pipes, manholes, and lift stations are made by the operations group. More significant improvements, that will likely require capital funding, are reviewed with the Engineering Department to determine the appropriate action and priority.

A significant portion of the District's collection system infrastructure is gravity sewer pipe. District operations staff review CCTV work to identify defects in the pipeline or facility and decides if any action is required. Recommendations for routine repairs are made and executed by the operations department. Larger or more costly repairs or sewer lines which show significant deficiencies are forwarded to the Engineering Department for review and possible addition to the Five Year Capital Improvement Plan (CIP).

Capital Plan

The District has developed and currently maintains a five year capital plan which is updated annually. Most of the projects identified are focused on repairing, rehabilitating, or replacing existing infrastructure that is nearing the end of its useful life. A copy of the latest capital plan is included in Exhibit 4-5.

Equipment and Replacement Parts

The sewer agencies within the Tahoe Basin have formed an emergency response partnership, which allows them to better respond to emergencies. This not only includes lending labor but also the contingency equipment necessary. A list of contingency equipment available in this pool is included in Exhibit 4-6.

4.4 WASTEWATER CREWS AND TRAINING

The District maintains a staff of one supervisor and five field staff to maintain the collection system. The District uses a combination of in-house classes; on the job training; emergency response training, conferences, seminars, and other training opportunities to train its wastewater collection system staff. The District's safety training classes are documented in Exhibit 4-7. All levels of personnel in the Utilities Department are required to hold professional certifications in the collection system industry. These certifications require ongoing continuing education units which must be completed in order to maintain certification status.

List of Exhibits

Exhibit 4-1. Lift Station Details

Exhibit 4-2. Existing Facilities

Exhibit 4-3. Sample Cleaning Log

Exhibit 4-4. Sewer System Maintenance Work Plan

Exhibit 4-5. Capital Improvement Plan

Exhibit 4-6. Contingency Equipment

Exhibit 4-7. District's Safety Training Classes

5.0 DESIGN AND PERFORMANCE PROVISIONS

Proper design and installation of sewer system pipelines and appurtenances is one of the most important aspects in maintaining a functioning, long-lasting sewer system. A properly designed and installed sewer system can minimize system deficiencies that could cause or contribute to future overflows and reduce operation, maintenance, and renewal requirements.

The District's design and construction standards are used by the District staff and are communicated to consulting engineers and/or developers at the start of a design process or proposed development.

5.1 DISTRICT'S DESIGN AND CONSTRUCTION STANDARDS

The District's design criteria for construction of new and rehabilitated gravity and pressure sewer lines and appurtenances are outlined in the District's "Rules, Regulations, Rates and Charges Governing the Use and Management of the District Sewer System Facilities" (Ordinance). Specifications for sewer main construction are found in the District's "Technical Specifications for Sewer System Construction, March 17, 1989". A summary of the Sewer Ordinance has been compiled by the District as a handout for Contractors and consulting engineers working within the District boundaries on sewer construction projects. The summary handout is provided in Exhibit 5-1.

The following are some general guidelines and requirements for sewer construction within the TCPUD boundary:

General Specifications

Construction plans for new or rehabilitated sewers must be approved by the District Engineer before construction can begin. A California State licensed contractor must be responsible for the performance of the work connected with the installation of services, and must be approved by the District prior to the start of work.

Methods of Construction

Trenching and pipe laying shall be done in conformance with the Construction Safety Orders (OSHA). Bedding material shall be placed from four inches (4") below the pipe to the springline of the pipe and material shall be Type I (imported, clean sand passing No. 3 sieve). Type II bedding material (imported crushed rock) can be used when the bottom of the trench is wet or yielding.

Gravity Sewer

Gravity sewer lines must be a minimum of four inches (4") in diameter with a minimum slope of 2 percent, ¼" per foot and lay true to line and grade. All pipe must have approved rubber gasket fittings, not glue joints or slip fittings.

Pipe Material

Approved pipe materials are:

- Polyvinyl Chloride Pipe (PVC)
- Polyvinyl Chloride Pipe C-900
- Ductile Iron Pipe (DIP)

Orangeburg, Acrylonitrile-Butadiene-Styrene (ABS), and Vitrified Clay pipe are NOT permitted.

Pressure Sewer

The District inspects private pressurized sewer lines are to be constructed in accordance with Section 5.04.7.4 of the District's sewer ordinance. The District inspects the installation of audible and visual alarms in accordance with Sewer Ordinance Section 5.04.7.10.

Pump Stations

Two pumps (one for redundancy) are required for individual residences. The wet well for a single family residence must be sized for 150 gallons per person of storage; multi-unit residential, commercial and industrial should be sized for 250 gallons per person. Pumps shall be either non-clog submersible pumps or grinder pumps.

5.2 INSPECTION AND TESTING PROGRAM

The inspection and testing procedures for new and rehabilitated residential sewer lines within the TCPUD boundary are outlined in Section 6 of the District's Sewer Ordinance. Testing and maintenance of sewer mains are outlined in Section 17, Tahoe City Public Utility District "Technical Specifications for Sewer System Construction".

A District inspector must inspect all permitted sewer work to ensure compliance with all requirements of the District. The types of inspections that are typically conducted are: initial trench inspection, witness of pressure test, and other field inspection and testing as required.

List of Exhibits

Exhibit 5-1. TCPUD Summary of Sewer Service Requirements

6.0 OVERFLOW EMERGENCY RESPONSE PLAN

The purpose of the Sanitary Sewer Overflow Response Plan is to minimize the impact of sanitary sewer overflows (SSO's) to the public and the environment. All sanitary sewer overflows will be responded to in a timely manner to expedite the necessary steps to relieve the overflow. Relieving the sewage blockage and spill containment will be our highest priority, taking in to consideration public health concerns. This response plan will be the guideline for the standard operating procedures in the event of a sanitary sewer overflow. The response plan will be reviewed periodically to ensure that all corrective measures are being taken.

6.1 6.1 INITIAL SPILL RESPONSE

When the Utilities Coordinator is notified of a potential Sanitary Sewer Overflow during working hours, they will immediately dispatch a field crew, notify the Utilities Superintendent, Underground Field Supervisor and Director of Utilities. After hours, the On Call Employee will notify the Superintendent or Director of Utilities of a potential sanitary sewer overflow. The On Call Operator will provide first response. The Superintendent or Director of Utilities shall notify other staff members from the Utilities Staff to assist in the spill response as required. If the Utilities Superintendent or the Director of Utilities cannot be contacted, the On Call Operator shall contact other employees while not delaying the response. This communication response is summarized in Figure 2-2 of this document.

- The crew will respond to the site of the complaint with the proper Spill Response equipment. If the problem is identified as an actual spill, it may be necessary to send for additional equipment or personnel.
- The crew will assess the problem and take the necessary steps to contain the spill, eliminate the overflow, and begin necessary cleanup, signage, photos, water quality sampling and notifications.
- If the problem has escalated to an emergency situation, further staff assistance, such as Pump Station operators, and Electrical Technicians, etc may be contacted. If assistance is needed from outside services, the following Agencies of outside contractors may be contacted:

Agency/Vendor	Equipment	Business Hour Phone	After Hours Phone
North Tahoe PUD	Vactors, Bypass Equipment , Staff	530 546-4212	530 546-4212
Truckee Sanitary District	Vactors, Bypass Equipment, Staff	530 587-3804	530 587-3804
Alpine Septic	Tank Trucks	530 577-7867	530 577-7867

Waters Septic Service	Tank Trucks	888-909-7867	888-909-7867
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Additional agencies, staff and equipment can be found in Exhibit 4-6.

6.2 EMERGENCY TRAFFIC CONTROL

In the event that the spill is located in a high traffic area, additional staff shall be contacted if necessary to provide traffic control. If the traffic control will be on a State Highway, both Highway Patrol and Cal Trans shall be contacted. Request the Highway Patrol to contact Cal Trans.

California Highway Patrol: Truckee Dispatch- 530 582-7500

Cal Trans: 530 583-3201

Placer County Sherriff Dispatch: (530) 581-6300 Emergency Dispatch: 530 823-4411

El Dorado County Sheriff Dispatch: 530 621-6600 Emergency Dispatch: (530) 544-3464

6.3 BYPASS AND CLEARING BLOCKAGE

Every attempt shall be made to clear the blockage as quickly as possible. If the blockage is not relieved within the first few attempts (20 minutes), it is crucial that bypass or storage procedures are implemented immediately.

- If a pump station can be isolated and used for temporary storage, consult with the Pump Station Field Supervisor or Pump Station Operators.
- In small residential areas, the storage capacity of the Vactor(s) may be sufficient to bypass flows and stop the spill until the blockage is cleared or a larger bypass is set up.
- Locate the nearest downstream manhole that can accept the additional flow.
- Set up the 4 inch pump on the Vactor or the 4-inch portable pump, but be advised that larger pumps may be needed. Sufficient 4-inch discharge hose is located in the Vehicle Barn or Old Welding Shop in the Lower Yard. The pump discharge hose should be secured or placed far enough into the manhole that it will not come out during pumping. The pump and pump hose should be protected from traffic by barricades.
- Take photos of any bypass setups.

6.4 Containment

Containment of already spilled material is top priority. The crew will make every valued effort to keep the SSO in as small an area as possible. It is preferred that the crew keeps the SSO in the

street and out of storm drains. To make sure the SSO is contained, the crew may use the following methods:

- Use drain covers, 3 inch high rubber dams, sand bags or soil to keep the overflow from reaching a storm drain.
- Should the overflow take place in an area not normally accessible to the public, such as; (fields, tributaries, etc.), the crew will use any reasonable means to contain the flow in that area for recovery.
- The crew will make every reasonable attempt to dam up the spill in the storm drain or catch basin and recover it from that point.
- Take photos of all containment efforts.

6.5 SITE RESTORATION AND CLEANUP

Every effort to restore the environment to the condition that existed before the SSO occurred will be made by using the following procedures:

- If the SSO occurred in the street, staff will apply a light mist of diluted household bleach to the affected area. If the SSO occurred in an unpaved/dirt area staff will vacuum up all affected areas and loose material and apply a light application of diluted household bleach to the saturated areas.
- Collect and dispose of any standing or pooled sewage that is accessible to the public.
- Attempt to recover all spilled sewage in gutters, storm drains, culverts, swales, ditches, dry creeks, etc.
- Quantify the volume of all sewage recovered at the time it is disposed of out of the truck.
- Clear surrounding area of paper, solids, and any other signs of a SSO.
- If the spill area is not accessible to vacuum up, rake up all loose material and debris and place into garbage bags, scarify the soil with a rake and apply a diluted household bleach solution.
- Take photos.

6.6 WATER QUALITY SAMPLING

Within 48 hours of becoming aware of an SSO, that has reached any active creek, stream, or river or has reached Lake Tahoe, there are requirements that water quality samples be taken at certain locations. A spill sample kit with appropriate bottles for the sampling of Bacterial indicators and Ammonia is located in the Superintendent's office on top of the file cabinet.

- Contact the lab at Tahoe Truckee Sanitation Agency (TTSA) to notify them of the need for sampling analyses for Bacterial and Ammonia parameters. Both constituents have a maximum of 24 hours of hold time, so coordination of sampling and lab delivery is critical. Call TTSA at (530) 587-2525.
- Creeks, Rivers and Streams: Collect one sample 100' upstream of the point of entry of the SSO. Collect one sample 100' downstream of the point of entry of the SSO. Collect one sample at or near the point of entry of the SSO.
- Lake Tahoe: Collect one sample along the shoreline approximately 100' away from the point of entry of the SSO. Collect another sample 100' in the opposite direction of the SSO point of entry from the first sample. Collect one sample at or near the point of entry of the SSO to the Lake.
- Care shall be taken to ensure samples are taken properly and stored properly.
- Always wear sterile blue nitrile gloves while handling the sample containers. Change gloves after each sample bottle is filled.
- Always sample in a clean to dirty order. Sample creeks, streams and rivers upstream **first**, downstream **second** and at the **location of the spill last**. For sampling Lake Tahoe, if possible, sample upwind of point of entry of the SSO **first**, downwind of the point of entry of the SSO **second**, and then collect the sample at the location of the SSO entry into the Lake **last**.
- Record date, time and location that each sample is taken on the sample paperwork in the kit, and label each sample bottle with a specific sample ID, date and time prior to filling.
- If practical sample bottles shall be filled in a minimum of 4-6 inches of water depth. Take great care to assure no debris, dirt or sediment enters the sample bottle. Do not touch the inside of the sample bottle or lid with your fingers or any foreign objects. Fill the sample container to the 100mL line for bacterial samples and completely fill all other sample containers, and quickly replace lid and tighten securely.
- Place each sample bottle into a separate and unused zip lock bag and place into a cooler with an ice pack or cubed ice placed in a sealed zip lock bag.
- Samples shall be transported and analyzed at the Tahoe Truckee Sanitation Agency (TTSA) within 12-18 hours of being collected if possible. If the SSO occurs on the weekend, contact the on duty operator at TTSA at 530-587-2525. Let them know you need the lab to accept and set up these samples within 24 hours of being collected.
- Take photos at the sample sites.

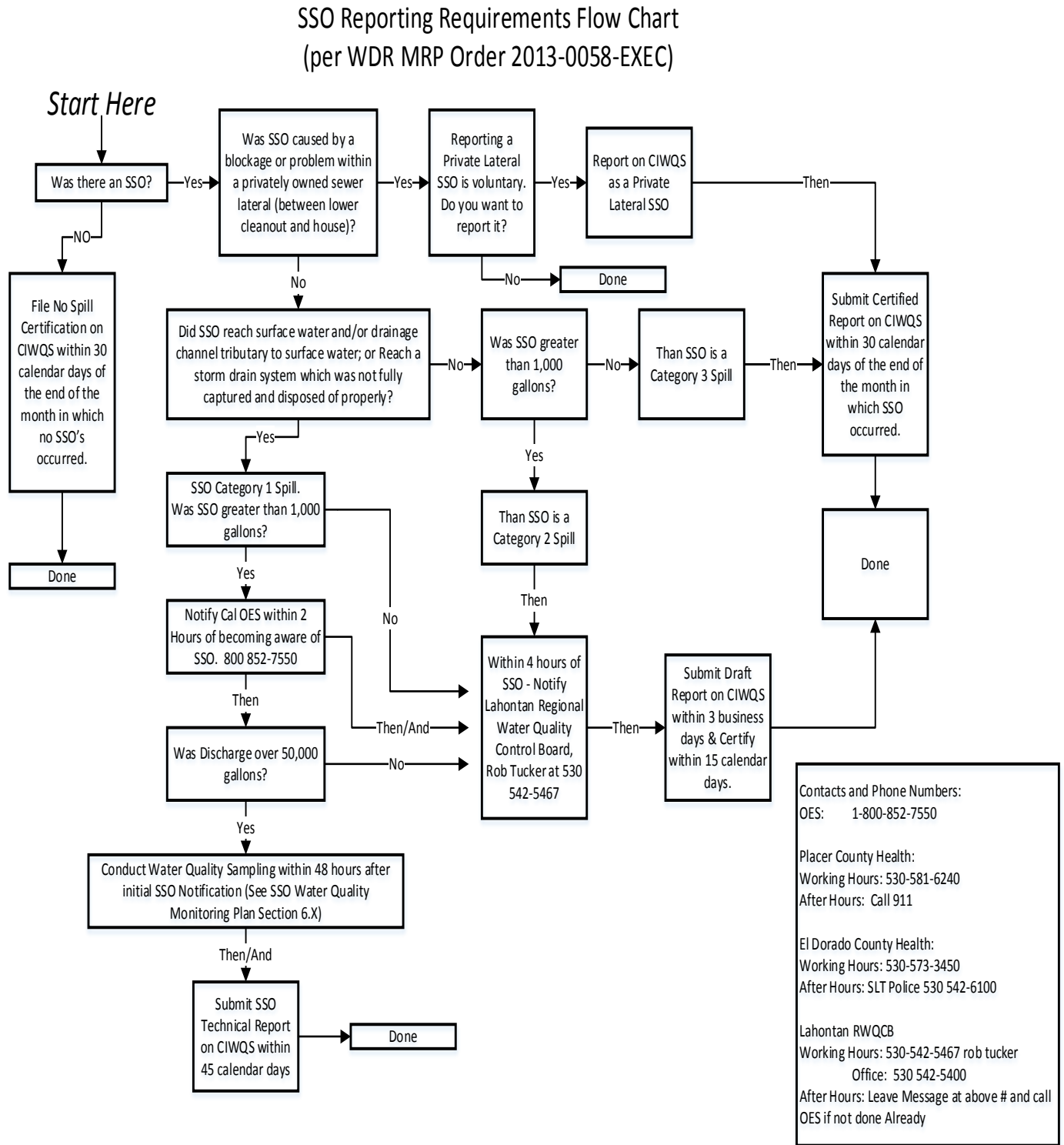
6.7 Reporting and Notification

SSOs that occur in California as a result of a failure within the District's sanitary sewer system are to be reported by the District using the State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow eReporting Program (<http://ciwqs.waterboards.ca.gov/>).

Notification and reporting requirements based on SWRCB Order No. WQ 2013-0058-EXEC, Adopted Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as of July 30, 2013), can be found in Exhibit 6-1.

Figure 6-1 is a reporting flowchart to be used to determine reporting type, schedule and completion timelines. A written summary of California-specific SSO Notification and Reporting requirements is included as Exhibit 6-1.

Figure 6-1 SSO Reporting Requirement Flow Chart



6.8 BLOCKAGE INVESTIGATION

Following elimination of the blockage and cleanup activities have been completed, the cause of the spill shall be investigated. If the spill occurred in a gravity sewer main or lower lateral, the affected segment of line shall be televised using the District CCTV equipment. If District equipment is not adequate to provide accurate information, contact the District's CCTV contractor Mountain Pipeline at (775) 846-5782, (530) 550-9301, or (530) 582-0353.

6.9 DOCUMENTATION AND TRAINING

A complete Sanitary Sewer Overflow Field Report form, as shown in Exhibit 6-3, shall be completed at the conclusion of any SSO. All spills shall be reviewed by the Director of Utilities and Superintendent as to the adequacy of the response, cause of the blockage, mitigation of the spill cause and evaluation of procedures for adequacy or improvement.

The District's collection system staff is trained in OERP as new employees. The following training procedures must be completed within the first 180 days of employment:

- Injury and illness prevention
- Hazard communication
- Safety inspections
- Fall protection
- Confined space entry
- Motorized equipment operations
- Traffic control

District employees responsible for responding to and reporting an SSO event must complete the following SSO-related training procedures within 180 days of employment and annually thereafter:

- Overflow Emergency response plan
- First aid/CPR

6.10 Sewer Intrusion into a Private Residence or Building

Sewer intrusion into a private residence or commercial building caused by a blockage or SSO related to a District owned and operated facility will be handled by the Utilities Superintendent or Director of Utilities. Property damage shall be immediately documented and photographed by the field crew during first response. A professional and certified sewage cleanup contractor shall be dispatched to begin cleanup procedures. The District's Director of Accounting shall be

notified of the occurrence and will contact the District's Insurance carrier to begin the loss process. Property damage caused by a blockage or SSO in the private lateral or customer owned facilities shall be reviewed and the customer shall be given contact information for certified sewage clean up specialists.

Sewage Cleanup Contractors

CALNEVA HYDRO STEAM (for sewage cleanup)
24 hour emergency service/Howard or Anna Rankell
(530) 587-0505 or 583-3645 or 546-3756 or (775) 831-3645

BELFOR Property Restoration (for sewage cleanup)
24 hour emergency response 1- 800-856-3333
Belforusa.com

List of Exhibits

Exhibit 6-1. California Specific SSO Notification and Reporting Summary

Exhibit 6-2. District Standard Operating Procedures for SSO Response

Exhibit 6-3. SSO Field Reporting Form

7.0 FATS, OILS, AND GREASE CONTROL PROGRAM

Fats, Oils, and Grease (FOG) is discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly, FOG can cause pipe blockages leading to SSOs. To control FOG, the District has established a FOG Control Program, which includes:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan 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;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors), follow design standards for the grease removal devices, ensure proper maintenance, follow Best Management Practices (BMPs), and comply with record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforce the FOG ordinance, and to sufficiently staff to the FOG program to inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as a problem.

7.1 NATURE AND EXTENT OF FOG PROBLEM

The District has approximately 60 commercial and industrial sources of grease discharging into the sewer collection system. Ten years ago, FOG was a primary cause for SSOs and lift station wet wells would typically require maintenance every few weeks to remove FOG. Over the past 10 years, the District has implemented a FOG control program and the quantity of FOG that is introduced to the system has been reduced. In the past few years, FOG related SSOs have been dramatically reduced. No reportable SSOs with grease as a contributing factor have occurred since 2008. Also, lift station wet wells that used to be cleaned monthly or more frequently typically last 3 months or more before requiring maintenance.

Staff attributes most of this FOG reduction to:

- Grease Trap/Interceptor requirements on all remodels or change of business licenses

- Proactive inspection program
- Public and Business Education and Outreach Program

7.2 FOG CONTROL PROGRAM

The District's FOG Control Program includes four elements: Legal Authority, Preventative Maintenance, Commercial FOG Source Control, and Public Outreach.

Legal Authority

The District has the responsibility to minimize the amount of FOG that enters the sanitary sewer systems from residential, commercial, and industrial sources. On April 6, 2006, Sewer Ordinance 255 was passed, see Exhibit 7-1.

This ordinance requires all non-residential facilities involved in the manufacture, preparation, or serving of foods that are connected to the sanitary sewer system to follow the FOG Control requirements identified in this ordinance. This ordinance:

1. Requires each Food Service Establishment (FSE) to obtain a wastewater discharge license.
2. Defines grease discharge limits.
3. States that the District will perform one CCTV inspection per year to identify whether excess grease is entering the sewer lateral from the FSE.
4. Allows for the inspection of grease removal equipment, service laterals, and sample ports at a frequency to be determined by the District.
5. Allows the District to recoup additional inspection costs or costs associated with a wastewater backup when the backup occurred as the result of an FSE's discharge
6. Defines the design, sizing, and construction standards for all pretreatment facilities (based on the California Plumbing Code).
7. Defines maintenance requirements for the owners of grease removal equipment to maintain the equipment in an efficient operating condition.
8. Requires FSE to maintain a Cleaning and Maintenance Log as shown in Exhibit 7-2.
9. Prohibits the use of food waste disposal grinders and chemical or biological agents that dissolve FOG.

Commercial FOG Source Control

Identification and Education of Food Service Establishments

Currently there are 63 FSEs in the District's service area. Fifty (50) of these FSEs have approved grease removal equipment. Seven of these FSEs are currently permanently or temporarily

exempt from owning and maintaining grease removal equipment. The remaining 6 FSEs are not exempt but currently do not have grease removal equipment. Exhibit 7-3 identifies the license number, name, location, sample port type, pretreatment facilities, and pretreatment facility size.

The District has distributed a number of instructional materials aimed at encouraging FSEs to follow best management practices to minimize grease entering the sewer system. A summary of some of these materials is documented below:

1. On September 28, 2007, a letter was sent to FSE owners advising them of the new requirements under Sewer Ordinance 255.
2. The District developed a list of frequently asked questions regarding the FOG Reduction Program. This pamphlet is included as Exhibit 7-4.
3. The District developed a list of companies in the area that may be available for grease interceptor cleaning and disposal as documented in Exhibit 7-5.

Inspection and Enforcement Program

The District conducts semi-annual CCTV inspections of FSE laterals, sampling of discharge as required, monthly inspections of large interceptors and visits FSE's annually to review maintenance, training and records compliance.

If an FSE is not in compliance with the sewer ordinance, a notice of non-compliance is given. Non-compliance will result in additional inspections and associated inspection and testing fees as needed until the violation is corrected.

Staffing

Currently, there is one primary employee responsible for the support of FOG compliance. The primary FOG compliance employee spends approximately 20% of their time on FOG related issues.

FOG Disposal

Grease traps can be cleaned by the food service establishment, and you may either contract with a grease hauler to remove the waste or, once properly bagged and mixed with kitty litter, the sanitary landfill may accept it. Grease interceptors must be pumped by a pumping service that you contract with.

The District has concluded that there is adequate local capacity to dispose of grease from small commercial sources within the District at this time. Larger capacity grease interceptors require commercial cleaning and waste is typical hauled to waste disposal facilities in Nevada.

Preventative Maintenance

In addition to source control, the District also focuses sewer cleaning activities in areas of known FOG sources through the accelerated cleaning program as shown in Exhibit 7-6. The goal of this effort is to prevent FOG accumulation from blocking the flow of wastewater and potentially cause a Sanitary Sewer Overflow.

The District also leverages operational findings from cleaning, CCTV, or pump station maintenance. If a maintenance crew identifies an abnormally fast FOG accumulation rate in the pipe or wet well, they will notify the Technical Services Department of the issue. Based on the Technical Services Department's knowledge of the contributing FSEs, an ad-hoc FOG source investigation may be conducted in an attempt to determine why increased FOG accumulation rates are occurring.

Public Outreach

The District has a FOG public education outreach program that promotes proper disposal of FOG. The District has distributed FOG pamphlets in several languages to reach the greatest number of people possible. Examples of FOG reduction public outreach materials that have been distributed are included in Exhibit 7-7.

List of Exhibits

Exhibit 7-1. Sewer Ordinance 255

Exhibit 7-2. FSE Cleaning and Maintenance Log

Exhibit 7-3. FSE Inventory

Exhibit 7-4. TCPUD Fats, Oils and Grease (FOG) Reduction Program Frequently Asked Questions

Exhibit 7-5. Grease Interceptor Cleaning and Disposal Sites

Exhibit 7-6. Sewer Cleaning Activities in Areas of Known FOG Sources

Exhibit 7-7. FOG Reduction Public Outreach Materials

8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The System Evaluation and Capacity Assurance Plan (SECAP) element of the Risk-Based SSMP aims to:

1. Establish a process to assess the current and future capacity requirements for the collection system facilities.
1. Prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under dry weather and peak flow conditions. At a minimum, the plan will include:
 - a. Evaluation
 - Describe 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.
 - b. Design Criteria
 - Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.
 - c. Capacity Enhancement Measures
 - Describe 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, Infiltration and Inflow (I&I) reduction, increases and redundancy in pumping capacity, and storage facilities.
 - The CIP shall include an implementation schedule and shall identify sources of funding.
 - d. Schedule:
 - The District will 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 with the Risk-Based SSMP review and update requirements.

8.1 SERVICE AREA AND COLLECTION SYSTEM DESCRIPTION

The Tahoe City Public Utility District (TCPUD) is located on the northwestern shore of Lake Tahoe. The service area covers approximately 22 square miles and stretches approximately from D.L. Bliss State Park to the Dollar Point area, extending north from Tahoe City to the Placer/Nevada County line just south of Truckee town limits. shows the District's service area.

TCPUD collects wastewater from within its service area and conveys it to a connection point with the Tahoe Truckee Sanitation Agency (TTSA). TTSA conveys the flow through an interceptor pipeline to a treatment plant in Truckee.

The TCPUD collection system is summarized in Table 8-1.

Table 8-1. Collection System Characteristics

Infrastructure	Category	Extent
Collection System Pipeline	Gravity Mains	150 miles
	Force Mains	7 miles
	Diameter Range	4 – 36 inches
Wastewater Pump Stations		21

Characteristics of the pump stations are summarized in Table 8-2. Because the pump stations are critical locations, TCPUD has identified the potential spill characteristics at each wet well; this information is summarized in Table 8-3.

Table 8-2. Wastewater Pump Station Characteristics

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Name	Class (Satellite/Main)	Station Configuration	Name-Plate Capacity, gpm (one pump out)	Number	Year Pump Installed	Var. Speed?	Controller	Flow Meter	Telemetry	Back-up Power	Fuel Storage	Transfer Switch	Comments/Observations	Buildings	Force Main
Rubicon Gold Coast	Main	S&L packaged wet well/dry well; non-clog centrifugal	350	2	2001		Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Cummins 200KW Installed 2006	Concrete Con-vault; 500gal capacity	Upgrade in 1995	Soft Starts regulate start and stop speeds. Peak during July/August/Christmas. Large capacity for storage.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Long force main - transition at Hwy 89 & Rubicon Glen Dr.
Rubicon Beach	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Standby Caterpillar generator installed 1996. No auto-transfer switches.	Fuel tank incorporated under the base of the generator		Wet well access is difficult Generator is eyesore for homeowners.		
Lonely Gulch	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Share standby generator at North Lane	N/A		No potable water at site		
North Lane	Main	S&L packaged wet well/dry well; non-clog centrifugal	250	2	Approx. 1970		Original bubblers	None	Status points only	Caterpillar 125 KW Installed 2007	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995		Block bldg with asphalt composition roof overlayed with wood siding; Good condition	
Bay Vista	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Receptacle for portable generator	N/A		Low density - 60 to 80 part-time residents. No potable water at site		

Tahoe City Public Utility District

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Meeks Bay	Main	S&L pumps; vertical motor mount	400	2	1991	X	Milltronics Ultrasonic; level alarm floats	Foxborough w/ chart recorder	Status points only	Caterpillar 125 KW Installed 2007	Concrete Con-vault; 500gal capacity	Upgrade in 1995	No fresh water available. Problems with man-lift to dry well.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Discharges near Sugar Pine Park Boundary
Glenridge	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	Approx. 1970		Original bubblers	None	Status points only	Receptacle for Portable Generator	N/A		Access in winter becomes an issue; Storage available for a couple days; No potable water at site		Discharges into FM from Meeks Bay
Waters Edge	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	Approx. 1970		Original bubblers	None	Status points only	Caterpillar 40KW Generator Installed 2014	Fuel tank incorporated under the base of the generator		No potable water at site		
Tahoma	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	150	2	Approx. 1970		Original bubblers	None	Status points only	Underground power fed from pole at Hwy w/ receptacle for portable generator.	N/A		Large wet well & horizontal storage. No potable water at site.		
McKinney	Main	S&L packaged wet well/dry well; non-clog centrifugal	375	2	1991	X	Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Standby Generator replaced 1995. Caterpillar genset.	Double Walled Steel base tank 350 gal capacity	Upgrade in 1995	Concern about stability of station during creek flooding.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition	
Madden	Main	S&L packaged wet well/dry well; non-clog centrifugal	2500	3	1991 2014 (Pump 3)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 100KW Generator Installed 2009	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995	Takes all flow from Interceptor.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Dual FM - can be valved to either FM or back to station

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Blackwood	Main	S&L packaged wet well/dry well; non-clog centrifugal	2500	3	1991 2014 (Pump 3)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 125KW Generator Installed 2008	Double Walled Steel base tank 250 gal capacity	Upgrade in 1995	Creek bed has been cleaned from debris; stabilized shoreline of creek	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Goes under creek to Highway
Sunnyside	Main	S&L packaged wet well/dry well; non-clog centrifugal	2900	3	2013 (Pump 1 and 3) 1989 (Pump 2)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 250KW Generator Installed 2006	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995	Largest PS in District; handles all West Shore flows.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Parallel force main installed ~1998 to handle higher flows
Highway 89	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	1991		Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Standby Generator replaced 1992. Caterpillar genset.	Fuel tank incorporated under the base of the generator		Takes flows from lake front Tahoe Tavern condos & a few businesses; dry well outside of bldg, 25ft away. No potable water at site.	15' x 18' outbldg for generator, etc.; built 1989; 15' from PS	
Commons Beach	Satellite	S&L Wet Well Mounted	75	2	2005		Submersible Transducer; level alarm floats	None	Status points only	Receptacle	N/A		Flows received only from restrooms for Commons Beach	Sam building as restrooms occupies north part (back) of building	4" Polyethylene force main from pump station to highway
Marina	Satellite	submersible	100	2	Approx. 1970		Druck Submersible Transducer; level alarm floats		Status points only	Receptacle for portable generator 100-200 ft away	N/A			Block bldg with asphalt composition roof overlayed with wood siding; Good condition	

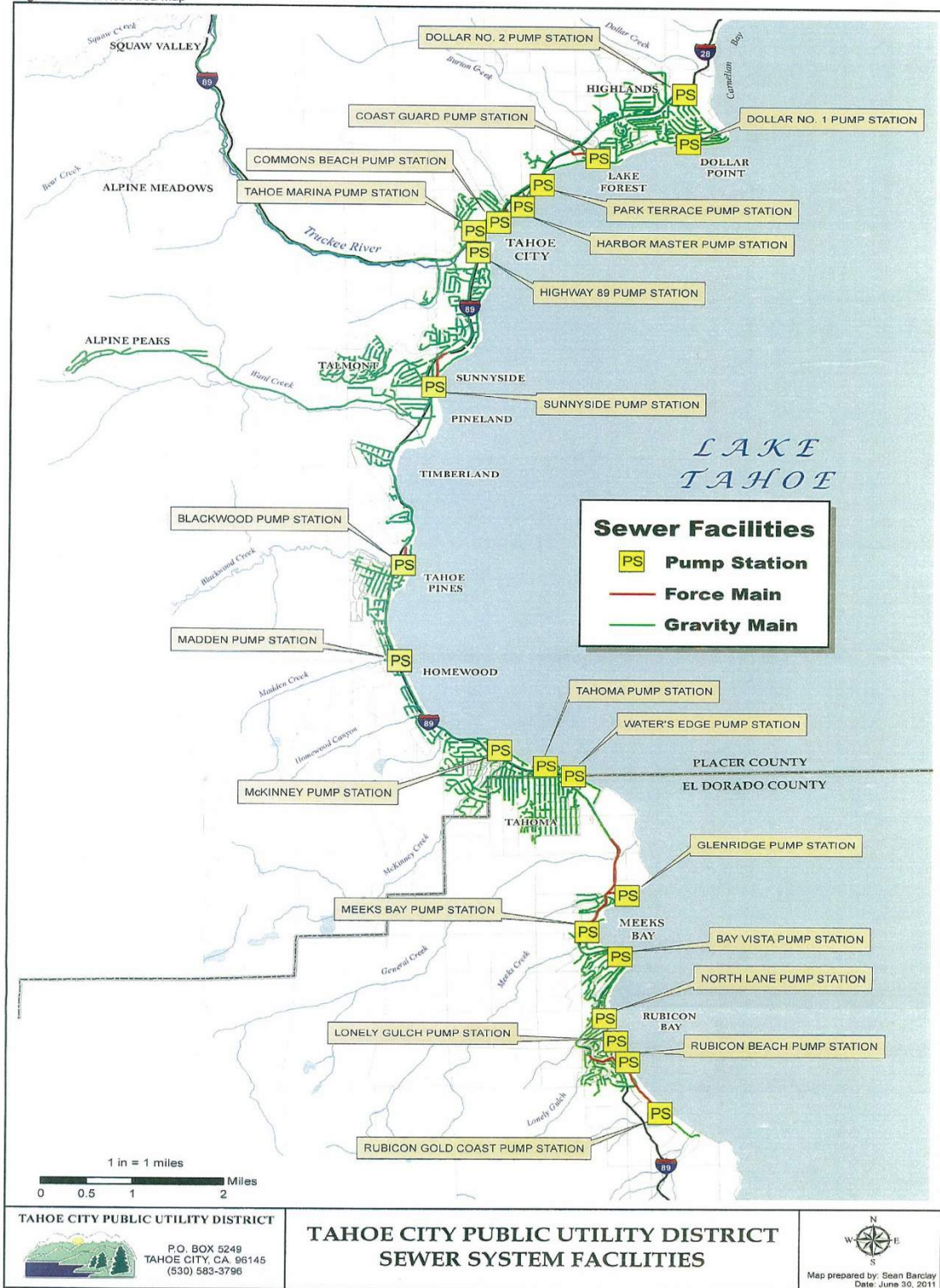
Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Harbormaster	Main	S&L packaged wet well/dry well; non-clog centrifugal	275	2	2007	X	Milltronics Ultrasonic; level alarm floats, backup static bubbler system redundant to Milltronics	Siemens Mag Meter	Status points only	Caterpillar 125 KW Installed 2007	Fuel tank incorporated under the base of the generator 250 gal	New 2007	New station installed in 2007 increased storage from 6,000 gallons to 26,000 gallons with 30-inch gravity main.	Concrete building, asphalt composition roof, fire sprinklers; excellent condition	Dual 6" Force Mains PVC C-900, Bypass Ports and Pump Out Port
Park Terrace	Satellite	submersible grinder	100	2	1989		Milltronics Ultrasonic; level alarm floats	None	Status points only	Caterpillar 20KW Installed in 2011	Fuel tank incorporated under the base of the generator 70 gal		Takes flow from small, lake-front area. Pumps to Grove St PS; Pressure washdown the wetwell. Access is a concern; must use private driveway		
Coast Guard	Main	S&L packaged wet well/dry well; non-clog centrifugal	700	2	1991	X	Milltronics Ultrasonic; level alarm floats	Doppler clamp on meter w/ chart recorder	Status points only	Caterpillar 100 KW Installed 2010	Concrete Con-vault; 500gal capacity	Upgrade in 1995	Problems with flow meter.	Block bldg with asphalt composition roofs overlaid with wood siding/good condition. Powered elevators in station.	
Dollar Point No. 1	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	1967		Original bubblers	None	Status points only	Receptacle for portable generator	N/A		Station located on private property at lake's edge; no potable water at the site; pumps run about 2-3 hours/week; station serves serves 40-50 homes		Pumps to Coast Guard
Dollar Point No. 2	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	1967		Submersible Pressure Transducer with Float Backup	None	Status points only	Caterpillar 55 KW Generator installed 2010	Fuel tank incorporated under the base of the generator 120 gal		Pumps directly to North Shore Interceptor; no potable water at the site		

Table 8-3. Wastewater Pump Station Wet Well Spill Characteristics

Sewer Lift Station	Lead		Lag		Alarms Hi/Low			Spill Level Inches	Wet Well Capacity -Gallons	Wet well Dimension (diameter x depth)	Elev. At Top of Wet well	Total Gals Stored in MHs & Lines before spill	Spill MH Location	Elevation
	On	Off	On	Off	Hi	full scale Hi	Low							
Dollar 2 - Observation	50"	30"	55"	40"	69"		20"	124"	1,598.0	4' x 17'	6,484.50	5,990	MH 5+13 on Edgewood & Skyland Dr.	
Dollar 1 - Edgewater	50"	30"	55"	40"	95"		20"	204"	1,410.0	4' x 15'	6,232.00	7,150	MH's near Station are under lake level & are bolted down; sewage would back-up to MH 21+87 to spill. Spills 2' above wet well top because of bolted MH covers.	
Coast Guard	70"	50"	75"	55"	80"		35"	174"	4,233.0	6' x 20'	6,232.00	37,900	MH 17+37, Lateral V, Star Harbor	
Park Terrace	30"	20"	40"	25"	52"		12"	8.37' from top of Inlet	1,525.0	4.6' x 12.8'	6,230.23	5,094	MH B-1 in front of Station & possibly MH 2.83 on "BB" line N of Station	
Harbormaster	8'	4'	9'	4'	10'	15'	2.5'	240"	10,174.0	10'L x 8.5'W x 16'D	6,230.00	26,000	MH # 8, 10' West of Wet Well Cover	6,231.8
Tahoe Marina ^H	2.0'	1.0'	3.0'	1.5'	4'		.5'	92"	724.0	4' x 7.7'	6,230.00	6,946	MH 1+90, Lateral C, NE of Station; Horizontal Wet well capacity - 4460 gal.	
Highway 89	50"	30"	55"	35"	80"	138"	20"	138"	2,960.0	6' x 14'	6,231.50	34,698	MH 1+01 Lateral C Tavern Shores	
Sunnyside	6.0'	4.8'	6.5'	5.5'	6.7'	14.1'	3.5'	168"	4,766.0	9' x 11'	6,234.00	638,434	MH 9+92 WSEF2	
Blackwood	6.0'	4.8'	6.5'	5.5'	7.5'	13.08'	3.5'	216"	6,600.0	9' x 14.5'	6,232.00	254,900	MH 3+03 Lateral P	6,230.0
Madden	6.0'	4.8'	6.5'	5.5'	6.8'	18'	4.3'	144.5"	5,728.0	9' x 9'	6,236.00	261,500	MH 201+90 Meadow Rd WSEF	6,230.8
McKinney	60"	40"	65"	45"	80"	150"	25"	240"	2,937.0	5' x 20'	6,231.50	17,420	Wet well at pump station	6,231.5
Tahoma ^H	50"	30"	55"	40"	60"		39"	141.5"	1,109.0	4' x 11.8'	6,236.00	16,740	MH 28+58.5 Lateral AAA	6,236.8
Waters Edge	50"	30"	55"	40"	62"		43"	168"	1,316.0	4' x 14'	6,233.50	8,717	MH 63+43.76 Lateral H	6,229.3
Glenridge ^H	50"	30"	55"	40"	70"		40"	176.5"	1,381.8	4' x 14.7'	6,233.00	22,452	MH 5+07 Lateral A	6,231.7
Meeks Bay	60"	45"	65"	50"	85"	222"	40"	218.5"	6,843.0	8' x 18.2'	6,238.70	42,586	MH 87+65	6,232.2
Bay Vista ^H	50"	30"	55"	40"	73"		47"	150"	1,175.0	4' x 12.5'	6,264.50	6,254	Wet well at pump station	6,264.5
North Lane	50"	30"	55"	40"	68"		57"	216"	3,806.0	6' x 18'	6,248.00	8,960	MH 2+23 Lateral E	6,247.0
Lonely Gulch	50"	30"	55"	40"	64"		49"	228"	1,786.0	4' x 19'	6,252.00	3,026	Wet well at pump station	6,252.0
Rubicon Beach ^H	50"	30"	55"	40"	57"		20"	139"	1,090.0	4' x 11.6'	6,234.30	10,977	MH 10+55 on 30" storage line	6,299.4
Rubicon Gold Coast	60"	30"	65"	35"	80"	108"	35"	190"	3,594.0	6' x 17'	6,238.50	25,700	MH 311+65.5 WSEF3	6,233.0

H = Horizontal Storage

Figure 8-1. Service Area Map



8.2 WASTEWATER FLOWS

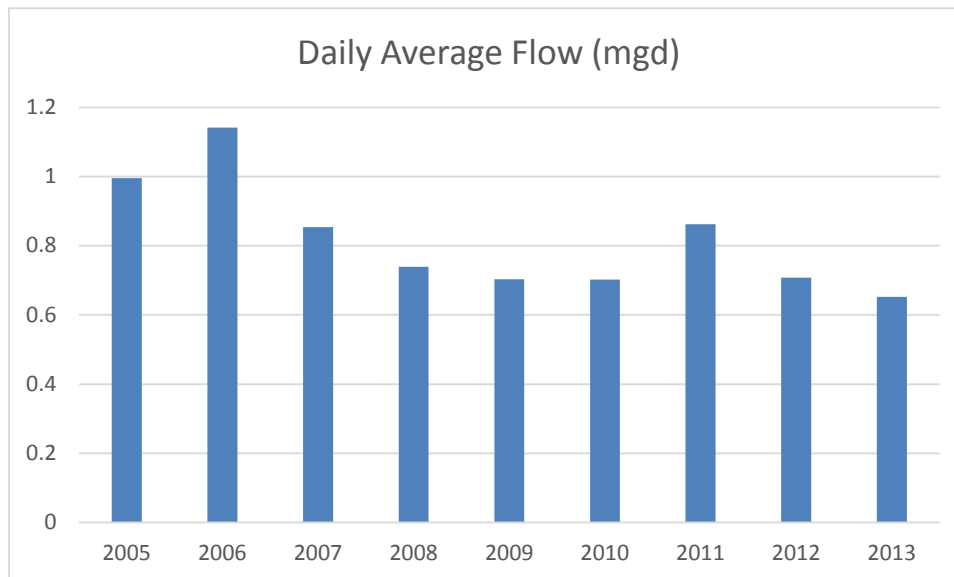
This section summarizes information related to the amount of wastewater generated within the District. TCPUD discharges wastewater to the TTSA Truckee River Interceptor Pipeline for conveyance out of the Basin and treatment. Flow meter data from this connection point can be used to summarize the total wastewater generated within the District. Flow characteristics from 2005 to 2013 are summarized in Table 8-4.

Table 8-4. Flow Characteristics

Parameter	Category	Value
Flows	Average Daily Flow 2005-2013	0.8 mgd
	Design Daily Flow (allocated maximum flow to TTSA)	7.8 mgd

Average flows from TCPUD for 2001 through 2008 are summarized in Figure 8-1. These more recent flow data show a decrease from the average daily flow reported in previous studies. Because of zoning restrictions and slow development in the Basin, future flows are expected to increase slowly, if at all.

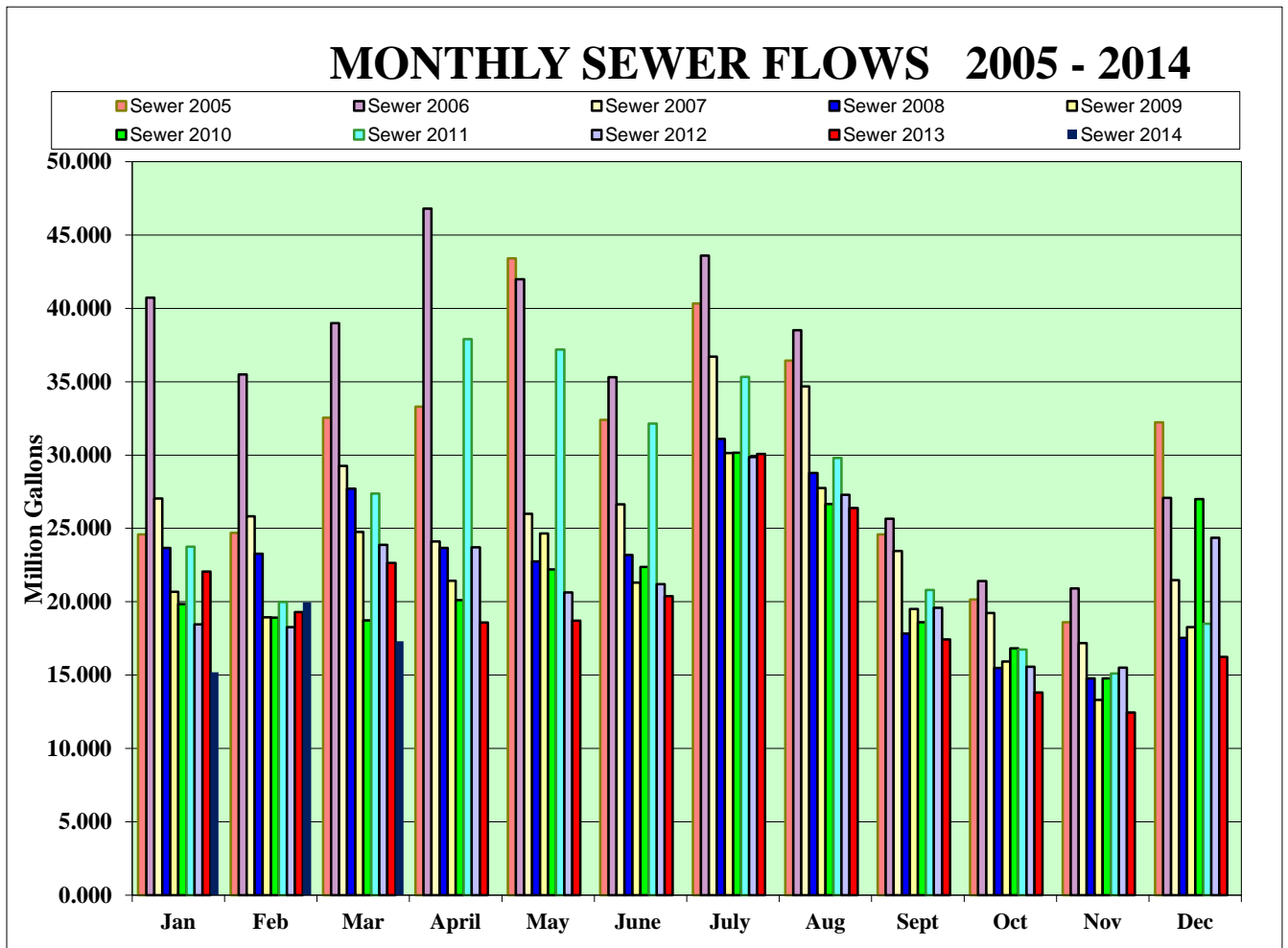
Figure 8-1. Average Daily Flows from TCPUD



Over time the flows have been fairly steady and appear to be decreasing in recent years. The monthly distribution typically has wet weather peak flows generally experienced in late March through May due to snow melt and runoff. Dry weather peak flows are experienced in July and August due to high occupancy rates. Flows are lowest in October and November due to climate

and low occupancy and then rising in response to climate and winter occupancy. These trends are shown in Figure 8-2.

Figure 8-2. Monthly Distribution of Wastewater Flows



The highest monthly flows seen by TCPUD occurred during the January 1997 storm. This data is not shown above. This was a major rain on snow storm that generated flows exceeding the 100-year flow at many USGS gauging stations in the Basin. TCPUD experienced an overflow after erosion along Blackwood Creek separated a manhole and allowed inflow that exceeded the system capacity.

8.3 SYSTEM EVALUATION

TCPUD had a Sewer Master Plan completed in 1991. After the major peak daily flows of 1997, TCPUD prepared a hydraulic system analysis in 1997. A draft Sewer Master Plan was issued in October 2001, and an updated Sewer Master Plan was published in 2002.

The 1997 hydraulic analysis included several recommendations that TCPUD has implemented to reduce the risk of future SSOs. These include physical inspection of pipelines, I/I reduction, flow meter maintenance and calibration, and construction of a parallel force main for the Sunnyside pump station. The District has been performing closed-circuit television (CCTV) inspection to identify areas of I/I. If cracks or defective joints are located, they are grouted and sealed or excavated and point repairs performed. It appears that this program has been effective in reducing the monthly flow collected within the TCPUD service area.

As a result, TCPUD has not experienced SSOs due to inadequate hydraulic capacity, and due to regional growth limitations enacted by the Tahoe Regional Planning Agency (TRPA), TCPUD forecasts that its collection system capacity will not be exceeded by the current or projected build-out flows.

The District has a sewer pipe inspection program that is described in Section 4 of this document. During sewer inspections, any evidence of surcharging, high water marks, or infiltration are noted in the database. District staff then follow-up to investigate these areas and determine if a hydraulic capacity problem exists.

Based on staff observations, the District has confirmed that there are no known hydraulic capacity limitations within its collection system during dry weather or during peak wet weather events. However, the District is planning on some firm capacity enhancements to three of its largest pumping stations. District staff will continue to monitor flow data periodically during wet weather events. If it is determined that wet weather peak flows are increasing to the point where a capacity-related SSO may occur, then this portion of the system will be evaluated further in the future.

8.4 PLANNED SYSTEM IMPROVEMENTS

The District has a Capital Improvement Program (CIP) to make necessary upgrades to its sewer system. An average of approximately \$1,000,000 is budgeted by TCPUD each year for sewer capital projects. The CIP does currently include some projects that are intended to address firm capacity limitations in the lift station system. In addition, if any capacity needs are identified through CCTV inspection or other methods, capital projects will be developed to address those issues. A copy of the District's Capital Improvement Plan is attached as Exhibit 4-5.

9.0 MONITORING, MEASUREMENTS, AND PROGRAM MODIFICATIONS

9.1 INTRODUCTION

The District will monitor the effectiveness of the Risk-Based SSMP on a regular basis, and will update and modify the Risk-Based SSMP elements to keep them current, accurate, and available for audit, as appropriate. The following describes the District's procedure for monitoring the effectiveness of the Risk-Based SSMP and the procedures used to minimize SSOs.

9.2 MONITORING

The District will track Key Performance Indicators (KPI) through cleaning logs and regularly-prepared reports. To monitor the effectiveness of the Risk-Based SSMP, the District has selected a procedure whereby specific parameters are documented and compared on an annual basis. These parameters will provide quantitative, focused results that indicate the overall success of the Risk-Based SSMP, or conversely, the underlying problems that may then be further investigated. Table 9-1 lists each Risk-Based SSMP element, the overall purpose of the Risk-Based SSMP element, and the specific parameters that the District plans to track that will help in evaluating the effectiveness of the Risk-Based SSMP.

Table 9-1. Risk-Based SSMP Monitoring Parameters

Risk-Based SSMP Element	Summary of Element Purpose	KPI
1.0 Goals	Establish priorities of District and provide focus for District Staff	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, reconsider Goals and evaluate potential changes
2.0 Organization	Document organization of District staff and chain of communication for SSO response	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, update Organization Chart as staff changes or reorganizations occur
3.0 Legal Authority	Ensure the District has sufficient legal authority to properly maintain the system	<ul style="list-style-type: none"> None needed
4.0 Operations and Maintenance Plan	Minimize blockages and SSOs by properly maintaining the system and keeping the system in good condition	<ul style="list-style-type: none"> Total number and volume of SSOs Causes of SSOs Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence) Length of pipe inspected with CCTV per year
5.0 Design & Construction Standards	Ensure new facilities are properly designed and constructed	<ul style="list-style-type: none"> None needed

Risk-Based SSMP Element	Summary of Element Purpose	KPI
6.0 Overflow Emergency Response	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	<ul style="list-style-type: none"> Average and maximum response time Percent of total overflow volume contained or returned to sewer
7.0 Fats, Oil, and Grease Control	Minimize blockages and overflows due to FOG	<ul style="list-style-type: none"> Number of overflows due to FOG (linked to SSO Identification Number) Number of FOG producing facilities inspected (on schedule) Percent of FOG producing facilities found to be in compliance
8.0 Capacity Management	Minimize SSOs due to insufficient capacity by evaluating the system capacity and implementing necessary projects	<ul style="list-style-type: none"> Number of SSOs due to capacity limitations or wet weather (linked to SSO Identification Number)
9.0 Monitoring, Measurement, and Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes	<ul style="list-style-type: none"> As part of Element 10 – Program Audits, evaluate tracking of KPI and effectiveness in determining effectiveness of SSMP
10.0 Program Audits	Formally identify SSMP effectiveness, limitations, and necessary changes on an annual basis	<ul style="list-style-type: none"> Date of completion of last annual audit
11.0 Communication Plan	Communicate with the public and satellite agencies	<ul style="list-style-type: none"> Number of written comments received from the public Percentage of positive comments

The District will use these KPI to assist with completion of the annual Risk-Based SSMP program audit described in Element 10. The District will also continue to track additional information, such as customer complaints and length of pipe cleaned, to assist with evaluation of its Risk-Based SSMP effectiveness.

9.3 RISK-BASED SSMP MODIFICATIONS

The District will track parameters shown in Table 9-1, the result of which will be included in the KPI checklist in Table 9-2. The Risk-Based SSMP will be updated periodically to maintain current information. The District will review the success of and/or necessary improvements to its Risk-Based SSMP as part of an annual Risk-Based SSMP program audit (described in detail in Element 10). The District will update critical information, such as contact numbers and the SSO response chain of communication, as needed. A comprehensive Risk-Based SSMP update should occur every five years.

Table 9-2. Key Performance Indicator (KPI) Checklist

KPI	2010	2011	2012	2013	2014
Total number of SSOs	1	3	2	2	
Total volume of SSOs	20	170	1300	180	
Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence)	0	0	0	0	
Total number of SSOs within the Shorezone	1	1	0	0	
Total volume of SSOs within the Shorezone	20	90	0	0	
Number of pump station failures	0	0	0	0	
Number of pipe failures	1	3	1	2	
Length of pipe CCTVd (miles)	18	17	41.3	40.6	
Length of Pipe Hydro Cleaned (miles)	60 (est)	60 (est)	84.4	46.6	
Percentage of total overflow volume contained or returned to sewer	0	100	17	60	
Number of overflows due to FOG	0	0	0	0	
Number of FOG producing facilities inspected	NA	NA	17	34	
Percent of FOG producing facilities found to be in compliance	NA	NA	15	29	
Number of SSOs due to capacity limitations or wet weather	0	0	0	0	

10.0 PROGRAM AUDITS

This Risk-Based SSMP section serves to record the evolution of the Risk-Based SSMP Elements. The focus of the Program Audit will be to identify and correct program deficiencies in order to continually improve the program performance. The District will audit its Risk-Based SSMP annually. These audits will identify any deficiencies in the current Risk-Based SSMP (based on number of SSOs experienced) and will describe the steps required to correct those deficiencies (if applicable).

10.1 AUDITS

The District's Director of Utilities will lead the audit of the District's SSMP on an annual basis. Calendar year 2010 will be the first year audited. The program audit will cover the period from the previous program audit to the current date.

Each of the major Elements of the Risk-Based SSMP will be addressed during the audit. An Audit Checklist, provided as Exhibit 10-1, shows the categories to be evaluated. Where results of the evaluation indicate deficiencies, corrective measures will be developed. The results of the audit will be included in an Annual Audit Report. The written report, summarizing the findings from the audit, will be kept on file with the Risk-Based SSMP document. The Audit Report must be made available to applicable oversight agencies (i.e., the Regional Water Quality Control Board in California) in the event of an investigation.

10.2 RISK-BASED SSMP UPDATES

The District will determine the need to update its Risk-Based SSMP based on the results of the program audit and the performance of its wastewater collection system. The overall measurement of program effectiveness will be a reduction in the frequency and volume of SSOs since the previous audit period. Corrective measures will be developed for all Program deficiencies identified. Corrective actions, including a schedule for implementation of changes, will be documented in the Annual Audit Report. The full Risk-Based SSMP should be updated at least every five years.

List of Exhibits

Exhibit 10-1. Sewer System Management Plan Annual Audit Checklist

11.0 COMMUNICATION PROGRAM

11.1 SSMP APPROVAL

The SSMP was approved by the District's Board of Directors on April 23, 2010 by Resolution No. 10-13, attached as Exhibit 11-1. Prior to April 23, 2010, a 30 day public notice period was advertised as well as the date of the public hearing which was conducted on April 23, 2010. The notice is also attached as part of Exhibit 11-1. Updates to the approved SSMP were reviewed and approved by the District's Board of Director on May 16, 2014.

11.2 COMMUNICATING SEWER SYSTEM PERFORMANCE

The District will continually update the District's website and will disseminate information, in meetings and/or by flyers, to land developers, consulting engineers, and plumbing contractors regarding the need and methods to reduce SSOs. Plumbers and sewer contractors will have access to all available District plans, specifications, and standard details to ensure that projects are properly designed and built to the District Standards. A link to the final SSMP document, including annual audit results, is included on the District's website. A copy of the most current SSMP document will also be made available to interested parties for review and comment at the District's main office.

11.3 EDUCATIONAL INFORMATION

Useful educational information regarding the prevention of SSOs can be found on the following websites:

<http://www.stoptheclog.com/fog.html>

<http://www.wef.org/AboutWater/ForThePublic/WastewaterTreatment/>

<http://www.calfog.org/>

<http://www.trpa.org/>

Information on other Tahoe Basin sewer agencies' SSMPs can be found at their respective websites as listed in Table 11-1.

Table 11-1. Tahoe Basin Sewer District Websites

District	Website
Incline Village General Improvement District	www.ivgid.org
Kingsbury General Improvement District	www.kgid.org
North Tahoe Public Utility District	www.ntpud.org
Round Hill General Improvement District	www.rhgid.org

District	Website
South Tahoe Public Utility District	www.stpud.us
Tahoe City Public Utility District	www.tahoecitypud.com

List of Exhibits

Exhibit 11-1. SSMP Approving Resolution and Notice of Public Hearing

Exhibits

Exhibit 3-1. TCPUD Ordinance TOC

Exhibit 3-1. TCPUD Ordinance TOC

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Exhibit 4-1. Lift Station Details

Exhibit 4-1. Lift Station Details

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Name	Class (Satellite/Main)	Station Configuration	Name-Plate Capacity, gpm (one pump out)	Number	Year Pump Installed	Var. Speed?	Controller	Flow Meter	Telemetry	Back-up Power	Fuel Storage	Transfer Switch	Comments/Observations	Buildings	Force Main
Rubicon Gold Coast	Main	S&L packaged wet well/dry well; non-clog centrifugal	350	2	2001		Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Cummins 200KW Installed 2006	Concrete Con-vault; 500gal capacity	Upgrade in 1995	Soft Starts regulate start and stop speeds. Peak during July/August/Christmas. Large capacity for storage.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Long force main - transition at Hwy 89 & Rubicon Glen Dr.
Rubicon Beach	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Standby Caterpillar generator installed 1996. No auto-transfer switches.	Fuel tank incorporated under the base of the generator		Wet well access is difficult Generator is eyesore for homeowners.		
Lonely Gulch	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Share standby generator at North Lane	N/A		No potable water at site		
North Lane	Main	S&L packaged wet well/dry well; non-clog centrifugal	250	2	Approx. 1970		Original bubblers	None	Status points only	Caterpillar 125 KW Installed 2007	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995		Block bldg with asphalt composition roof overlayed with wood siding; Good condition	
Bay Vista	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	Approx. 1970		Original bubblers	None	Status points only	Receptacle for portable generator	N/A		Low density - 60 to 80 part-time residents. No potable water at site		

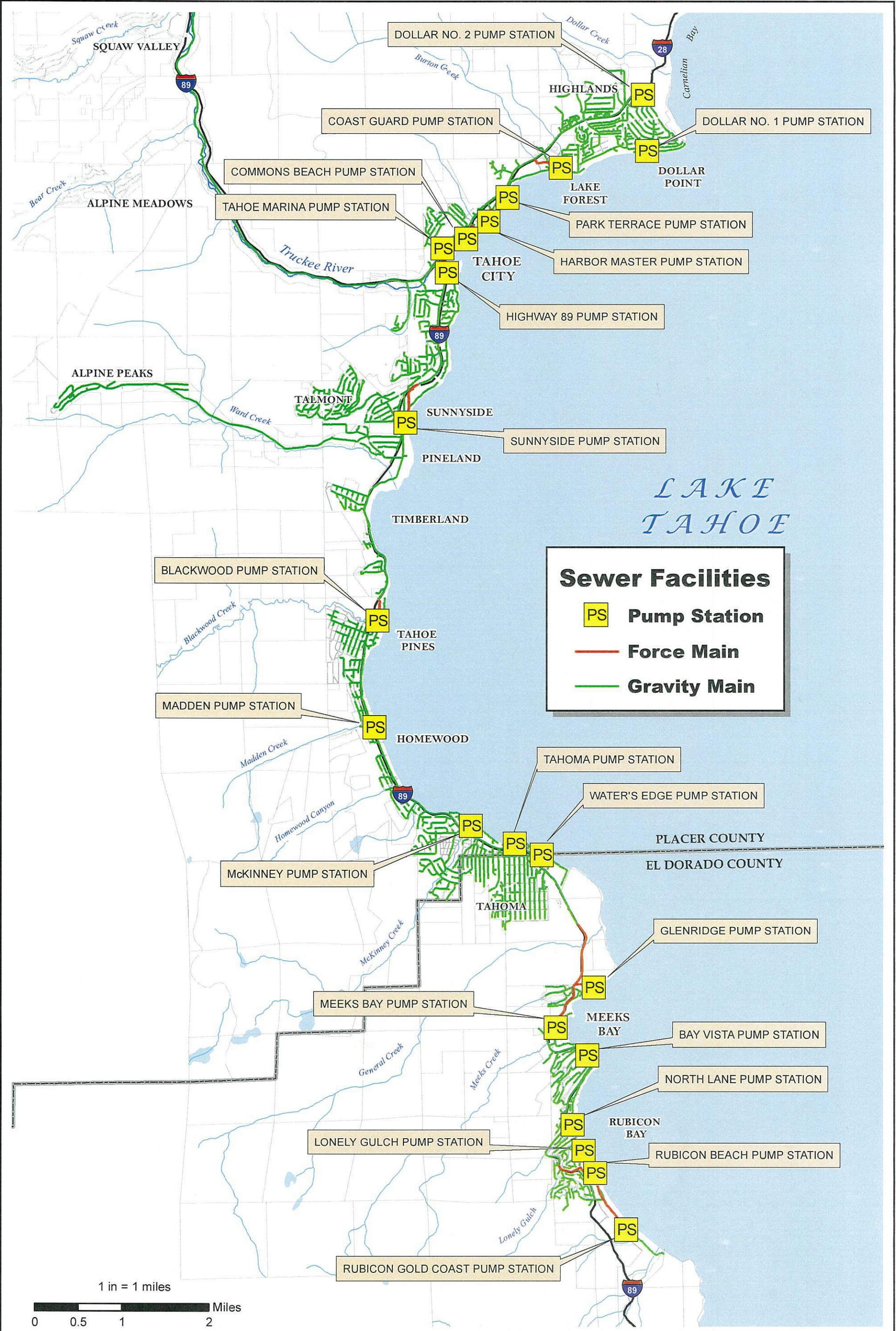
Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Meeks Bay	Main	S&L pumps; vertical motor mount	400	2	1991	X	Milltronics Ultrasonic; level alarm floats	Foxborough w/ chart recorder	Status points only	Caterpillar 125 KW Installed 2007	Concrete Con-vault; 500gal capacity	Upgrade in 1995	No fresh water available. Problems with man-lift to dry well.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Discharges near Sugar Pine Park Boundary
Glenridge	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	Approx. 1970		Original bubblers	None	Status points only	Receptacle for Portable Generator	N/A		Access in winter becomes an issue; Storage available for a couple days; No potable water at site		Discharges into FM from Meeks Bay
Waters Edge	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	Approx. 1970		Original bubblers	None	Status points only	Caterpillar 40KW Generator Installed 2014	Fuel tank incorporated under the base of the generator		No potable water at site		
Tahoma	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	150	2	Approx. 1970		Original bubblers	None	Status points only	Underground power fed from pole at Hwy w/ receptacle for portable generator.	N/A		Large wet well & horizontal storage. No potable water at site.		
McKinney	Main	S&L packaged wet well/dry well; non-clog centrifugal	375	2	1991	X	Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Standby Generator replaced 1995. Caterpillar genset.	Double Walled Steel base tank 350 gal capacity	Upgrade in 1995	Concern about stability of station during creek flooding.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition	
Madden	Main	S&L packaged wet well/dry well; non-clog centrifugal	2500	3	1991 2014 (Pump 3)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 100KW Generator Installed 2009	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995	Takes all flow from Interceptor.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Dual FM - can be valved to either FM or back to station

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Blackwood	Main	S&L packaged wet well/dry well; non-clog centrifugal	2500	3	1991 2014 (Pump 3)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 125KW Generator Installed 2008	Double Walled Steel base tank 250 gal capacity	Upgrade in 1995	Creek bed has been cleaned from debris; stabilized shoreline of creek	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Goes under creek to Highway
Sunnyside	Main	S&L packaged wet well/dry well; non-clog centrifugal	2900	3	2013 (Pump 1 and 3) 1989 (Pump 2)	X	Milltronics Ultrasonic; Submersible Pressure Transducer Backup, high high level alarm float	Badger Magnetic Meter	Status points only	Caterpillar 250KW Generator Installed 2006	Double Walled Steel Vault - Lube Cube™; 350 gal capacity	Upgrade in 1995	Largest PS in District; handles all West Shore flows.	Block bldg with asphalt composition roof overlayed with wood siding; Good condition; Powered elevators in station	Parallel force main installed ~1998 to handle higher flows
Highway 89	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	200	2	1991		Milltronics Ultrasonic; level alarm floats	Badger Magnetic Meter	Status points only	Standby Generator replaced 1992. Caterpillar genset.	Fuel tank incorporated under the base of the generator		Takes flows from lake front Tahoe Tavern condos & a few businesses; dry well outside of bldg, 25ft away. No potable water at site.	15' x 18' outbldg for generator, etc.; built 1989; 15' from PS	
Commons Beach	Satellite	S&L Wet Well Mounted	75	2	2005		Submersible Transducer; level alarm floats	None	Status points only	Receptacle	N/A		Flows received only from restrooms for Commons Beach	Sam building as restrooms occupies north part (back) of building	4" Polyethylene force main from pump station to highway
Marina	Satellite	submersible	100	2	Approx. 1970		Druck Submersible Transducer; level alarm floats		Status points only	Receptacle for portable generator 100-200 ft away	N/A			Block bldg with asphalt composition roof overlayed with wood siding; Good condition	

Designation		Pump Information					Instrumentation and Controls			Standby Power				Related Pipelines	
Harbormaster	Main	S&L packaged wet well/dry well; non-clog centrifugal	275	2	2007	X	Milltronics Ultrasonic; level alarm floats, backup static bubbler system redundant to Milltronics	Siemens Mag Meter	Status points only	Caterpillar 125 KW Installed 2007	Fuel tank incorporated under the base of the generator 250 gal	New 2007	New station installed in 2007 increased storage from 6,000 gallons to 26,000 gallons with 30-inch gravity main.	Concrete building, asphalt composition roof, fire sprinklers; excellent condition	Dual 6" Force Mains PVC C-900, Bypass Ports and Pump Out Port
Park Terrace	Satellite	submersible grinder	100	2	1989		Milltronics Ultrasonic; level alarm floats	None	Status points only	Caterpillar 20KW Installed in 2011	Fuel tank incorporated under the base of the generator 70 gal		Takes flow from small, lake-front area. Pumps to Grove St PS; Pressure washdown the wetwell. Access is a concern; must use private driveway		
Coast Guard	Main	S&L packaged wet well/dry well; non-clog centrifugal	700	2	1991	X	Milltronics Ultrasonic; level alarm floats	Doppler clamp on meter w/ chart recorder	Status points only	Caterpillar 100 KW Installed 2010	Concrete Con-vault; 500gal capacity	Upgrade in 1995	Problems with flow meter.	Block bldg with asphalt composition roofs overlayed with wood siding/good condition. Powered elevators in station.	
Dollar Point No. 1	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	1967		Original bubblers	None	Status points only	Receptacle for portable generator	N/A		Station located on private property at lake's edge; no potable water at the site; pumps run about 2-3 hours/week; station serves serves 40-50 homes		Pumps to Coast Guard
Dollar Point No. 2	Satellite	S&L packaged wet well/dry well; non-clog centrifugal	100	2	1967		Submersible Pressure Transducer with Float Backup	None	Status points only	Caterpillar 55 KW Generator installed 2010	Fuel tank incorporated under the base of the generator 120 gal		Pumps directly to North Shore Interceptor; no potable water at the site		

Exhibit 4-2. Existing Facilities

Exhibit 4-2. Existing Facilities



Sewer Facilities

- PS Pump Station
- Force Main
- Gravity Main

TAHOE CITY PUBLIC UTILITY DISTRICT



P.O. BOX 5249
TAHOE CITY, CA. 96145
(530) 583-3796

**TAHOE CITY PUBLIC UTILITY DISTRICT
SEWER SYSTEM FACILITIES**



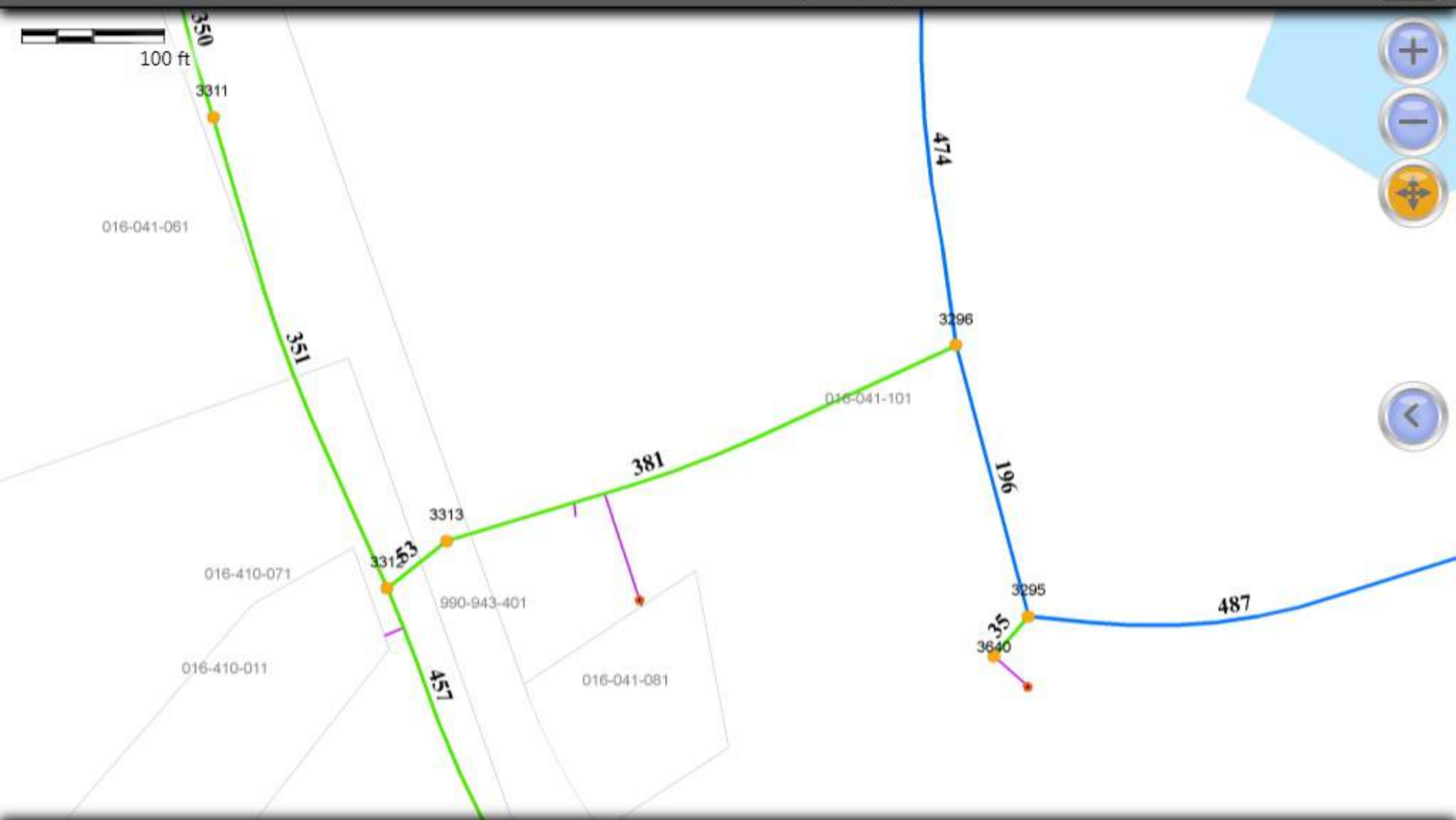
Map prepared by: Sean Barclay
Date: June 30, 2011

Exhibit 4-3. Sample Cleaning Log



View Map

Browse the map display



Tasks



Identify Results

Identify features and view the results



Identify Results: (3)



12122

Original Gravity Main Labels



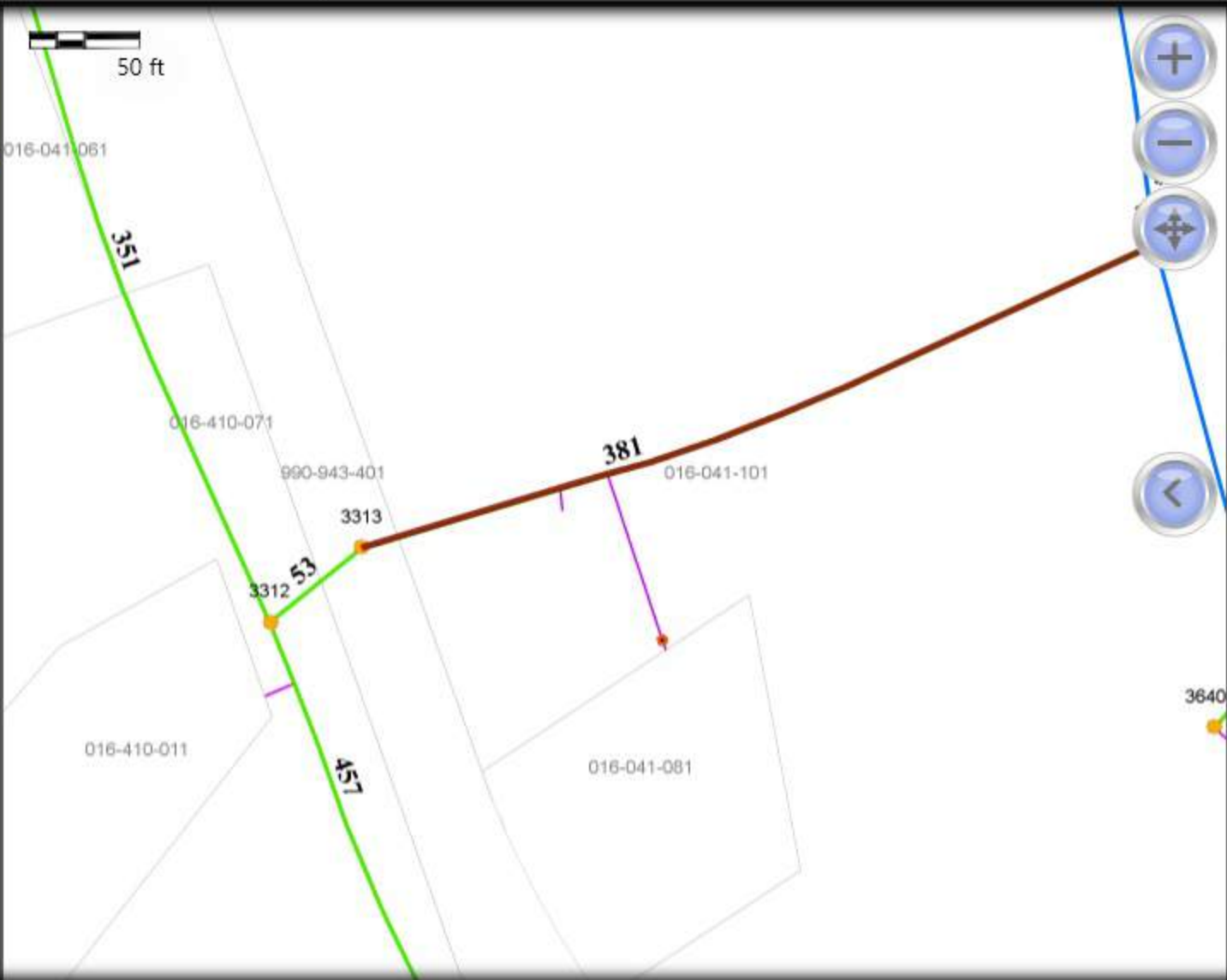
12122

Original Main



STATE HWY 89

Original District Parcels



Map



Attributes

Back

Menu





Edit Attributes

Click an attribute to edit its value



Service Date 5/8/2014 8:19:35 AM >

Service Type <Not Defined> >

Debris Type <Not Defined> >

Debris Severity <Not Defined> >

Work Order Generated <Not Defined> >

Inspection_Notes <Not Defined> >



Map



Attributes

Cancel

Menu

Finish





T:\District Working\Geographic Information Systems\Spatial Data\gdb\Working\Sewer Cleaning.gdb\

Contents Preview Description

OBJECTID	Facility_ID *	Service_Date	Service_Type	Debris_Type	Debris_Severity	Work_Order_Gen	Inspection_Notes	Design_Length	created_user	created_date	last_edited_user	last_edit
1024	11739	10/25/2011 8:47:43 AM	Flush	Sand/Gravel	Medium	No		63				
1025	11740	10/24/2011 1:38:14 PM	Routine Cleaning	Sand/Gravel	Medium	No		419				
1035	11750	10/25/2011 8:46:28 AM	Routine Cleaning	Sand/Gravel	Medium	No		166				
1042	11757	10/24/2011 2:36:14 PM	Routine Cleaning	Sand/Gravel	Light	No		251				
1073	11806	10/31/2011 9:03:08 AM	Routine Cleaning	Sand/Gravel	Light	No		127				
1287	11652	12/12/2011 12:03:14 PM	Routine Cleaning	Sand/Gravel	Medium	No		251				
1404	10002	3/12/2012	High Frequency	Sand/Gravel	Medium	No	0	244				
1405	10003	3/12/2012	High Frequency	Sand/Gravel	Medium	No	0	414				
1408	10006	3/12/2012	High Frequency	Sand/Gravel	Medium	No	0	507				
1442	11652	12/12/2011	Routine Cleaning	Sand/Gravel	Medium	No	0	251				
1560	10099	5/1/2012 1:38:49 PM	High Frequency	Sand/Gravel	Medium	Yes		285				
1562	10268	5/9/2012 1:17:05 PM	Routine Cleaning	Sand/Gravel	Medium	Yes	rocks need to be cleaned out	356				
1567	10526	5/15/2012 3:35:51 PM	Routine Cleaning	Sand/Gravel	Medium	No		256				
1595	10574	5/15/2012 12:58:59 PM	Routine Cleaning	Sand/Gravel	Medium	No		197				
1699	11276	5/7/2012 11:49:13 AM	CCTV	Sand/Gravel	Medium	No		410				
1739	12517	4/18/2012 10:58:24 AM	CCTV	Sand/Gravel	Medium	No		680				
1740	12518	4/18/2012 11:58:37 AM	CCTV	Sand/Gravel	Medium	No		587				
1741	12540	4/17/2012 12:53:16 PM	CCTV	Sand/Gravel	Heavy	No		642				
1742	12541	4/17/2012 12:54:29 PM	CCTV	Sand/Gravel	Heavy	No		172				
1887	12369	6/1/2012 1:05:42 PM	Routine Cleaning	Sand/Gravel	Medium	No		379				
1971	12682	5/30/2012 11:19:18 AM	Routine Cleaning	Sand/Gravel	Medium	No		115				
1976	10002	8/1/2012 1:20:57 PM	High Frequency	Sand/Gravel	Medium	No		244				
1980	10006	8/1/2012 2:06:15 PM	High Frequency	Sand/Gravel	Medium	No		507				
1986	10012	7/17/2012 9:16:13 AM	Routine Cleaning	Sand/Gravel	Medium	No		490				
2034	10069	7/9/2012 2:08:54 PM	Routine Cleaning	Sand/Gravel	Light	No		400				
2070	10127	7/19/2012 1:13:28 PM	Routine Cleaning	Sand/Gravel	Medium	No		158				
2086	10144	7/30/2012 1:31:35 PM	Routine Cleaning	Sand/Gravel	Heavy	No		370				
2087	10145	7/30/2012 1:31:15 PM	Routine Cleaning	Sand/Gravel	Heavy	No		75				
2100	10162	7/10/2012 1:00:06 PM	Routine Cleaning	Sand/Gravel	Light	No		310				
2211	10327	7/25/2012 2:16:07 PM	Routine Cleaning	Sand/Gravel	Light	No		227				
2364	12227	7/2/2012 10:12:12 AM	Routine Cleaning	Sand/Gravel	Medium	No		495				
2365	12228	7/2/2012 9:52:12 AM	Routine Cleaning	Sand/Gravel	Medium	No		361				
2465	12714	7/2/2012 2:08:08 PM	Routine Cleaning	Sand/Gravel	Medium	No		261				
2466	12715	7/2/2012 2:07:45 PM	Routine Cleaning	Sand/Gravel	Medium	No		365				
2467	12716	7/2/2012 2:56:15 PM	Routine Cleaning	Sand/Gravel	Medium	No		93				
2468	12717	7/2/2012 2:50:45 PM	Routine Cleaning	Sand/Gravel	Medium	No		393				
2469	12718	7/2/2012 2:50:24 PM	Routine Cleaning	Sand/Gravel	Medium	No		130				
2521	10678	8/14/2012 3:40:19 PM	Routine Cleaning	Sand/Gravel	Heavy	No		90				
2637	10868	8/14/2012 2:55:32 PM	Routine Cleaning	Sand/Gravel	Light	No		180				
3249	10933	9/24/2012 9:59:49 AM	Routine Cleaning	Sand/Gravel	Medium	No		247				
3277	10992	9/19/2012 11:02:24 AM	Routine Cleaning	Sand/Gravel	Medium	No		422				
3414	12211	10/11/2012 8:21:16 AM	CCTV	Sand/Gravel	Light	No		230				
3451	10005	3/5/2013 2:07:20 PM	High Frequency	Sand/Gravel	Medium	No		299				
3453	10074	3/25/2013 3:12:08 PM	Other	Sand/Gravel	Heavy	No		495				
3457	10292	3/25/2013 3:07:35 PM	Routine Cleaning	Sand/Gravel	Heavy	No		30				
3458	10295	3/7/2013 1:00:16 PM	Routine Cleaning	Sand/Gravel	Heavy	No		137				
3459	10296	3/25/2013 3:09:49 PM	Routine Cleaning	Sand/Gravel	Heavy	No		24				
3460	10297	3/25/2013 3:10:36 PM	Other	Sand/Gravel	Heavy	No		163				

Exhibit 4-4. Sewer System Maintenance Work Plan

Exhibit 4-4. Sewer System Maintenance Work Plan

Tahoe City Public Utility District

Work Order / Activity Description	Department	Work Type
Compressor Air Tanks	Equipment / Vehicles	Equipment Preventative
Generator Exercise - All	Equipment / Vehicles	Equipment Preventative
Generator Load Bank - All	Equipment / Vehicles	Equipment Preventative
Generator Major Service - All	Equipment / Vehicles	Equipment Preventative
Cave Rock Repeater PM	Sewer	Station Preventative
Commons Beach PM	Sewer	Station Preventative
Force Main ARV Inspection	Sewer	Station Preventative
High Frequency Cleaning - 1 month	Sewer	Underground Preventative
High Frequency Cleaning - 12 months	Sewer	Underground Preventative
High Frequency Cleaning - 3 months	Sewer	Underground Preventative
High Frequency Cleaning - 6 months	Sewer	Underground Preventative
JPIA Inspection - Stations	Sewer	Station Preventative
Main Line Cleaning - Tahoe City	Sewer	Underground Preventative
Main Line Cleaning - Zone 1	Sewer	Underground Preventative
Main Line Cleaning - Zone 10	Sewer	Underground Preventative
Main Line Cleaning - Zone 2	Sewer	Underground Preventative
Main Line Cleaning - Zone 4	Sewer	Underground Preventative
Main Line Cleaning - Zone 5	Sewer	Underground Preventative
Main Line Cleaning - Zone 6	Sewer	Underground Preventative
Main Line Cleaning - Zone 7	Sewer	Underground Preventative
Main Line Cleaning - Zone 8	Sewer	Underground Preventative
Odor Control Building PM	Sewer	Station Preventative
Odor Control Building Startup / Shutdown	Sewer	Station Preventative
Offsite Parts Inventory & Inspection	Sewer	Station Preventative
Station - Fire Ext / First Aid Service	Sewer	Station Preventative
Station Bubbler	Sewer	Station Preventative
Station Dewinterize / Valve Exercise	Sewer	Station Preventative
Station E & I PM **	Sewer	Station Preventative
Station E & I SCADA Test	Sewer	Station Preventative
Station Mechanical PM **	Sewer	Station Preventative
Station Read - Sewer	Sewer	Station Preventative
Station Winterize	Sewer	Station Preventative
Wet Well Cleaning / PM **	Sewer	Station Preventative
Wet Well High Frequency Cleaning	Sewer	Station Preventative
Wet Well Inspection	Sewer	Station Preventative
Air Monitor	Utilities General	Utilities General

** Samples provided



TCPUD Utilities Department

Station Preventative

ID <input style="width:80%;" type="text"/>	Logged By <input style="width:80%;" type="text"/>	Status <input style="width:80%;" type="text"/>	Priority <input style="width:80%;" type="text"/>
Service Request <input style="width:80%;" type="text"/>	Type <input style="width:80%; border: 1px solid black;" type="text" value="NA"/>	Begin Date / Time	End Date / Time
Department <input style="width:80%; border: 1px solid black;" type="text" value="Sewer"/>	Work Type <input style="width:80%; border: 1px solid black;" type="text" value="Station Preventative"/>	<input style="width:80%;" type="text"/>	<input style="width:80%;" type="text"/>
Activity Description			
<input style="width:80%; border: 1px solid black;" type="text" value="Station E & I PM"/>			
Location	<input style="width:80%; border: 1px solid black;" type="text"/>		

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Check all lighting off/on		
2	<input type="checkbox"/>	Hand run Pump 1		
3	<input type="checkbox"/>	Hand run Pump 2		
4	<input type="checkbox"/>	Hand run Pump 3		
5	<input type="checkbox"/>	Check for contact ARC		
6	<input type="checkbox"/>	Check for contact chatter		
7	<input type="checkbox"/>	Check for noise and smell		
8	<input type="checkbox"/>	Check overall operation		
9	<input type="checkbox"/>	Check for burned or pitted contacts		
10	<input type="checkbox"/>	Check for coil discoloration		
11	<input type="checkbox"/>	Check for weak spring pressure		
12	<input type="checkbox"/>	Check general operation		
13	<input type="checkbox"/>	Shut off power to station - Run generator 1 hr max	1 hour maximum run time	
14	<input type="checkbox"/>	Record prestart reading in log book		
15	<input type="checkbox"/>	Check mechanical & electrical operation		
16	<input type="checkbox"/>	Clean & lube moving parts		
17	<input type="checkbox"/>	Check generator & record shut down reading in log book		
18	<input type="checkbox"/>	Check transfer back to line power		
19	<input type="checkbox"/>	Check volts & amps		
20	<input type="checkbox"/>	Create repair work order if needed		
21	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Assets			
Asset ID	Layer or Facility	GIS Location	Label / Name
1	ssPumpStation	DOLLAR NO. 1 PUMP STATION	DOLLAR NO. 1 PUMP STATION
10	ssPumpStation	HIGHWAY 89 PUMP STATION	HIGHWAY 89 PUMP STATION
11	ssPumpStation	SUNNYSIDE PUMP STATION	SUNNYSIDE PUMP STATION
12	ssPumpStation	BLACKWOOD PUMP STATION	BLACKWOOD PUMP STATION
13	ssPumpStation	MADDEN PUMP STATION	MADDEN PUMP STATION
14	ssPumpStation	McKINNEY PUMP STATION	McKINNEY PUMP STATION
15	ssPumpStation	TAHOMA PUMP STATION	TAHOMA PUMP STATION
16	ssPumpStation	WATER'S EDGE PUMP STATION	WATER'S EDGE PUMP STATION
17	ssPumpStation	GLENRIDGE PUMP STATION	GLENRIDGE PUMP STATION
18	ssPumpStation	MEEKS BAY PUMP STATION	MEEKS BAY PUMP STATION
19	ssPumpStation	BAY VISTA PUMP STATION	BAY VISTA PUMP STATION
2	ssPumpStation	DOLLAR NO. 2 PUMP STATION	DOLLAR NO. 2 PUMP STATION
20	ssPumpStation	NORTH LANE PUMP STATION	NORTH LANE PUMP STATION
21	ssPumpStation	LONELY GULCH PUMP STATION	LONELY GULCH PUMP STATION
22	ssPumpStation	RUBICON BEACH PUMP STATION	RUBICON BEACH PUMP STATION
23	ssPumpStation	RUBICON GOLD COAST PUMP STATION	RUBICON GOLD COAST PUMP STATION
24	ssPumpStation	Odor Control Station	Odor Control Station
4	ssPumpStation	COAST GUARD PUMP STATION	COAST GUARD PUMP STATION
6	ssPumpStation	PARK TERRACE PUMP STATION	PARK TERRACE PUMP STATION
7	ssPumpStation	HARBOR MASTER PUMP STATION	HARBOR MASTER PUMP STATION
8	ssPumpStation	COMMONS BEACH PUMP STATION	COMMONS BEACH PUMP STATION
9	ssPumpStation	TAHOE MARINA PUMP STATION	TAHOE MARINA PUMP STATION



TCPUD Utilities Department

ID	<input type="text"/>	Logged By	<input type="text"/>	<input type="text"/>	Status	<input type="text"/>	Priority	<input type="text"/>
Service Request	<input type="text"/>	Type	<input type="text"/>		Begin Date / Time	<input type="text"/>		
Department	<input type="text" value="Sewer"/>		Work Type	<input type="text" value="Station Preventative"/>		<input type="text"/>		
Activity Description	<input type="text" value="Station Mechanical PM"/>							
Location	<input type="text"/>							

JAN	MAR	MAY
JUL	SEP	NOV

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Clean station, mop floor, wipe equipment down		
2	<input type="checkbox"/>	Empty & remove trash		
3	<input type="checkbox"/>	Check all lighting off/on		
4	<input type="checkbox"/>	Check Fire Extinguisher-remove invert & replace		
5	<input type="checkbox"/>	Check first aid kit		
6	<input type="checkbox"/>	Check dehumidifier system		
7	<input type="checkbox"/>	Check bubbler system, bleed water		
8	<input type="checkbox"/>	Check & service sump pump		
9	<input type="checkbox"/>	Check vent system, lube meter if needed		
10	<input type="checkbox"/>	Hand run pump 1		
11	<input type="checkbox"/>	Hand run pump 2		
12	<input type="checkbox"/>	Hand run pump 3		
13	<input type="checkbox"/>	Check plumbing-pumps, motors, valves, flanges		
14	<input type="checkbox"/>	Check water hammer, leaks, noises		

Tasks

Order	Completed	Description	Notes	DateCompleted
15	<input type="checkbox"/>	Check all drum levels		
16	<input type="checkbox"/>	Check elevator-use elevator control & remote control-check for bumps, noise, etc		
17	<input type="checkbox"/>	Chlorination check		
18	<input type="checkbox"/>	Safety check & sign log		
19	<input type="checkbox"/>	Create repair work order if necessary		
20	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Assets

Asset ID	Layer or Facility	GIS Location	Label / Name
1	ssPumpStation	DOLLAR NO. 1 PUMP STATION	DOLLAR NO. 1 PUMP STATION
10	ssPumpStation	HIGHWAY 89 PUMP STATION	HIGHWAY 89 PUMP STATION
11	ssPumpStation	SUNNYSIDE PUMP STATION	SUNNYSIDE PUMP STATION
12	ssPumpStation	BLACKWOOD PUMP STATION	BLACKWOOD PUMP STATION
13	ssPumpStation	MADDEN PUMP STATION	MADDEN PUMP STATION
14	ssPumpStation	McKINNEY PUMP STATION	McKINNEY PUMP STATION
15	ssPumpStation	TAHOMA PUMP STATION	TAHOMA PUMP STATION
16	ssPumpStation	WATER'S EDGE PUMP STATION	WATER'S EDGE PUMP STATION
17	ssPumpStation	GLENRIDGE PUMP STATION	GLENRIDGE PUMP STATION
18	ssPumpStation	MEEKS BAY PUMP STATION	MEEKS BAY PUMP STATION
19	ssPumpStation	BAY VISTA PUMP STATION	BAY VISTA PUMP STATION
2	ssPumpStation	DOLLAR NO. 2 PUMP STATION	DOLLAR NO. 2 PUMP STATION
20	ssPumpStation	NORTH LANE PUMP STATION	NORTH LANE PUMP STATION
21	ssPumpStation	LONELY GULCH PUMP STATION	LONELY GULCH PUMP STATION
22	ssPumpStation	RUBICON BEACH PUMP STATION	RUBICON BEACH PUMP STATION
23	ssPumpStation	RUBICON GOLD COAST PUMP STATION	RUBICON GOLD COAST PUMP STATION
4	ssPumpStation	COAST GUARD PUMP STATION	COAST GUARD PUMP STATION
6	ssPumpStation	PARK TERRACE PUMP STATION	PARK TERRACE PUMP STATION
7	ssPumpStation	HARBOR MASTER PUMP STATION	HARBOR MASTER PUMP STATION
8	ssPumpStation	COMMONS BEACH PUMP STATION	COMMONS BEACH PUMP STATION
9	ssPumpStation	TAHOE MARINA PUMP STATION	TAHOE MARINA PUMP STATION



TCPUD Utilities Department

Station Preventative

ID	<input type="text"/>	Logged By	<input type="text"/>	<input type="text"/>	Status	<input type="text"/>	Priority	<input type="text"/>
Service Request	<input type="text"/>	Type	NA		Begin Date / Time	<input type="text"/>		
		Department	Sewer		End Date / Time	<input type="text"/>		
Activity Description		Work Type	Station Preventative		Yearly in Oct			
Wet Well Cleaning / PM								
Location	<input type="text"/>							

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks

Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Visually inspect for grease etc.	Yearly in Oct	
2	<input type="checkbox"/>	Clean wet well		
3	<input type="checkbox"/>	Create REPAIR work order	if needed	
4	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Assets

Asset ID	Layer or Facility	GIS Location	Label / Name
1013	ssWetwell	U5-1-42	Dollar No. 1 P.S.
1294	ssWetwell	U18-1-18	Coast Guard P.S.
1300	ssWetwell	U5-1-42	Dollar No. 2 P.S.
1729	ssWetwell	U1-5-2	Highway 89 Pump Station
2465	ssWetwell	U8-1-11	Blackwood P.S.
2634	ssWetwell	U16-1-13	Madden P.S.
2645	ssWetwell	U15-1-12	Sunnyside P.S.
2870	ssWetwell	U16-1-28	McKinnney P.S.
2967	ssWetwell	U9-1-49	Tahoma Pump Station
3198	ssWetwell	U10-1-16	Water's Edge Pump Station
3255	ssWetwell	U13-1-4	Glenridge P.S.
3300	ssWetwell	U17-1-8	Meeks Bay P.S.
3377	ssWetwell	U11-1-8	Bay Vista Pump Station
3412	ssWetwell	U11-1-15	North Lane P.S.
3464	ssWetwell	U11-1-19	Lonely Gulch P.S.
3507	ssWetwell	U12-1-18	Rubicon P.S.
3527	ssWetwell	U17-1-21	Rubicon Pump Station
3674	ssWetwell	U31-27-21	Commons Beach
3675	ssWetwell	U31-14-1	Park Terrace
3676	ssWetwell	U31-24-1	Tahoe Marina

Exhibit 4-5. Capital Improvement Plan

TCPUD
Sewer Capital Plan

All Budget Estimates are in 2009 Dollars				2009 Actual		2010 Actual		2011 Actual		2012 Actual		2013 Projected		Budget 2014		2015		2016		2017		2018		Project Total	
Asset Category	Upgrade or Replacement	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Phase	Project Budget	Project Total	
PROGRAMATIC PROJECTS																									
8350	Line Replacement/Sliplining	Collection	Replacement	P&D/CONST		P&D/CONST	\$ 7,205	P&D/CONST	\$ 48,616	P&D/CONST	\$ 30,825	P&D/CONST	\$ 49,965	P&D/CONST	\$ 125,000	P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	\$ 561,611	
	Manhole Rehabilitation	Collection	Replacement	P&D/CONST	\$ -	P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	P&D/CONST	\$ 75,000	\$ 97,800	
	Lateral Repairs	Collection	Replacement	P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		P&D/CONST		\$ -	
NA	Public Projects Relocations/Upgrades (EIP)	All	Replacement				\$ -		\$ -		\$ -		\$ -		\$ 97,800		\$ -		\$ -		\$ -		\$ -	\$ 97,800	
SUBTOTAL					\$ -		\$ 7,205		\$ 48,616		\$ 30,825		\$ 49,965		\$ 222,800		\$ 75,000		\$ 75,000		\$ 75,000		\$ 75,000	\$ 659,411	
ENGINEERING PROJECTS																									
X	8335	TRPA BMP Projects (District-Owned Sewer Facilities)	Transmission	Upgrade	P&D/CONST	\$ 21,313		P&D/CONST	\$ 933	P&D/CONST	\$ 125	P&D/CONST	\$ -											\$ 22,371	
	8407	Admin Building TRPA BMP Project (42.5% Sewer Share)	All	Upgrade									\$ 321	P&D/CONST	\$ 8,151	CONST	\$ 84,776							\$ 93,248	
	8330	WS Export Truckee River Crossing Repair	Transmission	Replacement						P&D	\$ 41,254	P&D	\$ 24,336	P&D/CONST	\$ 5,695	P&D	\$ 413,915	CONST	\$ 784,350					\$ 1,269,550	
	8315	Tahoe City Residential Sewer System Rehabilitation	Collection	Replacement						PRELIM	\$ 205					P&D/CONST	\$ 285,225	CONST	\$ 1,479,619					\$ 1,765,049	
		Jackpine Drive SLR	Collection	Replacement																					
		Pioneer Drive SLR	Collection	Replacement																					
	8358	Golf Course SLR	Collection	Replacement												P&D	\$ 93,345	CONST	\$ 449,580					\$ 542,925	
	8331	Dollar/Edgewater Lakefront SLR	Collection	Replacement												P&D	\$ 168,480	CONST	\$ 736,320					\$ 904,800	
	8356	Beach (Julie) Lane Paving and BMPs	Transmission	Upgrade						P&D	\$ 2,920	P&D/CONST	\$ 14,190	CONST	\$ 10,085	CONST	\$ 18,880							\$ 46,075	
	8360	Dollar 1 (Edgewater) Backup Power	Transmission	Upgrade						PRELIM	\$ 1,020					P&D/CONST	\$ 120,360							\$ 121,380	
	8357	Emergency Bypass Facilities (Pump Stations)	Transmission	Upgrade												P&D	\$ 129,720	CONST	\$ 665,520					\$ 795,240	
		Emergency Bypass Facilities (Force Mains)	Transmission	Upgrade																					
		Satellite Pump Station Overflow Wet Wells	Transmission	Upgrade												P&D	\$ 79,560	CONST	\$ 361,080					\$ 440,640	
	8359	Metering Manholes	Collection	Upgrade													P&D	\$ 75,600	CONST	\$ 637,200				\$ 712,800	
		West Shore H2S Control Facilities	Transmission	Upgrade													P&D/CONST	\$ 40,000						\$ 40,000	
		Projects as Defined by Future Sewer Master Plan	All	Both														CONST	\$ 1,500,000	CONST	\$ 1,500,000	CONST	\$ 1,500,000	\$ 4,500,000	
SUBTOTAL					\$ 21,313		\$ 933		\$ 45,524		\$ 38,846		\$ 23,931		\$ 1,394,261		\$ 4,592,069		\$ 2,137,200		\$ 1,500,000		\$ 1,500,000	\$ 11,254,078	
OPERATIONAL PROJECTS																									
X	NA	Lateral TV Camera Replacement	Equipment	Replacement	PURCH	\$ 15,000																		\$ 15,000	
X	NA	Mini-Excavator	Equipment	Upgrade	PURCH	\$ 45,000																		\$ 45,000	
X	8325	Madden Genset Replacement	Transmission	Replacement	P&D/CONST	\$ 46,952																		\$ 46,952	
X	NA	Snowmobile Replacements	Equipment	Upgrade	PURCH	\$ 10,000																		\$ 20,000	
X	8328	Coast Guard Genset Replacement	Transmission	Replacement			P&D/CONST	\$ 39,408																\$ 39,408	
X	8327	Dollar 2 Backup Power	Transmission	Upgrade			P&D/CONST	\$ 7,811																\$ 7,811	
X	8326	Park Terrace Backup Power	Transmission	Upgrade			P&D/CONST	\$ 2,393	P&D/CONST	\$ 18,023														\$ 20,416	
X	NA	Rubicon Beach Corrosion Control	Transmission	Replacement						CONST	\$ 20,383													\$ 20,383	
X	NA	Fuel System Upgrade (20% Reimbursement from NTFPD)	Equipment	Upgrade						PURCH	\$ 13,610													\$ 13,610	
X	NA	Fueling Station Replacement (20% from NTFPD)	Equipment	Upgrade						CONST	\$ 39,803													\$ 39,803	
X	8307	Easement Line Cleaning Machine	Equipment	Upgrade						Eliminate	\$ -													\$ -	
	8329	Sunnyside Pump & Control Upgrades	Transmission	Upgrade						P&D/CONST	\$ 201,655	P&D/CONST	\$ 61,117											\$ 262,772	
	NA	Portable Sewer Flow Meters	Equipment	Upgrade									PURCH	\$ 10,000										\$ 10,000	
	NA	Spare Pumps	Equipment	Upgrade									PURCH	\$ 20,000										\$ 20,000	
	8314	Pump Station Flow Meters	Transmission	Replacement			P&D/CONST	\$ 3,566	P&D/CONST	\$ 25,549	P&D/CONST	\$ 82,349	P&D/CONST	\$ 51,092	CONST	\$ 56,300	CONST	\$ 56,300						\$ 275,156	
	8316	Blackwood Pump & Control Upgrades	Transmission	Upgrade									P&D/CONST	\$ 102,046	P&D/CONST	\$ 14,000								\$ 116,046	
	8317	Madden Pump & Control Upgrades	Transmission	Upgrade									P&D/CONST	\$ 102,750	P&D/CONST	\$ 15,000								\$ 117,750	
	8345	Satellite Pump Station Controls	Transmission	Replacement						P&D/CONST	\$ 4,378	P&D/CONST	\$ 16,738	P&D/CONST	\$ 73,000	P&D/CONST	\$ 45,000								\$ 139,114
	8334	Transfer Switch Replacement	Transmission	Replacement											P&D/CONST	\$ 51,000	P&D/CONST	\$ 51,000						\$ 102,000	
	8332	Marina Backup Power	Transmission	Upgrade											P&D/CONST	\$ 34,000								\$ 34,000	
	NA	Portable Pump	Equipment	Upgrade											PURCH	\$ 40,000								\$ 40,000	
	NA	Bypass Trailer	Equipment	Upgrade											PURCH	\$ 40,000								\$ 40,000	
	NA	Spill Response Trailer	Equipment	Upgrade											PURCH	\$ 25,000								\$ 25,000	
	NA	Glenridge Pump Station Access Road Paving (Dist. Share)	Transmission	Upgrade											PURCH	\$ 15,000								\$ 15,000	
	NA	Second Mainline Camera for TV Van	Equipment	Upgrade											PURCH	\$ 20,000								\$ 20,000	
	NA	Lateral TV Camera For TV Van	Equipment	Upgrade											PURCH	\$ 12,000								\$ 12,000	
	NA	Maintenance Yard Fencing Replacement (25% Sewer Share)	Equipment	Replacement											PURCH	\$ 10,000								\$ 10,000	
		Equipment or Facility Replacement/Upgrades	All	Replacement													CONST	\$ 100,000	CONST	\$ 100,000	CONST	\$ 100,000	CONST	\$ 100,000	\$ 400,000
SUBTOTAL					\$ 116,952		\$ 63,178		\$ 117,368		\$ 288,382		\$ 363,741		\$ 405,300		\$ 252,300		\$ 100,000		\$ 100,000		\$ 100,000	\$ 1,907,221	
GRAND TOTAL EXPENDITURES																									
				2009	\$ 138,265	2010	\$ 71,316	2011	\$ 211,508	2012	\$ 358,054	2013	\$ 437,637.31	2014	\$ 2,022,361.33	2015	\$ 4,919,369	2016	\$ 2,312,200	2017	\$ 1,675,000	2018	\$ 1,675,000	\$ 13,820,709.84	
					\$ 365,000		\$ 909,610		\$ 1,042,040		\$ 1,806,581														
Original Budget per Approved Rate Study 5-Year CIP (Jan-09)					\$ 365,000		\$ 847,560		\$ 970,660		\$ 1,863,756		\$ 1,824,960		NA		NA		NA		NA		NA		
SURPLUS (DEFICIT) TO RATE STUDY TARGET					\$ 226,735		\$ 776,244		\$ 759,152		\$ 1,505,702		\$ 1,387,323		NA		NA		NA		NA		NA		
Projects Moved/Included in Operating Expense Budgets																									
7051	Sewer Master Plan	All	Replacement																					Below	
	Pump Station Physical Assessments (Wet, Dry, FMs)	Transmission	Replacement													P&D	\$ 100,000							\$ 100,000	
	Wet Well Minor Repairs (During Assessment)	Transmission	Replacement													P&D	\$ 125,000							\$ 125,000	
	AC Pipe Corrosion Investigation	Transmission	Replacement													P&D	\$ 20,000							\$ 20,000	
	Storage Capacity Assessment	Transmission	Replacement													P&D	\$ 40,000							\$ 40,000	
	Seismic Review of Pump Stations	Transmission	Replacement													P&D	\$ 25,000							\$ 25,000	
	Sewer Master Plan Report	All	Replacement													P&D	\$ 190,000							\$ 190,000	
		Collection	Replacement																					\$ -	
SUBTOTAL					\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ 500,000		\$ -		\$ -		\$ -	\$ 500,000	

Exhibit 4-6. Contingency Equipment

Appendix I
Emergency Equipment

OUTSIDE AID

TABLE I-1

STANDBY PUMP SUPPLIERS

Phone

U.S. Rentals Reno, NV	(775) 359-6660
Carson/South Lake Tahoe (United Rental)	(530) 541-2130
Sunbelt (Roseville)	(775) 331-2121
Rain for Rent, Stockton, CA	(209) 466-5602
Pacific Machine Co. Inc., Sacramento, CA	(916) 387-1336
<u>H&E Equipment, Reno, NV</u>	<u>(775) 358-3323</u>
<u>Cashman Equipment</u>	<u>(775) 332-5450, (775) 358-5111</u>

TABLE I-2

PORTABLE GENERATORS

Phone

Nevada Generator Systems	(775) 356-8010 24 Hrs HM (775) 825-1184
Cashman Equipment	(775) 332-5450, <u>(775) 358-5111</u>

TABLE I-3

TANK TRUCKS - EMERGENCY EQUIPMENT

Phone

Cruz Excavating	(775)831-1170
Par Electric (Bob)	(775) 329-0407
Granite Construction (Donavon Greenwell)	(775)358-8792 office
Waters Vacuum Tank & Truck (Steve McCoy)	(775)825-1595 (775)376 3699
Truckee North Tahoe Materials	(530)582-3600, (530) 550-2350
Roto Rooter	(775)588.2406

TABLE I-4

TOWING SERVICES

Phone

North Shore

Alpine Towing	(775) 833-9777
High Sierra Towing, Truckee	(530) 587-0488

Milne Towing, Truckee	(530) 587-6000
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Dependable Towing, Truckee	(530) 587-5292
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South Tahoe

Running Bear Towing	(775) 972-5114, (530)587-7189
Emerald Bay Towing	(775) 544-2993

TABLE I-5

WATER TRUCKS

Water's Vacuum Tank Trucks
Water's Water Trucks

Phone

(775) 825-1595 & (530) 587-7794
(530) 587-7994

TABLE I-6

WELDING SERVICES

Alpine Metal

Phone

(530) 541-4180

Joel's Welding & Fabrication

(530) 546-2344

TABLE I-7

CONTAINMENT MATERIALS (STRAW **Phone**
BALE SUPPLIERS)

Benson Feed & Tack, Carson City

(775) 882-3999

Al Pombo Trucking, Truckee

(530) 587-4112

**SUPPLIES AND EQUIPMENT AVAILABLE FOR
EMERGENCY USE FROM OTHER AGENCIES**

TABLE I-8

PORTABLE PUMPS

AGENCY/QUANTITY

EQUIPMENT

Alpine Springs County Water District

- 2 2" Gas powered Pumps

Douglas County Sewer Improvement District No. 1

- 2 3" Gasoline Driven Pumps
- 1 2" Submersible Electric Pump
- 1 3" Submersible Electric Pump
- 1 Godwin 6" Dri Prime Diesel Pump

Incline Village General Improvement District

- 1 4" Trash Pump, Godwin 300GPM @ 75' head
- 1 2.5" pump (water only) 100 GPM
- 1 6" Gorman trailer-mounted diesel, 1100 GPM
- 2 1-1/2" Centrifugal Pump (sewer or water), 50 GPM
- 2 500 GPM hydraulic operated trash pumps with power units

Kingsbury General Improvement District

- 1 4" 800 GPM Hydraulic Submersible Pump with power unit
- 1 2 1/2" Air-powered submersible pump

North Star CSD

- 1 2" 3.5 HP Honda pump 150 GPM. 250 feet of 2" discharge hose
- 1 2" 5 HP Honda trash pump 180 GPM 100. 100 feet of 2" discharge hose

North Tahoe Public Utility District

- 1 8" Godwin Sewer Pump
- 1 1-1/2" 2 cycle Homelite 200 GPM
- 1 1-1/2" 2 cycle Homelite 192 GPM
- 2 3" 5 HP Diaphragm Pump, 50 GPM

- 1 2" Gorman Rupp Trash Pump, 100 GPM
- 1 4" trailer-mount G-R Pump (potable water only) 800 GPM

Squaw Valley Public Services District

- 1 2" Honda, gasoline-powered Water Pump, 180 GPM
- 1 6" Trash Pump, Trailer Mounted, Diesel, 1100 GPM
- 1 2" Rupp gas-powered Trash Pump, 10 hp, 200 GPM

South Tahoe Public Utility District

Sewer Pumps:

- 2 8" Godwin Trash Pump - 2000 GPM
- 1 20 HP Submersible Pump, 1600 GPM @ 12' to be used with 100 KW Generator

Tahoe City Public Utility District

Fresh Water Pumps:

- 1
- 2
- 1 50 HP Berkeley Horizontal 400 GPM

Trash Pumps:

- 2 3" Hydraulic operated Submersible Pumps 300 GPM @ 30'
- 1 2" Hydraulic operated Submersible Pump 300 GPM @ 30'
- 1 3" Honda Centrifugal Pump 250 GPM @ 15'

Tahoe-Truckee Sanitation Agency

- 1 10" Peabody Barnes centrifugal pump, 4 MGD, 80' shutoff head
- 1 12" Gorman-Rupp centrifugal pump, 5 MGD, 100 foot shutoff head, 3420 feet of 12" irrigation type discharge pipe
- 6 3" Honda 326 GPM

Truckee Sanitary District

- 1 3" Teel electric diaphragm 110v
- 2 3" Hydraulic Trash Pump for use with Vactor
- 1 1-1/2" Homelite 50 feet of discharge hose
- 1 3" Homelite Gas 360 GPM, 50' of 4" Discharge hose
- 0 30 HP, 240 VAC, 3-phase Pump, 1000 GPM at 55' discharge head, trailer-mounted. Will handle 3" solids. Suction hose plus 60' of discharge hose.
- 1 6" Godwin Pump, trailer mount 1500 GPM
- 1 4" Godwin Pump, trailer mount 475 GPM
- 2 8' x 6" bypass traffic ramps
- 1800' pf 6", 200 psi, Lay flat bypass hose on trailer
- 1 3" hose trailer 1520 ft. Hose & Pump

U.S. Eorest Service - South Lake Tahoe

- 1 Mark III 60 GPM Pacific Pumper
- 2 small 4-cycle Pumps, 40 GPM est.
- 1 4-cylinder Pump, 500 GPM est.
- 1 500 gallon Water Trailer
- 1 Homelite 385 GPM Trash Pump

TABLE I-9
PORTABLE GENERATORS
AGENCY/QUANTITY

EQUIPMENT

Alpine Springs County Water District

- 1 110 volt, 15 amp (2200watt)
- 1 480 volt, 3 phase, 60 amp, trailer-mounted

Incline Village General Improvement District

- 1 5 KW 100/220 volt Generator with gas engine
- 1 45 KW volt Generator, quick change
- 2 100 KW generator on trailer diesel powered

Kingsbury General Improvement District

- 1 4 KW, 110/220 volt

North Tahoe Public Utility District

- 2 Detroit Diesel D-30, 25 KW
- 1 Kato 3 phase, 60 amp, 120/240 volt, trailer-mounted
- 1 Kato 3 phase, 480 volt, 60 amp
- 2 Generators, AC 3500

Northstar CSD

- 1 5 KW Honda
- 1 1 KW Honda

South Tahoe Public Utility District

- 1 Deutsche 50 KW single or 3 phase-trailer mounted
- 1 Onan, 120/240 volt, trailer-mounted, 7KW
- 1 100 KW, 480/240, 3 phase katolight and 240/120 1 phase portable lights
- 2 250 KW portables trailer mounted
 - .1 - katolite
 - .1 - DMT

Squaw Valley Public Services District

- 1 Mobile 50 KVA, 3 phase, 480/220 (out of service)
- 1 Honda EB 650 110/220 gasoline Portable Generator

Tahoe City Public Utility District

- 1 Baldor 110/240/480 Volt 175KW Diesel Portable Generator
- 2 Coleman Quiet-Pak 40 KVA 110/220/480
- 1 Cat, 125 KVA

Truckee Sanitary District

- 1 150 KW trailer-mounted, 3 phase, 240/480 volt
- 2 75 KW trailer-mounted, 3 phase, 240/480 volt
- 1 7.5 KW Powerchief, 1 phase, 240/120 volt

- 1 2500 Watt Briggs & Stratton, 1 phase, 120 volt
- 1 Honda 650 Watt w/light set, 110 volt
- 1 Honda 4000 Watt, 240/120 volt
- 1 20KW trailer mount, 3 phase, 240 volt

Tahoe Truckee Sanitation Agency

- 1 Honda 2000 Watt, 120 volt
- 1 Honda 3500 Watt, 120/240 volt
- 1 Honda 5000 Watt, 120/240 volt
- 1 Honda 6500 Watt, 120/240 volt
- 1 Honda 650 Watt w/light set, 100 volt
- 1 Honda 4000 Watt, 120/240 volt
- 1 Onan Generator, 4000 Watt, 110 volt, mounted on TRI truck

TABLE I-10

FUEL ON HAND

AGENCY/TYPE OF FUEL

QUANTITY

Alpine Springs County Water District

Diesel Fuel 500 gallons
Unleaded Gasoline 500 gallons

Douglas County Sewer Improvement District No. 1

Diesel Fuel 5,000 gallons
Unleaded Gasoline 500 gallons

Incline Village General Improvement District

Diesel Fuel 2,000 gallons
Unleaded Gasoline 2,000 gallons

Kingsbury General Improvement District

Diesel Fuel 1,000 gallons
Unleaded Gasoline 250 gallons

North Tahoe Public Utility District

Diesel Fuel 1,000 gallons
Unleaded Gasoline 1,500 gallons

Northstar CSD

Diesel Fuel 2,000 gallons
Unleaded Gasoline 1,000 gallons
Kerosene 50 gallons
Propane 50 gallons

South Tahoe Public Utility District

Diesel Fuel 10,000 gallons
Unleaded Gasoline 2,000 gallons
Diesel All Truck Mounted 4-100 gallons

Squaw Valley Public Services District

Diesel Fuel 500 gallons
Unleaded Gasoline 500 gallons

Tahoe City Public Utility District

Diesel Fuel 3,000 gallons
Unleaded Gasoline 3,000 gallons

Tahoe-Truckee Sanitation Agency

Diesel Fuel 21,000 gallons (maximum)
Unleaded Gasoline 1,000 gallons

Truckee Sanitary District

Diesel Fuel 1,500 gallons
Unleaded Gasoline 2,500 gallons

TABLE I-11
CHEMICALS ON HAND
AGENCY/QUANTITY

CHEMICAL

Incline Village General Improvement District

250 gallons Cationic Polymer
4000 gallons Sodium Hypochlorite (12%)
2 - 100 LB drums Calcium Hypochlorite

Kingsbury General Improvement District

4 - 5 gallon barrels Calcium Thiosulfate

North Tahoe Public Utility District

Liquid Chlorine
Calcium Hypochlorite
32 - 150 LB Chlorine cylinders

Northstar CSD

4- 55 gallon containers 12.5% Sodium Hypochlorite
1 - 500 gallon container 12.5% Sodium Hypochlorite
1 55 gallon container Citric Acid

1 - 2,000 gallons "Bioxide" (H2s control)

South Tahoe Public Utility District

3000 to 20,000 gallons 12% Sodium Hypochlorite solution

20 barrels	Sodium Hypochlorite
500 to 6000 gallons	20% Caustic Soda Solution
275 to 3300 gallons	Emulsion Cationic Polymer

Tahoe City Public Utility District

5 - 5 gallon carboys	12% Sodium Hypochlorite
5- 30 gallon barrels	12% Sodium Hypochlorite

Tahoe-Truckee Sanitation Agency

4,200 gallons	Alum
25 tons	Lime
7100 gallons	NaOH
3600 gallons	H2SO4
4500 gallons	HCl
12 - 1 ton cylinders	Chlorine
2500 gallons	FeCl
15 tons	Soda Ash
17,000 gallons	Methanol
500 gallons	Polymer
15 tons	Salt

Douglas County Sewer Improvement District

9 - 150 LB	chlorine cylinders
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TABLE I-12
HEAVY EQUIPMENT
AGENCY/QUANTITY

EQUIPMENT

Alpine Springs County Water District

1	416 C 4X4 Cat Backhoe
1	Dump truck, 5 cu yard, International

Douglas County Sewer Improvement District

1	one-ton dump truck
1	Loader, Case w/14

Incline Village General Improvement District

1	Dump Truck 2WD 3 axle, 12 yard
1	Dump truck, 4wd, 2 axle, 8 yard
1	Fork lift, 5000 LB 4WD, towable
2	Hydro flusher/vacuum truck (2 - 2WD)
1	Loader backhoe, CAT 436
3	Loader Cat, 950 w/buckets & snowblades
1	20 Ton Equipment Trailer
1	10 ton gooseneck trailer

Kingsbury General Improvement District

- 1 Dump Truck, 12 yard
- 1 Vactor Truck 10 yard w/jetrodder
- 1 Vactor Truck 4WD, 12 yard w/jetrodder
- 1 Hot Asphalt Box, 3 yard
- 1 4wd Case 580 Loader Backhoe, w/4 in 1 Bucket and extendahoe w/thumb
- 1 4wd 214 JCB Backhoe w/ 4 in 1 bucket and extendahoe
- 1 4wd Case 531D Loader w/QD 4 in 1 bucket and forks
- 1 4wd F-550 Dump Truck w/hydraulic tool circuit and plow
- 1 3yd Regenerative air street sweeper

North Tahoe Public Utility District

- 1 CASE 580 - Loader backhoe, w/4 in 1 bucket
- 1 JD510C loader backhoe, 4 WD, w/4-in-one bucket
- 1 Crane truck - 8 ton with arc welder
- 1 Dump truck, 10-yard
- 1 Dump truck, 5-yard
- 1 Flatbed, 2-ton w/lift gates w/hydraulic equipment
- 1 Fork lift, Clark
- 2 Hydro flusher/vacuum truck, vactor
- 1 Loader, JD 544B
- 1 Snowcat, LMC
- 1 Trailer, 8-ton flatbed
- 1 One Ton Flatbed w/ lift gate

Northstar CSD

- 1 Case 580K Loader backhoe 4X4 w/4 in 1 bucket, extend a hoe 18" & 24" bucket
- 1 624E Loader w/4 in 1 quick connect bucket, plow and blower capabilities
- 1 624GH loader w/4 in 1 quick connect bucket, plow and blower capabilities
- 1 344G loader w/2.25 yd bucket
- 1 International S1900 5 yd. Dump w/sand box install capabilities & 5 yd. Sand box
- 1 F800 4x4 truck w/Harben flusher unit, 650 gal Water tank, ½ ton crane & portable pump
- 1 Cat 950 loader with 4 in 1 bucket and plow attachment

- 1 Kodiak 5000 ton per hour self contained snow blower
- 1 JD772 all wheel drive grader w/front snow plow attachment
- 2 Blanchet snowblowers 1900 tons per hour w/loader attachment capabilities
- 2 12 ft. snow plow blades w/loader attachment capabilities
- 1 Schwartz 5yd street sweeper
- 1 4X4 Utility service truck w/power and hand tools

South Tahoe Public Utility District

- 1 Layman street broom
- 2 Air compressor, 150 CFM, portable
- 1 Crane truck, 10 ton 50' boom
- 3 Dump trucks; 6 ½ yd and 2- 10 yd, and 6 yd pup trailer
- 1 Flatbed truck, 16'
- 2 Forklifts, 3-ton and 2 ton
- 3 Hydraulic power supply, portable
- 1 Hydro flusher/vacuum truck, camel sewer
- 2 vacuum trucks
- 2 Hydro trucks water (potable) only
- 3 Loader backhoes
- 2 Loaders, Case 2 ½ yd w/12' push plow
- 1 Snowcat
- 1 Snow Blower, loader mounted
- 1 Trailer, equipment, 3 axle
- 2 Trailers, flatbed - 18,000 lb and 6,000 lb
- 1 TV truck, ques
- 1 2000 gallon 4 WD water truck
- 1 24" trench compactor

Squaw Valley Public Services District

- 1 hydro flusher truck
- 1 5 yd dump truck
- 1 Loader backhoe, JCB 214 Sitemaster
- 1 John Deere 444 A loader

State of California, Department of Transportation/ Truckee Station - NORTH SHORE

- 1 3-ton flatbed w/plow
- 1 4-ton dump w/plow (w/C791 spreader)
- 1 4-ton sander w/plow (w/C562 spreader)
- 1 4-ton sander w/plow (w/C660 spreader)
- 1 6-ton dump w/plow (w/C835 spreader)

- 1 Diesel 3 axle DB with plow
- 1 5-ton dump w/plow
- 1 5-ton Truck Tractor w/plow, 4 WD
- 1 Sno-blo modified Sno-go
- 1 Sno-blast, rotary
- 1 A.W. Pacer, 300
- 1 A.W. Pacer, 301
- 1 Loader, Case 24B
- 1 Snow pole driver
- 1 Spreader w/C2005
- 1 Spreader w/C1133
- 1 Trailer, equipment
- 1 Spreader
- 1 Air compressor
- 2 - kettles asphalt
- 1 Sweeper, rotary

**State of California, Department of
Transportation/Truckee Station - EW**

- 1 2 ton dump body w/plow w/C982
spreader
- 1 4 ton Butler loader, DB
- 3 4 ton dump body w/plow
- 1 4 ton sander w/plow w/C548 spreader
- 1 Dump body w/plow
- 1 6-ton sander, dump body w/C711
spreader
- 1 8-ton sander-plow, dump body w/C876
spreader
- 1 8-ton sander-plow, dump body w/C710
spreader
- 1 Fuel truck
- 1 5-ton dump body, 4x4
- 1 Sno-go modified
- 1 Coleman Sno-go
- 1 Sicard Sno-go
- 3 chain control campers
- 3 A.W. graders
- 1 A.W. grader w/ dozer blade
- 1 Hough loader
- 1 Case loader
- 1 Seq. arrow trailer
- 5 sanders
- 1 Portable pavement tamper
- 1 Forklift, 2-1/2 ton
- 1 Rock splitter
- 1 Spreader, material box, Layton w/C3544

**State of California, Department of
Transportation/Tahoe City Station,
(Contact Truckee)**

- 1 Trailer, Layton pavers /C3147
- 1 2-ton dump w/plow, w/C981 spreader
- 2 4-ton dumps with plow
- 1 5-ton sander with plow w/C999 spreader
- 1 10-ton dump w/plow w/C999 spreader
- 2 5-ton dump with plow
- 1 Sno-go, standard
- 2 Sno-go, modified
- 2 A.W. graders
- 1 Loader, 2-1/2 CY, Case
- 1 Sander box, slip in
- 1 Sander box
- 1 Spreader, w/C1244
- 1 Backhoe with loader, John Deere
- 1 Patch heater
- 1 Roller heater
- 1 Roller, tandem
- 1 Sweeper, street

**State of California, Department of
Transportation/South Lake Tahoe Station**

- 2 4 dump trucks
- 5 sander plow trucks
- 2 Front loaders
- 7 motorgraders
- 7 rotary snow plows
- 1 street sweeper
- 1 snow cat
- 1 tilt-bed equipment trailer
- 1 pull-type sweeper

Tahoe City Public Utility District

- 2 Dumps, 3-5 yd F-550 with V-Plows
- 1 Dump, 5 yd bobtail
- 1 Hydro flusher/vacuum truck, 10 wheel
2100 vactor jet, 12 yd Debris Bin
- 1 Hydro flusher/vacuum truck, 6 wheel
2100 vactor jet, 7 yd Debris Bin
- 1 Loader backhoe, CASE 580 C
- 1 Loader backhoe Case 590 Super M
- 1 Loader backhoe trailer, 10 ton
- 1 Pickup w/snowplow ¾ ton
- 1 Utility truck F550 w/hydraulic boom and
liftgate

- 1 Utility truck F450 w/hydraulic boom/liftgate
- 1 1-Ton Utility Truck with liftgate and 8 gpm hydraulic system
- 1 Bob cat, 823
- 1 New Holland turf tractor

Tahoe-Truckee Sanitation Agency

- 1 Mack Truck
- 1 Honda Foreman 4x4
- 1 Kawasaki Mule 3010
- 1 Utility Trailer
- 1 Air compressor, trailer-mounted, 150 cfm, 100 psi
- 2 Fork lifts, Clark
- 1 Loader
- 1 Loader backhoe, 4WD Caterpillar, 416C
- 2 Plow trucks, 1 and ½ ton
- 1 Skidsteer loader, 843 Bobcat
- 2 Snowmobiles
- 1 Trailer, 20,000 lb tilt
- 1 Truck, 10 yard Mack, R06885

Truckee Sanitary District

- 0 Dump truck 5 yd 4WD w/directional plow
- 1 Loader, Cat 950 938 wheel, 3/3 3 yard bucket and Balderson plow
- 1 Loader backhoe, JD 410-CAT 430 D - All Wheel Drive
- 1 Loader backhoe, Cat 426 all wheel drive
- 11 Service trucks, 4WD
- 2 TV truck, ques-CUES
- Misc. Line cleaning equipment
 - 1 Hydro flusher/vacuum truck, vactor 6wd, 11 cubic yard debris tank, 1500 gal. Flush wtr, 600' hose
 - 1 Vactor 5,yd, 4x4, 1000 gal. Water, 600' hose
 - 2 Lateral cleaner on Vactors, 150' hose each
 - 1 Fork lift, Clark, TOYOTA gas powered
 - 1 10 wheel Mack dump truck
 - 1 25 ton, tilt bed equipment trailer
 - 01 Lateral cleaning kit for hydro, 150' hose
- ADD: 1 PipeHunter Jet Rodder 4 x 4
- 1 CAT 303.5 Mini-Excavator
- 1 CAT 272 Skid Steer Loader
- 1 Holder Snowblower

U.S. Forest Service, South Lake Tahoe

(Most equipment in field during summer; requisitioned thru Minden dispatch @775-883-5995)

- 1 10 yd dump truck
- 1 Tiltbed trailer
- 1 580E Case backhoe loader
- 1 D-4H Dozer w/rippers
- 1 Ford A66 loader w/3 yd bucket
- 1 855 Case crawler loader/backhoe
- 1 JD 577 Grader

TABLE I-13

MISCELLANEOUS EQUIPMENT

AGENCY/QUANTITY

EQUIPMENT

Alpine Springs County Water District

- 1 Portable air compressor for sewer line testing
- Assorted Miscellaneous portable welding equipment, gas, oxygen
- Assorted Miscellaneous hand tools, sewer & water systems maintenance

Incline Village General Improvement District

- 1 Portable arc welder
- 1 Safety trailer w/road signs & barricades
- 1 Hose trailer w/1000 feet of 3" fire hose & fittings (1/2 Water & 1/2 Sewer)
- Assorted Sewer air plugs (4" - 18")

Kingsbury General Improvement District

- 1 Trailer - mounted ARC/Acetylene/Oxygen Welder
- 1 Mig Welder
- 1 Portable Hydraulic Shoring
- 1 Shoring Box
- 2 Air Compressor
- 2 Jumping Jack
- Assorted Miscellaneous Barricades & Signs
- 1 Portable Plasma cutter
- 1 Stihl Cutoff Saw
- Assorted Miscellaneous Leak Locators
- 1 Hot Water Line Thawer
- 1 Hot Water Pressure Washer
- 2 Metrotech 810 Line Locators

- 1 Easy Laser Alignment System
- 1 18" diamond blade walk behind pavement saw
- 3 Ventilation blowers 1 110AC and 2 12v DC
- 1 4 gas air monitor

North Tahoe Public Utility District

- 1 Fuel trailer
- 3 Force air ventilator for manholes
- 3 Homelite pipe saws
- 1 Aluminum irrigation pipe forming press for 12" material
- 2 Gas/tech gas-oxygen meters
- Assorted Shoring material and hydraulics
- 1700 L.F. 12" aluminum irrigation pipe and trailers
- 40 Barricades
- 40 Flashers
- 150 Traffic delineators
- 2 Trailer mounted directional arrow signs w/generators
- 1 Compressor Trailer Mount 185 CFM
- 50 Traffic Cones
- 1 Pavement saw
- 1 Smoke tester
- 1 Air tester
- 1 2" Hydraulic pump
- 1 4" Hydraulic pump
- 2 Trench Shields

Northstar CSD

- 1 mobile 100 gallon fuel tank w/electric pump
- 1 250 CFM trailer mounted, on demand, air compressor w/hammer, 50ft 1 inch hose & attachments
- 1 15 CFM portable Honda air compressor w/100 ft. of 1/2 inch hose
- 1 Whacker
- 1 Vibratory plate
- 1 Electric hack saw
- 1 Sawsall
- 1 welder MIG
- 1 Arc welder
- 1 2 cycle 12 inch abrasive blade cut saw
- 1 Oxy/act. Cutting torch and attachments
- 1 TV camera and 200 ft of push rod

- 1 TV camera self propelled with 1000' of

- cable (Aries)
- 1 F250 pickup utility
- 1 F150 pickup
- 1 Ford Explorer
- 1 F550 Utility Truck
- 1 Chevy S10 Quad Cab
- 1 chevy Blazer
- 1 Chevy Tahoe
- 1 F550 flatbed dump
- 1 chevy 3500 flatbed dump
- 1 F350 with plow attachment

- Assorted Road signs and barricades
- Assorted Confined space entry equipment
- Assorted Hazmat cleanup supplies (small spills)
- Assorted Hand and power tools for light and heavy equipment maintenance

South Tahoe Public Utility District

- 2 Lighted arrow boards
- 200 ft hand rods
- 2 Portable air compressors, 160 cfm and 150 cfm
- 2 Portable welder, 225 amp Miller
- 3 Jumping jacks, large & small
- 1 Wacker Vibro plate
- 3 Homelite cutoff saw
- 1 Asphalt saw
- 2 Pneumatic pipe saw 18" to 36" capacity steel/ductile iron
- Assorted Hydraulic shoring jacks and materials
- Assorted Road barricading supplies
- Assorted Miscellaneous sizes and lengths of suction and discharge hoses
- 800' 6" discharge hose
- 5 Hydraulic jackhammers

Squaw Valley Public Services District

- 1 Air compressor, 185 CFM, Ingersol
- 50' air hose
- 2 Hydraulic shoring jacks
- 1 Confined space entry equipment

Tahoe City Public Utility District

- 2 Yamaha snowmobiles with trailer
- 1
- 1
- 2 18 HP portable hydraulic unit 25 ft. hose

- 1 175 HP Stanley hydraulic unit, trailer mounted

Tahoe-Truckee Sanitation Agency

- 1 Arc & heliarc outfit, portable with generator built in
- 1 Battery charger
- 2 Blade cut saw, portable 2-cycle abrasive, 1 each 16" and 12"
- Assorted Cable chokers
- Assorted Chains, chain falls, come-a-longs
- 1 Core drill, Milwaukee
- 1 Drill press, radial arm
- 1 Drill press, stationary
- 1 Hacksaw, portable power
- 3 High water pressure cleaner portable
- 1 4x8x6 foot shoring shield - hydraulic
- 1 Speedshoeing w/supplies
- 1 Cordless Sawzall
- 1 Cordless hammer drill
- 1 Hoist, portable 1-ton electric
- 1 Hydraulic press, stationary, 50 ton
- 1 Hydraulic unit, portapower manual
- 1 Lathe
- 1 Magnetic drill
- 1 Mill
- 2 Oxyacetylene cutting outfit
- 1 Stationary arc & heliarc outfit
- 1 Steam cleaner, portable
- 1 Table saw
- 1 Band saw
- 1 Plasma cutter

Truckee Sanitary District

- 1 Air compressor, Ingersol Rand Diesel 160 CFM trailer mount w/200' hose
- 1 Arc welder, 200 amp, gas powered, portable
- 1 Drill press, 1/2" maximum X15" throat
- 1 Drill press 1/2", floor mounted
- 1 Manhole blower for smoke testing
- 1 Oxyacetylene rig
- 2 Pipe cut off saw, Homelite-Husky
- 8 Shoring sections hydraulic w/boards on trailer
- 1 Steam cleaner
- 1 TV camera for lateral, w/150' of push rod

- 1 Welder, MIG, 160 amp
- 2 Whackers
- 5 Traffic plates, various sizes
- 1 Hydraulic core drill, various size diamond bits
- 2 Shoring shields, hydraulic, Speed Shore
- 1 Husky chain saw
- 1 Asphalt saw w/diamond blade, on trailer
- 1 Confined space entry & rescue equipment on two 4x4 service vehicles
- 1 SAR equipment on two 4x4 service vehicles

City of South Lake Tahoe

1 - Emergency response trailer containing: Tool box with miscellaneous hand tools including screw drivers, wrenches, hacksaw, hammers, duct tape & crowbar.

Hazmat supplies: 1 box M-FL 550 DD maintenance absorbent fold, 3 boxes P 110 powersorb pads, 9 ea A672-072 Nochar booms, 2 bundles #156 oil sorbent pads, 1 - 20gal overpad, 1 - 5 gal GI can w/spout, 4 barricades, 1-12 volt light bar on tripod w/cigarette lighter plug, 10-28" traffic cones, 10 - 28" traffic cones w/reflectors, 2 push brooms, 2 shovels.

TABLE I-14
REPAIR FACILITIES
AGENCY

EQUIPMENT/AMENITIES

Incline Village General Improvement District

4-bay vehicle repair shop w/1 floor hoist and overhead rail hoist.

Shop at WWTP equipped with bearing press, electric and gas welding, 1/2" drill press, pipe threading to 4".

Brake and tire repair equipment
 Electric and gas welding equipment
 1800 sq. ft. automotive repair shop

North Tahoe Public Utility District

Welding equipment - oxy & arc TIG & MIG

Drill press
 Power hacksaw
 1-1/2 ton overhead electric hoist
 Assorted auto repair tools

Northstar CSD	Glass Beading Cabinet 5 bay repair shop facility w/equipment and tools for heavy and light equipment repair
South Tahoe Public Utility District	Complete auto repair shop Machine shop - 3 lathes, 1 milling machine, drill presses, grinders, and other miscellaneous equipment Welding equipment, portable and stationary 1 - torch cutting facility pattern 1 - Coates tire changing and balancing machine Sand blast equipment 1 - Lincoln combination arc/heli-arc welding machine 1 - drill press 1 - auto repair facility 2- bay vehicle repair shop 1- 15,000 lb vehicle lift
Tahoe Truckee Sanitation Agency	Machine shop (1 lathe, 1 mill, 1 radial arm drill) Wire feed welder Plasma cutting Metal band cut off saw Punch press 300 amp ARC-TIG welder

TABLE I-15
MISCELLANEOUS SUPPLIES
AGENCY/QUANTITY

EQUIPMENT

Alpine Springs County Water District

Assorted	water pipes inventory - 2" to 8" galvanized copper, PVC
Assorted	sewer pipes inventory - 4" to 8" CIP, PVC
Assorted	Sewer pipe plugs, 4" to 10"

Incline Village General Improvement District

Assorted	Repair parts for most pipes from ¾" to 20"
----------	--

Kingsbury General Improvement District

- Assorted Repair parts and valves for most pipes from 3/4" to 16"
- Assorted Repair/rebuild parts for Cla-Valves from 2" to 12" including controls. Complete valves from 2" to 8"
- Assorted Full circle and other repair clamps from 3/4" to 16"
- Assorted Hydrants, repair parts, and tools to work on most Mueller, Dresser, and M&H hydrants (rebuild in place)
- Assorted Weldable fittings and pipe from 2" to 8" for fabrication

North Tahoe Public Utility District

- Assorted 3/4" to 3" pipe fittings
- Assorted 3/4" to 6" pipe
- Assorted Flexible couplings, 1/2" to 12" ACP, D.I., PVC & steel
- 1300 L.F. 12" aluminum pipe
- Assorted A/C CL 2400 4" to 6" pipe and fittings
- Assorted A/C CL 2400 8" to 12" pipe
- Assorted Saddles, 2" to 22"
- Assorted SDR 35 sewer pipe and repair materials

Northstar CSD

- Assorted 3/4" to 2" pipe fittings
- Assorted 3/4" to 1" pipe
- Assorted 3/4" to 1" repair clamps
- Assorted 6" to 12" circle clamps
- Assorted 6" to 12" Romac couplers
- Assorted 4" to 8" caulder couplings with various gaskets
- Assorted Mueller fire hydrants
- Assorted Limited supplies of 4" to 12" water and sewer pipe
- Assorted Water meters and boxes

South Tahoe Public Utility District

- Assorted Pump parts
- Assorted Electrical supplies
- Assorted Spare motors, various sizes and types
- Assorted Various sizes and types of pipe to 30", water and sewer
- Assorted Various sizes of Dressler couplings and repair clamps

Squaw Valley Public Services District

- 400' camoflex hose
- Assorted Pipe inventory

Assorted Water & sewer parts inventory
 Assorted plugs, 4" - 15"

Douglas County Sewer Improvement District

Assorted Miscellaneous couplings, pipe & accessories

Tahoe City Public Utility District

500' 6" discharge hose with camlock fittings 50' and 100' sections
 Assorted Manhole entry gear
 4
 3 miscellaneous pipe locating equipment
 4 4-Gas Detectors

Tahoe-Truckee Sanitation Agency

2300 L.F. 12" aluminum pipe
 2 Pipe locators
 1000 L.F. 8" flexible discharge hose
 Assorted Manhole entry gear/confined space entry equipment
 5 Plugs good for lines 24" to 36"

TABLE I-16
SEWER LINE CLEANING, GROUTING
& INSPECTION EQUIPMENT
AGENCY/QUANTITY

EQUIPMENT

Incline Village General Improvement District

1 Root cutter with 50 feet of 4" hose, 50 feet of 8" hose, 700 feet of 1" hose
 1 Repair kit
 1 Vactor 9 yard, truck combination sewer cleaner with hydraulic tools and vent fan
 1 Hydro flusher vacuum truck, vactor/7 yd, 2WD, single axle, 700' 1" hydraulic hose
 1 Cues main line inspection equipment -Van mounted
 1 1 ¼ yd Vacuum unit on service vehicle
 1 Extenda Jet mobile unit 400' 1" hose

North Tahoe Public Utility District

1 Hydro flusher/vacuum truck, vactor 6WD w/600' of hose & vacuum
 1 Hydro flusher/vacuum truck, vactor 2WD

- w/600' of hose & vacuum
- 1 Flusher truck with 500' hose
- 1 Rodder truck-mounted Champion 64C
w/1000' of 3/8" rod
- 1 TV truck

Northstar CSD

- 1 Harben Flusher unit w/500' high pressure
hose
- 1 TV unit w/200 ft of push rod
- 1 TV unit with 1000' of cable self propelled
(Aries)

South Tahoe Public Utility District

- 1 Hydro flusher vacuum truck sewer
- 2 Hydro cleaners
- 1 TV Van
- 200' hand rods

Tahoe City Public Utility District

- 1 Hydro flusher/vacuum truck, 10 wheel
2100 vactor jet with 12 Yd Debris Bin
- 1 Hydro flusher/vacuum truck, 6 wheel
2100 vactor jet with 7 Yd Debris Bin
- 1 TV camera & monitor, portable lateral
monitor

Truckee Sanitary District

- 12 Color TV truck, 4x4, Ques Cues
transporters
- 0 lateral cleaning kit for hydro, 150' hose
- 2 Vactors, all wheel drive, w/lateral kits,
150' hose
- 1 PipeHunter JET RODDER, 4 x 4

Squaw Valley Public Services District

- 1 Hydro flusher truck, Camel
- 1 Cues Pro Scout with track camera & 600 Ft
cable

**Douglas County Sewer Improvement
District**

- 1 Hydro flusher/vacuum truck, vactor jet

TABLE I-17
CHLORINE LEAK REPAIR KITS &

SAFETY EQUIPMENT
AGENCY/QUANTITY

EQUIPMENT

Incline Village General Improvement District

- 2 MSA No. 401 air masks
- 1 Cascade System – Trailer Mounted

North Tahoe Public Utility District

- 1 Chlorine cylinder repair kit, 150 lb
- 2 MSA model 401 air masks
- 1 Cascade truck mounted air system with (6) 244 cu. ft. cylinders, w/recharge system

Northstar CSD

- 4 MSA self contained breathing apparatus
- 3 MSA masks w/dual tank air supply, 100 ft of hose and 5 minute escape tanks
- Assorted Confined space entry gear and tyvek suits
- Assorted Misc. gloves, outer gear, filtered masks, glasses and face shields
- 2 Gas monitors

South Tahoe Public Utility District

- 4 MSA self-contained breathing apparatus
- Assorted Confined space entry equipment

Tahoe City Public Utility District

- 1
- 4
- 1
- 4
- 4 4-gas monitors
- 2 tripod with wench & fall protection harness

Tahoe-Truckee Sanitation Agency

- 1 Chlorine repair kit, 1 ton cylinders
- 5 Self contained breathing apparatus
- 2 Spare bottles
- 1 Fixed air compressor
- 3 Level "A" entry suits
- Assorted Manhole entry gear/confined space entry equipment

Douglas County Sewer Improvement District

- 1 Chlorine Repair Kit, 100-150 lb cylinders

Exhibit 4-7. District's Safety Training Classes

APPENDIX C - JOB SAFETY CLASSIFICATIONS (JSC)

JSC	JOB TITLE
1 MANAGEMENT (Red Flag Training = RF) (Reasonable Suspicion, Drug & Alcohol = RS)	General Manager (RS) Chief Financial Officer(RF) (RS) District Engineer/Assistant General Manager (RS) Director of Utilities (RS annual) Director of Parks and Recreation (RS annual)
2 SUPERVISORY (Red Flag Training = RF) (Reasonable Suspicion, Drug & Alcohol = RS) (Use of Respirators = RES) (Safety Inspections = S)	Director of Resource Development and Community Relations (S) Engineering Systems Coordinator (S) Human Resources Admin/Risk Mgmt Team (RF) (RS annual) (RES) (S) Accountant I / II (RF) Executive Assistant to the General Manager (S)
3 UTILITIES SUPERVISORY (Safe Practice for Operating Vehicles = D) (Respirator Fit & PFT = RESP)	Utilities Superintendent/Risk Mgmt Team Field Supervisor – Pump Stations (D) (RESP) Lead Worker – Pump Stations (D) (RESP) Lead Worker – Underground (D) (RESP) Lead Worker – Electrician (D) (RESP)
4 ENGINEERING SUPERVISORY (Asbestos/Cement Pipe = AC) (Reasonable Suspicion, Drug & Alcohol = RS) (Traffic Control = TC)	Planning Engineer (TC) Associate Civil Engineer (TC) Technical Services Supervisor (AC optional) (RS annual)
5 PARKS SUPERVISORY (Safe Practice for Operating Vehicles = D) (Respirator Fit & PFT = RESP)	Parks Superintendent/Risk Mgmt Team Senior Field Supervisor, Parks and Facilities (D) (RESP) Field Supervisor, Parks and Facilities (D) (RESP)
6 RECREATION SUPERVISORY (Safe Practice for Operating Vehicles = D) (Reasonable Suspicion, Drug & Alcohol = RS)	Recreation Supervisor (D) (RS) Recreation Coordinator (D) Recreation Specialist
7 SAFETY COMMITTEE MEMBER	District Safety Committee Members
8 OFFICE PERSONNEL	Account Clerk I / II / III Utilities Coordinator Project Assistant Administrative Secretary Department Secretary I / II
9 UTILITIES OFFICE / FIELD PERSONNEL (Confined Space Entry & Rescue = CS) (Excavation Safety = E)	Engineering Technician Engineering Assistant I / II / III (CS optional for II and III) Construction Inspector I / II (CS optional for II) (E)
10 UTILITIES FIELD PERSONNEL (Forklift Training = FL) (Qualified Person Arc Flash = QP)	Operations Technician – Electrician (FL) (QP) Operations Technician – Mechanic (FL) (QP) Operations Specialist I / II / III (FL) (QP *) Utilities Technician (FL) Utilities Seasonal (1 st Aid/CPR/AED Optional)
11 RECREATION OFFICE / FIELD PERSONNEL	Recreation Leader I / II / III
12 PARKS FIELD PERSONNEL	Parks Maintenance Worker I / II / III
13 KIOSK PARKS PERSONNEL	Parks Maintenance Worker I / II / III Parks Cashier

* As determined by Utilities Superintendent

SAFETY TRAINING PROGRAM MATRIX

TRAINING TOPICS	JOB SAFETY CLASSIFICATIONS (JSC)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
HAZARDOUS MATERIALS EMERGENCY RESPONSE PLAN	I	I	I	I	I	I	I	I	I	I	I	I	I	I
ERGONOMIC HAZARDS	I	I	I	I	I	I	I	I	I	I	I	I	I	I
FIRE PREVENTION PROGRAM	I	I	I	I	I	I	I	I	I	I	I	I	I	I
HAZARD COMMUNICATIONS (GHS) - Right to Know	I	I	I	I	I	I	I	I	I	I	I	I	I	I
INJURY & ILLNESS PREVENTION PROGRAM	I	I	I	I	I	I	I	I	I	I	I	I	I	I
SEXUAL HARASSMENT							I	I	I	I	I	I	I	I
SLIPS, TRIPS & FALLS, BACK INJURIES	I	I	I	I	I	I	I	I	I	I	I	I	I	I
WORKPLACE VIOLENCE PREVENTION	I	I	I	I	I	I	I	I	I	I	I	I	I	I
INCIDENT INVESTIGATIONS	O	I	I	I	I	I	I							
ASBESTOS/CEMENT PIPE			A	A*					A	A				
BLOODBORNE PATHOGENS			B	B	A	A		B	B	B	A	A	O	
CONFINED SPACE ENTRY PROCEDURES			A						A*	A				
CONFINED SPACE RESCUE SERVICES			A						A*	A				
ELECTRICAL SAFETY			I		I				O	I		I		
QUALIFIED PERSON TRAINING- ELECTRICAL			T							T*				
QUALIFIED PERSON ANNUAL EVALUATION- ELECTRICAL			A							A*				
EXCAVATION SAFETY			I	I					I*	I				
FALL PROTECTION			I		I					I		I		
FIRST AID/CPR/AED	B	B	B	B	B	B		B	B	B*	B	O	O	
FORKLIFT/MOTORIZED EQUIPMENT OPERATIONS			T		T					T*		O		
LOCKOUT/TAGOUT PROCEDURES			I		I				O	I		I		
RED FLAG TRAINING	I*	I*						I						I
SAFE USE OF PESTICIDES					I							I		
SAFE USE OF POWER TOOLS			I		I				O	I		I		
SAFETY INSPECTIONS/HAZARD ID - Risk Assess. Analysis	O	I*	I	I	I	I	I			I		I		
TRAFFIC CONTROL			I	I*	I				O	I		I		
TREE WORK SAFETY PROCEDURES					I							I		
USE OF PERSONAL PROTECTIVE EQUIPMENT			I	I	I		I		I	I	I	I		
USE OF RESPIRATORS		A*	A		A					A		A		
USE OF RESPIRATORS - FIT TEST			A*		A*					A		A		
USE OF RESPIRATORS - PULMONARY FUNCTION			A*		A*					A		A		
WELDING SAFETY/HOT WORK CHECKLIST			I		I					I		I		
SEXUAL HARASSMENT PREVENTION-SUP'V (AB1825)	B	B	B	B	B	B								B
DRUG & ALCOHOL: REASONABLE SUSPICION FOR SUP'V	T*	T*	A	T*	A	A*								
ETHICS TRAINING, CA LOCAL AGENCIES (AB 1234)	B													B
NIMS/SIMS TRAINING	I													I
SAFE PRACTICE FOR OPERATING VEHICLES	O	O	I*	O	I*	I*	O	O	I	I	O	O	O	

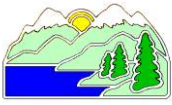
Job Safety Classifications

- | | |
|----------------------------|---------------------------------------|
| 1: Management | 8: Office Personnel |
| 2: Supervisory | 9: Utilities Office/Field Personnel |
| 3: Utilities Supervisory | 10: Utilities Field Personnel |
| 4: Engineering Supervisory | 11: Recreation Office/Field Personnel |
| 5: Parks Supervisory | 12: Parks Field Personnel |
| 6: Recreation Supervisory | 13: Kiosk Parks Personnel |
| 7: Safety Committee Member | 14: Board Members |

Key

- I: Initial mandatory training
- A: Initial and annual refresher training
- B: Initial and biennial refresher training
- T: Initial and triennial training
- O: Optional training
- * - Required for select personnel only, not for all in JSC

Exhibit 5-1. TCPUD Summary of Sewer Service Requirements



**Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service**

Form D

Conditions of Service for a new construction, major remodel, tear down/rebuild or minor remodel permit. It is the responsibility of the property owner or their authorized representative to read this document, acknowledge your understanding of it and agree to all conditions and requirements outlined in this document and perform all construction, demolition and or remodel work in accordance with all current Tahoe City Public Utility District Ordinances and Regulations.

As a condition of service you shall pay all required fees and deposits to the District. Please note that other conditions or fees not indicated in this document may also apply.

Conditions of Service for the residential parcel indicated below:

Address _____ APN _____

Note: Any of the following conditions or requirements prefaced by (WATER ONLY) are for either sewer and water customers or water only customers but do not apply to sewer only customers who are not in a TCPUD water system. -Your status is noted below-

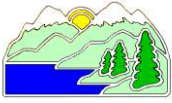
- Sewer & Water Customer - Sewer only Customer - Water Only Customer

A. The Following Conditions Must Be Met As Part Of The Permit Application Process:

1. (Form A): A plan check must be successfully completed with all punch list items satisfied.
2. (Form B): A summary of fees including applicable connection, permit and inspection fees associated with this project will be outlined in this document and must be paid prior to a permit being issued. Please note that other fees or charges not indicated in this document may also apply. Any deviation by the owner from the plans approved by the District may cause changes in the fees and charges as quoted in Form B.
3. (Form C): A residential permit application must be completed and signed by the customer or their authorized representative.
4. (Form D): The Single Family Residential Sewer and or Water Conditions of Service (this document, see instructions above). Please note that other conditions or fees not indicated in this document may also apply.
5. (Form "F-pressure request") Pressure Test Request and Utility Estimate Request
6. (FORM "Fire") Single Combined Water Service with Fire Sprinkler System

B. The Following Conditions Must Be Met As Part Of The Construction Permit Process:

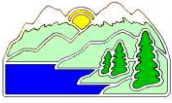
1. It is the responsibility of the property owner or their authorized representative(s) to make sure all required inspections as specified in the construction permit are scheduled and completed.
2. Trenches for all new sewer and or water services installed as part of new construction / remodel projects must be inspected prior to backfill. Materials and construction methods must conform to District standards. The District must witness all trench inspections.



Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service

Form D

3. A pressure test of water and or sewer lines is required when any new installation or modification is made. The District must witness all pressure tests.
4. All fixtures must be low flow and shall meet or exceed all State and Federal regulations.
5. Internal domestic water pressure must not exceed 60 psi at any fixture, a State of California requirement. The property owner must install a pressure-reducing valve if water pressure is greater than 60 psi. The District must verify water pressure prior to the final County inspection.
6. (WATER ONLY) Backflow prevention devices are required on potentially hazardous water services. The District will determine the need for backflow prevention assemblies during the plan check process. The applicant should get District approval for the location and model of backflow prevention assemblies if required. Each assembly must be tested and certified by a District-approved tester prior to the District Final. Note: Stop and waste valves shall not be installed underground. If installed, they must be located a minimum of 12" above grade or crawl space foundation spill rim. Frost-free yard hydrants shall have a District approved backflow prevention device installed and tested.
7. Drain lines from backflow assemblies or from glycol based heating systems are not to discharge to the sanitary sewer system.
8. (WATER ONLY) Hydronic heaters, fire sprinklers, and irrigation systems that are connected to the potable water supply will need a Reduced Pressure Assembly (RP) installed on the feed line to them.
9. (WATER ONLY) Water Heat Exchangers aka Indirect Water Heaters: For the protection of potential internal tank heating coil leakage, the District requires the use of a double-wall heat exchangers when the domestic water is heated by the hydronic heating equipment. An alternative requirement would be the installation of a Reduced Pressure Principle Backflow Prevention Assembly (RP) on the main domestic water line, prior to any tees.
10. The District must inspect all fixtures prior to the final County inspection. All pre-final inspections and testing must be complete, all fixtures must be set and be low flow and internal domestic water pressure must be reduced to 60 psi (if necessary) prior to the TCPUD final inspection.
11. Other conditions may be identified during the plan checking or inspection processes that must be satisfied prior to the District Final.
12. All costs associated with the materials and construction of these facilities are the sole responsibility of the property owner.
13. The property owner must comply with all District ordinances and is responsible for that compliance for all planning and work that engineers, contractors, sub-contractors, agents and consultants perform for them on and about their property.
14. (WATER ONLY) New construction billing for domestic water service shall start at the time of a successful trench / pressure test inspection. Fire service billing shall start at time of successful final inspection or conditional final agreement.
15. (SEWER ONLY) New Construction Delay Start Billing for sanitary sewer service. Billing will be delayed for two consecutive quarters after the quarter in which a successful trench inspection is completed. Teardown-rebuild remodels may also qualify for delay start billing. See attached table on page 9. No further billing delays or extensions will be offered.



Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service

Form D

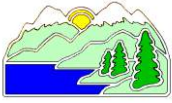
C. Licensed Contractor

1. All work associated with the installation of residential sewer service lines must be performed by a California state licensed contractor. The owner must provide the District with the name, address and state license number of the contractor prior to the work commencing.
2. The property owner may install his or her own sewer and/or water facilities with District authorization. A \$1,050 bond shall be placed with the District, and evidence of insurance must be provided in accordance with Sewer Ordinances 255, Section 5.01.7, and Exhibit 10.01 and Water Ordinance 263, Section 6.2.

- Sewer Service Requirements -

D. Sewer Pipe:

1. Gravity sewer system: minimum of 4" diameter pipe
2. All pipe must have approved rubber gasket fittings, no glue joint or slip fittings
3. Orangeburg and ABS pipe may not be used for external piping and must be removed if they are the existing pipe material
4. PVC SDR 35 with min. 24" of cover non traffic, **or** min. 36" of cover in traffic areas
5. PVC C-900 or DI if less than 24" of cover, **or** less than 36" of cover in traffic areas
6. Bends shall be less than 45 degrees. If 45 degrees or greater, a cleanout shall be placed immediately upstream of bend. If a 90 degree bend is desired a special District clean out (c/o) arrangement is available (a handout is available). Bends of over 90 degrees are not allowed.
7. Pressure system: minimum of 2" diameter pipe, maximum of 3" diameter pipe
8. Pressure pipe: Class 200: Polyethylene, Ductile Iron or SDR-21 Ring-Tite pressure pipe.
9. Tracer / locator wire must be attached to both gravity and pressure pipe
 - 10 AWG minimum THW, THHW, TW or THWN wet location insulation
 - Foundation c/o to property line c/o, 2-foot tail brought up in box
 - Shall surface at all mid-line c/o's, continuous / unbroken coil in box
 - Shall be taped to the top of pipe at 5' or less intervals and at all bends
 - Splices, if needed, shall incorporate a U.L. listed underground splice kit
 - Wire shall be tested for continuity
 - "Sewer" burial tape must be installed 12" to 18" above all pressure sewer lines (2008)



Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service

Form D

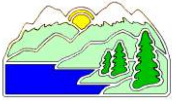
E. Sewer Cleanouts:

Cleanouts (c/o's) must be installed:

1. Foundation c/o(s) within 5' of the foundation at each house sewer outfall.
2. Midline c/o(s) required if line exceeds 100 feet, a double-wye c/o may be used if desired; and
3. Property Line Double-Wye c/o(s) installed within 5' of the property line, on customer's side.
4. Immediately upstream of all bends of 45° and greater or at special 90 degree c/o's.
5. Within a concrete box, equal to Christie B-9, or Christie G-5 (G-5 only if "T-Cone S402" caps are used) with a metal lid stamped "SEWER". All boxes must be covered to grade. If box is in a traffic area, it must be set 1/2" below finished grade; and
6. All cleanouts must be the same size and material as the sewer service line.
7. T-Cone S-402 (or equal) or same as pipe material caps are to be used.
8. Cleanout risers to be brought up at 90 degrees, all fittings to be close-coupled at the wye.

E. Sewer Trench:

1. Bedding material shall be imported Type 1 sand bedding material, unless in wet area, which shall then be imported Type 2, 3/4" crushed rock bedding.
2. All bedding material shall be placed 4" below and 12" above pipe.
3. Intermediate backfill shall be placed above the bedding material to the surface and must not contain rocks greater than 3". The use of screened native material is acceptable.
4. Compaction, intermediate backfill shall be compacted to prevent trench failure.
5. Slope shall be a minimum of 1/4" per foot (2% slope). In certain cases slope of less than 2% may be allowed but requires prior approval of the District Engineer.
6. A backwater valve may be required if 2% slope cannot be maintained or if any fixture rim elevations are not above the rim level of the next upstream District manhole. Backwater valves shall be installed prior to the foundation cleanout, boxed and fully accessible.
7. When water lines share a common trench with sewer, the following shall apply:
 - Gravity sewer & water – minimum of ten feet of horizontal separation at all points – OR – water must be a minimum of 1 foot above and 1 foot horizontal from sewer between the lines at all points and water must sit on a separate solid bench.
 - Pressurized sewer & water – minimum of ten feet of horizontal separation at all points.
 - See Ord. 255, subsection-5.03.3.3 for separation criteria for other utilities and sewer.



**Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service**

Form D

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8. Cover: SDR 35 shall have a minimum of 24" of cover in non-traffic and 36" of cover in traffic areas.
- Non-traffic areas with less than 24" of cover require C-900 DR-14, DR-18 or ductile iron pipe.
 - Traffic areas with less than 36" of cover require C-900 DR-14, DR-18 or ductile iron pipe.
9. All sewer pressure mains (force mains) shall have a minimum of 30" of cover and have "Sewer" burial tape installed 12" to 18" above all pressure sewer lines (2008).

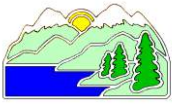
F. Sewer Pressure Test:

1. A pressure test shall be performed after the trench has been backfilled to rough grade.
2. Gravity line air test: pipe shall hold 3.5 psi for 5 minutes with no more than 0.5 psi loss in pressure during the 5 minute period.
3. Gravity line hydro test: pipe shall hold 8 feet of water head (measured from pipe invert) for 5 minutes with no more than 1 inch of loss in water volume per each 100 feet of pipe length. Pre-approval from the District is required for this test.
4. Pump System Pressure line air test: pipe shall hold 10.0 psi for 10 minutes and shall have no loss in pressure. Pressure line must be drained for air test if system has a bypass valve.
5. Hydro testing of pump system pressure lines is not allowed.

NOTE

**SEWER ONLY CUSTOMERS PLEASE STOP HERE AND PROCEED TO PAGE 6
(L. FINAL INSPECTION) OF THIS FORM.**

**SEWER AND WATER OR WATER ONLY CUSTOMERS PLEASE PROCEED TO THE NEXT SECTION BELOW
(-Water Service Requirements-) READ AND COMPLETE THE REST OF THIS FORM.**



- Water Service Requirements -

G. Water Trench:

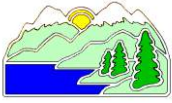
1. Bedding material shall be Type 1 imported sand, unless in wet area, which shall then be Type 2, imported ¾" crushed rock bedding.
2. Bedding material shall be placed 4" below and 6" above pipe.
3. Intermediate backfill must not contain rocks greater than 3". Screened native is acceptable.
4. All Domestic and Fire Sprinkler service lines shall have a minimum cover of 30-inches.
5. When water lines share a common trench with sewer, the following shall apply:
 - Gravity sewer & water lines – minimum of ten feet of horizontal separation at all points
- OR – water line must have minimum of 1 foot vertical and 1 foot horizontal separation from the sewer line at all points and be on its own separate solid bench.
 - Pressurized sewer & water lines – minimum of **ten feet** of horizontal separation at all points.
 - See Ord. 263, subsection-6.14 for separation criteria for other utilities and water.

H. Water Meter and Boxes:

1. The District will install a meter, meter setter, valves, and meter boxes as part of a new construction or remodel permit for both domestic and fire sprinkler systems. Meter, meter head and all meter installation fees apply.
2. If the District determines that you will need to install a Domestic meter setter and a meter boxes and or a Fire Sprinkler meter and meter boxes as part of your construction permit you will be given the specifications and details needed to perform the installation as part of your other or special conditions of service prior to issuance of your permit. Meter fees apply.

I. Water Pipe:

1. Domestic service: minimum of 3/4" I.D. (inside diameter)
2. Domestic service: Copper Type K or polyethylene (P.E.) with a rated minimum 160 psi. All parts used must be lead free
3. Fire Sprinkler service: minimum of 3/4" I.D. (inside diameter) or as determined by the property owners engineer and approved by the District
4. Water Main Install: Copper Type K or polyethylene with a rated minimum 160 psi or C900 class 200 PVC water main pipe. All parts used must be lead free including the backflow assembly.
5. Tracer / locator wire must be attached to both the domestic and/or fire service line.
 - Wire must come up in the service box and terminate at the foundation and
 - Be 10 AWG minimum THW, THHW, TW or THWN wet location insulation
 - Shall be taped to the top of pipe at 5' or less intervals and at all bends
 - Splices, if needed, shall incorporate a U.L. listed underground splice kit
 - Wire shall be tested for continuity



Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service

Form D

J. Water Pressure Test:

1. During the trench inspection a 15 to 30-minute pressure test of both the domestic and/or fire service lines shall be conducted.
2. All water lines, the domestic meter, meter setter and/or fire service meter (meters and setters only if property owner was required to install them as a condition of service) installed shall be left exposed from the District curb stop valves to the foundation.
3. The domestic and/or fire service lines shall be fitted with a valve or hose bib at the house connection end of the lines to facilitate flushing and charging of the service lines for testing. The District inspector will verify that the lines are charged prior to testing.
4. Pressure testing of the domestic and/or fire service lines shall be under the normal working pressure of the supplying District water main with no detectable leakage.

K. Final Inspection:

1. Customer must call 530-580-6324 for a final inspection when all required pre-final inspections and testing have been successfully completed and all fixtures are set.
2. All fixtures must be low-flow (Toilets – 1.6 gallons per flush; Showers - 2.5 gallons per minute; Faucets – 2.2 gallons per minute, including utility sinks.) All fixtures shall meet all Local, State and Federal Regulations.
3. Internal domestic water pressure, must be 60 psi or less for any water district or system.
4. Cleanouts must be boxed, exposed and to grade, with proper caps and steel lids marked “Sewer.”
5. (WATER ONLY) Water box lids must be boxed, exposed and to grade with steel lids marked “Water”.
6. (WATER ONLY) If potentially hazardous water services are found during the final inspection, backflow prevention devices must be installed and tested prior to a final approval. Hand held shower heads must maintain a clearance of a minimum of 1” above the rim of the tub or shower basin, OR Hand held shower heads must have a built in or owner installed approved backflow prevention device at the point of connection.



**Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service**

Form D

L. Other or Special Conditions or Requirements:

The following conditions or requirements as determined by a TCPUD representative shall also apply to your permit. Other terms, conditions and requirements not listed here and within this document may also apply. Applicant to sign and date if applicable.

(Water Only) Domestic and Fire Sprinkler Meter Installation Responsibility (if required)

- The District will install a domestic water meter, setter and boxes (if required).
- The District will install a fire sprinkler meter, setter and boxes (if required).
- The District will install a dual domestic/ fire sprinkler meter, setter and boxes (if required).

Other or Special Conditions or Requirements as determined by the District

- See additional attached conditions or requirements

- Read Inspector Plan Review Notes and Comments

- Heat Exchanger – see attached Water Heat Exchanger press release

Property Address

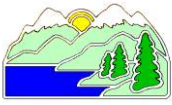
APN

Applicant Signature

Date

TCPUD Representative

Date



**Tahoe City Public Utility District
Residential Sewer and or Water Conditions of Service**

Form D

New Construction Delay Start Billing for sanitary sewer service. Billing will be delayed for two consecutive quarters after the quarter in which a successful sewer trench inspection is completed. Teardown-rebuild remodels may also qualify for delay start billing. No further billing delays or extensions will be offered. See schedule below.

Trench inspection Quarter	Start Billing
1- (Jan, Feb, Mar)	OCT
2- (Apr, May, Jun)	JAN
3- (Jul, Aug, Sep)	APRIL
4- (Oct, Nov, Dec)	JULY

N/A to this permit, as determined by the District.

I understand and agree to the provisions and benefits offered in the New Construction Delay Start Billing for residential sewer service. I also understand that no further billing extensions or delays shall be offered. These provisions and benefits may also apply to qualifying Tear Down-Rebuild Remodels. TTSA sewer billing is not included in this agreement.
Applicant sign below if you agree to these terms.

Applicant sign: _____

The permit fee includes four (4) inspections; any additional inspections will incur extra charges.

All applicants must comply with the service requirements and new construction / remodel procedures contained herein and in District Ordinances 255 and 263. The requirements are based upon today's application. If you have any changes or modifications to the application please notify the District.

Applicant statement: I acknowledge that I have received, read and agree to the TCPUD sewer and or water conditions of service requirements as stated in this document and shall abide by all regulations and requirements stated in District Ordinances 255 and 263.

Property Address

APN

Applicant Print Name

Applicant Signature

Date

For District Use Only

TCPUD Representative

Date

Exhibit 6-1. California Specific SSO Notification and Reporting Summary

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13

Date



Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssol/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

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; orReach 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 voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

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.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. **REPORTING REQUIREMENTS**

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a “Username” and “Password” by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **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:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a 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).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee’s sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

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 sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

Exhibit 6-2. District Standard Operating Procedures for SSO Response

6.0 OVERFLOW EMERGENCY RESPONSE PLAN

The purpose of the Sanitary Sewer Overflow Response Plan is to minimize the impact of sanitary sewer overflows (SSO's) to the public and the environment. All sanitary sewer overflows will be responded to in a timely manner to expedite the necessary steps to relieve the overflow. Relieving the sewage blockage and spill containment will be our highest priority, taking in to consideration public health concerns. This response plan will be the guideline for the standard operating procedures in the event of a sanitary sewer overflow. The response plan will be reviewed periodically to ensure that all corrective measures are being taken.

6.1 INITIAL SPILL RESPONSE

When the Utilities Coordinator is notified of a potential Sanitary Sewer Overflow during working hours, they will immediately dispatch a field crew, notify the Utilities Superintendent, Underground Field Supervisor and Director of Utilities. After hours, the On Call Employee will notify the Superintendent or Director of Utilities of a potential sanitary sewer overflow. The On Call Operator will provide first response. The Superintendent or Director of Utilities shall notify other staff members from the Utilities Staff to assist in the spill response as required. If the Utilities Superintendent or the Director of Utilities cannot be contacted, the On Call Operator shall contact other employees while not delaying the response. This communication response is summarized in Figure 2.2 of this document.

- The crew will respond to the site of the complaint with the proper Spill Response equipment. If the problem is identified as an actual spill, it may be necessary to send for additional equipment or personnel.
- The crew will assess the problem and take the necessary steps to contain the spill, eliminate the overflow, and begin necessary cleanup, signage, photos, water quality sampling and notifications.
- If the problem has escalated to an emergency situation, further staff assistance, such as Pump Station operators, and Electrical Technicians, etc may be contacted. If assistance is needed from outside services, the following Agencies of outside contractors may be contacted:

Agency/Vendor	Equipment	Business Hour Phone	After Hours Phone
North Tahoe PUD	Vactors, Bypass Equipment , Staff	530 546-4212	530 546-4212
Truckee Sanitary District	Vactors, Bypass Equipment, Staff	530 587-3804	530 587-3804
Alpine Septic	Tank Trucks	530 577-7867	530 577-7867

Waters Septic Service	Tank Trucks	888-909-7867	888-909-7867
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Additional agencies, staff and equipment can be found in Appendix I.

6.2 EMERGENCY TRAFFIC CONTROL

In the event that the spill is located in a high traffic area, additional staff shall be contacted if necessary to provide traffic control. If the traffic control will be on a State Highway, both Highway Patrol and Cal Trans shall be contacted. Request the Highway Patrol to contact Cal Trans.

California Highway Patrol: Truckee Dispatch- 530 582-7500

Cal Trans: 530 583-3201

Placer County Sherriff Dispatch: (530) 581-6300 Emergency Dispatch: 530 823-4411

El Dorado County Sheriff Dispatch: 530 621-6600 Emergency Dispatch: (530) 544-3464

6.3 BYPASS AND CLEARING BLOCKAGE

Every attempt shall be made to clear the blockage as quickly as possible. If the blockage is not relieved within the first few attempts (20 minutes), it is crucial that bypass or storage procedures are implemented immediately.

- If a pump station can be isolated and used for temporary storage, consult with the Pump Station Field Supervisor or Pump Station Operators.
- In small residential areas, the storage capacity of the Vactor(s) may be sufficient to bypass flows and stop the spill until the blockage is cleared or a larger bypass is set up.
- Locate the nearest downstream manhole that can accept the additional flow.
- Set up the 4 inch pump on the Vactor or the 4-inch portable pump, but be advised that larger pumps may be needed. Sufficient 4-inch discharge hose is located in the Vehicle Barn or Old Welding Shop in the Lower Yard. The pump discharge hose should be secured or placed far enough into the manhole that it will not come out during pumping. The pump and pump hose should be protected from traffic by barricades.
- Take photos of any bypass setups.

6.4 Containment

Containment of already spilled material is top priority. The crew will make every valued effort to keep the SSO in as small an area as possible. It is preferred that the crew keeps the SSO in the

street and out of storm drains. To make sure the SSO is contained, the crew may use the following methods:

- Use drain covers, 3 inch high rubber dams, sand bags or soil to keep the overflow from reaching a storm drain.
- Should the overflow take place in an area not normally accessible to the public, such as; (fields, tributaries, etc.), the crew will use any reasonable means to contain the flow in that area for recovery.
- The crew will make every reasonable attempt to dam up the spill in the storm drain or catch basin and recover it from that point.
- Take photos of all containment efforts.

6.5 SITE RESTORATION AND CLEANUP

Every effort to restore the environment to the condition that existed before the SSO occurred will be made by using the following procedures:

- If the SSO occurred in the street, staff will apply a light mist of diluted household bleach to the affected area. If the SSO occurred in an unpaved/dirt area staff will vacuum up all affected areas and loose material and apply a light application of diluted household bleach to the saturated areas.
- Collect and dispose of any standing or pooled sewage that is accessible to the public.
- Attempt to recover all spilled sewage in gutters, storm drains, culverts, swales, ditches, dry creeks, etc.
- Quantify the volume of all sewage recovered at the time it is disposed of out of the truck.
- Clear surrounding area of paper, solids, and any other signs of a SSO.
- If the spill area is not accessible to vacuum up, rake up all loose material and debris and place into garbage bags, scarify the soil with a rake and apply a diluted household bleach solution.
- Take photos.

6.6 WATER QUALITY SAMPLING

Within 48 hours of becoming aware of an SSO, that has reached any active creek, stream, or river or has reached Lake Tahoe, there are requirements that water quality samples be taken at certain locations. A spill sample kit with appropriate bottles for the sampling of Bacterial indicators and Ammonia is located in the Superintendent's office on top of the file cabinet.

- Contact the lab at Tahoe Truckee Sanitation Agency (TTSA) to notify them of the need for sampling analyses for Bacterial and Ammonia parameters. Both constituents have a maximum of 24 hours of hold time, so coordination of sampling and lab delivery is critical. Call TTSA at (530) 587-2525.
- Creeks, Rivers and Streams: Collect one sample 100' upstream of the point of entry of the SSO. Collect one sample 100' downstream of the point of entry of the SSO. Collect one sample at or near the point of entry of the SSO.
- Lake Tahoe: Collect one sample along the shoreline approximately 100' away from the point of entry of the SSO. Collect another sample 100' in the opposite direction of the SSO point of entry from the first sample. Collect one sample at or near the point of entry of the SSO to the Lake.

Care shall be taken to ensure samples are taken properly and stored properly.

- Always wear sterile blue nitrile gloves while handling the sample containers. Change gloves after each sample bottle is filled.
- Always sample in a clean to dirty order. Sample creeks, streams and rivers upstream **first**, downstream **second** and at the **location of the spill last**. For sampling Lake Tahoe, if possible, sample upwind of point of entry of the SSO **first**, downwind of the point of entry of the SSO **second**, and then collect the sample at the location of the SSO entry into the Lake **last**.
- Record date, time and location that each sample is taken on the sample paperwork in the kit, and label each sample bottle with a specific sample ID, date and time prior to filling.
- If practical sample bottles shall be filled in a minimum of 4-6 inches of water depth. Take great care to assure no debris, dirt or sediment enters the sample bottle. Do not touch the inside of the sample bottle or lid with your fingers or any foreign objects. Fill the sample container to the 100mL line for bacterial samples and completely fill all other sample containers, and quickly replace lid and tighten securely.
- Place each sample bottle into a separate and unused zip lock bag and place into a cooler with an ice pack or cubed ice placed in a sealed zip lock bag.
- Samples shall be transported and analyzed at the Tahoe Truckee Sanitation Agency (TTSA) within 12-18 hours of being collected if possible. If the SSO occurs on the weekend, contact the on duty operator at TTSA at 530-587-2525. Let them know you need the lab to accept and set up these samples within 24 hours of being collected.
- Take photos at the sample sites.

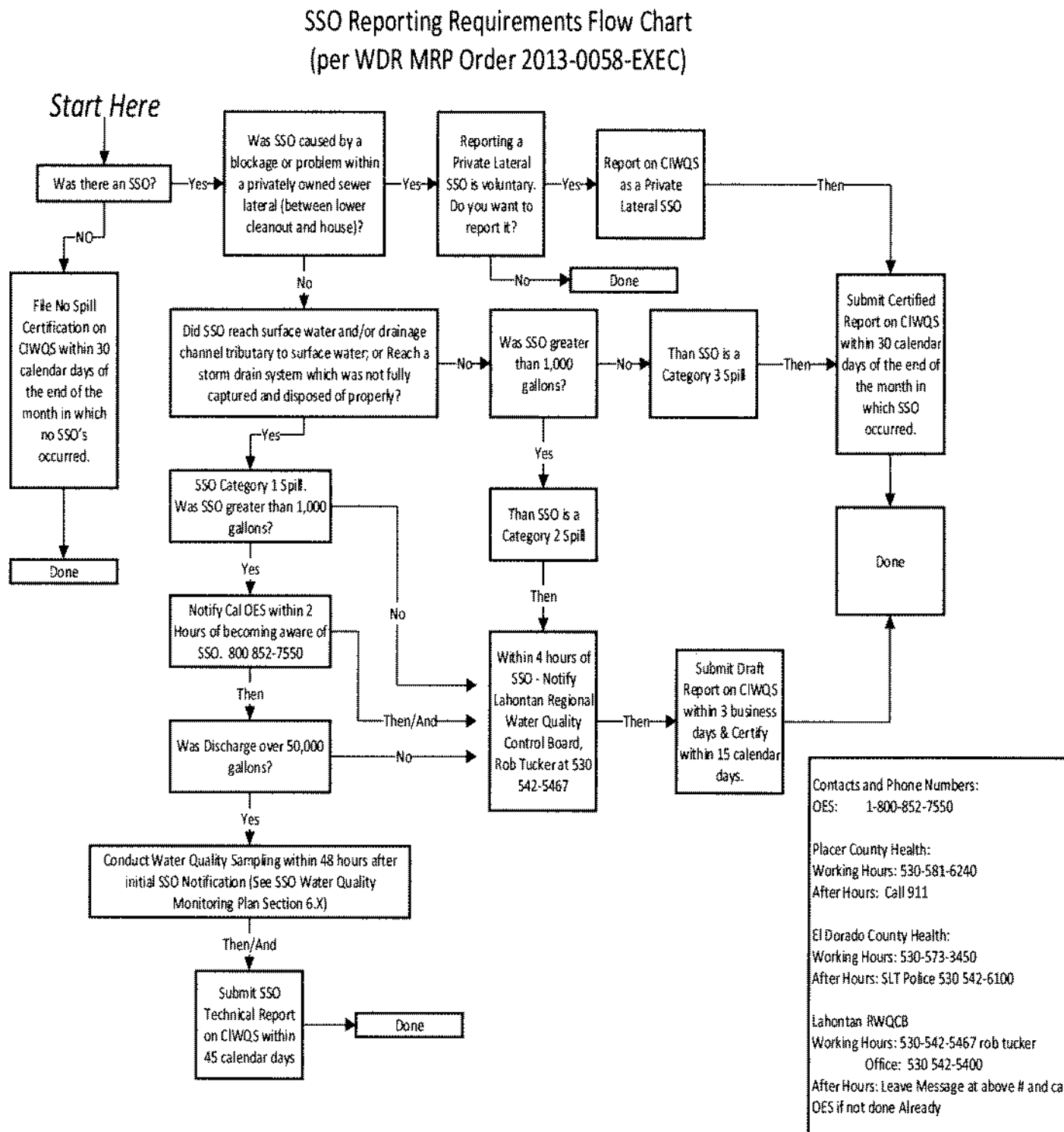
6.7 Reporting and Notification

SSOs that occur in California as a result of a failure within the District's sanitary sewer system are to be reported by the District using the State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow eReporting Program (<http://ciwqs.waterboards.ca.gov/>).

Notification and reporting requirements based on SWRCB Order No. WQ 2013-0058-EXEC, Adopted Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as of July 30, 2013), can be found in Appendix XX

Figure 6-1 is a reporting flowchart to be used to determine reporting type, schedule and completion timelines. A written summary of California-specific SSO Notification and Reporting requirements is included as Appendix XX.

Figure 6-1 SSO Reporting Requirement Flow Chart



6.8 BLOCKAGE INVESTIGATION

Following elimination of the blockage and cleanup activities have been completed, the cause of the spill shall be investigated. If the spill occurred in a gravity sewer main or lower lateral, the affected segment of line shall be televised using the District CCTV equipment. If District equipment is not adequate to provide accurate information, contact the District's CCTV contractor Mountain Pipeline at 775-846-5782, 530-550-9301, or (530) 582-0353.

6.9 DOCUMENTATION AND TRAINING

A complete Sanitary Sewer Overflow Field Report form, as shown in Exhibit 6-3, shall be completed at the conclusion of any SSO. All spills shall be reviewed by the Director of Utilities and Superintendent as to the adequacy of the response, cause of the blockage, mitigation of the spill cause and evaluation of procedures for adequacy or improvement.

The District's collection system staff is trained in OERP as new employees. The following training procedures must be completed within the first 180 days of employment:

- Injury and illness prevention
- Hazard communication
- Safety inspections
- Fall protection
- Confined space entry
- Motorized equipment operations
- Traffic control

District employees responsible for responding to and reporting an SSO event must complete the following SSO-related training procedures within 180 days of employment and annually thereafter:

- Overflow Emergency response plan
- First aid/CPR

6.10 Sewer Intrusion into a Private Residence or Building

Sewer intrusion into a private residence or commercial building caused by a blockage or SSO related to a District owned and operated facility will be handled by the Utilities Superintendent or Director of Utilities. Property damage shall be immediately documented and photographed by the field crew during first response. A professional and certified sewage cleanup contractor shall be dispatched to begin cleanup procedures. The District's Director of Accounting shall be

notified of the occurrence and will contact the District's Insurance carrier to begin the loss process. Property damage caused by a blockage or SSO in the private lateral or customer owned facilities shall be reviewed and the customer shall be given contact information for certified sewage clean up specialists.

Sewage Cleanup Contractors

CALNEVA HYDRO STEAM (for sewage cleanup)

24 hour emergency service/Howard or Anna Rankell
(530) 587-0505 or 583-3645 or 546-3756 or (775) 831-3645

BELFOR Property Restoration (for sewage cleanup)

24 hour emergency response 1- 800-856-3333
Belforusa.com

Exhibit 6-3. SSO Field Reporting Form



Tahoe City Public Utility District – Sanitary Sewer Overflow Field Report

Spill location name: _____ (Manhole ID# or Address)

Street address & City: _____

Spill appearance point:

- Building Forcemain Gravity Sewer Manhole Pump Station
- Property Line Cleanout House Cleanout Other _____

Did the spill discharge to a drainage channel and/or surface water? Yes No

Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system? Yes No

Final spill destination: Road Building Surface Water Drainage Ditch Unpaved surface
 Other paved surface Other _____

Estimated spill volume: (in gallons) _____

Estimated volume of spill recovered: (in gallons) _____

Estimated volume of spill that reached surface water, drainage channel or not recovered from a storm drain: (in gallons) _____

Estimated spill start date/time: _____/_____/_____ ____:____ AM / PM

TCPUD Notification date/time: _____/_____/_____ ____:____ AM / PM

Estimated crew arrival date/time: _____/_____/_____ ____:____ AM / PM

Estimated spill end date/time: _____/_____/_____ ____:____ AM / PM

Blockage Location: Main District Lateral Manhole Customer Lateral Other _____

Spill Cause: Debris Root intrusion Pipe structural problem Grease Outside Contractor
 Vandalism Flow exceeded capacity Pump station failure

Other: _____

Spill Response Activities: (Mark all that apply) Cleaned-up Contained all or portion of spill Restored flow
 Inspected sewer using CCTV to determine cause Returned all or portion of spill to sewer system Other
(Describe) _____

Spill response completion date/time: _____/_____/_____ ____:____ AM / PM

Photos Taken Yes No

Disinfected Yes No

Health warnings posted? Yes No Location _____

Name of impacted surface water: _____

Water quality samples taken: Yes No Not applicable to this spill

Form Completed by: _____ **Date:** _____

List of Exhibits

Exhibit 6-1. California Specific SSO Notification and Reporting Summary

Exhibit 6-2. District Standard Operating Procedures for SSO Response

Exhibit 6-3. SSO Field Reporting Form

Exhibit 7-1. Sewer Ordinance 255

Tahoe City Public Utility District

Sewer Ordinance (Conformed Version)*

Rules, Regulations, Rates and Charges Governing the Use, Operation and Management of the District Sewer System Facilities



Conformed January 28, 2014

- * This is a conformed version combining the Ordinances listed below into a single document for the convenience of the public and staff.
- Ordinance 255, adopted April 17, 2006
 - Exhibit B - Fee Schedule, from Ordinance 263, adopted May 26, 2009
 - Ordinance 266, adopted September 22, 2009
 - Ordinance 277, adopted December 20, 2013
 - Ordinance 278, adopted December 20, 2013

General Manager

Cindy Gustafson

Board of Directors

Lou Reinkens

Dan Wilkins

Erik Henrikson

Ron Treabess

Judy Friedman

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ADMINISTRATION

1.01 DISTRICT AUTHORITY AND GOVERNANCE

The District is formed and operates under the Public Utility District Act, Division 7 of the California Public Utility Code. A five (5) member Board of Directors governs the District locally. The Board of Directors is responsible for setting policy and general administrative procedures for the District.

The District may, by an order approved by a majority vote of the members of the Board of Directors, prescribe, revise, and collect fees, rates, rentals, or other charges for services and facilities furnished by the District in connection with its sanitary sewer system. Revenues derived by the District from said fees, rates, rentals or other charges for service or facilities may be used for any purpose except the acquisition or construction of additional local street sewers or laterals which are solely for private use.

1.02 REGULATION GOVERNING SEWER SERVICE

1.02.1 General

Ordinance 255 of the Tahoe City Public Utility District (hereinafter referred to as "District,") establishes the rules, regulations, rates and charges governing the use, operation and management of the District sewer system facilities.

1.02.2 Purpose

The purpose of this Ordinance is to clearly outline the requirements and guidelines applicable to sanitary sewer facility construction and maintenance within the District boundaries. This Ordinance also establishes charges for services and provides a method for the collection of charges.

1.02.3 Application

The provisions of this Ordinance shall apply to sewer construction, use, maintenance, discharge, deposit or disposal of all wastewater, both directly and indirectly into and through all of the District's sanitary sewer system, and to the issuance of permits and collection of fees.

1.02.4 Consistent with Other Codes

This Ordinance meets or exceeds the California Plumbing Code, the Uniform Plumbing Code, the Uniform Building Code, National Electrical Code and the National Fire Protection Code.

1.02.5 Effective Date

This Ordinance shall become effective 30 days from date of adoption, and the rates and schedules specified shall become applicable with the billing for the service year commencing January 1.

1.02.6 Prior Ordinances Revoked

To the extent that any of the existing and prior ordinances of the District applicable to its sewer systems, works and facilities are inconsistent herewith, all such prior sewer ordinances shall be deemed revoked upon this Ordinance becoming effective.

1.02.7 Interpretation

The General Manager of the District is charged with interpretation, regulation and enforcement of the provisions of this Ordinance.

1.02.8 Violations

In order to protect the health, safety and welfare of the community, any person found to be violating any provision of this Ordinance shall be served by the District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. Upon failure of a person to cease or prevent further violations, and at the direction of the Board of Directors, the General Manager shall exercise his or her authority to disconnect the premises from the system.

In the event such violation results in a public hazard or menace, the General Manager may enter upon the premises without notice and do such things and expend such sums as may be necessary to abate such hazard. The Owner shall be responsible for the costs associated with the work performed. Any person violating any of the provisions of this Ordinance shall become liable to the District for any expense, loss or damage occasioned the District by reason of such violation.

If a violation occurs on any premises and such violation continues beyond the time limit prescribed, such premises shall be subject to disconnection from the District sewer system upon seven (7) days written notice by first class mail addressed to the Owner. Disconnect and reconnect fees in accordance with Section 10.10 shall apply.

1.02.9 Requests for Variance

All requests for variance or deviation from these standards shall be submitted, in writing, by the Owner to the General Manager prior to installation of the facilities. It is incumbent upon the Owner to secure such written permission and not to assume that permission will be forthcoming for said variances or deviations.

1.02.10 Appeals

Any person who is dissatisfied with any determination made under this Ordinance may at any time within 30 days after such determination make an appeal. The first appeal will be made to the General Manager. Should the applicant be dissatisfied with the decision of the General Manager, a subsequent appeal may be made to the Board of Directors within 30 days of the General Manager's decision.

1.02.11 Appeal to General Manager

Any person who is dissatisfied with any determination made under this Ordinance may at any time within 30 days after such determination, appeal to the General Manager by giving written notice to the General Manager and to the Clerk of the Board of Directors. The appeal shall set forth the events and circumstances leading to the appeal, the nature of the ruling or interpretation from which relief is sought, the nature of the impact of the ruling on the appellant's property or business, together with any other reasons for the appeal.

The General Manager shall investigate the matter appealed and shall make a written decision, which shall be mailed to the appellant within 30 days of receipt of the appeal.

If the dispute involves an amount of charges, the appellant shall pay the amount disputed in full when the charges are due. Any charge paid under protest will be refunded to the appellant should the General Manager determine that the charges were wrongfully made.

1.02.12 Appeal to Board of Directors

Any person who is dissatisfied with any determination made by the General Manager may at any time within 30 days after such determination, appeal to the Board of Directors by giving written notice to the Manager and to the Clerk of the Board of Directors. The appeal shall set forth the events and circumstances leading to the appeal, the nature of the ruling or interpretation from which relief is sought, the nature of the impact of the ruling on the appellant's property or business, together with any other reasons for the appeal.

The Manager shall transmit to the Board of Directors a report upon the matter appealed. The Board of Directors shall cause written notice to be given at least ten (10) days prior to the time fixed for hearing to all persons affected by such application of the time and place fixed by the Board of Directors for hearing such appeal. The Board shall consider all testimony and make a decision, which shall be mailed to the appellant within 30 days of the date of the Board action. The Board of Directors may, at any time, upon its own motion, revise any determination made by the Manager.

If the dispute involves an amount of charges, the appellant shall pay the amount disputed in full when the charges are due. Any charge paid under protest will be refunded to the appellant should the Board of Directors determine that the charges were wrongfully made.

1.03 SEVERABILITY

If any section, paragraph, sentence, clause or phrase of this Ordinance or any part thereof is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance or any part thereof. The Board hereby declares that it would have passed each section, paragraph, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, paragraphs, sentences, clauses or phrases be declared invalid.

1.04 AUTHORITY

Nothing contained within this Ordinance shall be construed to limit the authority of the Board of Directors to amend, supplement or change this Ordinance or any rules and regulations applicable thereto at any time.

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GENERAL POLICIES

2.01 USE OF PUBLIC SEWER SYSTEM REQUIRED

The Owner of any building situated within the boundaries of the District and proximate to any street or sewer easement in which there is located a public sewer shall be required at his expense to connect said building with the proper public sewer in accordance with the provisions of this Ordinance.

Where sanitary sewers are available within 200 feet of a property, no person shall construct or maintain any privy, privy vault, septic tank, cesspool, seepage pit or other facility intended or used for the disposal of sewage unless permitted by the appropriate regulatory authority.

2.02 SEWER SERVICE ACCEPTED

2.02.1 Gravity Flow

The District shall accept gravity flow sewer service where feasible from all properties within the District boundaries that are capable of being developed.

2.02.2 Pressure Systems

In some instances, the sewer main is higher than the sewer outlet on the residence. In other cases gravity systems cannot be made available for such reasons as economics, physical or environmental constraints. In these instances, the Owner must design and install a privately owned and operated pressurized system in order to obtain sewer service.

2.03 REGIONAL TREATMENT PLANT

The Tahoe City Public Utility District collects sewage from within the District service territory and transports it to Tahoe Truckee Sanitation Agency (TTSA), the regional treatment plant in Truckee, California, via the Truckee River Interceptor, owned and operated by TTSA. Any connections to this interceptor shall be made through collector manholes and are subject to the approval of the District and TTSA.

2.04 DISTRICT RECORDS AND MAPS

The location of facilities identified on District records and maps are believed to be accurate. The District does not warrant their accuracy.

2.05 ANNEXATION

It is the intent of the District to provide sewer service to all properties within its boundaries. An applicant for sewer service whose property is not located in the District's service territory will be served by the District only under the following conditions:

- a. The property must be located within the District's approved Sphere of Influence.
- b. The property owner must agree to have his or her parcel annexed into the District's service territory and pay all costs associated with processing the application through the appropriate Local Agency Formation Commission (LAFCO).
- c. The District must evaluate and find that there is sufficient capacity within the existing sewer collection system.

- d. If the District finds that there is not sufficient capacity in the existing sewer collection system to provide service, the applicant must agree to construct or pay for construction of the necessary facilities as determined by the District to provide service.
- e. The District must determine that service can be made available to the parcel(s) without jeopardizing service levels to existing District customers.
- f. The Owner's engineer must prepare the application to be submitted to LAFCO.
- g. Annexation shall be made subject to the policies and guidelines of LAFCO as provided for by California Government Code Section 56000 et seq.
- h. The Owner shall enter into an agreement with the District committing Owner to pay the costs of the LAFCO application process and District expenses, including, but not limited to engineering, administrative and incidental costs as delineated in Section 10.
- i. Any application for annexation initiated under the terms of this policy shall be approved by the Board of Directors.
- j. Properties that are outside the District's territory will be served only after receiving approval from the appropriate LAFCO.

2.06 SERVICE THROUGH CONTRACT

Sewer service to properties outside District boundaries that are within the jurisdiction of other agencies or to areas within the District but where service was not provided through a sewer assessment district may be provided with service through contract only and shall be provided at the discretion of the District.

Service to industrial facilities or other premises having unusual characteristics may be deemed unclassified and may be provided by contract only, and shall be provided at the discretion of the District.

2.07 COMMON SERVICE AGREEMENT

Where two (2) or more structures share a common house service sewer lateral, and the properties are subdivided, the Owners shall enter into a Common Service Agreement (see Exhibit 2.01) that shall be recorded against the parcels. Drafting, executing and recording the contract is required prior to final sewer inspection or approval of the parcel split, and shall be the responsibility of the Owners involved. Necessary easements shall be provided by the Owner.

Where existing common house service sewer laterals exist, the District recommends that Owners of the involved parcels draft, execute and record a Common Service Agreement. Parties to the contract should agree to share equally the operation and testing costs associated with the shared private sewer service lateral. The contract shall be written such that the agreement is binding upon the heirs, successors and assigns of each of the parties involved.

The District is not responsible for maintenance or operation of common service lines. Applicant for service shall provide District with a copy of the recorded contract.

Where separate service lines share a common trench, Owners shall comply with Section 5.01.1.

2.08 SERVICE LATERALS PROVIDED

2.08.1 Provided by way of Assessment District

A lateral sewer from the District's main sewer to the curb or property line abutting the street or District right-of-way shall be provided to those parcels for which fees have been paid through assessment district proceedings. Lateral sewers that were paid for through assessment district proceedings but which in error were not installed by the contractor shall be installed at the District's expense.

2.08.2 Nonexistent Laterals, Wyes and/or Points of Service

Before a stub out, wye or point of service that is shown to exist on District maps is determined to be "nonexistent," the person attempting to locate the service lateral connection point shall contact the District for assistance. The District shall review records of closed circuit inspections or shall, at its expense, perform a closed circuit camera inspection of the main to ensure that there is, in fact, a stub. The District shall not be liable for any expense, equipment, excavation and/or labor incurred by any person in determining the existence or the "nonexistence" of any stub out, wye, point of service and/or other facility.

When the District has previously been provided with record maps, and the District has made a determination that no service lateral, wye or point of service exists as shown on the record maps, the District may waive any applicable sewer main tapping fee, and may install or cause to be installed a service lateral at the District's expense, provided there is a sewer main servicing the property with uncommitted capacity.

2.08.3 Not Paid Through Assessment District

Services and main extensions that were proposed but not installed and for which full payment was not paid through an assessment district shall be installed at the expense of the Owner. Owner shall enter into a Development Agreement with the District for design and extension of service.

2.08.4 Subdivided Parcels

Owners shall be responsible for all costs associated with the extension of sewer service to parcels that were subdivided subsequent to Assessment District proceedings or where parcels are outside of Assessment District boundaries. Owner shall enter into a Development Agreement with the District for the design and extension of service.

Developed parcels that are subsequently subdivided shall either provide a new service to the subdivided property or comply with Section 2.07, Common Service Agreement, at the discretion of the District.

2.09 DISCONTINUANCE OF SERVICE

Service may be discontinued for any of the following reasons:

- a. Delinquency - in the payment of any bill
- b. Improper Maintenance - Failure of the Owner to maintain his or her facilities in an open and free-flowing condition, free of physical defects
- c. Non-Compliance - Failure to comply with this Ordinance or any District rules and regulations for installation, inspection, or operation of sewer facilities

- d. Owner Request – Where a structure will be removed or remodeled and service will be discontinued for at least 90 days, or where a sewer lateral will be permanently removed for any reason. In either case, service will be discontinued by way of cutting and capping the house service sewer lateral in accordance with Section 5.05.3. User fees will be discontinued following permanent service removal in accordance with District policy.
- e. As deemed necessary - by the General Manager.

2.10 DISASTER POLICY

Should appropriate governing agencies determine that a property is uninhabitable following a disaster, the District may elect to temporarily suspend user fees. The Owner of the property involved must notify the District in writing and request a temporary suspension of fees.

The Owner shall also be responsible for capping building lateral(s) on the property in accordance with Section 5.05.3 as soon as this procedure can be safely completed. A District Inspector must be called to witness the capping. The District may require a pressure test of the building lateral(s) prior to re-connection (see Section 6.02.)

Sewer service charges will not be billed during the time that the house service sewer is capped. Sewer service charges will resume when service is resumed.

2.11 WATER CONSERVATION

2.11.1 Water Pressure Not to Exceed 60 psi

All installations shall comply with the requirements of ordinances, rules and regulations of the District pertaining to water conservation. Reference District Ordinance 106, which states, in part, that water pressure will not exceed 60 psi. In addition to restricting excess use of drinking water, conserving water reduces flow into the sewage treatment facility thereby minimizing unnecessary treatment.

2.11.2 Low Flow Fixtures

Low flow restrictions shall be installed on all fixtures, and meet the requirements of the current California Plumbing Code, or the following, whichever is lower:

Toilet:	1.6 gallons per flush
Shower head:	2.5 gallons per minute
Faucet:	2.2 gallons per minute

2.12 TIME LIMITS

Any time limit provided for in this Ordinance may be extended by mutual written consent of both the District and the Owner, Permittee or Applicant, or other person affected.

RECORDING REQUESTED BY:
AFTER RECORDING RETURN TO:

FOR RECORDER'S USE ONLY:

Tahoe City Public Utility District
P.O. Box 5249
Tahoe City, CA 96145
530-583-3796

COMMON SERVICE AGREEMENT

WHEREAS, _____ owns that real property located at _____, Assessor Parcel Number (APN) _____, _____, California; See Exhibit "A", Grant Deed attached.

WHEREAS, _____ owns that real property located at _____, Assessor Parcel Number (APN) _____, _____, California; See Exhibit "B", Grant Deed attached.

WHEREAS, _____ owns that real property located at _____, Assessor Parcel Number (APN) _____, _____, California; See Exhibit "C", Grant Deed attached.

WHEREAS, _____ owns that real property located at _____, Assessor Parcel Number (APN) _____, _____, California; See Exhibit "D", Grant Deed attached.

WHEREAS, _____ AND _____

WHEREAS, _____ AND _____

(the Property Owners) have connected to the Tahoe City Public Utility District ("DISTRICT") sewer system;

WHEREAS, the Property Owners have constructed on their private property a joint sewer pipeline to connect between their properties and the District sewer system;

NOW, THEREFORE, it is hereby agreed among the Property Owners and the District:

COMMON SERVICE AGREEMENT

APN(s):

1. The Property Owners have constructed a joint sewer pipeline to serve the properties referenced herein. This joint sewer pipeline is to serve only the properties specified above. The continued operation, maintenance, and testing of the joint sewer pipeline from the structure to the District's main, and cost thereof, shall be the exclusive responsibility of the Property Owners, and not of the District.

2. Each of the properties specified above shall be billed as a full and separate residential living unit.

3. If there is any failure, blockage or other problem relating to the joint sewer pipeline, the District may be required to close the joint sewer pipeline temporarily, as it might with any other District customer. The Property Owners recognize that this closure or other repairs may affect the properties specified above, regardless of which property owner may have caused the problem with the joint sewer pipeline.

4. It is the responsibility of the Property Owners to have the line repaired, if needed, by a California Licensed Contractor. If the District is required to make any repairs, inspect repairs or do other work on the joint sewer pipeline, the Property Owners agree that the District may split the costs equally, (regardless of which property owner necessitated the District's work), between the properties specified above and bill each of them equally for the District's cost. The Property Owners expressly agree that they will be liable for their share of the cost, as billed by the Contractor and the District, regardless of which Property Owner necessitated the work.

5. The Property owners recognize that it is their responsibility to reach an understanding by means of license or easement between each other for the placement and use of the joint sewer pipeline.

6. The Property Owners and the District agree that this Agreement and the sharing of costs and responsibility between the Property Owners, shall be binding upon their heirs, successors and assigns of each of the Property Owners.

7. The Property Owners expressly agree to indemnify and hold harmless the District, its agents and employees from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from Property Owners' sharing of the joint sewer pipeline.

COMMON SERVICE AGREEMENT

APN(s): _____

PROPERTY OWNER SIGNATURES:

(All Signatures Must Be Notarized – Use the Acknowledgment Form)

By: _____

Date: _____

Print Name: _____

By: _____

Date: _____

Print Name: _____

By: _____

Date: _____

Print Name: _____

By: _____

Date: _____

Print Name: _____

NOTE: THE DOCUMENT MAY BE SIGNED IN COUNTERPART.

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DUTIES, RIGHTS AND RESPONSIBILITIES

3.01 DUTIES OF DISTRICT PERSONNEL

3.01.1 Board of Directors

The Board of Directors shall make and enforce such rules and regulations as may be necessary for the safe, economical and efficient operation, management and protection of the District's sewer collection system. Further, the Board of Directors shall establish and regulate rates, fees and service charges.

3.01.2 General Manager

The General Manager shall administer, implement and enforce the provisions of this Ordinance. Any powers granted to or duties imposed on the General Manager may be delegated by the General Manager to persons employed or retained by the District.

3.01.3 Employees

District personnel shall enforce the provisions of this Ordinance. All District personnel shall identify themselves upon request when entering the work site or property for any inspection of work or for other purposes required or provided for by this Ordinance.

3.01.4 Contractors

All Contractors working on behalf of the District shall identify themselves upon request when entering the work site or property for any work or for other purposes required or provided for by this Ordinance.

3.02 RIGHTS AND RESPONSIBILITIES OF DISTRICT

3.02.1 Control of Sewer System

The main sewer system shall be under the exclusive control and management of the District. The District shall maintain all main sewers, trunk sewers and related appurtenances. Figure 3.01 illustrates the sewer facilities maintenance responsibilities of District and Owner.

3.02.2 Right of Entry

Authorized representatives of the District are permitted to make limited, reasonable inspections, at reasonable times, of any grounds, building or residence served to the extent necessary to ensure compliance with this Ordinance or amendments. The Owner shall be given the opportunity to accompany the District on all inspections.

If the purpose of the inspection is to verify the presence of multiple units or issues related to other billing factors and the District is not given access to enter the property within 30 days of the date requested, the account may be adjusted.

3.02.3 Service Interruption

The District will exercise reasonable diligence and care to provide continuous operation of its sewage collection facilities and to avoid, so far as practicable, curtailments or interruptions in such service. The District, its officers, agents or employees will not, however, be liable for interruption, shortage or curtailment or stoppage of said service, or for any loss or damage occasioned thereby.

3.02.4 Temporary Suspension of Service

When it is necessary or convenient to make repairs or improvements to its system or appurtenances, the District shall have the right to temporarily suspend sewer service or obstruct the flow of sewage from the lateral sewer. The District shall not be liable for any loss or damage occasioned thereby. Repairs or improvements will be made as rapidly as practicable and, so far as possible, at such times as will cause the least inconvenience to its customers and users.

3.02.5 Correction Notices

Whenever possible, the District shall serve the Owner with written notice if corrective action is needed on the facilities which are Owner's responsibility to maintain, and allow a reasonable time for the satisfactory correction thereof. If the Owner fails to respond within the time period stated in such notice, District shall cause said sewer facilities to be suspended by plugging the sewer line, or if District finds it necessary in the interest of public health and safety, District may perform work on said facilities and the reasonable costs and expenses incurred for work and material shall be paid by the Owner. Any charges shall be collectible by District as provided by this Ordinance. Administrative fees may be levied in accordance with Exhibit 10.01.

3.03 RIGHTS AND RESPONSIBILITIES OF OWNER

3.03.1 Compliance with Ordinance

Owner shall comply with the provisions contained within this ordinance.

3.03.1.1 Tenants' Compliance

The Owner shall be responsible for tenant's compliance with all provisions contained within this Ordinance.

3.03.2 Connection by Application and Permit Only

Connections to the District's sewer system shall be made in accordance with the provisions of District rules, regulations, ordinances and specifications. No person shall connect to, alter or discharge into the sewer system without making application to the District, securing a permit and paying applicable charges. No person other than authorized representatives of the District shall connect to any District sewer facilities without prior written approval and payment of all charges.

3.03.3 Accessibility

The Owner shall provide to the District, its employees and its authorized agents access at all reasonable times to enter Owner's premises for any purpose properly connected with the provision of sewer service, including inspection to determine that District Ordinances are being observed, in accordance with Section 3.02.2.

3.03.4 Obstructions

In accordance with District Easement Encroachment Policy, Exhibit 3.01, no person shall place on any sewer pipeline any obstruction, including, but not limited to wires, fences, trees or structures, which may impede or otherwise interfere with the District's ready access to any portion of the sanitary sewer system owned by the District without prior approval from the District. Upon the District's written request, such obstruction shall be immediately removed by the Owner at no cost to the District or, at the District's option, shall be removed by the District at the Owner's expense, should the need arise. If the Owner wishes to reinstall the obstruction, it shall do so at his or her own expense.

The reinstallation shall be subject to subsequent removals if access by the District is again required.

3.03.5 House Service Sewer Lateral

The Owner shall, at his or her own risk and expense, install, keep and maintain in good repair all house service sewer laterals and building service sewer laterals, including cleanouts, from the premises served to the point of discharge into District's main or trunk sewer. Figure 3.01 illustrates the sewer facilities maintenance responsibilities of the Owner.

The Owner shall operate and maintain the house service sewer lateral in an open and free-flowing condition, capable of passing tests as outlined in this Ordinance. The Owner shall be responsible for blockages in the lateral sewer, unless the blockage is caused by a physical defect in the District's area of responsibility, Figure 3.01.

3.03.6 Loss and Damage

The Owner shall be responsible for any loss or damage caused by improper or defective installations, facilities or equipment, (whether inspected or approved by District), or inadequate maintenance of the facilities.

3.03.7 Owner's Responsibility Related to Excavation

Prior to and whenever any underground construction is to be performed, the Owner shall contact the District and review the appropriate record drawings on file at the District Office. The Owner shall be responsible for the following:

3.03.7.1 Owner to Determine Location

The Owner shall make such calculations, findings and conclusions as may be necessary to determine the approximate location of the District sanitary sewer facilities in relationship to the proposed excavation. In the event of conflicting positions, the District sanitary sewer facilities shall have prior rights to its location.

3.03.7.2 Expose Sewer Facilities and Determine Adequate Fall

The Owner shall be responsible for the proposed excavation and shall explore for and expose the District sanitary sewer facilities using reasonable care. Once the District sanitary sewer facilities are exposed, the Owner responsible for the excavation shall verify the clearances and compatibility of the proposed works. It is the Owner's responsibility to determine adequate fall before installation of the house sewer service lateral and/or before establishing the finished floor elevation of the structure.

3.03.7.3 District Assistance with Location

Whenever the stub-out, wye or other point of service is not located as shown on the District's record maps the District shall assist the Owner to the extent reasonably possible after reasonable effort has been made by the Owner to locate the point of service by use of surface and underground pipeline detectors. The District will locate sewer stubs for new service through closed circuit television.

The District shall not be responsible for the cost of equipment, excavation, labor and/or material expenses incurred by the Owner in determining the location of stub-outs, service laterals, wyes or other District sanitary sewer facilities, whether existing or non-existing.

3.03.7.4 Damage to District's Facilities

The Owner shall be solely responsible for any and all damage to the District's sanitary sewer facilities during excavation and backfill, regardless of the cause. This includes consequential damage due to improper pipe protection and backfill procedures.

3.03.7.5 Underground Service Alert

The Owner shall call Underground Service Alert 48 hours prior to any start of excavation.

3.03.7.6 Written Notices

The Owner shall respond to written notices served by the District, that require corrective action, within the time period stated in the notice. Owner shall be responsible for reasonable costs and expenses incurred by the District for labor and material, should it be necessary for the District to plug the sewer line or to perform work on Owner's facilities.

3.04 PAYMENT OF CHARGES AND FEES

3.04.1 Connection Fees

Payment of sewer connection fees in accordance with Exhibit 10.01 is the responsibility of the Owner. The Owner shall notify the District if there is any change in sewer use in accordance with Sections 10.05.1.1 and 10.05.2.1.

3.04.2 Service Charges

In accordance with Section 10.06.1, all sewer service charges shall be billed to the Owner of the property, whether or not the Owner is also the occupant. For the purposes of the Ordinance, determination of lot or parcel Ownership thereof shall be based upon the latest available records of the Assessor's offices of Placer and El Dorado Counties. Sewer service charges shall be in accordance with Exhibit 10.01.

Easement Encroachment Policy

Tahoe City Public Utility District

BACKGROUND

The District owns and operates water and sewer facilities on the North and West shores of Lake Tahoe extending from Dollar Hill south to D.L. Bliss State Park. These facilities are located both within public rights of way and across private property. When located on private property, the District generally possesses a utility easement permitting the District to install, operate, and maintain the utility facilities.

An Easement is a right to use a defined area of the real property of another for a specified purpose. The owner of the real property generally retains all the benefits of ownership of the land, which are not inconsistent with and do not unreasonably interfere with the rights of the easement holder.

The utility easements of the District vary as to form. In general, they are for the installation, operation, and maintenance of water or sewer facilities, are in-gross to the benefit of the District, and are non-exclusive. The owner of the real property is prohibited from doing or installing anything that will hinder or prohibit the District's enjoyment of the easement. Most contain a clause specifically prohibiting the installation of any structure without the written approval of the District.

As landowners continue to improve their properties, the District's facilities are increasingly found to conflict with their plans. Furthermore, property owners have, over the years, constructed various improvements on their property, which are in conflict the rights of the District.

PURPOSE

The purpose of this document is to create a fair and consistent policy establishing permitted uses within District easements and establishing procedures required to permit allowed encroachments. Furthermore, this policy will establish procedures for addressing existing un-permitted encroachments.

POLICY

General

It is the District's primary responsibility to provide safe and efficient water and sewer services to its ratepayers and to protect their interests. The District considers any Encroachment or improvement within a District easement that prohibits direct surface access to the underground facilities to be contrary to its easement rights.

However, the District recognizes the detrimental impact of having a utility and associated easement located across private property. Therefore, the District has and will make every effort to cooperate with Landowner's desires to improve their property.

Definitions

Encroachment. An Encroachment is an activity or condition, which results in interference with the rights of the District under its easements. With respect to this policy there are four defined classes of encroachments:

Class 1 – Encroachments that only slightly interfere with the District’s access to the easement area and are easily removed. The following are examples of Class 1 Encroachments:

- flower beds
- lawns and groundcovers
- small shrubs
- irrigation systems
- gravel surfacing
- paving stone surfacing
- asphalt concrete driveways and walkways

Class 2 – Encroachments that significantly interfere with the District’s access to the easement area. However, due to their nature they are readily removable or only impact a limited area of the easement. The following are examples of Class 2 Encroachments:

- concrete driveways and walkways
- larger trees whose roots do not have propensity to invade sewer facilities
- minor landscaping fences
- minor landscaping features such as rockery or timber walls

Class 3 – Encroachments that are a major interference to the District’s access to the easement area and are very difficult to remove or impact a large area of the easement. The following are examples of Class 3 Encroachments:

- major landscaping elements such as fountains and waterfalls
- major fences
- retaining walls
- decks and patios
- non-occupied structures such as small sheds and breezeways

Class 4 – Structures or portions of structures such as houses, garages, workshops, porches, and overhangs that prohibit access to the easement area, have the potential to damage facility, are impossible or unreasonable to remove, or create a liability for the District.

Existing Encroachment: An existing Encroachment is an Encroachment, which exists prior to the effective date of this policy, whether approved, or not.

Proposed Encroachment: A proposed Encroachment is a new Encroachment proposed by a Landowner or is a **remodel or reconstruction** of an *Existing Encroachment*.

Encroachment Policy

Class 1 Encroachments:

- Class 1 Encroachments are permitted encroachments within District easements and require no separate approval from the District.

Class 2 Encroachments:

- Proposed Class 2 Encroachments may be permitted by letter approval from the District. Plans should be submitted to the District for review and comment.
- Existing Class 2 Encroachments may remain without approval of the District.

Class 3 Encroachments:

- Proposed Class 3 Encroachments are prohibited, except as provided in the Exceptions section below.
- When Existing Class 3 Encroachments are discovered, the District will send the Landowner a letter explaining that the Encroachment is a violation and explaining the District's rights. The letter will include a copy of the existing easement and this Policy. The letter will request that if the Landowner has any plans in the area they should remove or modify the Encroachment but it will explain that the District has no plans to pursue the issue further.
- The Landowner may request that an Existing Class 3 Encroachment be permitted as provided in the Exceptions section below.

Class 4 Encroachments:

- Proposed Class 4 Encroachments are prohibited, except as provided in the Exceptions section below.
- When Existing Class 4 Encroachments are discovered, the District will send the Landowner a letter explaining that the Encroachment is a violation and explaining the District's rights. The letter will include a copy of the existing easement and this Policy. The letter will request that if the Landowner has any plans in the area they should remove or modify the Encroachment but it will explain that the District has no plans to pursue the issue further.
- The Landowner may request that an Existing Class 4 Encroachment be permitted as provided in the Exceptions section below.

Exceptions

Prior to considering any exceptions to the above policy, the following two options should be thoroughly investigated by the Landowner:

- **Redesign of the project to eliminate, reduce, or change the nature of the Encroachment.**
- **Relocate the existing utility and easement to eliminate, reduce, or change the nature of the Encroachment.**

Class 3 Encroachments – The District can allow exceptions to the above policy for Class 3 Encroachments under the following conditions:

- Relocation of the utility and easement is not feasible or desired by the District. The District will determine this solely.
- The Encroachment is designed to permit access to the greatest extent possible and is designed to not damage the facility.
- The Encroachment can be removed in the case of emergency without dramatically impacting the landowner or occupants.
- The execution and recording of the attached Encroachment Agreement (Attachment A) defining the Landowner's responsibilities relative to the Encroachment.

Class 4 Encroachments – *The District Board of Directors must approve any exceptions to the above Policy related to Class 4 Encroachments. The District will strongly discourage exceptions to the above Policy for Class 4 Encroachments. In extreme cases, exceptions will be considered under the following conditions. The Landowner*

should contact the District for more information on this situation prior to planning any Class 4 Encroachment.

- Relocation of the utility and easement is not feasible or desired by the District. The Landowner should provide an engineering report analyzing relocation alternatives and providing recommendations. The District will determine the validity of the conclusions of the report.
- The utility facility is redesigned and reconstructed by the Landowner to a higher standard as determined by the District. The design should include provisions for removal of the facility without damage to the structure.
- The Landowner will be required to enter into a Development Agreement and comply with all of its provisions covering the utility facility reconstruction.
- The structure is designed to not damage the facility.
- The landowner will be required to execute and record an Amended and Restated Easement Agreement.

District Responsibilities

The District shall be solely responsible for determining the Class of Encroachment.

The District is responsible for restoring the easement area to a smooth graded and stabilized surface. The District will not be responsible for replacement of any improvements, regardless of Class, removed or damaged for access.

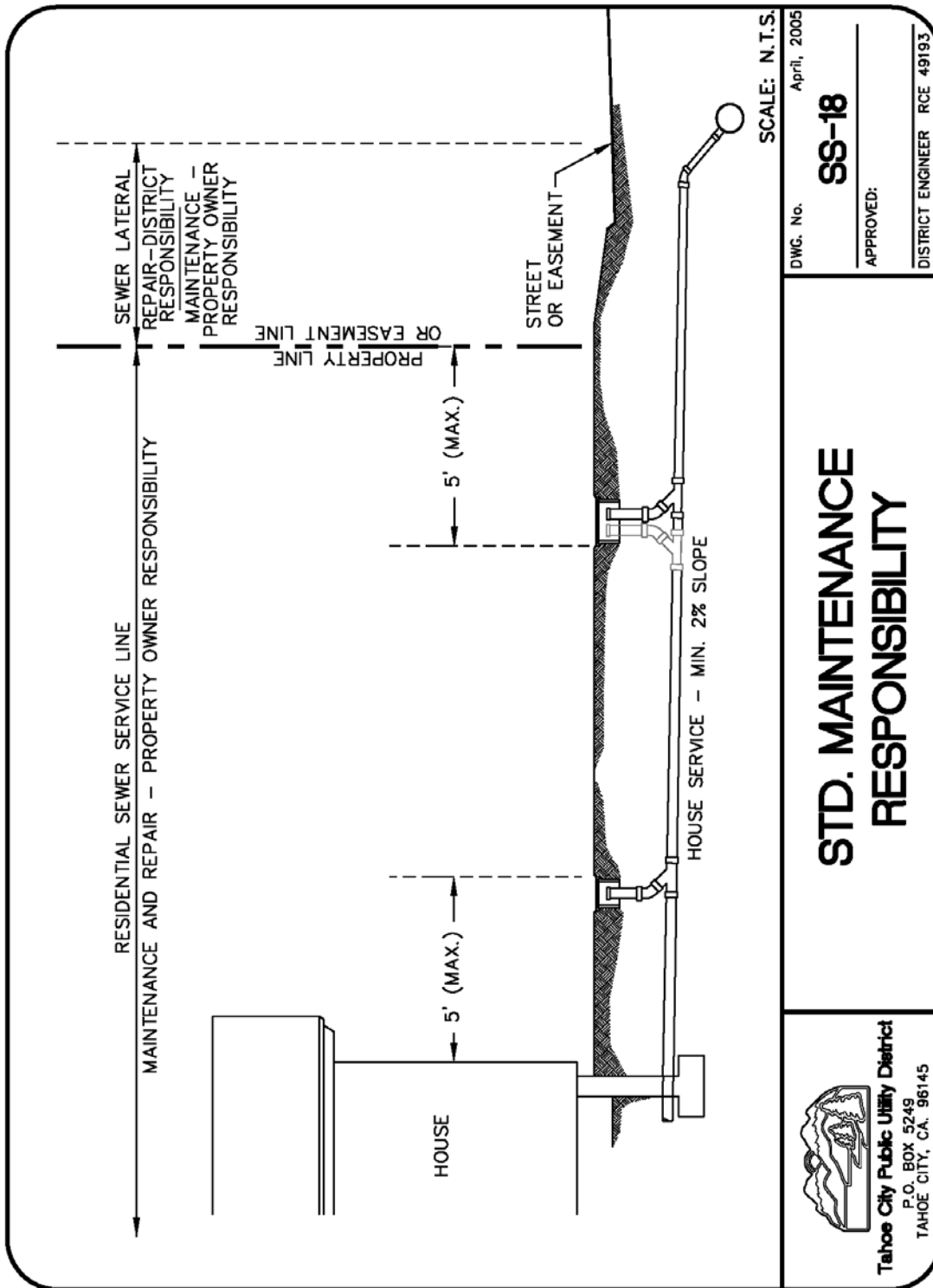
In emergencies, the District will remove improvement with least practicable damage and set them aside on Landowner's property.

For non-emergency activities, the District will provide notification to the Landowner to remove improvements. If improvements are not removed in a timely manner, the District will remove them at the expense of the Landowner.

Landowner Responsibilities

Landowner shall be responsible for all District expenses, including legal fees, associated with this policy.

Figure 3.01



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Section 4

**OBTAINING SEWER SERVICE:
APPLICATION AND PERMIT PROCESS**

4.01 SEWER SERVICE

4.01.1 Service Availability

The District will provide sewer service to parcels within the District's service territory. A letter of service availability will be given to Owners stating that, when the Owner has complied with the terms and conditions of service, including, but not limited to entering into a contract for service and payment of all fees, the District may provide sewer service.

4.01.2 Service Provided

The District will provide service to the parcel when the applicant has complied with the terms and conditions of service as outlined by the District, including payment of all fees and charges.

4.02 EXTENSION OF AND/OR ALTERATIONS TO SANITARY SEWER FACILITIES

4.02.1 Development Agreement

In order to extend or alter District sanitary sewer facilities, the Owner will be required to enter into a Development Agreement that will outline the terms and conditions of extensions and/or alterations to the sewer system. The Owner shall specify within the Development Agreement those persons or firms that he or she authorizes to act on Owner's behalf. The Owner shall accept responsibility for all communication and direction given by his or her authorized agents.

4.02.2 General Requirements

An Owner may request an extension of sanitary sewer facilities and/or alterations to existing sanitary sewer facilities in order to obtain sewer service from the District. The Owner shall be required to design and install, in accordance with District requirements, and at the Owner's expense, all sanitary sewer facilities required by said extension and/or alteration.

4.02.3 Excess Facilities

The District at its option, however, may require the Owner to install sanitary sewer facilities with more capacity, of greater length, or of a different route than would be required for the service requested, (excess facilities). The District may reimburse the Owner for the costs of excess facilities if excess facilities are required solely to benefit, improve or upgrade service to existing or other District customers.

If, however, such excess facilities are deemed necessary by the District for the orderly development of an integrated sanitary sewer system in the area of the proposed extension and/or alteration, the District may require the Owner to design, install, and pay the cost of excess facilities. The Owner may be entitled to reimbursement pursuant to Section 4.02.11.

4.02.4 District Specifies Facilities Installed

The District shall specify the size and location of the sanitary sewer facilities installed. Type and quality of material used in the installation of the sanitary sewer facilities shall meet the requirements specified in District Standard Specifications.

4.02.5 Owner Responsible for Fees

The installation of sanitary sewer facilities does not alleviate the Owner from payment of any other fees as specified within this document.

4.02.6 Improvement Plans

Improvement plans will not be considered approved by the District nor will sewer construction be authorized until the District Engineer signifies approval by letter or by dated signature on the Mylars in the approval block provided within the improvement plans.

There shall be no changes permitted to approved improvement plans unless such changes, corrections and/or additions are resubmitted to the District Engineer for consideration and subsequent approval. All changes, corrections and/or additions shall be noted, dated and initialed on the improvement plans by the Owner.

4.02.7 Agency Approvals and Permits

The Owner shall be responsible for obtaining approval from all appropriate agencies before commencement of construction of sanitary sewer facilities proposed for connection to the District sanitary sewer system. Procurement of permits from regulatory agencies shall be the full responsibility of the Owner.

4.02.8 Construction – New Facilities

Sanitary sewer facilities shall be constructed and tested in accordance with District requirements that are in force on the date the improvement plans were approved by the District, provided such construction is completed within one (1) year of the plan approval date. Improvement plans not completed within one (1) year of the approval date, as indicated by the District Engineer's dated signature on the plans, shall be updated to current District requirements.

4.02.9 Easements

Owner shall provide easements as required by the District for all facilities that will be transferred by dedication to the District. Easements shall be prepared on a form acceptable to the District and shall be recordable. Proof of ownership of properties shall be provided to the District in the form of a Grant Deed or Title Report, at the District's discretion.

4.02.10 Dedication and Acceptance

New or existing sanitary sewer facilities shall be accepted only after all District requirements are met. Existing sanitary sewer facilities shall be repaired, upgraded and tested in accordance with the current District requirements. Acceptance shall be made by resolution of the Board of Directors.

4.02.11 Reimbursement Agreement

The District, at its option, may enter into a Reimbursement Agreement with an Owner when that Owner has installed sewer facilities that may be used by other nearby properties. In this instance, the District will collect a prorated share of the cost of design and construction of those facilities from subsequent connections. The District is solely responsible for the determination of the proration of costs.

Administration of reimbursement monies will continue until all such prorated shares have been paid, but no longer than a period of ten (10) years after completion of the sanitary sewer facilities. The District will assess a fee for administration, as delineated in Section 10.

4.03 APPLICATION FOR SEWER SERVICE

4.03.1 General

No person shall connect to or alter any part of the sanitary sewer system without first making an application and securing a permit, nor may any person substantially increase the flow or alter the character of sewage, without first obtaining an additional permit and paying such charges as may be fixed by the District, including inspection charges, connection charges and service charges.

4.03.2 Application - New Construction or Remodel

Once sewer service is available to a parcel, the Owner shall apply for service on a form provided by the District. Application will be made at the District Administration office. The Owner will apply for either a standard construction permit if impacting the house service sewer or for a minor remodel permit if the project consists only of installing or removing internal fixtures.

A permit fee, in accordance with Exhibit 10.01 shall be charged at the time of application.

4.03.3 Application for Pressurized Sewer Service

Should it be determined that the sewer service must be pumped, the Owner shall submit an application for pressurized sewer service in addition to the standard service application. Requirements are described in Section 5.04.

4.03.4 Plan Check

A site plan that clearly indicates the location of water, sewer and gas utilities and all easements shall accompany the application for service.

4.04 PERMIT PROCESS

4.04.1 General

Upon approval of the application, District review of the proposed project and payment of all fees and charges, the District will issue a sewer connection permit or sewer remodel permit for the premises identified in the application. The permit, which must be executed by the Owner, shall outline the terms and conditions of service.

4.04.2 Connection Fees

Connection fees must be paid at the time of application in accordance with Exhibit 10.01.

4.04.3 Expiration of Building Permit

If a county building permit expires or if it is canceled or voided, the sewer permit shall be canceled at the same time and all connection fees previously paid to the District shall be refunded to the Owner without interest. Sewer permits shall be effective only for a period of three years, with extensions available, upon written request from the applicant. An administrative fee will be charged, as per Exhibit 10.01. The Owner must then reapply and is subject to the fees and requirements in effect at the time of application.

4.04.4 Expenses and Loss or Damage

All costs and expenses incident to the installation and connection of any sewer or other work for which a permit has been issued are the responsibility of the Owner. The Owner shall indemnify the District from any loss or damage that may directly or indirectly occur as a result of the work.

4.04.5 Transfer of Title with Open Permit

If an Owner transfers title from a parcel for which there is an open permit, the new Owner accepts responsibility for all outstanding work. The District will endeavor to obtain a transfer of permit responsibility during escrow. The new Owner will be required to enter into an agreement with the District wherein he or she accepts responsibility for completion of all incomplete work.

SPECIFICATIONS FOR SEWER CONNECTION: MATERIALS AND METHODS OF CONSTRUCTION

5.01 GENERAL

Specifications for gravity flow sewer service (Section 5.03,) pressurized sewer service (Section 5.04,) and physical discontinuance of sewer service (Section 5.05) can be found in this section. Specifications for sewer main construction can be found in "Technical Specifications for Sewer System Construction, March 17, 1989."

5.01.1 Common Trench for Neighboring Services

Neighboring structures shall not share a common pump, pressure service sewer or gravity house service sewer. Two house service sewers may be placed in a common trench on the common property line with a minimum of six (6) inches separation between the two (2) lines. The Owners shall provide an easement for the encroaching house service sewer. The owners are responsible for all costs associated with preparation and recordation of the easement.

Where two or more existing structures share an existing common service line, the Owners shall enter into a Common Service Agreement (see Exhibit 2.01) in accordance with Section 2.07.

5.01.2 Commercial, Industrial, Public Use and Multiple-Unit Service Lines

Commercial, industrial, public use and multiple-unit service lines shall be approved by the District prior to the start of construction. The District will approve the size of pipeline and type of materials.

5.01.3 Water Conservation

All installations shall comply with the requirements of ordinances, rules and regulations of the District pertaining to water conservation. (Reference District Ordinance 106.) The installation of a pressure-reducing valve may be necessary to meet water pressure requirements of 60 psi. All fixtures installed must be low-flow as defined in Section 2.11.2.

5.01.4 Floor Drains

Floor drains may not be connected to residential sewer services, whether in a mechanical room or garage or any other residential location. If a residential floor drain is encountered the Owner shall plug and cap the floor drains by pouring concrete into the drain with a District inspector present. A minimum of 18 inches of concrete, from trap to surface, shall be poured into the drain that leads to the house service sewer.

Floor drains are permitted for commercial services. Where sand, hydrocarbon-based oils and grease may be present, commercial floor drains must discharge through a sand-oil interceptor designed and installed according to Section 9.

5.01.5 Protection of Sewer During Winter

Sewer lines, cleanouts or stem pipes shall not extend above ground level after October 15 of each year for any structure that has not completed the subfloor. Sewer lines, cleanouts and the step pipe under the foundation must be capped and buried at a depth

of 24" below ground level and marked as to location until such time as primary construction commences.

5.01.6 State Licensed Contractor

A California State licensed contractor shall be responsible for the performance of all work connected with the installation of services and must be approved by the District prior to start of work. The Owner is required to provide the District with the name, address, and state license number of the contractor. The District shall not be responsible for work performed by the contractor. All contractors who work on sewer facilities within District boundaries must post a certificate of insurance with the District that shows property damage and public liability in an amount satisfactory to the District. The District must be shown as the certificate holder and as additional insured, entitled to defense, including District's officers, employees, representatives and agents. Contractors must also provide proof of worker's compensation insurance.

5.01.7 Owner-as-Contractor

An Owner may choose to install his or her own sewer facilities. Prior authorization must be obtained from the District. Authorization may be obtained by presentation of evidence of satisfactory insurance coverage for public liability and property damage and posting of a bond, in an amount specified in Exhibit 10.01, payable to the District, which shall be returned upon satisfactory completion of all work. The District shall not be responsible for work performed by Owner.

5.02 METHODS OF CONSTRUCTION - GENERAL

5.02.1 Trench

All trenching and pipe laying shall be done in conformance with the Construction Safety Orders as issued by the Division of Industrial Safety. Proper shoring is required in all trenches five (5) feet or more in depth. The District shall not complete inspection or approval unless proper shoring is achieved in accordance with the Division of Industrial Safety. If excess water is present in the trench, no grading shall be done until the water is removed.

The trench shall be graded to achieve the minimum cover requirements as defined in Table 1:

**Table 1
Minimum Cover Requirements: Sanitary Sewer Gravity Service Sewer**

Minimum Depth of Cover to Top of Pipe					
Type of Pipe	Standard Dimension Ration (SDR)	Pressure Rating	Traffic Area	Non-Traffic Area	With Engineering Analysis*
PVC	35	-	36"	24"	N/A
C-900 PVC	-	Class 150	30"	24"	12"
Ductile Iron	-	Class 350	24"	24"	6"

Note: Engineering analysis must prove that the alternate depth of cover is feasible considering all aspects of serviceability, including, but not limited to protection from freezing and crushing.

5.02.2 Bedding, Backfill and Compaction

Bedding, backfill and compaction shall conform to the following:

5.02.2.1 Bedding - Bedding material shall be placed from four (4) inches below the pipe to the springline of the pipe. Excavated material (“native”) may not be used as bedding material. Bedding Material shall be Type I except as required below. When the bottom of the trench is wet or yielding, Type II bedding shall be used. All soft material shall be removed to the depth necessary to provide firm stable bedding. No material shall be placed above the spring line of the pipe until the trench inspection is approved.

- a. **Type I Bedding Material** - Type I Bedding Material shall be imported clean sand. All material must pass a No. 3 sieve with no more than six percent (6%) passing a No. 200 sieve.
- b. **Type II Bedding Material** - Type II Bedding Material shall be imported crushed rocks with at least eighty percent (80%) of the rock having one or more fracture plane surfaces evident and shall have a grain size analysis within the following limits:

Passing 3/4 inch sieve	100%
Passing 1/2 inch sieve	90 - 100%
Passing 3/8 inch sieve	50 - 75%
Passing #4	4 - 8%
Passing #8	0 - 1%
Passing #16	0%

5.02.2.2 Backfill

Backfill shall consist of initial backfill and intermediate backfill.

- a. **Initial Backfill** – Initial backfill shall be placed from the springline of the pipe to a point twelve (12) inches above the top of the pipe. Initial backfill material shall be the same type imported material used for pipe bedding. Initial backfill shall be placed after the bedding material has been placed and the pipe joints have been inspected and passed by the District inspector. Initial backfill shall be on-site prior to inspection by the District inspector.
- b. **Intermediate Backfill** - Intermediate backfill shall be placed from twelve (12) inches above the pipe to the surface. Intermediate backfill material shall be screened excavated (native) material, free from roots, organic matter, trash, and debris, and shall contain no rocks greater than three (3) inches in diameter. All material containing rocks shall have enough gradation so that all voids are filled. Where excavated material cannot meet this specification Intermediate backfill shall only be placed after the line has been tested and approved by the District inspector. Excavations shall not remain open overnight outside of private property unless approved by the District. All trench backfill shall be completed within a maximum of five (5) working days.

5.02.2.3 **Compaction**

Bedding and backfill materials shall be compacted to a relative compaction of at least ninety percent (90%) of Modified Proctor Maximum Compaction (ASTM D 1557), unless otherwise required.

5.02.3 **Tracer Wire**

Tracer wire must be installed on all house service sewers from the foundation cleanout to the property line cleanout, and shall surface at all mid-line cleanouts, in a continuous, unbroken manner. The District will test the wire for continuity. Following are minimum requirements:

- a. Tracer wire shall be 10 AWG minimum
- b. THW, THHW, TW or THWN wet location insulation
- c. Taped to the top of the pipe at five (5) foot intervals, and all bends
- d. If spliced, splices shall incorporate a U.L. listed underground splice kit

5.03 **GRAVITY FLOW SEWER SERVICE**

5.03.1 **General**

The District shall accept gravity flow sewer service where feasible from all properties within the District boundaries that are capable of being developed.

5.03.1.1 **Codes Followed**

Material for and methods of construction of sewer services, mains and appurtenances shall be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

5.03.1.2 **System Design**

A gravity flow system shall consist of a gravity sewer pipe with a minimum slope of 2% having a cleanout at the foundation and a cleanout at the property line, at a minimum.

5.03.1.3 **Owner's Responsibility**

The Owner shall design the system for the project. The proposed plans should be submitted to the District for review and approval, accompanied by the standard application form for a gravity flow system.

5.03.1.4 **System Specifications**

The following requirements are intended to supplement the standard specifications for house service sewer construction and are considered minimum requirements. Where differences exist, the specifications contained herein prevail. Attached, as Figure 5.01 is the Standard Residential Sewer Service detail.

5.03.2 **Materials**

5.03.2.1 **House Service Sewer Pipe**

5.03.2.1.1 **Size**

House service sewer pipe shall be four (4) inches I.D. (inside diameter) minimum for a single-family residence and six (6) inches I.D. minimum for multiple-units, commercial, industrial and public use services.

5.03.2.1.2 Acceptable Pipe Material

Following are pipe materials that are acceptable for use as house service sewers:

- a. Polyvinyl Chloride Pipe (PVC) - PVC pipe shall be suitable for use as a gravity sewer conduit, have a maximum SDR of 35 and shall conform to and meet the requirements of ASTM, D-3034. The pipe shall be bell and spigot type. Joints for PVC pipe shall be "O" ring rubber gasket type or Johns-Manville "Ring-Tite" or equal. The rubber gasket shall be of special composition rubber recommended for sewer service. Maximum joint deflection shall be one (1) degree.
- b. Polyvinyl Chloride Pipe (PVC) C-900 - PVC C-900, Class 150 pipe shall conform to AWWA Standard C-900 for four (4) inch through 12 inch pressure water pipe or equal.
- c. Ductile Iron Pipe (DIP) Class 50 (class 51 for 4" DIP) Ductile iron pipe shall conform to the ANSI Specifications A.21.51, and AWWA C151 for Tyton joint pipe. Rubber gasket joints shall conform to ANSI A.21.11.

5.03.2.1.3 Unacceptable Pipe Material

Following are pipe materials that are NOT acceptable for use as house service sewers:

- a. Orangeburg is NOT an acceptable pipe material. If encountered in the field, it must be removed and replaced with pipe of an approved material.
- b. Acrylonitrile-Butadiene-Styrene (ABS) is NOT acceptable for house service sewer pipe outside of the foundation. If encountered in the field, it must be removed and replaced with pipe of an approved material.
- c. Clay is NOT an acceptable pipe material. If encountered in the field and it passes a pressure test, it may remain; if a pressure test fails, that section of failed pipe must be removed and replaced with an acceptable pipe material.

5.03.2.2 House Service Sewer Pipe Material in Traffic Areas

Where the house service sewer will have less than three (3) feet minimum cover in traffic areas, either PVC C-900 or ductile iron pipe shall be used (refer to Table 1, Page 5-4.)

5.03.2.3 Flexible Couplings

Flexible couplings shall be an elastomeric sleeve-type reducing or transition coupling with corrosion-resistant-metal tension band and tightening mechanism, specifically designed for joining underground non-pressure piping. Couplings shall be selected for joining the pipe materials and sizes being coupled. Flexible couplings may be Fernco Inc., Mission Rubber Company, or approved equal.

5.03.2.4 Cleanouts

Cleanouts shall be installed in accordance with the following:

- a. Location – At a minimum, a standard cleanout shall be located within five (5) feet of the structure, outside the building foundation, and a double-wye property line cleanout (Figure 5.02) shall be installed within five (5) feet of the property line, on the Owner's property.
- b. Spacing - Cleanouts shall be spaced at the rate of one for every 100 feet of line.

- c. Size - Cleanouts shall be the same size as the line served.
- d. At Bends of 45 Degrees– Cleanouts shall be placed within five (5) feet upstream of all bends of 45 degrees. Bends of greater than 45 degrees require a special cleanout arrangement. Bends of over 90 degrees are not allowed.
- e. At Bends between 45 degrees and 90 Degrees with Special Cleanout - Where bends greater than 45 degrees have been approved by the District, a special cleanout shall be installed. See Figure 5.03.
- f. Caps – Cleanouts shall have an approved watertight cap of the same material as the pipe. T-Cone caps are allowed on all pipe materials.
- g. Box - Cleanouts shall be set in a rectangular concrete box, N-9, B-12 or equal, however, cleanouts may be boxed with a G-5 or equal if a T-cone cap is used.
- h. Lids - All boxes must have a metal lid stamped “SEWER.” Lids must be installed to grade, unless in traffic area.
- i. Within Traffic Area – Cleanouts set within driveways or parking areas must have the lid set 1/2 inch below finished grade.

5.03.2.4.1 Property Line Cleanouts

A double-wye property line cleanout, in accordance with Figure 5.02, shall be installed on the following:

- a. All new or replacement house service sewers, whether residential, commercial, industrial, multiple-unit or public use.
- b. All existing house service sewers that are being upgraded, whether at time of sale or other construction, and have no wye installed at the property line.
- c. At Owner’s request.

5.03.2.5 Backwater Valves

The installation of a backwater valve may prevent wastewater from backing-up through the house service sewer into the structure being served. Installation and maintenance of backwater valves is the sole responsibility of the Owner. The District is not responsible for damage beyond the District’s control including backflow of sewage into any residential, multiple-unit, commercial, industrial or public use buildings. (See also Section 6.)

Backwater valves shall be installed in accordance with the following:

- a. Minimum size - Backwater valves shall be four (4) inch ID minimum, Flo-Control Series 1530 or NDS Model 475 or approved equal. District shall approve the backwater valve.
- b. Accessible - Backwater valves shall be located where they will be accessible for inspection and repair at all times.
- c. Joint laterals - Backwater valves may be required where residential, multiple-unit, commercial, industrial or public use house service sewers are connected to a joint lateral.
- d. Fixtures below manhole cover elevation - Backwater valves shall be installed where plumbing fixtures with overflow rims are located below the elevation of the next upstream manhole cover.

- e. Combined gravity flow and pressure systems - Backwater valves shall be installed inside or near the foundation if a pressurized sewer service transitions into the Owner's gravity system outside of the foundation.
- f. Upon determination by the General Manager - Where the General Manager determines a backwater valve may be necessary.

5.03.3 Method of Construction: House Sewer Service, Gravity Flow

5.03.3.1 Slope

Slope shall be a minimum of two (2) percent, 1/4 inch per foot, and lay true to line and grade.

5.03.3.2 Bends

Where bends are necessary in the construction of the house service sewer, the following requirements shall be met:

- a. Cleanouts shall be placed within five (5) feet upstream of all bends of 45 degrees.
- b. Bends shall not exceed forty-five (45) degrees
- c. Bends between 45 degrees and 90 degrees may be allowed under certain circumstances, and only with prior approval from the District. A special cleanout configuration must be installed if bends of greater than 45 degrees are used. See Figure 5.03, Special Cleanout.
- d. Offset Coupling of Bends – Bends in a gravity sewer line may be offset coupled in order to avoid the placement of a cleanout. Two (2) 22.5 degree bends may be substituted for a 45 degree bend if the two (2) 22.5 degree fittings are coupled no less than two (2) feet apart. The use of two (2) fittings that are offset-coupled may not exceed 45 degrees. Offset couplings may be used in series subject to the restrictions outlined in “Aggregate of Bends” below.
- e. Aggregate of Bends – Cleanouts shall be placed within five (5) feet downstream of a series of bends of less than 45 degrees each, which in aggregate equal but do not exceed 90 degrees. A cleanout may not be required if the last bend in aggregate is within 20 feet of a midline or property line cleanout.
- f. Close Coupling of Bends – Bends in a gravity sewer line may be close-coupled in order to possibly avoid the placement of a cleanout. Two (2) 22.5 degree bends may be substituted for a 45 degree bend if the two (2) 22.5 degree fittings are coupled no less than two (2) feet apart. The use of two fittings that are close-coupled may not exceed 45 degrees.

5.03.3.3 Common Trench

For the protection of the property owner and occupants, the District recommends that house service sewers not be placed in a common trench with water services and/or natural gas services. At their decision and with acceptance of associated risk, the Owner may elect to place house service sewers in a common trench as required below.

When common trenching of any utility service is proposed with the house service sewer, the Owner shall include on the plans a common service trench detail meeting the minimum requirements below. The approved common trench detail will be the basis for inspection and approval of the house service sewer installation.

The following minimum requirement for house service sewers in common service trenches shall be met at ALL points along the house service sewer. Clearances shall be measured between pipe exteriors.

- 1) Minimum coverage over house service sewer shall be as specified elsewhere.
- 2) The house service sewer shall be at least one (1) foot vertically below and one (1) foot horizontally from a water service.
- 3) The house service sewer shall be at least one (1) foot vertically below and one (1) foot horizontally from a natural gas service.
 - a. The gas service shall be installed in a continuous sleeve.
- 4) All other utilities shall be a minimum of one (1) foot clear (radial between pipe exteriors) of the house service sewer.
- 5) The common trench detail shall comply with all cover and separation criteria of the Utility Companies having jurisdiction over the other utilities occupying the common trench.

5.03.3.4 Testing for Leakage

House service sewers shall be either air-pressure tested or water tested for leakage in accordance with Section 6.03.

5.04 PRESSURIZED SEWER SERVICE

5.04.1 General

In some instances, the sewer main is higher than the sewer outlet on the residence. In other cases gravity systems cannot be made available for such reasons as economics, physical or environmental constraints. In these instances, the Owner must design and install a privately owned and operated pressure system in order to obtain sewer service.

5.04.2 Systems within Structure Foundation

Where the holding tank and pressure system is located within the foundation perimeter, the District shall neither review nor inspect the installation. The District shall inspect only that portion of the system that is outside of the foundation. The County Building Department shall be responsible for the review and inspection of pump system components located within the foundation of the structure.

The District will, however, require and inspect the installation of audible and visual alarms in accordance with Section 5.04.7.10 .

5.04.3 Codes Followed

Pressurized systems shall be installed in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

5.04.4 System Design

A pressurized system shall consist of a gravity sewer, a wastewater holding tank, proper venting, one or more pumps, a force main, electrical controls and an alarm system. Building plumbing should be designed to give the advantage of optimum location of pump and discharge line to sewer and minimum pumping head.

5.04.5 Owner's Responsibility

The Owner shall have a California licensed engineer design the pressurized system for the project. The proposed plans should be submitted to the District for review and approval, accompanied by the standard application form for a pressurized system.

Power failures do occur and it is the responsibility of the Owner to prevent sewage backup during such events. The Owner should consider the installation of additional storage to provide backup for power failures of short duration. An automatic water shut-off valve with manual override that activates during a power failure could prevent sewage backup.

Emergency power generation should also be considered to provide uninterrupted service. If auxiliary power is not supplied, at a minimum the Owner should provide a terminal block at the control panel for providing power from a portable generator.

The District recommends that the Owner establish a preventative maintenance program that would include a service agreement with a local plumbing contractor.

5.04.6 System Specifications

The following requirements are intended to supplement the standard specifications for individual pressure sewer system construction, and are considered minimum requirements. Where differences exist, the specifications contained herein shall prevail. Attached, as Figure 5.04 is the Residential Pressure Sewer Service Connection detail.

5.04.6.1 Pump Chamber Housing

Pumps, pumping chamber, controls, valves and other appurtenances shall be located within a protective structure, capable of housing the tank and all appurtenances. The structure shall be fully insulated to protect the facilities from freezing. Figure 5.05 is an example of a typical outdoor housing.

5.04.6.2 Flow Rate

The pressurized system shall be capable of meeting the required minimum flow rate at the total dynamic head characteristic of the system. The required minimum flow rate shall be the flow rate necessary to maintain a minimum velocity of 2.5-ft/sec in the discharge line during pumping, with a minimum discharge capacity of 20 gallons per minute (gpm.)

5.04.7 Materials

5.04.7.1 Pumping Chamber

The pumping chamber (wastewater holding tank) shall be constructed of leak-proof materials and shall be impervious to infiltration of surrounding waters and exfiltration of contained wastes. Minimum pumping chamber reserve capacity shall be as shown in Table 2.

**Table 2
Pumping Chamber Reserve Capacity**

Type of Service	Minimum Pump Chamber Reserve Capacity
Single-Family Residential	150 Gallons
Multi-Unit Residential, Commercial, Industrial, Public Use or Lake Zone Properties	250 Gallons

5.04.7.2 Pump Types

There are two types of pump designs that are acceptable for installation within the District service territory:

- a. **Submersible Sewage Ejector:** A non-clog submersible pump. In single dwelling units, the pump must be able to pass a one and one-half (1-1/2) inch diameter sphere, requiring a minimum two (2) inch discharge line. In multiple-units, commercial, industrial and public use occupancy, the pump must be able to pass a two (2) inch diameter sphere, requiring a minimum three (3) inch discharge line.
- b. **Grinder Pump:** A submersible pump with a solids grinding attachment, similar to a garbage disposal, which produces pulverized sewage. In single dwelling units, a minimum two (2) inch discharge line is required. Multiple-units, commercial, industrial and public use occupancy require a minimum three (3) inch discharge line.

5.04.7.3 Dual Pump Systems

To allow for redundancy in case of overload or mechanical failure, the Owner may install two pumps in parallel with appropriate valves and piping to allow discharge through a common discharge line. The dual pumps shall function independently in case of overload or mechanical failure. The standby pump (lag pump) shall be controlled in a manner that it will automatically take place of the first pump (lead pump) in the event of a failure. An alternating circuit shall be installed to ensure that each pump is exercised and fully functional and to balance the wear on each pump. The wastewater holding tank shall hold a minimum of 250 gallons per dwelling unit. Tank volume for multiple-unit, commercial, industrial and public use shall be determined on an individual basis.

Dual pump systems are required in multiple-unit residential, commercial, industrial and public use occupancy.

Pressurized systems located within 300 feet of the Lake Tahoe high water line or within 150 feet of an established contributing Stream Environment Zone (SEZ), creek or river are considered Lake Zone Services and require a dual pump system.

5.04.7.4 Discharge Pipe

The minimum discharge pipe size shall be as shown in Table 3.

**Table 3
Discharge Pipe Size: Pressurized Sewer Service**

Type of Service	Minimum Pipe Size with Grinder Pump	Minimum Pipe Size with Submersible Pump
Single-Family Residential	2"	2"
Multi-Unit Residential, Commercial, Industrial, or Public Use	3"	3"

The materials required for the buried discharge piping shall be a minimum of Class 200 pressure pipe in ductile iron, polyethylene or SDR-21, Ring-Tite pressure pipe. PVC Schedule 80, Class 200 or equivalent pressure pipe is acceptable for exposed discharge piping in and adjacent to the pump station.

5.04.7.5 Valves

Discharge pipes shall have a check valve, a bypass valve and an isolation gate or ball valve located as close to each other and the pumping unit as possible, readily accessible and protected from freezing.

5.04.7.6 Check Valves

Check valves shall be swing check style, rated for use in sewage applications, and shall be pressure rated to a minimum of 200 psi. Check valves shall be located on the discharge line as close to the pump as possible, and must be accessible. Unions may be used in the installation of check valves for repair and replacement. In dual pump systems, check valves are required on both individual pump discharge lines before they are joined.

5.04.7.7 Check Valve Bypass Line

A check valve bypass line shall be installed between the check valve and the isolation gate valve. The bypass shall be installed with an approved tee fitting, gate valve (same type as isolation valve) and pipe of the same size as the discharge line. Horizontal bypass return line shall be installed with a slight slope so that it will drain completely and shall be protected from freezing. The bypass line shall enter the wet well above the high water level line and be sealed appropriately where it enters the wet well. Bypasses on dual pump systems shall be installed separately between each check valve and isolation valve but may use a common drain return line to the wet well.

5.04.7.8 Isolation Gate Valve or Ball Valve

Isolation gate or ball valves shall be full-way type with working parts of corrosion resistant metal and shall have a body of cast iron or brass. The gate or ball valve shall be the same size as the discharge piping and have a minimum pressure rating of 200 psi. In dual pump systems isolation valves are required on both individual pump discharge lines before they are joined.

5.04.7.9 Cleanouts

There shall be no cleanouts located on the pressure system discharge line. Where a pressure system transitions to a gravity system within the foundation, a standard

cleanout shall be located on the gravity system leaving the structure within five (5) feet of the foundation. Where a pressure system exits the foundation, a standard cleanout shall be located within five (5) feet downstream of the transition from pressure to gravity. A cleanout shall be located at the property line only if the pressure line has transitioned to gravity at or prior to the property line (see Figure 5.04.)

5.04.7.10 Alarm System

An audible and visual alarm system shall be installed in the living area of the home, where it can be seen and heard at all times. The alarm system shall continuously signal when the sewage level in the pumping chamber exceeds a predetermined safe level.

Remote alarm systems shall be installed in all contributing units of multiple-unit residential, commercial, industrial or public use.

Annual alarm tests are recommended as part of an annual pump system maintenance program.

5.04.8 Method of Construction: House Service Sewer, Pressurized System

5.04.8.1 Common Trench

Pressurized sewer service discharge lines shall not be placed in a common trench with water or gas services. At the discretion of the District Engineer, other utilities may be included in the trench with pressurized sewer service discharge lines. Where a water service is located less than ten (10) feet horizontally from a pressurized sewer system, a District approved backflow prevention assembly shall be installed at the water meter for that service. Owner shall submit a common trench detail for approval, which shall be considered on a case-by-case basis.

5.04.8.2 Testing for Leakage

The discharge piping must be air-tested at 10 psi for 10 minutes in accordance with Section 6. Where possible, the pressure service shall be drained prior to testing. There shall be no detectable leakage.

5.04.8.3 Water Service Cross-Connection Control and Pressurized Sewer Service

5.04.8.3.1 Commercial, Industrial and Public Use Services

In accordance with Title 17, §7604, where a pressurized sewage system is installed at commercial, industrial or public use facilities, the Owner shall install an approved backflow prevention assembly at the meter or point of service on all water services to protect them from potential cross-connections.

5.04.8.3.2 Residential Services

Where a pressurized sewage system is located within close proximity of a water service or main, the Owner shall install an approved backflow prevention assembly on all water services to protect them from potential cross-connections.

5.05 PHYSICAL DISCONTINUANCE OF HOUSE SERVICE SEWER

Before the use of any house service sewer is discontinued, the Owner shall apply for and obtain a Permit from the District to cut and cap the sewer or place a seal cap, at the discretion of the District. The Owner must pay fees according to Exhibit 10.01.

5.05.1 Remodel

Where a structure or a portion of a structure will be removed or demolished, sewer service shall be physically disconnected. The Owner must cut and cap the sewer in accordance with Section 5.05.3.

5.05.2 Permanent Removal of House Service Sewer

Where an Owner chooses to permanently remove a house service sewer from service, the Owner must cut and cap the sewer in accordance with Section 5.05.3.

5.05.3 House Service Sewer Abandonment

In order to abandon an existing residential, commercial, industrial or public use house service sewer, the service must be cut and capped at the upstream side of the property line cleanout, within five (5) feet of the cleanout, or at a location as determined by the District. At least a two (2) foot section of the sewer service must be removed.

Both ends of the line must be capped or plugged with a District-approved direct-bury cap or plug, which must be witnessed by a District inspector prior to pouring concrete. A single 75-pound bag (minimum) of mixed concrete shall be poured onto the downstream side of the abandoned house service sewer service, following District inspection of the installed cap.

5.05.4 Mandatory Water Service Lockout

Prior to sewer service abandonment, the water service to the affected parcel must be either locked out or physically disconnected by the appropriate water purveyor.

5.05.4.1 Water Meter or Service Valve Lockout.

The water meter or curb stop valve serving the property must be padlocked or lockout tagged by an authorized agent of the water purveyor to prevent actuation by an unauthorized party. If the existing service valve at the property line is a non-locking type valve, the District or the water purveyor that serves the property may install a lockable meter setter or a locking-type valve on the Owner's side of the existing non-locking valve.

5.05.4.2 Physical Disconnect of Water Service

If there is no physical method by which the water service can be locked or tagged, the water line must be physically severed and abandoned. This method shall also be employed for a private single service or homeowner owned system. The water service line shall be physically disconnected as close to the non-locking property line service valve or homeowners property line as possible.

The line shall be severed with a minimum of two (2) feet of water line to be removed. The line shall then be capped or plugged on both exposed ends with a cap or plug as approved by the California Plumbing Code.

If one unit of a multiple-unit parcel's water service is to be abandoned, the service branch servicing the individual unit must be severed, capped and abandoned as far away from the unit as possible.

Lockouts and tag outs are only approved on District or State licensed water purveyors meter or property service valve.

5.05.4.3 Fire Services

Where properties are served with fire sprinkler services, these lines are to remain in service. If the fire service line is part of the domestic supply line to the structure or structures, the domestic service to the structure must be severed and capped prior to entering the structure. The fire and/or domestic service may have to be re-plumbed to achieve proper separation of systems prior to inspection of abandonment.

The Owner may not restore water service to the structure without the written permission of the water purveyor.

5.05.4.4 Irrigation Services

Where the Owner chooses to continue water service for irrigation, the domestic service to the structure must be severed and capped prior to entering the structure.

Figure 5.01

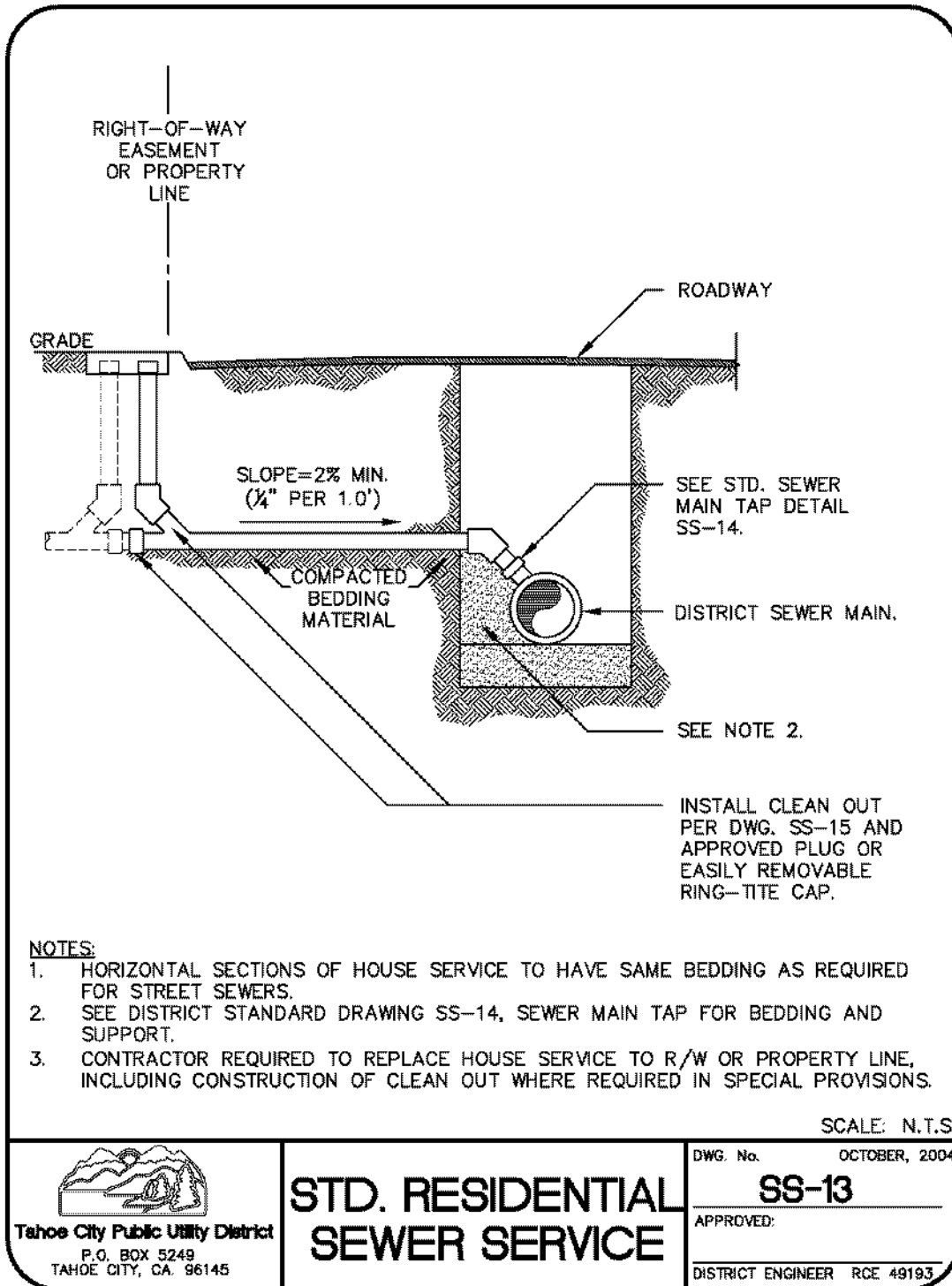


Figure 5.02

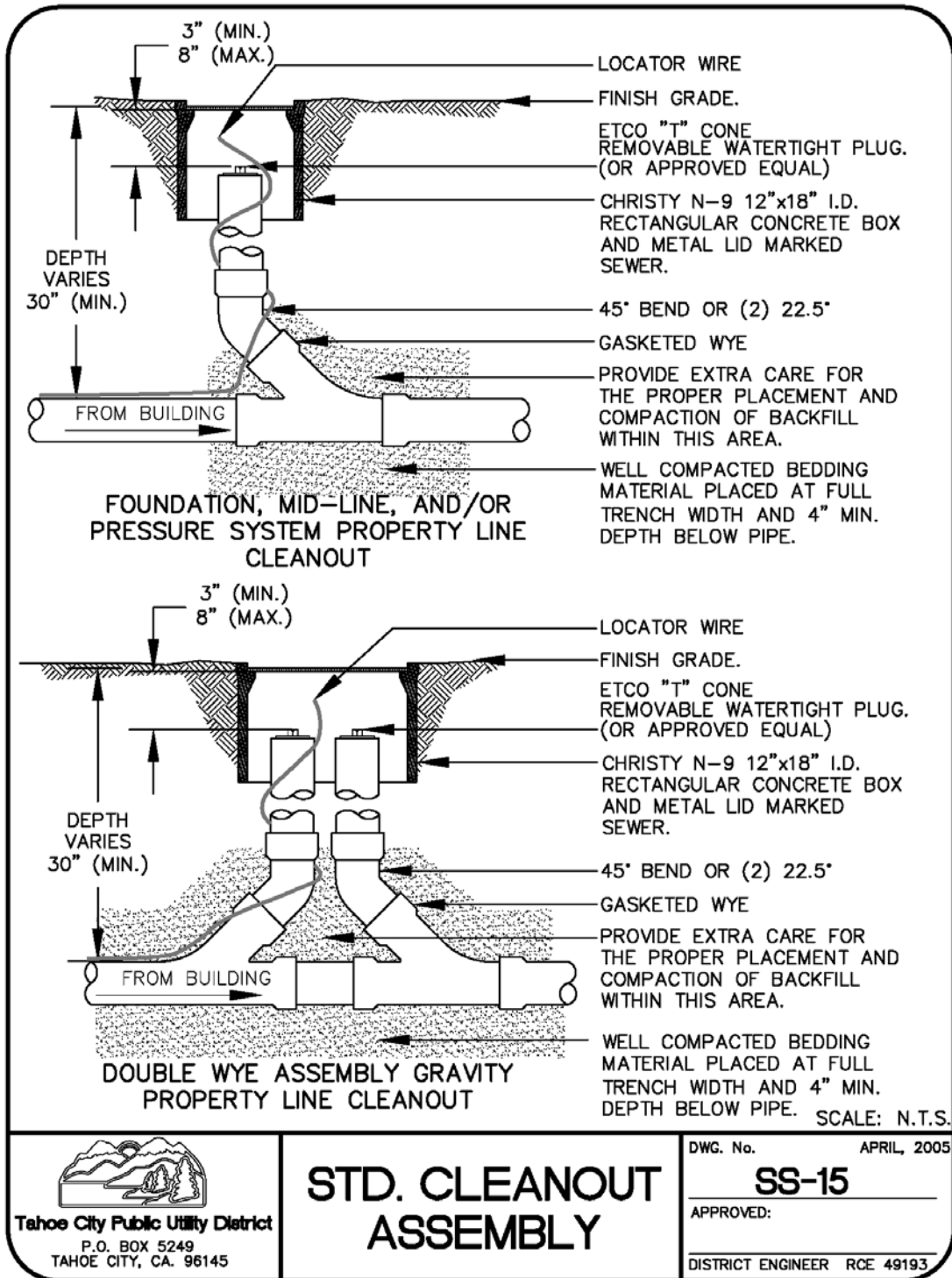


Figure 5.03

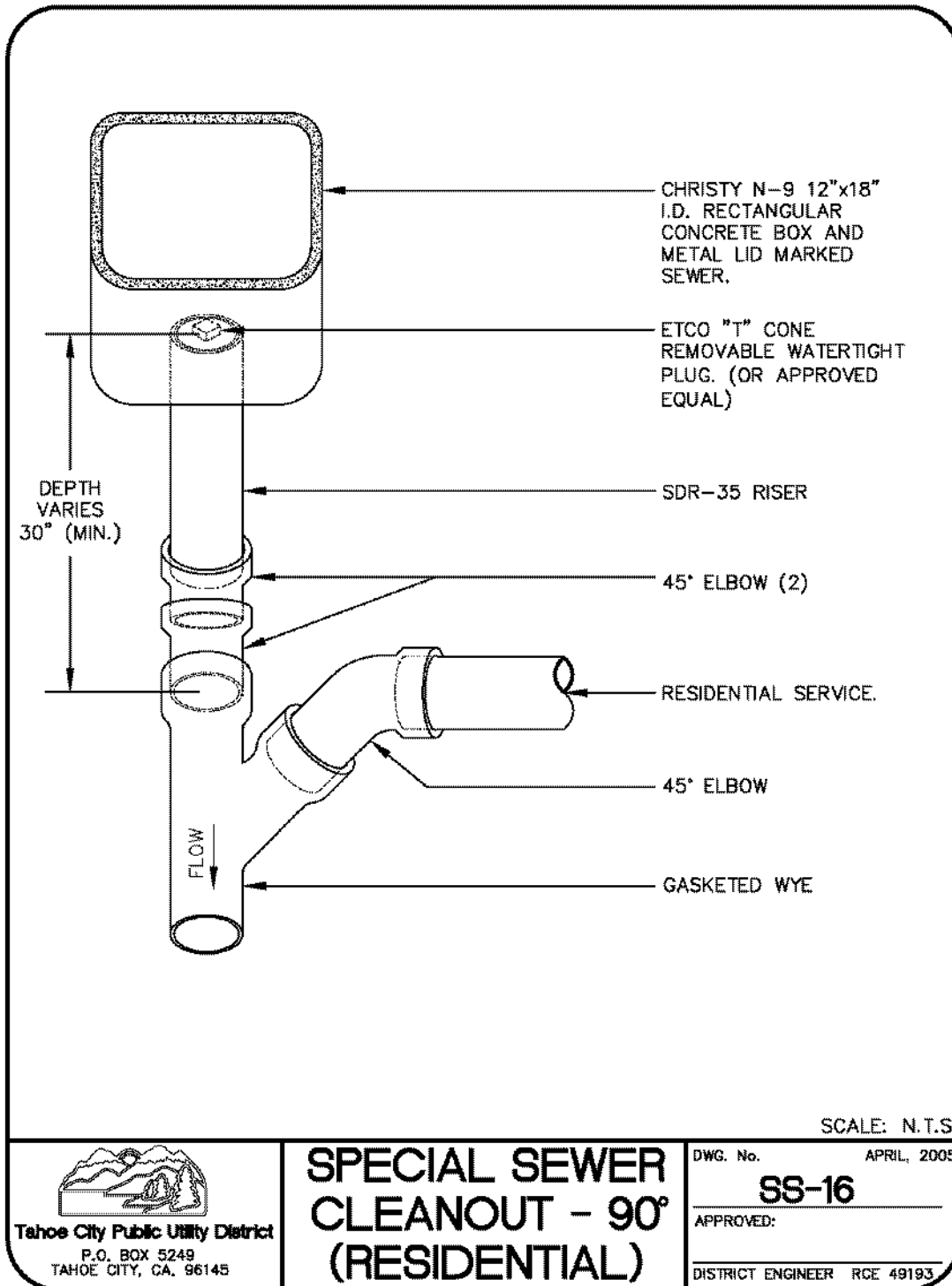
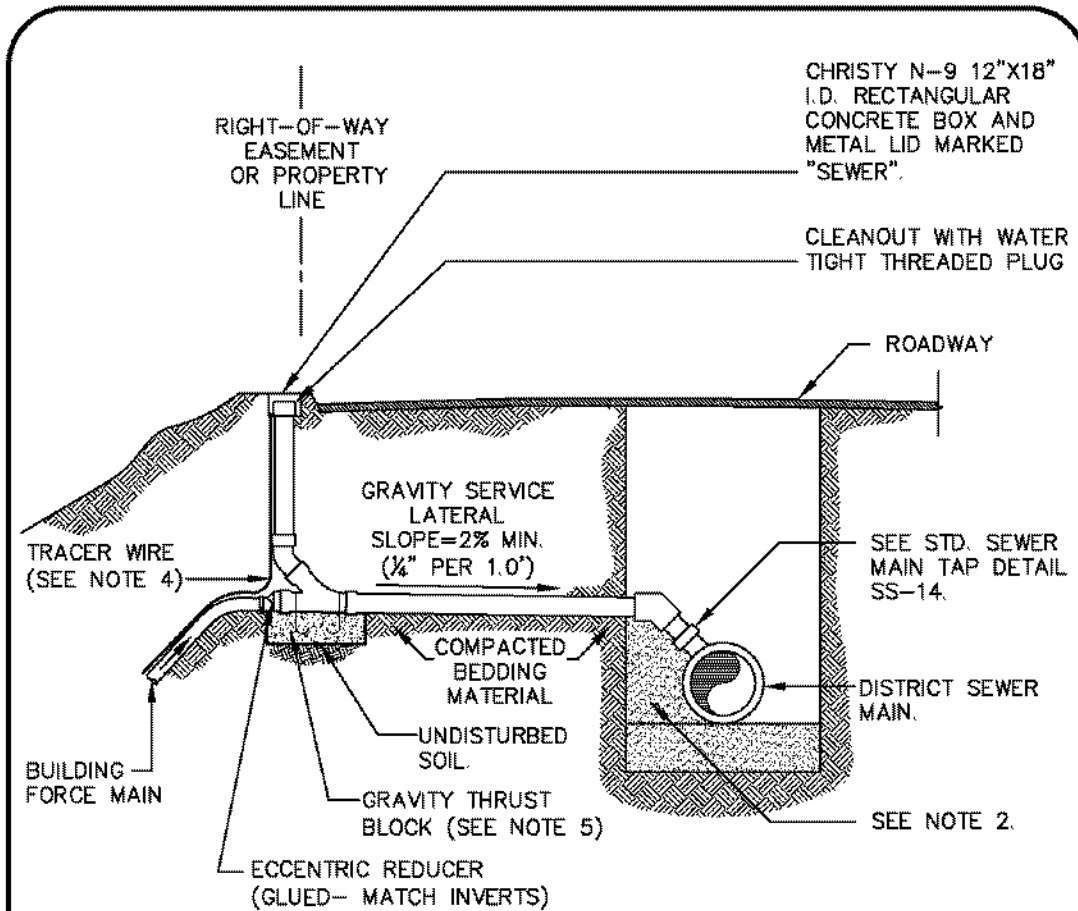


Figure 5.04



NOTES:

1. HORIZONTAL SECTIONS OF HOUSE SERVICE TO HAVE SAME BEDDING AS REQUIRED FOR STREET SEWERS.
2. SEE DISTRICT STANDARD DRAWING SS-14, SEWER MAIN TAP FOR BEDDING AND SUPPORT.
3. CONTRACTOR REQUIRED TO REPLACE HOUSE SERVICE TO R/W OR PROPERTY LINE, INCLUDING CONSTRUCTION OF CLEAN OUT WHERE REQUIRED IN SPECIAL PROVISIONS.
4. TRACER WIRE ATTACHED TO TOP OF FORCE MAIN. CONTINUOUS ALONG ENTIRE LENGTH OF FORCE MAIN. BEGINNING AT BOXED CHECK VALVE AND TERMINATING AT PROPERTY LINE CLEANOUT.
5. SECURE WYE FITTING WITH 1/2" DIA. REBAR STRAP. HOOK ENDS OF REBAR WITHIN THRUST BLOCK PER T.C.P.U.D. STD. THRUST BLOCK DETAIL W-08.
6. DO NOT USE DOUBLE WYE PROPERTY LINE CLEANOUT DOWNSTREAM OF PRESSURE TO GRAVITY TRANSITION.

SCALE: N.T.S.

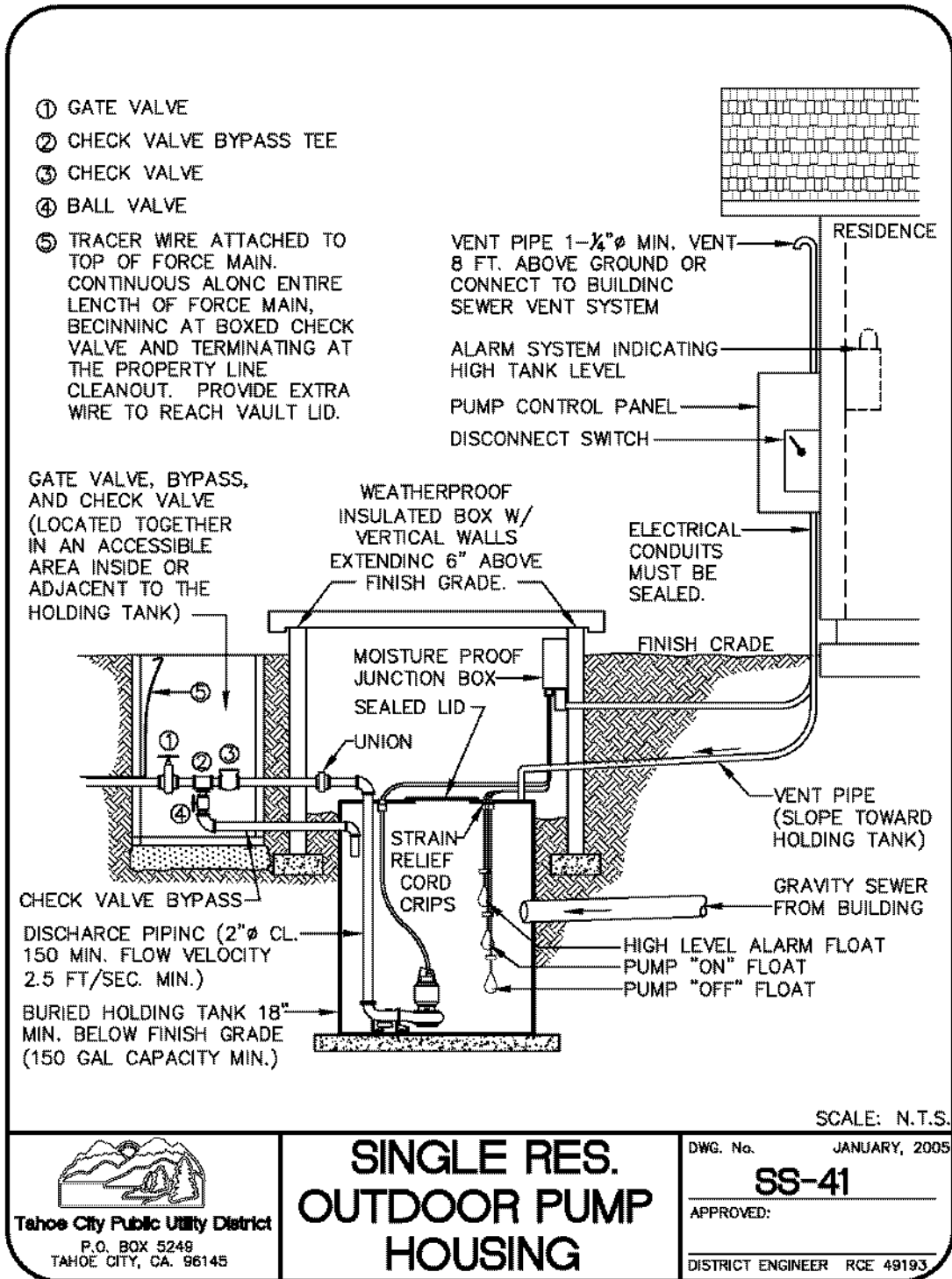


Tahoe City Public Utility District
 P.O. BOX 5248
 TAHOE CITY, CA. 96145

**RES. PRESSURE
 SEWER SERVICE
 CONNECTION**

DWG. No. **SS-39** JANUARY, 2005
 APPROVED: _____
 DISTRICT ENGINEER RCE 49193

Figure 5.05



Section 6

INSPECTION, TESTING AND MAINTENANCE PROCEDURES

6.01 INSPECTIONS

This section addresses the inspection of house service sewers and appurtenances. The inspection of sewer mains shall be in accordance with Section 17, Tahoe City Public Utility District "Technical Specifications for Sewer System Construction."

The following requirements apply to both gravity flow and pressurized house service sewers:

6.01.1 Codes Followed

Inspection of sewer fixtures, house service sewers, grease interceptors and sand-oil interceptors shall be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

6.01.2 Permit Required

The Owner must obtain a permit from the District in accordance with Section 4, under the following conditions:

- a. Prior to installation, repair or replacement of house service sewers or components of pressurized systems
- b. Prior to installation or replacement of internal fixtures
- c. Prior to construction / expansion of structures outside of the existing building foundation
- d. Prior to installation, repair or replacement of grease interceptors or sand-oil interceptors

6.01.3 Inspection Required

A District inspector shall inspect all permitted sewer work to ensure compliance with all requirements of the District.

6.01.4 No Warranty

As it relates to inspection services, the District, its officers, agents and employees shall not be deemed to make any warranties of any kind including warranties as to accuracy of location information, inspection or adequacy of materials or workmanship. The District shall not be responsible for any losses or damages sustained or resulting from any such inaccuracies or inadequacies or defective materials or workmanship.

6.01.5 Owner to Request and be Present for Inspection

It shall be the duty of the person performing work authorized by permit to notify the Public Works Department of the District when work is ready for inspection. Installation and testing conducted without such notice shall not satisfy the requirements of this Section. All facilities must be accessible and the system must be completely ready for inspection at the scheduled time. Failure to comply with this will result in an additional

inspection service charge in accordance with Exhibit 10.01 for each repeat site visit. The Owner must be present during all inspections.

6.01.6 Normal Inspection Schedule

Inspections may be scheduled Monday through Friday (excluding legal holidays) from 8:30 a.m. to 3:30 p.m., weather conditions permitting. Inspection requests should be made not later than 4:30 p.m. for next day inspections.

6.01.7 After-Hours Inspections

At the District's discretion, the District may schedule inspections outside of normal working hours, on weekends or holidays, if requested. The Owner must pay all associated costs. A deposit will be required prior to scheduling the work.

6.01.8 Unsatisfactory Inspection

When any work has been inspected and the results are not satisfactory, notice shall be given instructing the Owner, on-site and in writing, to correct the work authorized by the permit.

6.01.9 Connection Without Inspection

Any connection made to the District system without inspection and approval shall constitute a violation of this Ordinance. The District may require the Owner to uncover said installation for the purpose of inspection and examination. Should it become necessary for the District to expose the installation, expense incurred by the District shall be charged to the Owner.

6.01.10 Categories of Inspections

6.01.10.1 Residential Inspections

6.01.10.1a Residential New Construction or Remodel Permit

As a part of the standard construction permit (new construction, remodel) there shall be up to four (4) site inspections, to include an initial trench inspection, witness of a pressure test, and a final inspection. A fourth site visit is allowed for any purpose at no additional charge. Any inspection beyond four (4) will be billed to the Owner according to Exhibit 10.01.

When a sewer line is replaced without any remodel of the structure, a permit will be issued to include two site visits - one trench inspection and one sewer pressure test. Additional site visits will be charged in accordance with Exhibit 10.01.

6.01.10.1b Residential Minor Remodel Permit

As a part of the minor remodel permit (for the installation or replacement of internal fixtures only) there shall be a single final inspection. Any inspection beyond the one final inspection will be billed to the Owner according to Exhibit 10.01.

6.01.10.1c Residential Time of Sale Pressure Test

At time of sale, a single site visit will be provided to witness the pressure test. There will be no charge for the initial site visit. If additional site visits are necessary, they will be charged in accordance with Exhibit 10.01.

6.01.10.2 Commercial Inspections

6.01.10.2a Commercial New Construction or Remodel Permit

As a part of the standard construction permit (new construction or remodel) the Owner shall place a deposit that will be applied to the actual cost of inspection by District personnel. Inspections include, but are not limited to: initial trench, witness of a pressure test, and a final inspection. The deposit will be charged in accordance with Exhibit 10.01.

When a sewer line is replaced without any remodel of the structure, a permit will be issued to include two site visits - one trench inspection and one sewer pressure test. Additional site visits will be charged in accordance with Exhibit 10.01.

6.01.10.2b Commercial Minor Remodel Permit

As a part of the minor remodel permit (for the installation or replacement of internal fixtures only) there shall be a single final inspection. Any inspection beyond one final inspection will be billed to the Owner in accordance with Exhibit 10.01.

6.01.10.3 Types of Inspections

6.01.10.3a Initial Trench Inspection

The District will inspect all exposed trenches for proper bedding, backfill, grade, material and installation method. No house service sewer or sewer lateral shall be covered at any point until it has been inspected and passed by the District.

6.01.10.3b Witness of Pressure Test

A District inspector shall be present to witness a sewer pressure test, as described in this Section. Test results will not be accepted if a District inspector was not present during the pressure test.

6.01.10.3c Final Inspection

During the final inspection, a District inspector will check fixtures, water pressure, confirm that pressure tests are completed and that cleanouts are boxed.

The Owner of a building under construction or remodel shall not make use of the District sewer system until all the building sewer fixtures have been installed and have been inspected for compliance with water conservation and other requirements.

Prior to scheduling a final inspection, the Owner shall ensure that:

- a. All fixtures are set and connected to water
- b. All fixtures are low-flow, in accordance with Section 2.11.2
- c. Water pressure does not exceed 60 psi at any fixture that discharges to the sewer
- d. Pressure testing of sewer system has been satisfactorily completed
- e. Cleanouts are accessible, boxed and visible to the inspector and have proper caps installed securely
- f. All conditions outlined in the permit have been met

6.02 TESTING AND MAINTENANCE PROCEDURES

6.02.1 General

This section addresses the testing and maintenance of house service sewers and appurtenances. The testing and maintenance of sewer mains shall be in accordance

with Section 17, Tahoe City Public Utility District "Technical Specifications for Sewer System Construction."

The following requirements apply to both gravity flow and pressurized house service sewers:

6.02.1.1 Sewer Services Must be Capable of Passing Test

All persons who own a home, building or property that is connected to a District sanitary sewer must install and maintain the house service sewer in a condition that is capable of passing tests in accordance with this Section.

If a house service sewer does not meet the standards set forth in Section 5, the Owner shall complete corrective work and testing shall be performed within 30 days from the date of the original test or from the date of a written notice to the Owner, whichever occurs first.

6.02.1.2 Financial Responsibility

Cleaning and testing shall be conducted at the sole expense of the Owner of any house, building or property. Owners of condominiums or other multiple unit structures shall be responsible for the cost of testing, repair and replacement unless the property owner's association or other authorized entity assumes responsibility in writing.

6.02.1.3 Contractor

6.02.1.3.1 Licensed Contractor

A contractor, licensed by the State of California and approved by the District shall be responsible for the performance of all work associated with the cleaning and testing of sewer service lines. Contractors must post a certificate of insurance with the District showing property damage and public liability in an amount satisfactory to the District.

6.02.1.3.2 Owner as Contractor

A Owner may perform the cleaning and testing by obtaining authorization from the District and by posting a bond in an amount of specified in Exhibit 10.01. Owners must post a certificate of insurance with the District showing property damage and public liability in an amount satisfactory to the District. The District must be named as an additional insured on a Commercial General Liability Endorsement (Form B) to be included as an attachment to the Insurance Certificate.

6.02.1.4 Cleaning and Testing of Sewer Lines

House service sewers serving residential, multiple unit, commercial, industrial and public use, connected to a District sanitary sewer, shall be cleaned and pressure tested or visually inspected to ensure that they are not subject to infiltration or exfiltration.

Those house service sewers that are greater than ten (10) feet in length shall be cleaned and pressure-tested, and those that are ten (10) feet or less in length shall be inspected either by way of closed-circuit television or pressure testing.

Pressure testing and/or visual inspection shall apply to the following:

- a. Connection of a new structure to the District's sewer system
- b. Remodeling of a house, building or property served

- c. Change of use of a house, building or property served, for example, from residential to commercial, or from office and professional to restaurant, or from garage to apartment
- d. Upon repair or replacement of all or part of the building or house service sewer lines
- e. Prior to the close of escrow upon the sale of a house, building or property served, or by private transfer of a house, building or property served, unless the house, building or property served has been tested within the previous five (5) years. However, if the house service sewer is new or has been completely replaced, is constructed out of allowable pipe material, includes a double-wye cleanout, and has been tested within the previous ten (10) years, a pressure test will not be required prior to the close of escrow.
- f. Where inflow or infiltration is suspected, or if a defect in the house service sewer is suspected based upon observation by the District
- g. Upon determination by the General Manager that the cleaning and testing is required for the protection of the public health, safety or welfare

6.02.1.5 Cash Security in Lieu of Testing

6.02.1.5.1 Weather Conditions, Excavation Restrictions Prohibit Testing

Should cleaning, testing, repair or replacement be required on a gravity or pressurized house service sewer at a time when weather conditions, excavation restrictions, or other circumstances prohibit such repairs, the General Manager may defer completion of the requirements until such date as agreed upon between the Owner and the District. If the test is deferred, the Owner shall enter into a contract for performance of said work and shall place a cash deposit in the form of a money order, payable to the District, in an amount equal to one hundred twenty-five percent (125%) of the estimated cost of cleaning, testing repair or replacement of the house service sewer or sewer pressure system components.

The District shall prepare an estimate of said replacement costs. The Owner shall obtain an estimate from a California State licensed contractor for performing all work necessary so that the house service sewer will pass a sewer pressure test as described in Section 6.02 and 6.03.

The deposit required shall be based upon one hundred twenty-five percent (125%) of the estimated costs from whichever estimate is greater (District's or Contractor's). This amount will be held until the repair or replacement is made, which must be no later than June 15 following the circumstances preventing initial cleaning, testing, repair or replacement.

If the work agreed to is not completed by June 15, the deposit held by the District shall be used by the District to physically disconnect the house service sewer or to perform the work agreed to. The District may use the funds to pay a contractor to physically disconnect the sewer service or to perform the necessary work, at District's discretion. Should such costs exceed the amount deposited, the difference shall be billed to the Owner of record.

Upon completion of the necessary work, whether by Owner, District or contractor, the balance of funds will be released to the Owner within 15 days of the approved inspection of the work.

6.02.1.5.2 Time of Sale: Weather Conditions or Excavation Restrictions Prohibit Testing

Owners must plan for and make every effort to complete pressure testing of the house service sewer prior to close of escrow. The purpose of the withhold is to ensure the integrity of the house service sewer by holding funds for its repair or replacement during periods when the house service sewer is inaccessible. In the event that sewer cleaning, testing, repair or replacement would be required, at a time when weather conditions or excavation restrictions (October 15 until May 1) prohibit such repairs, the District may defer completion of such requirement until June 15th or such earlier date as agreed upon with the property owner. If the test is deferred, the Owner may post a performance bond with the District in an amount equal to one hundred twenty-five (125%) percent of the District's estimate of the cost of replacing the service lateral. The bond shall be callable on the date when the owner should have completed testing and the funds will be released to the District. The owner must also provide the District with a copy of an executed, binding contract with a California State licensed contractor, authorizing that contractor to perform all work necessary to test and repair or replace the existing house service sewer so that it will pass a sewer pressure test as described in Sections 6.02 and 6.03. The contract will include the cost to repair or replace existing pressurized systems and abandon any septic systems that may be on the property.

In place of a performance bond, the owner shall escrow funds in an amount equal to one hundred twenty-five (125%) percent of the District's estimate, if the property is being sold. Funds escrowed will not be released without written notification by the District to the title company holding such funds. If the cleaning and testing is not completed by the time set by the Ordinance, the funds held in escrow shall be released to the District. Said funds may be used by the District to perform or have a contractor perform physical disconnection, testing, repair or replacement of the sewer service. **Should such costs exceed the amount held in escrow; the difference will be billed to the property owner of record.** Such costs may become a lien on the property in accordance with normal service charge billing procedures. If funds held in escrow are released without the consent of the District and testing has not been satisfactorily performed, the District may perform or have a contractor perform physical disconnection, testing, repair or replacement of the sewer service. Such costs may become a lien on the property in accordance with normal service charge billing procedures.

Upon completion of the necessary work, whether by Owner, District or contractor, the balance of deposited funds will be released to the original depositing party within 15 days of the approved inspection of the work.

6.02.1.6 Pressure Test Waived

The General Manager shall have the authority to waive the cleaning and testing requirements if there is good reason to believe that such testing is not necessary.

6.03 TEST METHODS

6.03.1 General

This section addresses the methods used for testing house service sewers and appurtenances. The methods for testing sewer mains shall be in accordance with Section 17, Tahoe City Public Utility District "Technical Specifications for Sewer System Construction."

The following requirements apply to both gravity flow and pressurized house service sewers:

6.03.1.1 Tracer Wire

Tracer wire must be installed on new or replaced house service sewers in accordance with Section 5.02.3. The tracer wire on both pressure and gravity flow systems will be tested for continuity.

6.03.1.2 Test Gauge

Test gauges shall read in 1/10-pound increments and have a pressure range not greater than 15 psi. Gauge must be accessible to Inspector without trench entry.

6.03.1.3 Caps Secure

Following pressure test or visual inspection, District-approved caps are to be placed on all cleanouts to ensure that line remains free of debris or infiltration.

6.03.1.4 Seal Cap

At the discretion of the District, a seal cap may be set by the District.

6.03.1.5 Unsatisfactory Test Results

6.03.1.5.1 Failure of Pressure Test or Visual Inspection

If a house service sewer fails the pressure test following two (2) attempts, or if the visual inspection reveals defects, the line shall be repaired or replaced at the Owner's expense, within 30 days of the date of the initial pressure test. The Owner shall be responsible for notifying the District when corrective work has been completed and for scheduling a new test. Additional inspection fees will be charged in accordance with Exhibit 10.01.

6.03.1.5.2 Notice to Owner

When any work has been inspected and the test results are not satisfactory, notice to that effect shall be given instructing the Owner of the premises or the agent of such Owner, on-site and in writing, to repair the sewer or perform other work authorized by the permit in accordance with the ordinances of the District. Follow-up inspections shall be charged in accordance with Exhibit 10.01.

6.03.2 Test Methods: Gravity Service

Gravity house service sewers may be pressure tested with air or water. The requirements for air pressure testing are found in Section 6.03.2.1 while the requirements for water pressure testing are found in 6.03.3.1.

6.03.2.1 Air Pressure Test

Following backfill of the trench, the Owner shall perform an air test in the presence of District inspector. The air test shall be performed as follows:

6.03.2.1.1 Cleanouts

New Construction or Replacement - Standard cleanouts shall be installed to grade at a point five (5) feet outside of all structure foundations and double wye cleanouts (see Figure 5.02) shall be installed within five (5) feet of the property line, on the Owner's side.

Existing House Service Sewers - Owner may need to have line visually inspected by an outside contractor to determine location of existing cleanouts. Standard cleanouts are allowed on existing property line cleanouts. New cleanouts must be installed for testing if cleanouts cannot be located. New cleanouts installed at the property line must be double wye cleanouts (see Figure 5.02).

6.03.2.1.2 Test Plug

Cleanout to Cleanout - An air test plug shall be placed within the foundation cleanout and another within the property line cleanout, isolating the house service sewer.

Cleanout to Manhole - Test plug may be inserted in District manhole in lieu of property line cleanout if the lateral directly enters the manhole and the overall length of the house service sewer and the lateral is 100 feet or less. When testing from a District manhole, conformance with the Construction Safety Orders for confined space entry as issued by the Division of Industrial Safety is required. A separate permit for testing from a District manhole must be obtained from the District prior to the test.

6.03.2.2 Pressure

The line shall be pressurized to 3.5 psi and shall hold that pressure for five (5) minutes. A loss of 0.5 psi or less shall be considered acceptable. If the loss exceeds 0.5 psi, the test may be repeated once. A second loss of pressure constitutes failure of the pipeline. (Refer to Section 6.03.1.5.1.)

6.03.2.3 Release of Test Air

The air used to pressurize the air test shall be released in the presence and at the direction of the District inspector after the completion of the test. This shall be done with the air filler tube at the air test gauge. Test plugs shall not be pulled until the District inspector gives the instruction to do so. Note: Test plugs should never be pulled until the pressure on the test gauge has dropped below one (1) psi to avoid shock damage to the line.

6.03.3.1 Water Pressure Test

Following backfill of the trench, the Owner shall perform a water pressure test in the presence of a District inspector. The water pressure test shall be performed as follows:

6.03.3.1.1 Cleanouts

New Construction or Replacement - Standard cleanouts shall be installed to grade at a point five (5) feet outside of all structure foundations and double-wye cleanouts (see Figure 5.02) shall be installed within five (5) feet of the property line, on the Owner's side, in accordance with Section 5.03.2.4.

Existing House Service Sewers - Owner may need to have line visually inspected by an outside contractor to determine location of existing cleanouts. Standard cleanouts are allowed on existing property line cleanouts. If cleanouts cannot be located, new

cleanouts must be installed for testing. If a new cleanout is installed at the property line, it must be a double-wye cleanout (see Figure 5.02).

6.03.3.1.2 Test Plug

Cleanout to Cleanout - An isolation plug shall be placed within the foundation cleanout and another within the property line cleanout, isolating the house service sewer.

Cleanout to Manhole – An isolation plug may be inserted in District manhole in lieu of property line cleanout if the lateral directly enters the manhole and the overall distance of the house service sewer and lateral is 100 feet or less. When testing from a District manhole, conformance with the Construction Safety Orders for confined space entry as issued by the Division of Industrial Safety is required. A separate permit for testing from a District manhole must be obtained from the District prior to the test.

6.03.3.1.3 Cross-Connection Prevention

If test water is acquired from a domestic water source an air gap or some type of backflow protection approved by the AWWA and the water purveyor shall be required.

6.03.3.1.4 Pressure

The line shall be pressurized to 3.5 psi and shall hold that pressure for five (5) minutes. Required test pressure of 3.5 psi can be achieved by placing a pipe extension into the cleanout riser of the foundation cleanout and filling the pipe section to be tested with water. Clean water containing no dirt or debris must be used. A minimum of eight (8) feet of water head measured from the invert of the sewer line at the foundation cleanout to the top of the column of water located in the pipe extension is required (use pipe extension only if necessary). In no case shall the vertical distance measured from the lowest point of the pipeline section being tested to the surface of the water located in the pipe extension at the foundation cleanout exceed 15 feet. Additional cleanouts may have to be installed in steep or extremely long pipelines with each section of pipeline being tested individually.

The pipeline shall be allowed a maximum loss of one (1) inch of water level in five (5) minutes for a four (4) inch or six (6) inch pipeline per 100 feet of pipe length. If the loss exceeds one (1) inch of water, the test may be repeated once only if the second test can be completed within the allotted time of the scheduled inspection.

A second loss of pressure constitutes failure of the pipeline. See Section 6.03.1.5.1.

6.03.3.1.5 Release of Test Water

The water used in the test shall be released in the presence and at the direction of the District inspector after the completion of the test. This shall be done by releasing the test plug located at the downstream cleanout if tested in sections, or at the property line cleanout when the whole line is tested or when last test section is completed.

6.03.4 Test Methods: Individual Pressure Service

6.03.3.2 Air Pressure Test

Following backfill of the trench, the Owner shall perform an air test in the presence of a District inspector. If there is also a gravity flow line on any part of the service, it shall be tested by the same method used for a standard gravity flow line, in accordance with Section 6.03.2.

The air test shall be performed as follows:

6.03.4.1.1 Cleanouts

There shall be no cleanouts located on the pressure system. If the pressure system transitions inside of the building a standard cleanout shall be located on the gravity system leaving the structure within five (5) feet of the foundation. A double-wye cleanout (see Figure 5.02) shall be located at the property line only if the pressure line has transitioned to gravity at or prior to the property line.

Owner may need to retain a contractor to determine location of existing cleanouts on the gravity flow line. If cleanouts cannot be located, new cleanouts must be installed for testing.

6.03.4.1.2 Pressure Line Drained

The pressure line shall be drained and free of any liquids or solids prior to beginning the test.

6.03.4.1.3 Test Plug

An air test plug shall be placed within the transition thrust block/siphon break cleanout and tested against the check valve at the pump, isolating the house service sewer. The isolation valve must be fully open for the pressure test. Dual pump systems must be tested against both check valves simultaneously.

6.03.4.1.4 Pressure

The line shall be pressurized with air to ten (10) psi and shall hold that pressure for ten (10) minutes. There shall be no detectable pressure loss. If any loss is detected, the test may be repeated once. A second loss of pressure constitutes failure of the pipeline and/or check valves. See Section 6.03.1.5.1.

6.03.4.2 Alarm Test

The alarm shall be tested for operation at the high level mark.

6.03.4.3 Float Control Test

The on/off function of the pump shall be tested by either filling the wet well with water or by manually tipping the floats. Where dual pump systems are installed, the on/off function of each pump shall be tested.

6.03.4.4 Pump Output Test

The pump(s) shall be tested by filling the wet well and running each pump individually until stopped by the off control float. This test shall also be used to detect any leaks in the discharge piping prior to the check valve.

6.03.4.5 Wet Well Integrity Test

The external seals and gaskets located on the wet well lid and any inlet and vent piping shall be inspected for proper fit, tightness and leakage. All vent lines, discharge piping, drain lines, check valves and gate valves shall be visually inspected for proper size, leakage and orientation. Check valves must be installed per manufacturers specifications.

6.03.4.6 Panel Test

The panel shall be inspected to ensure that it is located within the main living area and is accessible. All switches, control devices and indicators shall be inspected to ensure they are functioning properly.

6.03.4.7 Water Pressure Test – Not Allowed

Water pressure testing is not allowed for pressurized house service sewers.

6.03.5 Pressure Tests of Grease Interceptors, Sand-Oil Interceptor and Sample Ports

Testing interceptors and sample ports shall be accomplished by either water testing or vacuum testing, as described below. Vacuum testing is not recommended for existing interceptors.

6.03.5.1 Water Pressure Test

6.03.5.1.1 Test Conditions

New interceptors shall be backfilled to within twelve (12) inches of the top of the interceptor prior to water testing. The lid seal, inlet and outlet piping shall remain exposed during the test.

6.03.5.1.2 Test Method

Plug Inlet and Outlet -Water test by plugging all inlet and outlet pipes and filling the test section with water to the top of the frame rim. Contractor shall repair all visible leaks prior to proceeding, at the direction of a District inspector.

Introduce Water - The water should be introduced into the test section at least four (4) hours in advance of the official test period to allow the concrete and joint material to become saturated.

Refill - The test section shall then be refilled to the original water level.

Measure the water level – first measure At the beginning of the test, the level of the water in the test section shall be carefully measured by a District inspector from a point on the frame rim.

Measure the water level – second measure - After a period of four (4) hours, the water level shall be measured from the same point on the frame rim and the loss of water during the test period calculated. If this calculation is difficult, enough water shall be measured into the test section at the direction of a District inspector to restore the water to the level existing at the beginning of the test, and the amount added taken as the total leakage.

6.03.5.1.3 Allowable Leakage - The allowable leakage shall not exceed 0.13 gallons per hour. Grease interceptors and sand-oil Interceptors showing leakage in excess of that allowed shall be repaired or reconstructed as necessary to reduce the leakage to that specified.

6.03.5.1.4 Failures Retested - All failures shall be retested after the necessary repairs have been completed.

6.03.5.2 Vacuum Test

Vacuum test equipment shall be provided by the owner and used per the manufacturers specifications. A vacuum test shall be accomplished by using acceptable equipment approved by the District, in accordance with the following:

6.03.5.2.1 Testing Conditions – Vacuum testing of existing interceptors is not recommended. New interceptors shall not be backfilled prior to vacuum testing.

6.03.5.2.2 Test Gauge

Test gauge shall read in 1/10-inch_of mercury (Hg) vacuum increments and have a range not greater than thirty (30) inches of mercury (Hg) vacuum. Combination gauges that meet these requirements are acceptable. Gauge must be accessible to Inspector without trench entry.

6.03.5.2.3 Test Method

Vacuum Drawn - A vacuum of four (4) inches mercury (Hg) shall be drawn on grease interceptors, sand-oil interceptors and precast sample ports.

Measure Time - The time, in seconds, for the vacuum to drop to three and one-half (3.5) inches of mercury (Hg) shall be witnessed by a District inspector.

6.03.5.2.4 Allowable Loss - The allowable leakage shall not exceed the times listed below:

<u>Time (seconds)</u>	<u>Interceptor Size (gallons)</u>
120	100 to 2,499
180	2,500 to 4,999
240	5,000 and greater

Grease interceptors, and sand-oil interceptors showing a loss in excess of that allowed shall be repaired or reconstructed as necessary to reduce the loss to that specified.

6.03.5.2.5 Failures Retested - All failures shall be retested after the necessary repairs have been completed.

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SECTION 7
DISCHARGES INTO SEWER SYSTEM

7.01 TEMPORARY DISCHARGE PERMIT

No person shall discharge any substance into District sewer system without first applying for a permit from the District, as provided for in Application and Permit for Temporary Discharge into District Sewer System, Exhibit 7.01.

7.01.1 Deposit

The applicant shall pay an application fee, a cash deposit based upon the total estimated discharge, in gallons, and a security deposit in the form of a cashier's check payable to the District, and. Deposits and fees are in accordance with Exhibit 10.01.

7.02 SWIMMING POOL AND SPA DISCHARGE

7.02.1 Notice of Discharge – Swimming Pool

The Owner shall provide 48 hours notice to the District when pools will be pumped into the collection system. The District shall inspect the system upon discharge. No fee will be charged for a discharge permit. All swimming pools and commercial spas shall be subject to connection fees and sewer service charges in accordance with Exhibit 10.01.

7.02.2 Backwash Filter Wastes

Backwash filter wastes shall be connected to the sewer in such a manner as to preclude unauthorized liquids from entering the sewer. In all cases the waste drains shall be located six (6) inches above surrounding flood grade. Plans shall be submitted to and approved by the District prior to construction.

A backflow prevention assembly, approved by the water service agency, shall be installed by Owner to protect the public or private water supply serving backwash systems.

7.03 DISCHARGE PROHIBITIONS

7.03.1 Septic Tank, Cesspool and Holding Tank Waste Discharge Prohibited

Disposal of residential, septic tank, cesspool, holding tank wastes or other discharges into the District sewer system is prohibited. Permission may be given in case of extenuating circumstances when the District deems it necessary to allow disposal of said materials. Construction site or other discharges shall be accomplished in conformance with the requirements of Exhibit 7.01.

7.03.2 Rain, Surface and Groundwater Drainage Prohibited

No person shall discharge any water into the District sewer system that is, or can be made suitable for discharge into an alternate disposal system not connected to District sewer collection system, such as a storm drain or infiltration disposal facility.

No sump pump, runoff pool, receptacle, drainage area or roof which receives or disposes of rain, surface or groundwater or snow melt shall be connected to the District wastewater collection system.

7.03.3 Bleeder Lines Prohibited

No person shall run bleeder lines or allow any plumbing fixtures of any kind or sort to bleed water into the sewer, nor shall any person introduce any excess water into District sewer collection and transmission facilities from any source.

7.03.4 Miscellaneous Discharges Prohibited

No person shall discharge or cause to be discharged to the District sewer system any of the following waste, water, effluent or substances or materials:

- a. Toxic or Poisonous Waste - Water or waste containing toxic or poisonous solids, liquids or gases in sufficient quantity either singly or by interaction with other wastes or waters to injure or interfere with the sewage treatment process, constitutes a hazard to humans or animals, creates a public nuisance, or creates any hazard in the receiving waters of the sewage treatment plant, including but not limited to cyanides in excess of two (2) mg/l as Cn in the wastes as discharged.
- b. Potential to Harm Sewers, People or Property - Such wastes that appear likely in the opinion of the General Manager to be capable of harming either the sewers, sewage treatment process or equipment or have an adverse affect thereon, or can otherwise endanger life, limb or public property or constitute a nuisance, giving consideration to such factors as quantity of such waste in relation to flows and velocities, materials of construction of sewers, the sewage treatment process, capacity of sewer lines and plant, degree of treatability and other pertinent factors.
- c. Temperature Consideration - Any liquid or vapor having a temperature higher than 150 degrees F.
- d. No Fats, Wax, Grease, or Oils - Any water or waste containing fats, wax, grease or oils, whether emulsified or not, or substances that may solidify or become viscous at temperatures between thirty-two (32) degrees and one hundred fifty (150) degrees F, in excess of (400) mg/l, in accordance with Section 8.00.
- e. Flammable or Explosive Liquid or Gas - Gasoline, benzene, naphtha, fuel, oil, or other flammable or explosive liquid or solid or gas.
- f. Unshredded Garbage - For residential services, any garbage that has not been properly shredded to such a degree that each particle can be carried freely under the flow condition normally prevailing in the sewer. Garbage disposals may not be connected to the sewer collection system in commercial food service establishments.
- g. Suspended Solids - Any water or waste containing suspended solids of such character and quantity that unusual attention or expense is required to handle the water or waste at the sewage treatment plant.
- h. Solid or Viscous Substances Adversely Impacting Operations
Ash, cinder, sand, mud, rock, straw, shaving, metal, glass, rag, feather, tar, plastic, wood, paunch manure, or other solid or viscous substance that could obstruct the sewer flow or cause interference with or damage to the proper operation of the sewer system and treatment facilities.
- i. Corrosive Properties or pH Values - Any water or waste having a pH value lower than 5.5 or higher than 9.0 or other corrosive properties

- capable of causing damage or hazard to persons or property or the proper operation of the sewer system and treatment facilities.
- j. Public Nuisance - Any noxious or malodorous gas or substance capable of creating a public nuisance.
 - k. Objectionable Waters or Wastes - Any waters or wastes containing iron, chromium, copper, zinc or similar objectionable or toxic substance, or wastes exerting an excessive chlorine requirement, and such degree that any such material in the composite sewage exceeds the limits established by the District therefore.
 - l. Radioactive - Any radioactive materials.
 - m. Loading Impact - Any unusual biological oxygen demand, chemical oxygen demand, or chlorine demand in such quantities as to constitute a significant load on District sewer system or regional treatment facilities.
 - n. Substances Not Amenable to Treatment - Other waters or wastes containing substances that are not amenable to treatment by the treatment processes employed at the regional plant or are amenable to treatment only to such degree that the regional treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

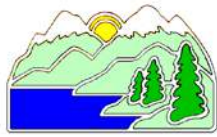
7.03.4.1 District's Options related to Discharge

The District may, following a proposal to discharge any waters or wastes to the District sewer system that contain the substances or characteristics set forth above:

- a. Reject the water.
- b. Require pretreatment to an acceptable condition.
- c. Require control over quantities and rates of discharge.
- d. Require payment to cover added costs of handling and treating such wastes.

7.04 PREMISES ACCESSIBLE

The District, its General Manager or duly authorized employees, bearing proper identification, shall be permitted to enter upon all premises and properties for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this section.



Tahoe City Public Utility District
P.O. Box 5249 • Tahoe City, CA 96145
Ph: 530-583-3796 • Fax: 530-583-1475

APPLICATION AND PERMIT FOR TEMPORARY DISCHARGE INTO DISTRICT SEWER SYSTEM
(Applicant must contact Tahoe-Truckee Sanitation Agency 530-587-2525 for approval & permit prior to application)

USER/COMPANY NAME: _____

USER ADDRESS/PHONE : _____

LOCATION OF PROJECT: _____

LOCATION OF MANHOLE(S) TO BE USED: _____

TYPE OF DISCHARGE: _____

DESIRED RATE OF DISCHARGE (see #2): _____

DURATION OF DISCHARGE: _____

ESTIMATED DATE OF DISCHARGE: _____

BILLING NAME & PHONE: _____
(If different from User Name above)

BILLING ADDRESS: _____

District Rules & Regulations covering discharges into sewer system

Applicant or user must have a copy of the permit in his/her possession at all times when discharging into sewer system. Applicant and user agree to abide by District ordinances, rules, and regulations pertaining to the use of the sewer system, and to accept liability for damage to sewer system facilities, and violation of regulatory agency rules, regulations, and actions caused by their negligence or failure to abide by District ordinances, rules, and regulations. No person shall discharge water or any substance into the District sewer system without completing the following:

1. Paying a non-refundable permit fee of \$41.00.
2. Making application and obtaining a permit for discharge into sewer system. At the time of application, applicant or user shall post a \$475.00 security deposit in the form of a cashiers check payable to Tahoe City Public Utility District. The deposit shall be refunded upon completion of use, and after determination has been made as to volume and number of pumping lifts involved with the discharge.
3. Applicant or user shall provide District with an estimate of gallons to be discharged and pay District the rate per gallons estimated at the time of application or \$60.00 usage deposit whichever is greater. The District shall be paid at the rate in effect at the time of service in accordance with Exhibit A. This rate is subject to change, from time to time, as the District adopts ordinance changes. In the event the number of gallons discharged exceeds the estimated gallons paid at the time of application, applicant or user shall pay the balance due District upon completion of use. The District reserves the right to deduct the cost of discharge from the deposit, if necessary.

RULES, REGULATIONS, AND PROCEDURES

1. No discharge shall take place until all equipment has been approved at the site by the District Inspector.
2. The maximum discharge rate shall be determined by the District at the time of application. The District reserves the right to modify the discharge rates at any time prior to and during discharge based on the condition, location, and size of the sewer collection system.
3. Discharge must be accomplished by pump, hose, and a longitudinal settling box between the pump and manhole, as shown on the schematic herein of this permit, size to be determined by maximum discharge allowed. Applicant or user shall not exceed the maximum discharge per cubic feet, (gallons per minute).
4. Applicant or user shall **notify District twenty-four (24) hours in advance**, prior to discharge, at which time an inspection appointment will be set.
5. Discharge into District’s sewer system shall be solely at the discretion of the District and may be terminated at any time.
6. There shall be no discharge of poisonous solids, liquids, gases, gasoline, benzine, naphtha, fuel, oil, ash, cinder, sand, mud, rock, straw, metal, glass, rag, feather, tar, plastic, wood, paunch manure, waters or wastes containing iron, chromium, copper, zinc, radio-active materials, any unusual BOD, chemical oxygen demand or chlorine requirements in such quantities as to constitute a significant load on District sewer system, or other solid or viscous substance which could obstruct the sewer flow, or any water or waste having a pH lower than 5.5 or higher than 9.0, as provided for in Section XIII of the District Sewer Ordinance.

Accepted: _____ Date: _____
Applicant/User

_____ Date: _____
TCPUD Authorized Representative

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FATS, OILS AND GREASE CONTROL

8.01 FATS, OILS AND GREASE CONTROL, GENERAL

The goal of the Fats, Oils and Grease Control section of this Ordinance is to stop sanitary system overflow and reduce grease accumulation in the sanitary sewer mains resulting from the introduction of fats, oils and grease by food service establishments (FSEs.) The Tahoe City Public Utility District (District) follows the requirements of the California Plumbing Code (CPC,) as it relates to grease control, and acts as the Administrative Agency as identified in the CPC, in enforcing grease control measures.

Any nonresidential facility involved in the manufacture, preparation or serving of foods that is connected to the sanitary sewer collection and treatment system shall follow the requirements within this Section. This section addresses all general grease control requirements. Specific maintenance requirements for grease interceptors shall be found in Exhibit 8.01A while maintenance requirements for grease traps shall be found in Exhibit 8.01B.

8.02 FOOD SERVICE ESTABLISHMENT WASTEWATER DISCHARGE LICENSE

A license is required for all businesses and individuals who operate or intend to operate a FSE and/or industrial-commercial food manufacturing facility within the District. These facilities include, but are not limited to:

Restaurants, delicatessens, coffee shops, bakeries, drive-in, fast-food, take-out, doughnut shops, hospitals, markets, schools, churches, motels/hotels, recreation or reception halls and conference centers.

If the licensee is not the Property Owner, the Property Owner must also enter into the license agreement and agree to the terms and conditions identified herein. Property Owner accepts responsibility for actions of all FSEs as their actions relate to the control of fats, oils and grease.

Food Service Establishment Wastewater Discharge Licenses are issued for specific use for a specific operation. Any sale, lease, transfer or assignment of the premises or operation for which the license was issued shall require a new license to be issued. A standard License form is attached as Exhibit "8.02."

8.02.1 Benefits of FSE License

A FSE license will define the type of establishment that may discharge grease into the sanitary sewer system. The license will be used to determine what method of grease control may be needed. The Food Service Establishment License will allow the District to:

- a. Determine the grease control needs specific to each food service establishment
- b. Provide the FSE with guidance on grease control methods
- c. Help FSEs improve kitchen best management practices
- d. Help FSEs meet the discharge requirements
- e. Ensure compliance with the California Plumbing Code

As a part of the licensing process, the District will perform one visual inspection of the FSE's business sewer service lateral per year via closed-circuit television, to identify whether excess grease is entering the sewer lateral from the FSE.

8.02.2 Renewal and Fees

Food Service Establishment Wastewater Discharge Licenses must be renewed annually. The annual license fee is identified in the Exhibit 10.01.

8.03 GREASE DISCHARGE LIMITATIONS

Wastewater discharge concentration entering the public sanitary sewer system shall not exceed 400 milligrams per liter of grease, as defined by EPA test method 1664A.

8.03.1 Grease Control Required to Meet Discharge Limitations

In order to meet the wastewater discharge limitations identified in §8.02 and as required by Tahoe Truckee Sanitation Agency, some form of grease control is required at all FSEs. All FSEs must comply with kitchen best management practices (BMPs) as a first measure to control grease.

8.03.1.1 New or Remodeled Establishments

An appropriately sized grease interceptor, as specified by Chapter 10 of the CPC and as described in Exhibit 8-A, must be installed at all new or remodeled commercial establishments serving food and any industrial-commercial facility where any grease or other objectionable material that may be discharged into a public or private sanitary sewer system. A variance from the requirement to install a grease interceptor may be granted in accordance with §8.06. A variance may allow for the installation or continued operation of a grease trap or mechanical grease trap, as described in Exhibit 8-B.

8.03.1.2 Existing Establishments

If weather conditions and Tahoe Regional Planning Agency regulations permit, existing establishments described in this Section must install a grease interceptor (or trap, if a variance is granted,) within the 180-day period after the first occurrence of any of the following events:

- a. Transfer of Ownership** – When ownership or ownership interest in the parcel, facility or business is transferred.
- b. County Building Permit** – When the County issues a building permit for construction, reconstruction or related work on the premise. The District will determine the appropriate FOG requirements based upon the application for service.

If weather conditions and Tahoe Regional Planning Agency regulations permit, existing establishments described in this Section must install a grease interceptor (or trap, if a variance is granted,) within the 60-day period after the first occurrence of any of the following events:

- a. Wastewater Backup or Discharge** - The backup or discharge of wastewater on or from the premises due to grease build-up within the building plumbing, building sewer service lateral or within District facilities if caused by discharge from the premises.

- b. **Discharge Exceeds Limits** - Where discharge samples indicate that the discharge exceeds the limits allowed by this Ordinance on three occasions within a twelve month period; or
- c. **Written Notice from District** - After receiving written notice from the District of the necessity for installation of such facilities.

8.04 ADMINISTRATIVE ACTION FOR NONCOMPLIANCE AND SEWAGE BACKUP

FSEs who do not comply with the District and CPC regulations related to the control of fats, oils and grease shall be subject to administrative action. This may include, but not be limited to, the assessment of fees for investigation and follow up action in accordance with Exhibit 10.01.

Where a sewage backup occurs as a result of FSE's discharge, all associated cleanup costs and fines incurred by the District or others from regulatory agencies shall be billed to the Owner.

8.05 DESIGN, CONSTRUCTION & INSTALLATION OF GREASE CONTROL SYSTEMS

8.05.1 General

Grease control facilities must be designed, constructed and installed at the expense of the FSE/Owner. The FSE/Owner must have a California licensed engineer design the grease control system for the project. The proposed plans must be submitted to the District for review, accompanied by the engineer's calculations and the District's standard application form.

The size, type and location of each grease interceptor, trap or alternative pretreatment method shall be approved by the District.

8.05.2 Codes Followed

Material for and methods of construction of grease control systems must be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

8.05.3 Type of Grease Control Method

The type of grease control method employed by a FSE will be based upon the method identified in Chapter 10 of the CPC.

8.05.4 Grease Interceptor or Grease Trap Design Specifications

Details on the design, construction, installation and testing of grease interceptors are located in Exhibit 8-A. Details on grease traps or mechanical grease traps are located in Exhibit 8-B.

8.05.5 Sample Ports

Within 180 days of the adoption of this Ordinance all existing food service facilities shall be required to install a sample port. Details on the sample port design and location can be found on Figures 8.01 and 8.02.

additional sample ports may be required on the sewer service lateral at facilities where the District suspects, through inspection or other cause, that grease is entering the District's sewer collection system.

District personnel may at anytime acquire a sample from the discharge sample port. Sample ports must be kept accessible at all times.

8.06 EXCLUSIONS

8.06.1 Food Waste Disposal Grinders (Garbage Disposals)

8.06.1.1 New FSEs

Upon the effective date of this Ordinance, no new food waste disposal grinders shall be installed within facilities subject to this Section that may discharge into the District's sanitary sewer system.

8.06.1.2 Existing FSEs with Grease Interceptor

FSEs with existing grease interceptors must remove the food waste disposal grinders from discharge into the District's sanitary sewer system within 1 year from the effective date of this Ordinance.

8.06.1.3 Existing FSEs with Grease Trap, Alternative Control or No Control

FSEs with existing grease traps, alternative pretreatment methods or no pretreatment devices must remove their food waste disposal grinders from discharge into the District's sanitary sewer system within 60 days from the effective date of this Ordinance.

8.06.2 Chemical and Biological Agents

The use of chemical and / or biological agents that could be used to dissolve fats, oils and grease are not allowed.

8.07 VARIANCE FROM GREASE INTERCEPTOR REQUIREMENTS

8.07.1 Waiver Based on Visual Inspection

Based upon the annual visual inspection of the building sewer lateral by way of closed circuit television camera, the District may grant a waiver of the requirements to install a grease interceptor for a period of up to one year. An inspection must reveal that there is another form of grease control in place that is being adequately maintained and that kitchen best management practices (BMPs) are being adhered to, and that discharge requirements are being met. The waiver may be renewed annually.

8.07.2 Waiver based on Alternative Control

The District may authorize the installation of an indoor grease trap or other alternative pretreatment technology in lieu of a grease interceptor. The FSE bears the burden of demonstrating that the installation of a grease interceptor is not feasible due to space constraints, plumbing requirements or other considerations. An engineer's wet stamped letter from the FSE stating the specific reasons that a grease interceptor is not feasible must be submitted with the request for a variance.

8.07.2.1 Space Constraints

Where properly documented space constraints or extensive remodeling is needed to correctly plumb for a grease interceptor, the District may consider an alternate method of grease control. In considering the waiver, the District will consider (1) the location of the sewer main and easement in relation to available exterior space outside building

and (2) The existing plumbing at or in a site that uses common plumbing for all services at that site. The applicant's engineer must certify that the alternate method is adequate by stamping the plans or providing a letter with his or her stamp approving the method.

8.07.2.2 Alternative Pretreatment

Alternative pretreatment technology includes, but is not limited to, devices that are used to trap, separate and hold grease from wastewater and prevent it from being discharged into the sanitary sewer collection system. All alternative pretreatment technology must be appropriately sized by the FSE/Owner and approved by the District. The applicant's engineer must certify that the alternate method is adequate by stamping the plans or providing a letter with his or her stamp approving the method. The applicant shall provide copies of the engineer's calculations.

8.08 MAINTENANCE

8.08.1 Maintenance, General

The FSE/Owner shall maintain grease interceptors and grease traps in an efficient operating condition by periodic removal and proper disposal of the accumulated grease. The District will work with each FSE to determine an appropriate schedule of grease removal. Maintenance requirements for grease interceptors are defined in Exhibit 8-A and for grease traps Exhibit 8-B.

8.09 INSPECTION

8.09.1 Building Service Lateral Televised Inspection

Visual inspections by way of closed-circuit television camera shall be required on all sewer service laterals exiting food service facilities on an annual basis and more frequently if deemed necessary by the District. The annual license fee shall cover the cost of one (1) annual inspection. If repeat inspections are required, they shall be charged at actual cost to the Owner.

8.09.2 Grease Interceptor and Grease Trap Inspections

The goal of the grease control program is to reduce the accumulation of grease in the sanitary sewer mains. Should the District's monitoring program indicate that grease control measures employed by a FSE are inadequate, either by way of visual inspection of the sewer lateral or through samples taken from the sample port, the FSE will be notified that they must review their kitchen practices to ensure that best management practices (BMPs) are being followed and that grease control facilities are being properly maintained. The District is available to work with the FSE to ensure that they will meet discharge limits.

To ensure that the FSE has resolved any problems and to achieve what is in the best interest of the FSE and the general public, the District will monitor these FSEs more frequently. If subsequent monitoring indicates that the problem persists and that grease continues to accumulate in the sewer lateral, the District will give written notice of non-compliance. Following notice of non-compliance, internal inspections may be made at anytime during normal business and maintenance hours.

District personnel may at anytime inspect external facilities.

8.09.3 Sample Port Inspections

The District will obtain random samples from sample ports for the purpose of determining whether a FSE is meeting discharge requirements. Samples may also be taken when conditions reveal that grease may be entering the District's collection system by way of the FSE's sewer service lateral. Initial samples will be analyzed at no charge to the FSE. Should the discharge exceed the limits prescribed herein, follow-up samples will be taken once corrective measures by the FSE are completed, in accordance with Section 8-AF.6 and 8-B.C.7, or as deemed necessary by the District, and all repeat analyses shall be billed to the FSE until the discharge limits are met.

Sample ports must remain accessible at all times.

8.10 ABANDONMENT

Abandoned grease interceptors shall be emptied and removed or filled in the same manner as required for abandoned septic tanks as described in Section 722.2 – 722.5 and Appendix K-11, CPC.

**Section 8
Fats, Oils and Grease Control****GREASE INTERCEPTORS**

A. GREASE CONTROL

The type of grease control method employed by a FSE will be based upon the method identified in Chapter 10 of the California Plumbing Code (CPC.)

B. USE OF GREASE INTERCEPTORS

Grease interceptors shall be required on all FSEs unless the District has granted a variance. A variance may be requested in accordance with §8.06. Where a variance has been granted, FSEs may choose to install a grease trap in place of a grease interceptor.

C. DESIGN**1. General**

Grease control facilities must be designed, constructed and installed at the expense of the FSE/Owner. The FSE/Owner must have a California licensed engineer design the grease control system for the project in accordance with the CPC and Figure 8-A1. The proposed plans must be submitted to the District for review, accompanied by the engineer's calculations and the District's standard application form.

The size, type and location of each grease interceptor shall be approved by the District

2. Codes Followed

Material for and methods of construction of grease control systems must be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

3. Single Facility Served

Grease interceptors installed for commercial facilities shall serve only one business establishment. Any exception to this requirement is at the discretion of the District.

4. Capacity

Grease interceptors shall be sized according to Appendix H of the CPC. Minimum capacity shall be 750 gallons. The FSE/Owner shall be responsible for providing stamped engineering capacity calculations and is responsible for appropriately sizing the grease interceptor.

5. Conflicts with Manufacturing Standards

Where manufacturer's minimum discharge or retention capacity specifications or standards differ from the standards included herein, the more stringent requirements shall prevail.

6. Location

Each grease interceptor shall be installed and connected to allow for easy access at all times for inspection, cleaning, and removal of the intercepted grease. A grease interceptor may not be installed in any part of a building where food is handled. Proper

location of the grease interceptor shall meet all CPC requirements and be approved by the District. It shall not be necessary to relocate existing interceptors provided they are accessible and being properly maintained.

7. Traffic Area

Interceptors located in vehicle traffic areas shall be capable of withstanding an H-20 axle load. The access port cover shall be at least ½ inch below finished grade and shall be capable of withstanding an H-20 axle load and shall be labeled "Sewer."

8. Plumbing

Each grease interceptor shall be plumbed so that only kitchen waste shall flow through the interceptor (See Figure 8.02.) Waste discharged into a grease interceptor shall not exceed 140°F (60°C). All other wastewater including fecal and non-fecal sources shall be plumbed downstream of the grease interceptor. Toilets, urinals and other fixtures containing fecal material may not flow through interceptors.

Interceptors shall be installed in such a manner that surface drainage may not enter. The waste shall enter the interceptor through the inlet pipe only.

Interceptors shall be designed so that they will not become air-bound. Except as otherwise provided, the cover and access ports shall be gas-tight. Each interceptor shall be properly vented, as required by Chapter 9, CPC.

9. Dishwashers

Dishwasher waste may be plumbed through a grease interceptor upon review and approval of the District. Discharge from the dishwasher may not exceed 140°F (60°C). The District may limit or prohibit the use of certain detergents, chemicals or defoaming agents used for washing or sanitizing.

10. Food Waste Disposal Grinders (Garbage Disposals)

Upon the effective date of this Ordinance, no new food waste disposal grinders shall be installed within facilities subject to this Section that may discharge into the District's sanitary sewer system.

Existing FSEs with grease interceptors must remove the food waste disposal grinders from discharge into the District's sanitary sewer system within 1 year from the effective date of this Ordinance.

11. Water Jacketed Installations

No water-jacketed grease interceptor shall be approved or installed.

12. Chemical and Biological Agents

The use of chemical and / or biological agents that could be used to dissolve fats, oils and grease are not allowed.

13. Discharge Sample Port

A sample port (see Figures 8.01 and 8-02,) shall be installed at the FSE/Owners' expense to ensure discharge limit compliance. Grease interceptor sample ports shall be located just downstream of the interceptor and upstream of the non-kitchen waste

flow tie-in. Sample ports shall be sized such that a sample may be taken at any time, under any flow conditions. A cleanout shall be installed immediately downstream of the sample port for cleaning purposes and to allow for the introduction of a closed-circuit camera into the sewer service lateral for visual inspections.

D. INSTALLATION

1. State Licensed Contractor

A California State licensed contractor shall be responsible for the performance of all work connected with the installation of grease interceptors and must be approved by the District prior to start of work. The FSE/Owner is required to provide the District with the name, address, and state license number of his contractor. The District shall not be responsible for work performed by the contractor.

2. Insurance Requirements

All contractors who work on sewer facilities within District boundaries must post a certificate of insurance with the District that shows property damage and public liability in an amount satisfactory to the District. The District must be shown as the certificate holder and as additional insured, entitled to defense, including District's officers, employees, representatives and agents. Contractors must also provide proof of worker's compensation insurance.

E. TESTING

Grease interceptors shall be tested for leakage at the time of installation, at the time of sale if not tested within five years of the date of close of escrow, and following repair or replacement. Testing shall be performed with water or by vacuum method. A District inspector must be present to witness the test.

1. Water Test

A water test shall be performed by plugging all inlet and outlet pipes and filling the test section with water to the top of the frame rim. The water should be introduced into the test section at least 4 hours in advance of the official test period to allow the concrete and joint material to become saturated. The test section shall then be refilled to the original water level.

At the beginning of the test, the elevation of the water in the test section shall be carefully measured from a point on the frame rim. After a period of 4 hours, the water elevation shall be measured from the same point on the frame rim and the loss of water during the test period calculated. If this calculation is difficult, enough water shall be measured into the test section to restore the water to the level existing at the beginning of the test, and the amount added taken as the total leakage.

The allowable leakage shall not exceed 0.13 gallons per hour. Grease Interceptors showing leakage in excess of that allowed shall be repaired or reconstructed as necessary to reduce the leakage to that specified. All failures shall be retested after the necessary repairs have been completed.

2. Vacuum Test

Vacuum Drawn - A vacuum of four (4) inches mercury (Hg) shall be drawn on grease interceptors and precast sample ports.

Measure Time - The time, in seconds, for the vacuum to drop to three and one-half (3.5) inches of mercury (Hg) shall be witnessed by a District inspector.

Allowable Loss - The allowable leakage shall not exceed the times listed below:

<u>Time (seconds)</u>	<u>Interceptor Size (gallons)</u>
120	100 to 2,499
180	2,500 to 4,999
240	5,000 and greater

Grease interceptors showing a loss in excess of that allowed shall be repaired or reconstructed as necessary to reduce the loss to that specified. All failures shall be retested after the necessary repairs have been completed.

F. MAINTENANCE OF GREASE INTERCEPTORS

1. Pumping and Hauling

Grease shall not be introduced into any drainage piping or public or private sanitary sewer facility. Grease from a grease interceptor shall be pumped and hauled by a District approved waste hauler. Pumped grease shall be hauled to a site or landfill facility designated to handle kitchen grease.

2. Cleaning Frequency

All grease interceptors shall be cleaned every 4 months, at a minimum, or when the floatable grease layer exceeds six inches (6") and or the settleable solids layer exceeds eight inches (8") in the primary interceptor compartment or when the total volume of captured grease and solid materials displaces more than 20% of the capacity of the primary interceptor compartment by a District approved dipping/sampling method. Interceptors that are undersized (existing) or are unable to meet the District's minimum discharge or retention capacity standards may require more frequent pumping.

3. Cleaning and Maintenance Log

The FSE shall post and maintain a current grease interceptor cleaning and maintenance log on the premises and shall have the log available for review by District personnel at all times. Receipts and bills of lading from the pumper/hauler and/or rendering service companies shall be retained for a minimum of 3 years.

4. Variance from Minimum Grease Removal Intervals

A FSE may apply for a variance from the minimum grease removal intervals cited herein if the FSE believes that it may achieve compliance with discharge requirements through less frequent cleaning and grease removal. Based upon review of best management practices, sampling and inspection, the District will make the determination if a variance may be granted. All costs associated with testing, sampling and inspection are the responsibility of the FSE.

5. Notification of Cleaning and Grease Removal

When the grease interceptor is being pumped and cleaned, a District inspector will witness the cleaning as an aide to the FSE, if the inspector is available. The FSE is asked to give as much advanced notice to the District as possible.

6. Malfunctioning Equipment

Grease reduction equipment that is either not functioning properly or has ceased to function must be reported to the District as soon as possible. Malfunctioning equipment may result in erroneous sample test results. Any grease interceptor that is not operating properly or does not meet the District's minimum discharge or retention capacity standards must be pumped or cleaned within five (5) working days or repaired within thirty (30) working days upon notice by the District, unless immediate cleaning and repair is necessary as determined by the District.

The District may issue an extension when a hardship is encountered with a repair or replacement.

G. INSPECTIONS

1. Grease Interceptor Inspections

District personnel will periodically inspect grease interceptors and food preparation areas. Internal inspections may be made at anytime during normal business and maintenance hours with or without prior notice. District personnel may at anytime inspect and obtain samples from external facilities.

H. ABANDONMENT

Abandoned grease interceptors shall be emptied and removed or filled in the same manner as required for abandoned septic tanks as described in Section 722.2 – 722.5 and Appendix K-11, CPC.

A. USE OF GREASE TRAPS

Grease traps, including both passive and automatic, shall be allowed when the District grants a variance from the requirement for a grease interceptor. A variance may be requested in accordance with §8.07. Where a variance has been granted, FSEs may choose to install a grease trap in place of a grease interceptor.

If the District determines that the grease trap is not providing adequate grease removal based upon sample collection and visual inspection, the District may rescind the variance and require the installation of a grease interceptor.

B. DESIGN**1. General**

Grease control facilities must be designed, constructed and installed at the expense of the FSE/Owner. The FSE/Owner must have a California licensed engineer design the grease control system for the project in accordance with the CPC. The proposed plans must be submitted to the District for review, accompanied by the engineer's calculations and the District's standard application form.

The size, type and location of each grease trap or alternative pretreatment method shall be approved by the District

2. Codes Followed

Material for and methods of construction of grease control systems must be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

3. Type of Grease Control Method

The type of grease control method employed by a FSE will be based upon the method identified in Chapter 10 of the CPC.

4. Single Facility Served

Grease traps installed for commercial facilities shall serve only one business establishment.

5. Capacity

Grease traps shall be sized according to the California Plumbing Code (CPC.) The grease retention capacity of the trap, expressed in pounds of grease, shall not be less than two times the approved rate of flow in gallons per minute.

6. Conflicts with Manufacturing Standards

Where manufacturer's minimum discharge or retention capacity specifications or standards differ from the standards included herein, the more stringent requirements shall prevail.

7. Location

Each grease trap shall be installed and connected to allow for easy access at all times for inspection, cleaning, and removal of the trapped grease. Proper location of the grease trap shall meet all CPC requirements and be approved by the District.

8. Flow Ratings

Grease traps shall be installed with a flow rate of between 20 gallons per minute and a maximum of 55 gallons per minute. Rate of flow shall not be less than 40 percent of the total capacity, in gallons, of fixtures discharging into the grease trap.

9. Flow Control Device

Each plumbing fixture or piece of equipment connected to a grease trap shall be provided with an approved type vented flow control or a restricting device installed in a readily accessible and visible location in the tailpiece of the drain outlet of each such fixture. All flow control devices shall be installed per Chapter 10 of the CPC.

Flow control devices shall be designed so that the flow through such device(s) shall at no time be greater than the rated capacity of the grease trap. No flow control device shall have adjustable or removable parts.

10. Fixtures

No more than four (4) separate fixtures shall be connected to or discharged into any one grease trap. For the purpose of this Section, the term "fixture" shall mean and include each plumbing fixture, appliance, apparatus or other equipment required to be connected to or discharged into a grease trap by any provision of this Section.

11. Fixtures Individually Trapped and Vented

Each fixture discharging into a grease trap shall be individually trapped and vented in an approved manner. An approved type grease trap may be used as a fixture trap for a single fixture when the horizontal distance between the fixture outlet and the grease trap does not exceed (4) feet and the vertical tailpipe or drain does not exceed 2-1/2 feet.

12. Water Seal

Each grease trap shall have an approved water seal of not less than 2 inches in depth or the diameter of its outlet, whichever is greater.

13. Dishwashers, Grease Traps and Alternative Pretreatment

Dishwasher waste may not be plumbed through a grease trap or alternative pretreatment method unless either method is specifically designed to work in conjunction with a specific dishwasher and is approved by the District. Discharge from the dishwasher may not exceed 140°F (60°C) or the design limit temperature set by the grease trap or alternative pretreatment method manufacturer, whichever is less. The District may limit or prohibit the use of certain detergents, chemicals or defoaming agents used for washing or sanitizing.

14. Food Waste Disposal Grinders (Garbage Disposals)

Upon the effective date of this Ordinance, no new food waste disposal grinders shall be installed within facilities subject to this Section that may discharge into the District's sanitary sewer system.

Existing FSEs with grease traps, alternative pretreatment methods or no pretreatment devices must remove their food waste disposal grinders from discharge into the District's sanitary sewer system within 60 days from the effective date of this Ordinance.

15. Water Jacketed Installations

No water-jacketed grease trap shall be approved or installed.

16. Chemical and Biological Agents

The use of chemical and / or biological agents that could be used to dissolve fats, oils and grease are not allowed.

17. Sample Port

A sample port (Figures 8.01 and 8.02) shall be installed at the FSE/Owner's expense to ensure discharge limit compliance. The sample port shall be located just outside of the building foundation and downstream of the foundation cleanout. Sample ports shall be sized such that a sample may be taken at any time, under any flow conditions. An additional sample port for grease traps may be located inside the facility only with prior authorization from the District.

C. MAINTENANCE OF GREASE TRAPS

1. Grease Disposal

Grease shall not be introduced into any drainage piping or public or private sanitary sewer facility. Grease from a grease trap shall not be disposed of into a rendering receptacle or container. Contact the District for proper grease trap disposal methods.

2. Cleaning and Maintenance Log

The FSE shall post and maintain a current grease trap cleaning and maintenance log on the premises and shall have the log available for review by District personnel at all times. Receipts and bills of lading from the disposal of grease shall be retained for a minimum of 3 years.

3. Passive Grease Traps

All passive grease traps shall be opened, inspected, cleaned and maintained a minimum of once per week (every 7 days) or when the total volume of captured grease and solid materials displaces more than 20% of the capacity of the trap. Grease traps that were undersized (existing) or are unable to meet the District's minimum discharge or retention capacity standards may have to be cleaned more frequently.

4. Automatic Grease Traps

Automatic grease traps shall be cleaned and maintained per manufacturer's specifications or a minimum of one time per week (every 7 days) or when the total volume of captured grease and solid materials displaces more than 20% of the capacity of the trap.

5. Alternative Pre-treatment Methods

Alternative pre-treatment methods shall be cleaned and maintained per manufacturer's specifications or minimum of one time per week (every 7 days).

6. Variance from Minimum Grease Removal Intervals

A FSE may apply for a variance from the minimum grease removal intervals cited herein if the FSE believes that it may achieve compliance with discharge requirements through less frequent cleaning and grease removal. Based upon review of best management practices, sampling and inspection, the District will make the determination if a variance may be granted. All costs associated with testing, sampling and inspection are the responsibility of the FSE.

7. Malfunctioning Equipment

Grease reduction equipment that is either not functioning properly or has ceased to function must be reported to the District as soon as possible. Malfunctioning equipment may result in erroneous sample results. Any grease trap (passive or automatic) or alternative pretreatment device that is not operating properly or does not meet the District's minimum discharge or retention capacity standards must be pumped or cleaned within two (2) working days or repaired within ten (10) working days upon notice by the District, unless immediate cleaning and repair is necessary as determined by the District.

The District may issue an extension when a hardship is encountered with a repair or replacement.

D. INSPECTIONS

1. Grease Trap Inspections

District personnel will periodically inspect grease traps and food preparation areas. Internal inspections may be made at anytime during normal business and maintenance hours with or without prior notice. District personnel may at anytime inspect and obtain samples from external facilities.

Tahoe City Public Utility District
Food Service Establishment Wastewater Discharge License

Food Service Establishment _____ License No. _____

Street Address _____

Assessor's Parcel Number _____

This License is issued pursuant to Section 8, TCPUD Sewer Ordinance 112. This license authorizes the discharge of wastewater effluent from a Food Service Establishment that is not controlled or specifically prohibited by the EPA or the State of California to be discharged into the District's sanitary sewer collection system, subject to the terms and conditions contained herein.

The Licensee shall be responsible for notifying the District of any changes in the factors that determine sizing of Grease Traps or Interceptors. This notification must be made prior to any alteration or replacement of the currently approved equipment.

Licensee _____
 Mailing Address _____

 Phone _____
 email _____

The effective date of this license is _____, and the license shall remain in effect for one year.

Conditions of License

1. Licensee shall comply with and shall be subject to all requirements, prohibitions, restrictions and enforcement provisions contained in the District's Sewer Ordinance, Section 8, as well as all other applicable requirements in the ordinance.
2. Licensee shall maintain the grease trap(s) and or interceptor(s) in proper working order at all times to ensure compliance with the discharge limits of 400 mg/l.
3. Licensee shall have the trap cleaned whenever needed to ensure proper operation. Licensee shall maintain a log showing the dates that the grease trap(s) and or interceptor(s) are being cleaned and shall maintain copies for a minimum of three (3) years.
4. At a minimum, District personnel shall take grab samples semiannually of the discharge at the sample port or at an appropriate point within the facility, after discharging from a grease trap.
5. Licensee shall notify the District if the grease trap(s) and or interceptor(s) are malfunctioning. They must thereafter be pumped or cleaned within 5 working days or repaired within 30 working days as directed by the District, in accordance with Exhibit 8-A (F.6).
6. Licensee shall repair, replace or increase the number or size of grease trap(s) and or interceptor(s) on-site or take whatever measures needed to achieve compliance with the specified limit of 400 mg/l for fats, oils and grease, if the discharge sample exceeds this amount.
7. District personnel may enter the premises during normal business or maintenance hours for the purpose of (a) inspecting Licensee's grease trap(s) and or interceptor(s) and any other facilities or processes which could adversely affect District's sanitary sewer system, (b) obtaining samples in order to ascertain compliance with the discharge limit of 400 mg/l, and (c) reviewing logs required by the terms of this license. District personnel may at any time inspect and obtain samples from external facilities.

8. The District may require the following, when deemed necessary by the District for the protection of the public sanitary sewer collection system, at Licensee's expense:
 - a. Additional testing of Licensee's discharge
 - b. Cleaning of Licensee's sand/oil interceptor(s); and/or
 - c. Any other action allowed by applicable law or regulation.

9. The Food Service Establishment Wastewater License fee(s) shall assessed per Exhibit 10.01 of District Ordinance 112.

10. Where the Licensee is not the owner of the property, the Owner shall execute this document and be bound by the terms and conditions contained herein and within Section 8 of the District's Sewer Ordinance.

A License fee of \$_____ was paid on this date _____ per Exhibit 10.01 of District Ordinance 112.

Dated: _____ By: _____
Licensee

Dated: _____ By: _____
Property Owner

Dated: _____ By: _____
Technical Services Supervisor

Dated: _____ By: _____
Director of Public Works

Figure 8.01

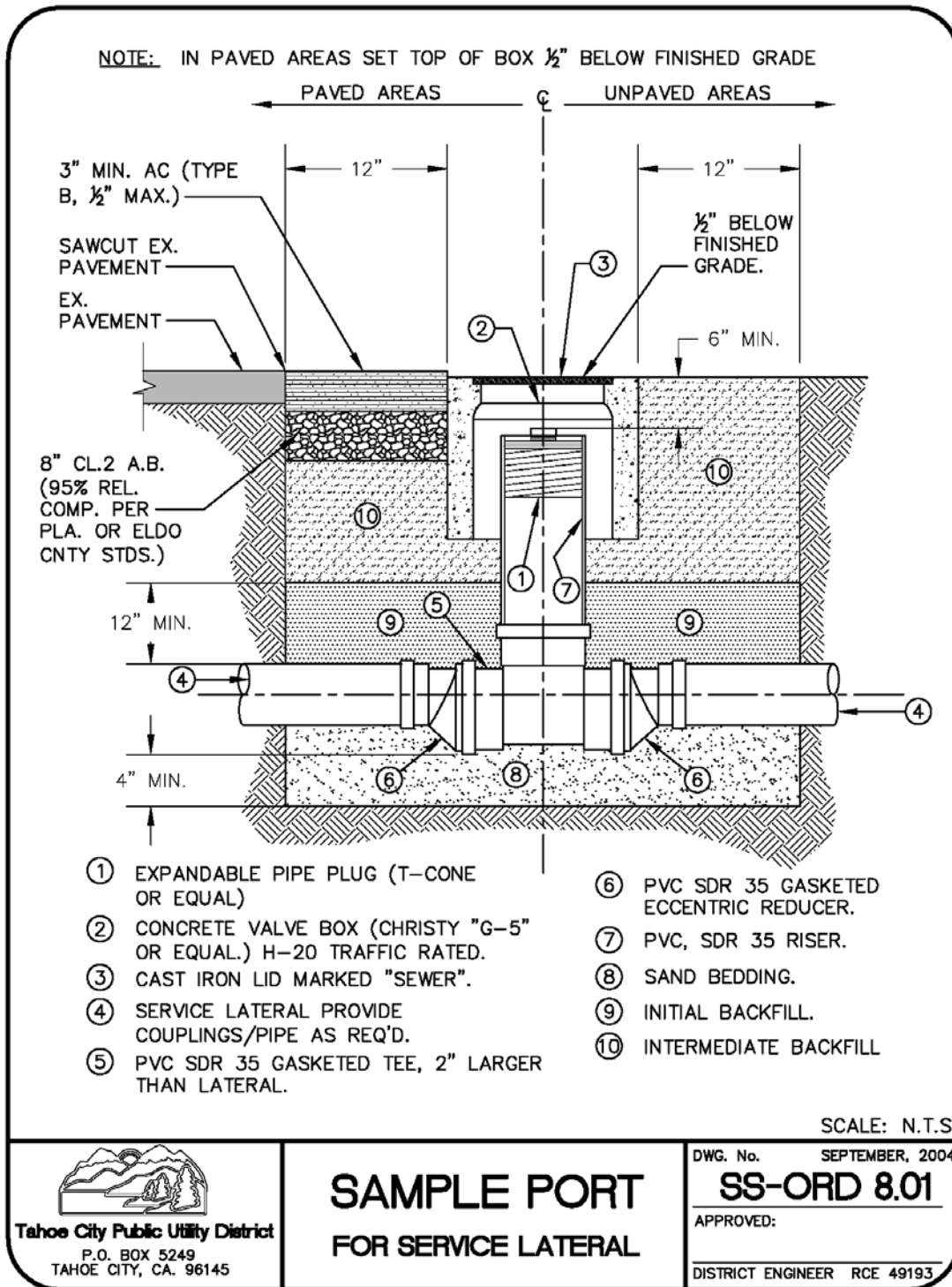
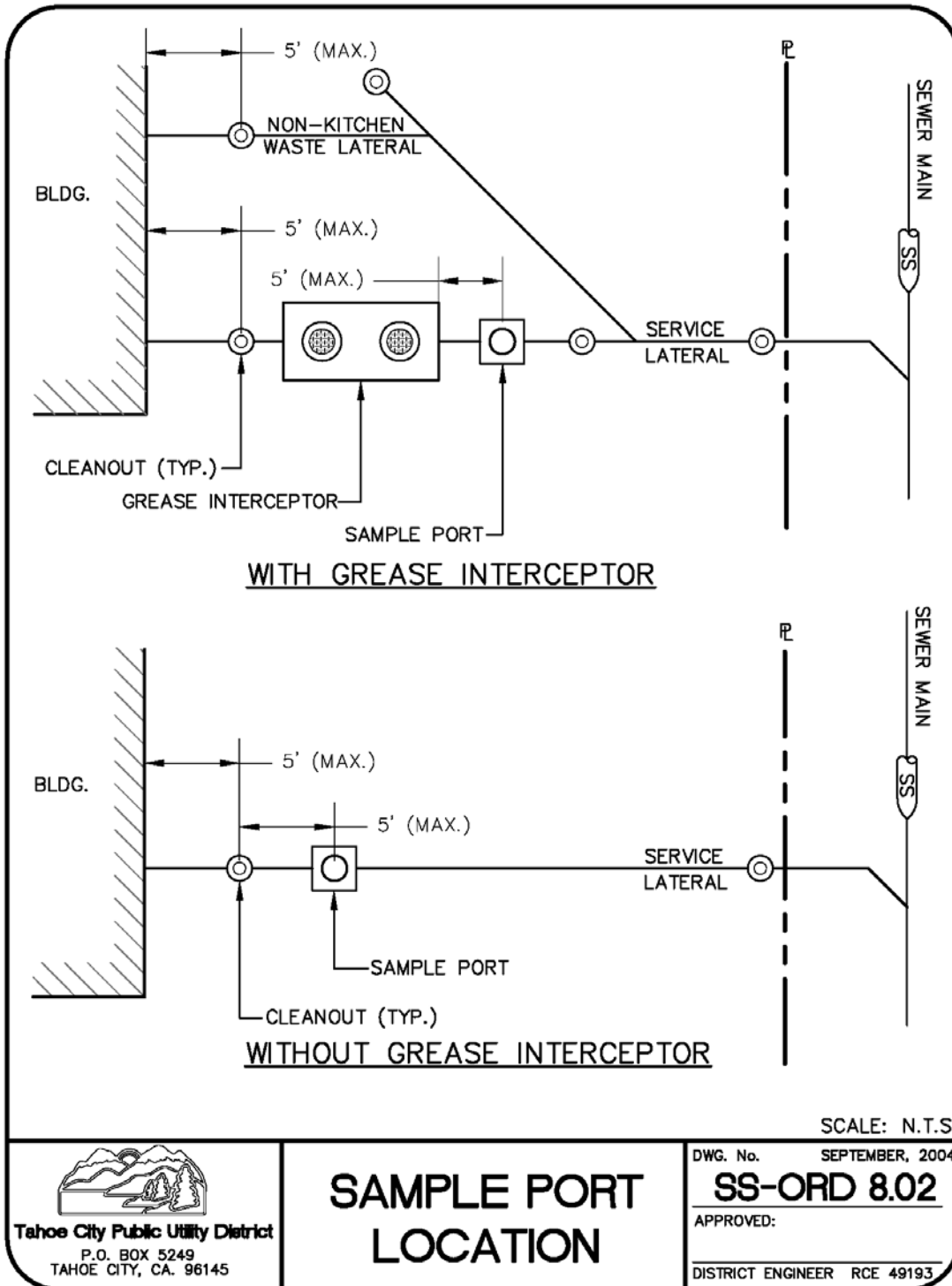


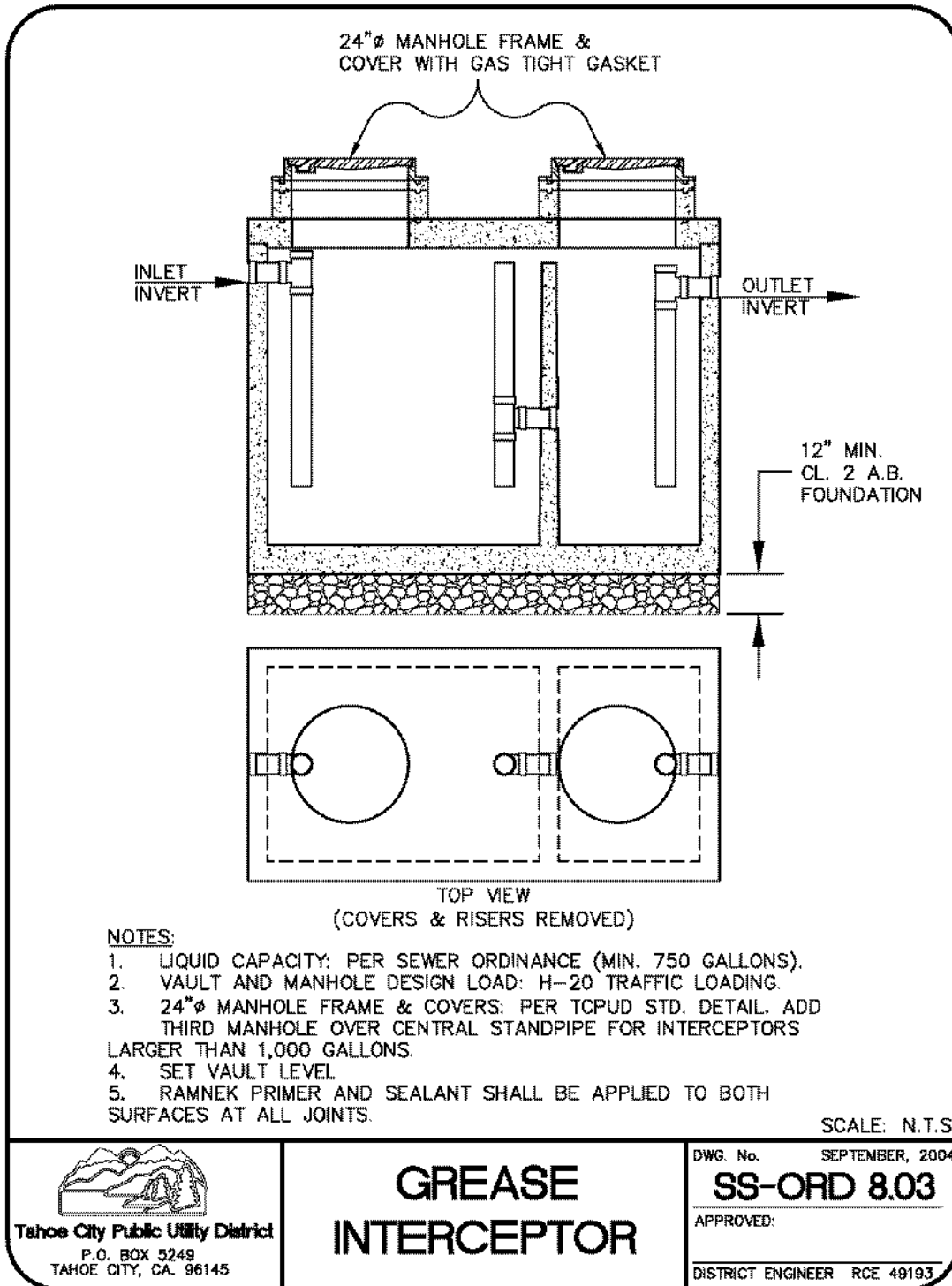
Figure 8.02




Tahoe City Public Utility District
 P.O. BOX 5249
 TAHOE CITY, CA. 96145

**SAMPLE PORT
LOCATION**

Figure 8.03



SAND, HYDROCARBON-BASED OILS AND GREASE CONTROL

9.01 SAND, HYDROCARBON-BASED OILS AND GREASE CONTROL, GENERAL

The goal of the Sand, Hydrocarbon-based Oils and Grease Control section of this Ordinance is to stop the introduction of sand and hydrocarbons into the sanitary system collection system. The Tahoe City Public Utility District (District) follows the requirements of the California Plumbing Code (CPC,) as it relates to oil and grease control, and acts as the Administrative Agency as identified in the CPC, in enforcing grease control measures.

Any nonresidential private or public wash rack used for cleaning vehicles, machinery or machine parts or facilities used for vehicle maintenance, storage, or repair, or any factories, industries or facilities which have oily or sediment-laden wastes shall follow the requirements within this Section.

9.02 SAND, HYDROCARBON-BASED OIL AND GREASE DISCHARGE LICENSE

A license is required for all businesses and individuals who operate or intend to operate a non-residential facility that has the potential to discharge sand, hydrocarbon-based oils and grease into the District's sanitary sewer collection system. These facilities include, but are not limited to:

Car washes, automobile repair shops, bus garages, highway maintenance yards, parts washing facilities, vehicle storage or other facilities that have oily or sediment-laden wastes.

If the licensee is not the Property Owner, the Property Owner must also enter into the license agreement and agree to the terms and conditions identified herein. Property Owners are responsible for actions taken by tenants or lessees where sand, hydrocarbon-based oils or grease may be discharged.

Sand, hydrocarbon-based oil and grease discharge licenses are issued for specific use for a specific operation. Any sale, lease, transfer or assignment of the premises or operation for which the license was issued shall require a new license to be issued. A standard License form is attached as Exhibit 9.01.

The license will define the type of establishment that may discharge sand, oils and grease into the sanitary sewer system. The license will be used to determine what method of sand, oil and grease control may be needed. The license will allow the District to:

- a. Determine the sand, oil and grease control needs specific to each facility
- b. Provide the facility with guidance on sand, oil and grease control methods
- c. Help the facility meet the District's discharge requirements
- d. Ensure compliance with the California Plumbing Code

As a part of the licensing process, the District will perform one visual inspection of the facility's business sewer service lateral per year via closed-circuit television, to identify whether excess sand, oil or grease is entering the sewer lateral from the facility.

9.02.1 License Renewal and Fees

Discharge Licenses must be renewed annually. The annual license fee is identified in Exhibit 10.01.

9.03 SAND, HYDROCARBON-BASED OIL AND GREASE DISCHARGE LIMITATIONS

Wastewater discharge concentration entering the public sanitary sewer system shall not exceed 100 milligrams per liter of hydrocarbon based oils and grease.

9.03.1 Sand, Oil and Grease Control Required to Meet Discharge Limitations

In order to meet the wastewater discharge limitations identified in §9.03 and as required by Tahoe Truckee Sanitation Agency, every private or public wash rack used for cleaning vehicles, machinery or machine parts or facilities used for vehicle maintenance, storage, or repair, or any factories, industries or facilities which have oily or sediment laden wastes shall connect to the sanitary sewer through a sand-oil interceptor.

9.03.1.1 New or Remodeled Establishments

An appropriately sized sand-oil interceptor, as specified by Chapter 10 of the CPC must be installed at all new or remodeled industrial-commercial facilities where any sand, hydrocarbon-based oil or grease, or other objectionable material may be discharged into the District's sanitary sewer collection system.

9.03.1.2 Existing Establishments

If weather conditions and Tahoe Regional Planning Agency regulations permit, existing facilities described in this Section must install a sand-oil interceptor (or trap, if a variance is granted,) within the 180-day period after the first occurrence of any of the following events:

- a. Transfer of Ownership – When ownership or ownership interest in the parcel, facility or business is transferred.
- b. County Building Permit – When the County issues a building permit for construction, reconstruction or related work on the premise. The District will determine the appropriate requirements based upon the County permit.

If weather conditions and Tahoe Regional Planning Agency regulations permit, existing establishments described in this Section must install a sand-oil interceptor within the 60-day period after the first occurrence of any of the following events

- a. Wastewater Backup or Discharge - The backup or discharge of wastewater on or from the premises due to sand or heavy solids build-up within the building plumbing, building sewer service lateral or within District facilities if caused by discharge from the premises.

- b. Discharge Exceeds Limits - Where discharge samples indicate that the discharge exceeds the limits allowed by this Ordinance on three occasions within a twelve month period; or
- c. Written Notice from District - After receiving written notice from the District of the necessity for installation of such facilities.

9.04 ADMINISTRATIVE ACTION FOR NONCOMPLIANCE AND SEWAGE BACKUP

Facilities that do not comply with the District and CPC regulations related to the control of sand, hydrocarbon-based oil or grease shall be subject to administrative action. This may include, but not be limited to, the assessment of fees for investigation and follow up action in accordance with Exhibit 10.01.

Where a sewage backup occurs as a result of a facility's discharge, all associated cleanup costs and fines incurred by the District or others from regulatory agencies shall be billed to the Owner.

9.05 DESIGN, CONSTRUCTION & INSTALLATION OF GREASE CONTROL SYSTEMS

9.05.1 General

Sand, oil and grease control facilities must be designed, constructed and installed at the expense of the Owner. The Owner must have a registered civil engineer design the sand-oil interceptor for the project in accordance with the CPC and Figure 9.01. The proposed plans must be submitted to the District for review, accompanied by the engineer's calculations and the District's standard application form.

The size, type and location of each sand-oil interceptor shall be approved by the District.

9.05.2 Codes Followed

Material for and methods of construction of sand-oil separators must be in accordance with the requirements of the most recent edition of the California Plumbing Code, the codes of the State of California, regulations of the Counties of Placer or El Dorado, and Ordinances and Construction Standards of the Tahoe City Public Utility District.

9.05.3 Sample Ports

Within 180 days of the adoption of this Ordinance all existing facilities identified in §9.01 shall be required to install a sample port. Additional sample ports may be required on the sewer service lateral at facilities where the District suspects, through inspection or other cause, that sand, hydrocarbon-based oils or grease may be entering the District's sewer collection system.

District personnel may at anytime acquire a sample from the discharge sample port. Sample ports must be kept accessible at all times.

9.06 MAINTENANCE

9.06.1 Maintenance, General

The Owner shall maintain sand-oil interceptors in an efficient operating condition by periodic removal and proper disposal of the accumulated sand and grease. The District will work with the each facility to determine an appropriate maintenance schedule.

9.07 INSPECTION

9.07.1 Building Service Lateral Televised Inspection

Visual inspections by way of closed-circuit television camera shall be required on all sewer service laterals exiting facilities that may discharge sand, hydrocarbon-based oil or grease on an annual basis and more frequently if deemed necessary by the District. The annual license fee shall cover the cost of one (1) annual inspection. If repeat inspections are required, they shall be charged at actual cost to the Owner.

9.07.2 Sand-Oil Interceptor Inspections

The District's goal is to eliminate the introduction of sand, hydrocarbon-based oils and grease into the sanitary sewer collection system. Should the District's monitoring program indicate that sand, oil and grease control measures employed by a facility are inadequate either by way of visual inspection of the sewer lateral facility or through samples taken from the sample port, the Owner will be notified to ensure that the sand-oil interceptor is being properly maintained. The District is available to work with the facility to ensure that they will meet discharge limits.

District personnel may at anytime inspect external facilities.

9.07.3 Sample Port Inspections

The District will obtain random samples from sample ports for the purpose of determining whether a facility is meeting discharge requirements. Samples may also be taken when conditions reveal that sand, hydrocarbon-based oils or grease may be entering the District's collection system by way of the facility's sewer service lateral.

Sample ports must remain accessible at all times.

9.08 ABANDONMENT

Abandoned sand-oil interceptors shall be emptied and removed or filled in the same manner as required for abandoned septic tanks as described in the CPC.

Tahoe City Public Utility District
Sand and Hydrocarbon Based Liquid Wastewater and Grease Discharge License

Sand-Oil-Grease Discharge Establishment _____ License No. _____
Street Address _____
Assessor's Parcel Number _____

This License is issued pursuant to Section 9, TCPUD Sewer Ordinance 255. This license authorizes the discharge of wastewater effluent from a Sand-Oil-Grease Discharge Establishment that is not controlled or specifically prohibited by the EPA or the State of California to be discharged into the District's sanitary sewer collection system, subject to the terms and conditions contained herein.

The Licensee shall be responsible for notifying the District of any changes in the factors that determine sizing of Sand-Oil Interceptors. This notification must be made prior to any alteration or replacement of the currently approved equipment.

Licensee Mailing Address _____

Phone email _____

The effective date of this license is _____, and the license shall remain in effect for one year. Initial license fees are due in full for new SOE and will be billed quarterly for existing SOE's in accordance with Section 9, TCPUD Sewer Ordinance 255.

Conditions of License

1. Licensee shall comply with and shall be subject to all requirements, prohibitions, restrictions and enforcement provisions contained in the District's Sewer Ordinance 255, Section 9, as well as all other applicable requirements in the ordinance.
2. Licensee shall maintain the sand/oil interceptor(s) in proper working order at all times so as to ensure compliance with the discharge limits of 100 mg/l of hydrocarbon based oil, grease and solvents.
3. Licensee shall have the sand/oil interceptor(s) cleaned whenever needed to ensure proper operation. Licensee shall maintain a log showing the dates that sand/oil interceptor(s) are being cleaned and shall maintain copies for a minimum of three (3) years.
4. At a minimum, District personnel shall take grab samples annually of the discharge at the sample port.
5. Licensee shall notify the District if the Sand-Oil interceptor(s) are malfunctioning. They must thereafter be pumped or cleaned within 5 working days or repaired within 30 working days as directed by the District, in accordance with Exhibit 8-A (F.6).
6. Licensee shall repair, replace or increase the number or size of sand/oil interceptor(s) on-site or take whatever measure needed to achieve compliance with the specified limit of 100 mg/l for hydrocarbon based oil, grease and solvents, if the discharge sample exceeds this amount.

7. District personnel may enter the premises during normal business and maintenance hours for the purpose of (a) inspecting Licensee's sand/oil interceptor(s) and any other facilities or processes which could adversely affect District's sanitary sewer system, (b) obtaining samples in order to ascertain compliance with the discharge limit of 100 mg/l, and (c) reviewing logs required by the terms of this license. District personnel may at any time inspect and obtain samples from external facilities.
8. The District may require the following, when deemed necessary by the District for the protection of the public sanitary sewer collection system, at Licensee's expense:
 - a. Additional testing of Licensee's discharge
 - b. Cleaning of Licensee's sand/oil interceptor(s); and/or
 - c. Any other action allowed by applicable law or regulation.
9. The Sand-Oil Establishment Wastewater License fee(s) shall assessed per Exhibit 10.01 of District Ordinance 255.
10. Where the Licensee is not the owner of the property, the Owner shall execute this document and be bound by the terms and conditions contained herein and within Section 9 of the District's Sewer Ordinance 255.

A License fee of \$_____ was paid on this date _____ per Exhibit 10.01 of District Ordinance 255.

Dated: _____

By: _____
Licensee

Dated: _____

By: _____
Property Owner

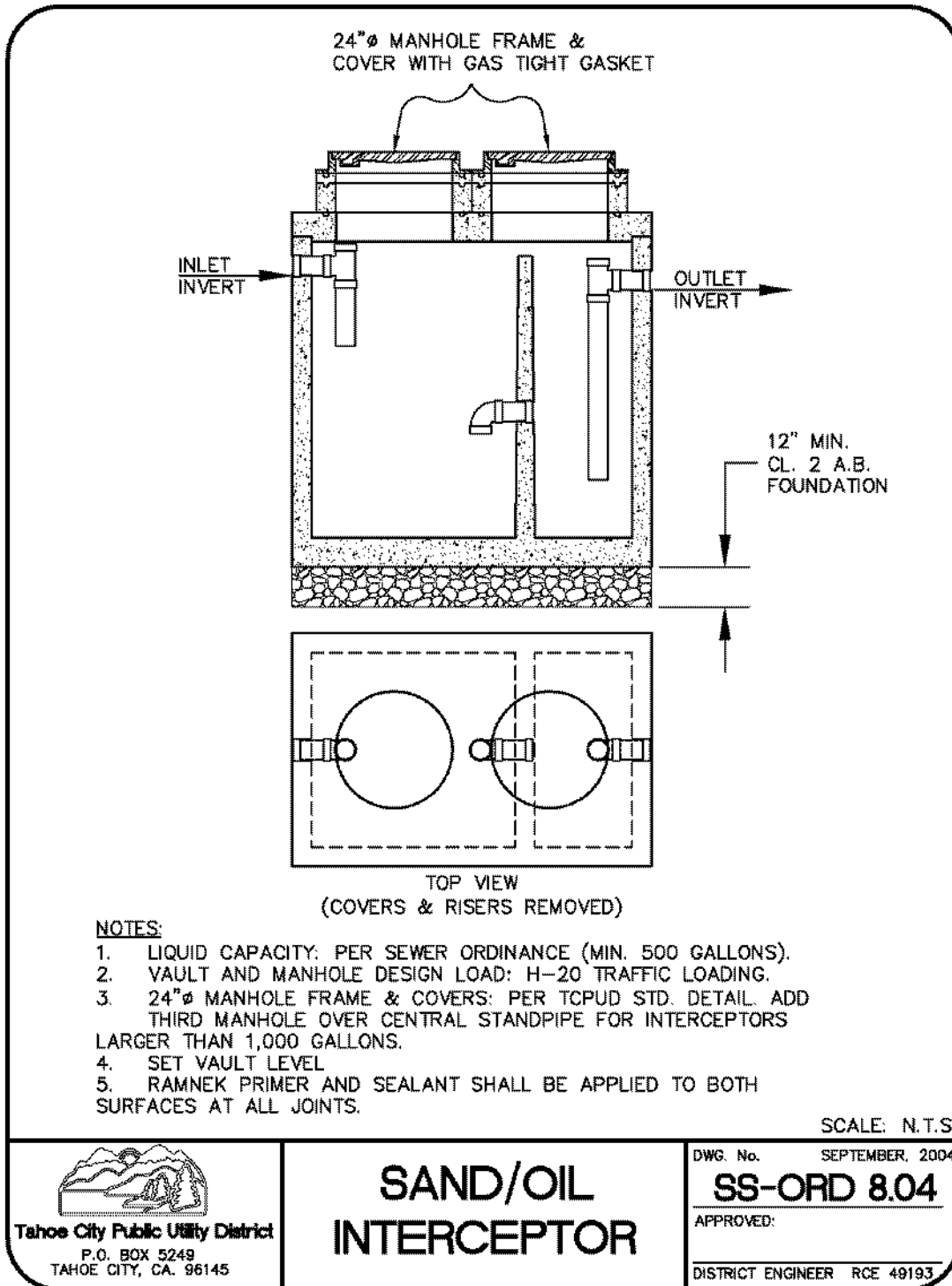
Dated: _____

By: _____
Technical Services Supervisor

Dated: _____

By: _____
Director of Public Works

Figure 9.01



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SECTION 10

DEPOSITS, FEES AND SEWER SERVICE CHARGES

10.01 GENERAL

The Owner is responsible for payment of deposits, fees and sewer service charges. Policies related to refunds of monies paid to the District are discussed at the end of each related section.

10.02 DEPOSITS

10.02.1 Sewer Lateral Construction Deposit

Any person constructing facilities to be dedicated to the District for operation and maintenance in accordance with this Ordinance, or for temporary service, shall pay deposits in advance to the District to cover actual fees, charges and costs to be incurred by the District. This includes expenses that are associated with the plan checking, permitting, consulting, construction and construction inspection of sanitary sewer facilities.

10.02.2 Security Deposit to Guarantee Performance

As a part of the development process outlined in Section 4.02.1, developers may place a cash deposit or provide a letter of credit in favor of the District to ensure completion of the sewer portion of the project, as outlined within the Development Agreement. If construction is not completed in accordance with the Development Agreement, the District shall have the right to utilize the cash deposited or draw upon the letter of credit in order to pay District's costs associated with completing the project.

10.02.3 Deposit In Lieu of Sewer Testing and/or Repair

When sewer air tests and/or minor repairs cannot be completed due to weather conditions or excavation restrictions, the Owner may place a deposit with the District equal to 125% of the estimated costs to replace the house service sewer in accordance with Section 6.02.1.5.

10.02.4 Temporary Discharge Permit Deposit

A deposit in an amount specified in Exhibit 10.01 shall be collected for temporary discharge permits in accordance with Section 7.01.1.

10.02.5 Seal Cap Deposit

In accordance with Section 6.03.1.4 a seal cap may be set to allow sewer service charges to be deferred during construction or reconstruction. Seal caps deposits may be placed for other reasons at the discretion of the District.

10.02.6 Tracking and Maintaining Deposits

The District shall track the deposits received by both applicant and project. The status of the funds on deposit shall be reconciled monthly by the District and copies of such reconciliation shall be made available to the applicant upon request. It is the District's intent to maintain a positive balance in the applicant's project deposit account. In the event of a pending or projected shortfall, the District shall provide written notice to the applicant stating the amount of additional deposit that must be provided. The applicant shall pay additional deposits within 30 days of the date requested by the District.

10.02.7 Refund of Deposits

The unused portion of all funds remaining on deposit with the District shall be returned to the applicant without interest, upon completion and final acceptance of the project, or cancellation of the permit.

10.03 Permitting, licensing, Plan Checking and Inspection Fees

10.03.1 Residential Fees

A permitting fee for new construction and remodels of single-family residences shall be charged in accordance with Exhibit 10.01. The fee shall be used for the review of improvement plans, permit issuance and construction inspections. For residential standard construction permits, the fee will provide up to four (4) site visits. Site visits in excess of four (4) shall be charged to the owner at the rate specified in Exhibit 10.01. For residential minor remodel permits, the fee will provide a single site visit. Each additional site visit will be charged at the rate specified in Exhibit 10.01.

Fees charged for residential service permits are flat fees, not deposits, and are not subject to refund or additional charges based on actual costs, unless site inspections exceed those allowed by the fee.

10.03.2 Commercial, Public Use & Multiple Unit Fees

The District shall review the improvement plans of all proposed commercial, public use, industrial, multiple unit and subdivision projects where sewer service is requested. The Owner shall pay a deposit to the District as specified in the Exhibit 10.01, along with a completed application for sewer permit. Two sets of improvement plans shall be provided to the District for plan check review to assure compliance with District requirements.

The deposit shall be applied to the District's cost for design review, procuring or preparing record improvement plans, administration, construction inspection, testing of materials, related construction activities, transportation expenses, and overhead and indirect costs.

10.03.3 Deposits for Temporary Sewer Service

The District shall review improvement plans for all proposed temporary sewer service. Temporary service may be provided for the purpose of temporary construction trailers, temporary sales offices and for special events requiring temporary sewer service. The Owner shall pay a deposit to the District as specified in Exhibit 10.01 along with a completed application for temporary sewer service. The deposit shall be applied to the District's cost for design review, procuring or preparing record improvement plans, administration, construction inspection, testing of materials, related construction activities, transportation expenses, and overhead and indirect costs. The deposit shall also include the actual cost of the service tap and the District's expense in witnessing the abandonment of temporary service when the temporary service is no longer needed.

10.03.4 Licensing Fees

As described in Sections 8.02 and 8.03, a fee will be charged for Food Service Wastewater Discharge licenses and for Sand, Hydrocarbon-Based Oil and Grease Discharge licenses. All fees will be charged in accordance with Exhibit 10.01.

10.03.5 Refund of Permitting, Plan Checking and Inspection Fees

The unused portion of all funds remaining on deposit with the District for permitting, plan checking and inspection fees shall be returned to the applicant without interest, upon completion and final acceptance of the project, or cancellation of the permit. In the case of temporary service, remaining unused funds on deposit will be refunded upon District witnessed and approved abandonment of the house service sewer lateral.

10.04 LINE EXTENSION FEES

The Owner shall pay all costs associated with sewer line extensions and other construction necessary to extend sewer service to his or her parcel(s). Associated costs shall be determined by the District and identified within the development agreement.

10.05 CONNECTION FEES, SUPPLEMENTAL CONNECTION FEES

Payment of sewer connection fees is the responsibility of the Owner. Residential and commercial connection fees are outlined below.

10.05.1 Residential Connection Fees

Upon application for service or service modification, connection fees for residential projects shall be charged in accordance with Exhibit 10.01. Fees are based upon the number of dwelling units served on a parcel.

10.05.1.1 Adjustments to Residential Connection Fees

If the property has been modified in a manner that reduces the dwelling units on the property, the sewer service charges shall be reduced accordingly in the next regularly scheduled billing cycle. The Owner shall retain credit for all sewer connection fees paid, however, the credit is not subject to refund. Should the dwelling units increase as a result of modifications, connection fees will be charged accordingly and the sewer service charges shall be increased in the next regularly scheduled billing cycle.

The property owner of a residential property shall notify the District if there is any change in sewer use, which may include the following:

- a. Additional Units - Addition of dwelling units on a parcel
- b. Multiple Units - Creation of multiple units on a parcel (apartment or duplex)
- c. Units Removed - Removal of dwelling units on a parcel.
- d. Parcels subdivided - Creation of different parcels that may impact provision of sewer service to structures on the original parcel(s).

10.05.2 Commercial, Industrial and Public Use Connection Fees

Upon application for service or service modification, connection fees for commercial, industrial and public use projects shall be charged in accordance with Exhibit 10.01. Fees are based upon the nature of use, application of Exhibit 10.01, and the number of employees. One sewer unit is comprised of 20 fixture units as described in the current California Plumbing Code.

10.05.2.1 Adjustments to Commercial, Industrial and Public Use Connection Fees

If the commercial, industrial or public use property has been modified in a manner that reduces the factor rating of the property, the sewer service charges shall be reduced

accordingly in the next regularly scheduled billing cycle. The Owner shall retain credit for all sewer connection fees paid; connection fees are not subject to refund nor transferable to other parcels.

Should the factor rating increase as a result of modifications, the Owner shall be billed for increased sewer connection fees in effect at the time of discovery. Any available connection fee credit shall be applied to the increased sewer connection fees. The Owner of record shall pay fees due at the time the District is made aware of the modifications.

The property Owner of a commercial service shall notify the District if there is any change in sewer use, which may include the following:

- a. Change in the nature of use (i.e. restaurant to office;)
- b. Increase or decrease in size of the structure;
- c. Fixtures Change - Addition or removal of fixtures;
- d. Seating Change - Addition or removal of inside or outside seats, benches or barstools
- e. Employee Change - Increase or decrease in the number of employees.

10.05.2.2 Connection Fees for Temporary Sewer Service

All applicants for temporary sewer service shall be charged a connection fee in accordance with the nature of use and Exhibit 10.01. A deposit will be assessed for the estimated cost of abandoning the service. Actual costs will be charged for the District's expense in witnessing service abandonment.

10.05.3 Supplemental Sewer Service Connection Fees

A supplemental sewer connection fee is assessed for sewer service to certain properties within the District where costs of construction and installation, maintenance and operation of sewer facilities are for the direct benefit of the territory described. These supplemental connection fees are charged to all residential and commercial, industrial and public use parcels, and are in addition to the District's standard connection fees delineated in Exhibit 10.01. There are two Sewer Service Areas within the District:

- a. Sewer Service Area No. 1 - All territory within the boundaries of Tahoe City Public Utility District, excepting therefrom that area hereinafter designated and defined as Sewer Service Area No. 2.
- b. Sewer Service Area No. 2 - That territory within the boundaries of Tahoe City Public Utility District, generally known as Sewer Assessment District No. 3, as shown on map thereof recorded August 23, 1966 in Book 1 of Assessment District Maps, Page 14, Records of Placer County Recorder.

10.05.3.1 DETERMINATION OF SUPPLEMENTAL SEWER SERVICE CONNECTION FEES FOR SEWER SERVICE AREA NO. 2

Supplemental sewer service connection fees shall be determined by multiplying the total square footage of the parcel being connected or being provided sewer service (as said parcel is delineated upon the map referred to in Section 10.05.3(b) above) by a factor of \$.014 per square foot. The result shall be the supplemental connection fee.

10.05.3.2 Payment of Supplemental Sewer Service Connection Fee

Supplemental sewer service connection fees are due and payable concurrent with the application of sewer service connection and payment of standard connection fees. No connection shall be permitted to District facilities unless the fee has been paid.

All provisions of this Ordinance regarding delinquency, penalties and responsibility for payment shall apply to the supplemental fee.

10.05.4 TTSA Fees

The Tahoe City Public Utility District will collect connection fees on behalf of Tahoe Truckee Sanitation Agency, the regional sewage treatment facility, and forward those fees to that agency. Should a question or dispute arise, the Owner should contact the accounting department of TTSA directly.

10.05.5 Deposit for Conditional Final

A deposit shall be placed in accordance with Exhibit 10.01, when the District authorizes approval of a final inspection prior to having met all conditions of service. A conditional final shall be given at the discretion of the District and shall be for minor deficiencies found during the final inspection.

10.05.6 Refund of Connection Fees

Connection fees, including supplemental connection fees, for permanent sewer service are non-refundable unless the Application for Sewer Permit is canceled prior to final connection. A fee shall be charged for processing a refund in accordance with Exhibit 10.01.

Connection fees for temporary sewer service will be refunded provided that service is discontinued and properly abandoned within 30 days of the date of expiration indicated in the Temporary Service Permit. A fee shall be charged for processing a refund in accordance with Exhibit 10.01.

10.06 SEWER SERVICE CHARGES

10.06.1 Responsibility for Payment

Sewer service charges shall be billed to Owners in accordance with Exhibit 10.01. The Owner of record is billed, whether or not the Owner is also the occupant. For the purposes of the Ordinance, determination of lot or parcel ownership shall be based upon the latest available records of the Assessor's offices of Placer and El Dorado Counties.

10.06.2 Billing and Payment of Sewer Service Charges

Sewer service charges will be billed quarterly in advance on January 1, April 1, July 1 and October 1 of each year. Payments are due in full within 30 days of the date of the billing.

10.06.3 Initial Sewer Service Charges

Billing for initial sewer service charges shall commence on the first day of the third quarter immediately following successful sewer trench inspection as determined by the District.

10.06.4 Service Charges for Temporary Sewer Service

Temporary sewer service is distinct from Temporary Discharge Permits that are discussed in Section 7. Sewer service charges for temporary sewer service shall be billed in the same manner as permanent sewer service charges.

10.06.5 Sewer Service Charge Adjustments

10.06.5.1 Change in Use

An adjustment of sewer service charges will be made when the District is notified of a change in use, when the District discovers a change or when the change is made, whichever occurs first. Any amount paid in excess of the actual computed sewer service charge shall be credited against the account. Any deficiency between the amount paid and the actual computed sewer service charge shall be added to the account.

Deficiencies or credits may not be applied for a period more than 2 years prior to the date the District determines that a billing discrepancy exists, except in the event of an unreported connection or discharge, in which case all charges and fees shall be assessed under Section 10.13.

Periodically, there are changes in the sewer use of property that affect the billing factor rating. The District will notify the owner in writing when these changes will impact the sewer service charges.

The owner, upon written notification by the District of an increase in the sewer connection fee and sewer service charges, may choose to remove the additional billing factors to avoid increased connection and sewer service charges. Removal of the additional billing factors must be completed by the owner and verified by the District within 30 days of the written increased billing factor rating notification.

10.06.5.2 Change in Billing Factors - California Plumbing Code

Billing factors are often impacted by changes in the California Plumbing Code (CPC) and the method by which sewer fixtures are rated. Adjustments will be made to Owners' sewer service charges based upon the changes made in the CPC. Additional connection fees will not be charged for existing fixtures based on CPC adjustments.

10.06.5.3 Permanent Disconnection of Service

Where service is removed in accordance with Section 5.05, sewer service charges will be discontinued effective the next regularly scheduled billing cycle.

10.06.5.4 Disaster Policy

Where service is temporarily discontinued due to property being uninhabitable as a result of a disaster, the District may temporarily suspend sewer service charges. The Owner must notify the District in writing and request a temporary suspension of fees. If conditions allow, at the discretion of the District, a seal cap may be placed on the sewer in accordance with Section 2.10. Alternatively, the sewer must be capped in accordance with Section 5.05. Sewer service charges will be reinstated upon removal of the seal cap or when service is resumed, whichever occurs first.

A deposit in accordance with Exhibit 10.01 shall be paid at the time a seal cap is scheduled to be placed. Unauthorized removal of seal cap shall result in an

administrative fee and a re-inspection fee, in accordance with Exhibit 10.01.

10.06.5.5 Bi-Annual Inspection of Commercial Properties

The District shall inspect the property bi-annually to ensure that the Owner is being properly billed for services used. More frequent inspections may occur if deemed necessary.

10.06.5.6 Delinquency, Interest and Late Fees

If the quarterly billing is not paid within 30 days of the invoice, the amount outstanding shall be considered delinquent and is subject to a 10% late fee. At the end of the third month of each quarter, the District will assess 1.5% interest on all amounts outstanding.

10.06.5.7 Change in Ownership Fee

A fee will be assessed by the District for each change in ownership in accordance with Exhibit 10.01. The fee will be added to sewer service charges in the initial billing cycle.

10.07 RETURNED CHECK FEE

A fee will be assessed by the District for each check tendered as payment to the District that is returned unpaid. Future payments made to the District may be required to be in the form of cash, a cashier's check or a money order. The fee is identified in Exhibit 10.01.

10.08 DISCONNECT AND RECONNECT FEES

Disconnection at Owner's request shall be subject to a disconnect and reconnect fee in accordance with Exhibit 10.01.

10.09 NON-PAYMENT OF CONNECTION AND / OR SERVICE CHARGES

If sewer service connection charges, service charges, late fees, or other costs billed are delinquent by June 30th each year, the District shall make a lien upon the land, lot or parcel for which service was provided for the unpaid amount plus lien fee in the amount of 10%, as authorized by law. The District shall seek any other relief or recourse available in law or in equity, including without limitation use of the provision of California Public Utilities Code §16469 and following may be taken by the District to enforce such payment.

Delinquent charges for sanitary sewer service together with penalties thereon, which remain delinquent as of June 30 of each year, shall be collected in the same manner as the general taxes for the District for the forthcoming fiscal year provided that the District shall give notice as provided by law.

Delinquent charges, together with all penalties thereon, may be collected by an action in any court of competent jurisdiction against a person or persons who owned the property when the service was rendered for the collection of all delinquent charges and penalties.

An action may be instituted in any court of competent jurisdiction to enforce any lien on the land for the sewer service charges and connection charges together with all penalties thereon.

Reasonable attorneys' fees and court costs of any action in any court for collection of

sewer service charges, together with any penalties thereon, or for a preliminary or permanent injunction, or for the issuance of an order stopping or disconnecting sanitary sewer service, or to enforce a lien, shall be an additional charge for such sanitary sewer service.

If sewer service is furnished by the District to the real property and is disconnected for unpaid charges, reconnection shall not be made until all sewer service charges and connection charges including penalties and disconnection and re-connection charges have been paid to the District.

10.10 TERMINATION OF SERVICE

The District may terminate service providing District gives notice of the delinquency and impending termination, at least ten (10) days prior to the proposed termination by means of personal service or a notice mailed, certified mail, postage prepaid, to the Owner to whom the service is billed, not earlier than nineteen (19) days from the date of mailing the District's bill for services, and the ten (10)-day period shall not commence until five (5) days after the mailing of the notice. The District shall make a reasonable, good faith effort to contact an adult person using the premises or the customer and the Owner by telephone or in person at least forty-eight (48) hours prior to any termination of service. Every notice of termination of service shall include all of the following information:

- a. The name and address of the Owner whose account is delinquent.
- b. The amount of the delinquency, and the date by which payment or arrangements for payment is required in order to avoid termination.
- c. The procedure by which the Owner may initiate a complaint or request an investigation concerning service or charges.
- d. The telephone number of a representative of the District who can provide additional information or institute arrangements for payment.

10.11 ADJUSTMENT OF CHARGES

Adjustments will be made when required. Any amount paid in excess of the actual computed charge shall be credited against the charge for the succeeding billing or refunded during the current year. Any deficiency between the amount paid and the actual computed charge shall be submitted on a special billing from District to property Owner.

Billings may be adjusted for the following reasons:

- a. Upon change of use or users; or
- b. Whenever charges are disputed.

Any request for an adjustment of sewer service charges shall state grounds for an adjustment and shall be made in writing to the General Manager.

10.12 TRANSFER OF SEWER PERMIT

A Permittee who transfers Ownership of a parcel to a new Owner of the same lot for which a sewer permit and building permit has been issued shall have the right to transfer the permit to a new Owner of the lot upon payment of a transfer fee as shown on Exhibit 10.01 of this Ordinance. No transfer shall extend any time period set forth in the sewer permit issuance regulations.

Sewer connection fees cannot be transferred from one parcel to another.

10.13 UNREPORTED CONNECTIONS AND DISCHARGES

An unreported connection is a connection, which has not been inspected and approved by the District. An unreported discharge is a discharge on property previously connected to the public sewer system that increases the sewer unit use on the property or for which all applicable charges have not been paid.

Upon discovery of unreported connections or unreported discharges to the sewer system which increase the factor rating or fixture units of the property or for which an Application for Sewer Permit has not been issued or for which sewer service charges have never been paid, the District shall charge all current sewer service charges, and current connection charges and fees, including all basic penalties and additional penalties thereon, from the time the unreported connection or discharge was made. All such charges and fees shall be deemed to be sewer service charges, including all current connection charges and all service charges and penalties thereon retroactive to the date of the unreported connection.

Connection charges and service charges shall be assessed by the District for any unreported connections and unreported discharges at the time of discovery by the District.

10.14 ANNEXATION FEES

Annexation fees and charges are required for all areas outside of the District boundaries applying for annexation to the District. Fees and charges will be determined based upon existing fee schedules and as determined by the District Engineer.

The annexation fees shall be due and payable on the date of any such annexation approval by the District and payment shall be a condition of said approval. Conditions of annexation shall be specified in an annexation agreement executed between the owner(s) and the District prior to the Local Agency Formation Commission hearings and approval of the proposed annexation.

The Owner or his or her successor in title or interest of any such parcel or lot as herein described shall be responsible for payment of the annexation fee provided in this section.

Annexation fees will be assessed on an individual basis and will reflect the assessed valuation of the area to be annexed; date of annexation; sewerage facilities to be dedicated to the District; total number of developed properties at the time of annexation; contractual relationship between the area to be annexed and the District; and other pertinent factors.

10.15 FEES FOR PREPARING AND / OR REVIEWING SPECIAL DOCUMENTS

10.15.1 Document Preparation

Before proceeding with the preparation of any special study, EIR or related document, the District shall collect from the person making the request a deposit in an amount determined by the District to be fair and equitable. Actual costs shall be applied to the deposit, and the Owner shall be refunded or billed accordingly.

10.15.2 Review of Special Documents

If the District will incur costs associated with either the legal or engineering review of special documents or plans, the Owner shall place a deposit equal to the estimated amount of the proposed review. Actual costs shall be applied to the deposit, and the Owner shall be refunded or billed accordingly.

10.15.3 Request for Easement Abandonment

All persons requesting an abandonment of easement may incur a charge for the processing of the request. The charge shall not exceed the actual expense to the District in researching and processing the request. An estimate of expenses will be provided upon request, and shall form the basis for the required deposit.

10.15.4 Reimbursement Agreement

The District, at its option, may enter into a Reimbursement Agreement with an Owner when that Owner has installed sewer facilities that may be used by other nearby properties. In this instance, the District will collect a prorated share of the cost of design and construction of those facilities from subsequent connections. The District is solely responsible for the determination of the proration of costs.

Administration of reimbursement monies will continue until all such prorated shares have been paid, but no longer than a period of 10 years after completion of the sanitary sewer facilities. The District will assess a fee of 10% of the reimbursed costs for administration.

10.16 OWNER'S RIGHT TO APPEAL

Any property owner who disputes the charges made under this section of the Ordinance may at any time within 30 days after such dispute, appeal to the District in accordance with Section 1.02.10 of this Ordinance.

ORDINANCE NO. 278 OF
TAHOE CITY PUBLIC UTILITY DISTRICT
AMENDING AND MODIFYING ORDINANCE NO. 255
(AS AMENDED BY ORDINANCE NUMBERS 257, 259-A, 261-A, 266, 268, 270 and 272)
EXHIBIT 10.01 SEWER CONNECTION FEES, USER FEES AND SERVICE FEES

WHEREAS, the Board of Directors has analyzed and considered the costs and expenses projected for operation of District sewer systems and capital improvements to facilities for the 2014 fiscal year; and

WHEREAS, District must establish and collect service fees in order to meet the anticipated operational and administrative costs of District sewer systems and capital improvements to facilities; and

WHEREAS, the District adopted rates on December 20, 2013; and

WHEREAS, the Board of Directors determines that, notwithstanding the need to implement revised sewer rates and charges, the state of the economy and its present effect on the finances of District customers should be considered. The Board has been provided data from staff that shows operating expense growth and capital spending have been below that projected in the adopted HDR rate study.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF TAHOE CITY PUBLIC UTILITY DISTRICT as follows:

1. Exhibit 10.01 of Ordinance No. 255 (as amended by Ordinance Numbers 257, 259-A, 261-A, 266, 268, 270 and 272). Rate Codes 201 through 399, is modified as shown on Exhibit 10.1 to this Ordinance 278 in order to implement lower sewer rates than those adopted by the Board on February 25, 2009. This modification is for the year 2014 only. The rates previously set in Exhibit 10.01 of Ordinance No. 255 shall take effect in 2014 unless the District revises the rates further.
2. Except as modified and amended hereby (and by Ordinance Numbers 257, 259-A, 261-A, 266, 268, 270 and 272), Ordinance No. 255 shall in all other respects remain in full force and effect.
3. This Ordinance and the amendments and modifications hereby made, shall become effective 30 days from the date of its enactment and prior thereto shall be posted and published as required by law.

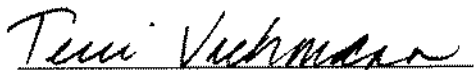
PASSED AND ADOPTED this 20th day of December 20, 2013 at a meeting of the Board of Directors of the Tahoe City Public Utility District by the following vote:

AYES: Friedman, Treabess, Reinkens
NOES: Henrikson
ABSENT: wilkins

TAHOE CITY PUBLIC UTILITY DISTRICT



BY: Lou Reinkens, President



ATTEST: Terri Viehmann, District Clerk

Tahoe City Public Utility District
Sewer Connection Fees & Service Charges
Effective April 1, 2014
Ordinance No. 278, Exhibit 10.01

Rate Code Month/Quarter	Sewer Connection Description	Unit Description	Connection Fee	Monthly Sewer Service Charges		Quarterly Sewer Service Charges	
				Prop 218 2013 Adopted	2014 Roll Back	Prop 218 2013 Adopted	2014 Roll Back
201/301	Residential	Dwelling Unit	\$1,000.00	\$47.93 /	\$36.34	\$143.79 /	\$109.02
213/313	Hotel Room, no Bath	Each	\$250.00	\$12.31 /	\$9.33	\$36.92 /	\$27.99
204, 212, 304, 312	Motel or Hotel Room – no Kitchen	Motel Unit	\$395.00	\$19.51 /	\$14.79	\$58.53 /	\$44.38
205/305	Motel Room with Kitchen	Motel Unit	\$435.00	\$20.79 /	\$15.76	\$62.36 /	\$47.27
206/306	Restaurant Seats, Outside & Bar Seats	Per Seat	\$25.00	\$1.33 /	\$1.01	\$3.98 /	\$3.03
207/307	Restaurant Seats, Inside	Per Seat	\$50.00	\$2.65 /	\$2.02	\$7.96 /	\$6.07
211/311	Laundry – Washing Machine, < 10 lbs.	Per Machine	\$200.00	\$9.75 /	\$7.39	\$29.24 /	\$22.16
215/315	Campsite with Sewer Connection	Each	\$490.00	\$24.17 /	\$18.33	\$72.50 /	\$54.98
216/316	Campsite - no Sewer Connection	Each	\$435.00	\$20.79 /	\$15.76	\$62.36 /	\$47.27
220, 221, 224, 320, 321, 324	Snack Bar, Service Station and Marina Boat Pumping Facility	Each	\$1,475.00	\$72.04 /	\$54.62	\$216.12 /	\$163.85
222/322	Barber Shop / Beauty Shop	Each chair, Min. 2 chairs	\$980.00	\$25.97 /	\$19.69	\$77.90 /	\$59.06
223/323	Theater	Each	\$2,945.00	\$144.01 /	\$109.18	\$432.03 /	\$327.54
230/330	Swimming Pool or Spa Backwash Filter	Per Filter	\$440.00	\$24.17 /	\$18.33	\$72.50 /	\$54.98
235/335	Unclassified Service	As Determined	As Determined	As Determined		As Determined	
All other Commercial or Professional Buildings, including Churches		Sewer Units PLUS Square Footage		Monthly Sewer Service Charges		Quarterly Sewer Service Charges	
				Prop 218 2013 Adopted	2014 Roll Back	Prop 218 2013 Adopted	2014 Roll Back
240/340	Sewer Units, .5 (1 to 10 fixture units)	Each	\$500.00	\$24.17 /	\$18.33	\$72.50 /	\$54.98
241/341	Sewer Units, .51 to 1.0 (11 to 20 fixture units)	Each	\$1,000.00	\$47.93 /	\$36.34	\$143.79 /	\$109.02
270/370	Floor Space up to 1,000 square feet	Each	\$1,000.00	\$47.93 /	\$36.34	\$143.79 /	\$109.02
271/371	Each additional 1,000 sq. ft. or fraction thereof	Each	\$500.00	\$24.17 /	\$18.33	\$72.50 /	\$54.98
299/399	Pro-rated Sewer Charge			n/a /	\$0.99	n/a /	\$2.97

Fiscal Year 2013 is the fifth and final year of the adopted Proposition 218 rates

TCPUD Ordinance 263 - Exhibit B - Water and Sewer Fees

Description	Fee	Notes
RESIDENTIAL–NEW CONSTRUCTION OR REMODEL		
Permit and final inspection (Minor-Remodel)	\$ 60.00	
Plan check for remodel not involving sewer or water systems	No Charge	
Permit plan check and up to 4 site inspections for new construction or remodel involving sewer and/or water system involvement	175.00	
Additional inspections exceeding ordinance standard	41.00	Per inspection
Residential sewer pump system review	171.00	
Residential fire sprinkler system review	113.00	
Conditional Final - Minor construction incomplete	525.00	Deposit- Refunded upon completion of pending work.
Replacement or relocation of existing water service line	60.00	One site visit (trench/pressure)
Replacement or relocation of existing sewer service lateral	144.00	Up to three site visits
Seal Cap Deposit	525.00	
COMMERCIAL - NEW CONSTRUCTION OR REMODEL		
Permit and final inspection (Minor-Remodel)	\$ 60.00	
Permit, development agreement, plan check and inspection	525.00	Deposit; billed at actual cost; including legal expense
Conditional Final – Minor construction incomplete	525.00	Deposit-Refunded upon completion of pending work
CUSTOMER CONSTRUCTION		
Development agreement, plan check and inspection for installation and or extension of water main	\$ 525.00	Deposit; billed at actual cost
Development agreement, plan check and inspection for installation and or extension of sewer collection system	525.00	Deposit; billed at actual cost
On-site inspection not related to permit or agreement	41.00	
Security bond for property owner performing own work	1,050.00	Refundable deposit
DISTRICT CONSTRUCTION FOR CUSTOMER’S BENEFIT		
Water service tap	\$ 2,100.00	Deposit; billed at actual cost
Fire sprinkler service tap	2,100.00	Deposit; billed at actual cost
Sewer stub install	2,100.00	Deposit; billed at actual cost
FOOD SERVICE WASTEWATER DISCHARGE PERMIT		
Permit for food service facility	\$ 176.00	Annual fee
Plan check – Grease interceptor or grease trap	60.00	Deposit; billed at actual cost
Inspection – Grease interceptor or grease trap	41.00	Per inspection
TEMPORARY DISCHARGE		
Permit	\$ 41.00	
Temporary discharge (\$0.98 per 1,000 gallons plus \$0.98 per 1,000 gallons per lift) includes swimming pool & spa drain	60.00	Deposit; billed at actual cost
Security deposit for damage to District facilities as a part of temporary discharge	475.00	Refundable if facilities not damaged
FIRE HYDRANT USE		
Permit	\$ 41.00	
Water use through hydrant meter	121.00	Deposit; billed at \$3.20 per 1,000 gallons
Security deposit for hydrant meter	785.00	Refundable deposit
SEWER AIR TEST – TIME OF SALE		
Processing fee and one site inspection	No Charge	
Repeat site visit	\$ 41.00	
Withhold in lieu of test: Processing fee	60.00	Additional charge if site visit req’d
Withhold in lieu of test: Site visit, if needed	41.00	

DISCONNECT WATER AND/OR SEWER SERVICE – CAP OFF PERMANENTLY		
Processing fee	\$ 24.00	
Inspection fee	41.00	Each site visit
Witness abandonment of septic tank	41.00	
MISCELLANEOUS SERVICES		
Water meter test for accuracy	60.00	Deposit; billed at actual cost. No charge if meter found to exceed 100% accuracy
Water sampling & testing, at customer's request	60.00	Deposit; billed at actual cost
Water service locate on private property	60.00	Minimum; billed at actual cost
Temporary shut-off of exposed water service	60.00	Minimum; billed at actual cost
Reconnect water service during regular business hours	60.00	Minimum; billed at actual cost
Reconnect water service after hours	87.00	Minimum; billed at actual cost
Sewer property line cleanout locate; cleanouts deeper than 18" below grade will not be exposed	117.00	Minimum; billed at actual cost
Cross-connection inspection, on-site	No charge	
DISTRICT LABOR AND EQUIPMENT EXPENSE		
District labor, overhead and vehicle expense	Actual cost	
Camera to televise sewer main	\$ 30.00 per hour	Equipment charge only; plus labor
Vactor	152.00 per hour	Equipment charge only; plus labor
Backhoe	46.00 per hour	Equipment charge only; plus labor
Emergency snow removal	Actual Cost	Minimum 1 hour
EASEMENTS		
Easement research, including, but not limited to, review and approval of easements; requests for easement abandonment and / or encroachment	\$ 60.00	Deposit; billed at actual cost
Easement encroachment agreement	525.00	Deposit; billed at actual cost
ADMINISTRATIVE AND MISCELLANEOUS FEES		
Unreported connections	\$ 352.00	
Unreported discharges	352.00	
Unreported fire hydrant use - excluding Fire Department use	352.00	
Investigation of unauthorized activity, including, but not limited to discharges, sump pumps and removal or bypass of District- approved backflow prevention assembly	Actual Cost	Including administrative, field investigation and legal expenses
Ordinance violation disconnect and reconnect (including non-payment)	Actual Cost	
MISCELLANEOUS CHARGES AND FEES		
Process returned check	\$ 24.00	
Delinquent payment of charges for services provided	10% of balance 1.5% of balance	30 days after each quarterly billing 60 days after each quarterly billing
Process refund of fees paid for service where service request was cancelled; excludes refund of overpayment on deposits	24.00	
Process refund of balance on deposit for service performed	No charge	
Process refund of connection fee	87.00	
Process change in ownership	24.00	
Copies, letter or legal size, each	.13	
Copies, blueprint (for plan review, only)	2.30	

NOTE: SNOW REMOVAL IS NOT INCLUDED WITH ANY SERVICE PROVIDED

**DEPOSITS MAY BE REDUCED OR INCREASED DEPENDING UPON
THE ACTUAL ESTIMATED COST**

DEFINITIONS

As used in this Ordinance unless the context requires otherwise, the terms and words set forth below are defined as follows:

AGENT - Any legal entity representing the interests of the Owner.

APPLICANT - The person making application for a sewer connection permit. Said person shall be the Owner or authorized agent of Owner to be served.

BACKFLOW - The reversal of the normal flow of liquid caused by either backpressure or backsiphonage.

BACKFLOW PREVENTER- An assembly or means designed to prevent backflow of sewage.

BARBER SHOP / BEAUTY SHOP - An establishment with the primary purpose of washing, cutting and styling hair, and where color tints or dyes may be used and where permanent waves may be given

BAR SEAT - See restaurant seat (inside or outside.)

BAR SINK - A single square or rectangular sink that does not exceed 15 inches in length and width, and 7 inches in depth; or a round sink that does not exceed 15 inches in diameter. It shall not be the primary sink in a residential unit.

BEAUTY SHOP – An establishment with the primary purpose of washing, cutting and styling hair, and where color tints or dyes may be used and where permanent waves may be given

BED AND BREAKFAST - For billing purposes, sleeping area is classified as a hotel unit; additional charge per dining chair as for restaurant seats.

BENCH SEATING - In an establishment that is rated according to the number of seats, 20 inches of benching will be considered as one seat. Each bench will be counted in increments of 20 inches. Fractional seats will not be charged.

BEST MANAGEMENT PRACTICE – Measures or practice used to reduce the amount of pollution entering the public sanitary sewer system.

BOOTH SEATING - In an establishment that is rated according to the number of seats, 24 inches of booth seating will be considered as one seat. Each booth seat will be counted in increments of 24 inches. Fractional seats will not be charged.

BIOCHEMICAL OXYGEN DEMAND (BOD) - The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20 degrees, expressed in milligrams per liter.

BILLING FACTOR RATING - The number of plumbing fixtures in a commercial, industrial or public use establishment related to plumbing fixture unit equivalents in the CPC and correlated to Exhibit 10.01.

BOARD OF DIRECTORS - The governing body of the Tahoe City Public Utility District.

BUILDING - Any structure used for human habitation, employment or place of business, recreation or other purpose, containing or required to contain sanitary facilities.

CPC – California Plumbing Code

CAMPSITE WITH SEWER CONNECTION - Public or privately operated facility designated for overnight use with facilities to connect to sanitary sewer for intermittent use.

CAMPSITE WITHOUT SEWER CONNECTION - Public or privately operated facility designated for overnight use without facilities to connect to sanitary sewer.

CHURCH – A building for public worship.

CLEANOUT - A sealed aperture permitting access to a sewer pipe for cleaning purposes.

COLLECTION SYSTEM - All District facilities utilized for the collection, pumping and transportation of sewage.

COMMERCIAL BUILDING / ESTABLISHMENT - Any structure used other than as a dwelling or for manufacturing.

COMMON INTEREST DEVELOPMENT - Generally a real property development in which the property Owners have a separate interest in a lot, parcel, area or space, and either one or both of the following; (1) rights to the benefit or use and enjoyment of commonly owned lots, parcels, areas or spaces; or (2) rights in certain mutual, common or reciprocal restrictions on all or a portion of the separately owned lots, parcels, areas or spaces and as such, are generally included within the definition of common interest development, in accordance with the laws of the State of California, including without limitation, the definition contained in California Civil Code §1350, (Davis-Sterling Act) and for the purposes of this Ordinance, shall include, without limitation, condominiums, planned unit developments, townhouses, community apartment projects, stock cooperatives or limited equity cooperatives.

CONDOMINIUM - A structure of two or more units, the interior space of which are individually owned; the balance of the property is owned in common by the owners of the individual units.

CONFERENCE FACILITIES - Facilities that are only used for conducting conferences intermittently throughout the year by groups of people that may vary significantly in number. The factor rating for these facilities is based upon the number of plumbing fixture units in the area used exclusively by the groups. The facilities are rated public.

CONNECTION – The physical connection of Owner’s facilities to District facilities.

CONNECTION CHARGE - An amount of money charged for connection to the District sanitary sewer system pursuant to District Ordinance. Residential connection charge is based upon size of service requested; Commercial, industrial or public use connection charges are based upon type of use, sewer units and square footage of the structure, as defined in Exhibit 10.01. Commercial, industrial or public use connection charges are subject to increase if nature of use is modified.

CONTRACTOR - An individual, firm, corporation, partnership or association duly licensed or approved by the State of California to perform the type of work to be done under the permit.

COUNTY - The Counties of Placer or El Dorado in the State of California.

CUSTOMER - Any Owner described herein who receives sewage service from or discharges sewage into the District system.

DAYCARE FACILITY – A facility for providing supervision and training for children and/or the elderly.

DISTRICT - The Tahoe City Public Utility District.

DISTRICT ENGINEER - Engineer retained by the District, acting within the scope of the particular duties delegated.

DISTRICT FACILITIES - SEE DISTRICT

DWELLING UNIT - A separate living unit with kitchen and bathroom facilities including those in single family residence, multiple dwellings, apartments, motels, hotels, mobile homes, trailers, condominiums or townhouses.

EASEMENT - A right, such as a right of way, afforded the District to make limited use of another’s real property.

FINAL INSPECTION – The point at which the District approves service modifications, to include all fixtures units,

FIXTURES – Plumbing fixtures within a residence, commercial, industrial or public use establishment; all fixtures must be low-flow, in accordance with the conservations provisions of this ordinance.

FIXTURE UNITS - Plumbing fixture unit load values for drainage piping and shall be as specified in this ordinance or if not included herein as specified in the Uniform Plumbing Code of the State of California.

FORCE MAIN – A pressure pipe joining the pump discharge at a wastewater pumping station with a point of gravity flow.

GARBAGE - All animal and vegetable wastes from the preparation, cooking and dispensing of food or its commercial or industrial processing.

GENERAL MANAGER - The manager of the Tahoe City Public Utility District.

GREASE – The measure of oil and grease content of a sample as determined by EPA Method 413.1, or other equivalent test method approved by the District.

GREASE INTERCEPTOR - A device, or structure and storage reservoir that provides for the separation and storage of waste water with a specific gravity of less than 1.0 and that prevents said light waste water from entering the sanitary sewer system. The interceptor is normally outside of the structure.

GREASE TRAP - A device designed to separate and store wastewater and prevent it from entering the sanitary sewer system. The trap is normally located within in the kitchen of a commercial establishment.

GUEST HOUSE - A space to be used by members of the family occupying the main dwelling and their non-paying guest, without a kitchen or cooking facilities, containing less than 500 square feet of floor area. All utilities serving the guesthouse shall be common to, dependant on, and associated with the main dwelling. Plumbing shall be limited to that required for a single bathroom. There shall be a deed restriction that prohibits sale and/or rental of the unit.

HOTEL ROOM - Each guest room that is made available for use, rental or hire for the purpose of furnishing transient living accommodations on a day-to-day basis. Includes Bed & Breakfast establishments.

INDUSTRIAL WASTES - Any liquid, gaseous, radioactive or solid waste substance or a combination thereof, resulting from any process of industry or manufacturing, or from the development or recovery of any natural resources.

INDIVIDUAL WASTEWATER PUMPING SYSTEMS - Systems installed by the property Owner in areas where gravity service is not feasible.

INSPECTION - The act of reviewing any or all sewer construction work or fixtures for determining compliance with the District rules.

INSPECTOR - A District representative, acting within the scope of his or her authority, who shall inspect construction work, witness tests, and review residential, commercial, industrial and public use projects for the purposes of determining compliance with the District rules and regulations.

INTERCEPTOR – (1) A major sewer line that collects waterborne wastes from several trunk lines or pumping stations and conveys it to a sewage treatment plant. (2) A device designed and installed to separate and retain deleterious, hazardous or undesirable matter from normal wastes and permit normal sewage or liquid wastes to discharge into the disposal terminal by gravity.

KITCHEN FACILITIES - A room or area containing a refrigerator, cooking facilities or a kitchen sink.

LAUNDRY – A commercial or public use facility equipped with machines for washing clothes.

LICENSED CONTRACTOR - A contractor having a valid license issued pursuant to Chapter 9, Division 3, of the Business and Professions Code, State of California, which license includes the activities applied for and permitted.

MARINA BOAT PUMPING FACILITY - Facility used to evacuate water/waste from holding tanks on vessels.

MOTEL UNIT - Each guest room that is made available for use, rental or hire for the purpose of furnishing transient living accommodations on a day-to-day basis. Includes Bed & Breakfast establishments, in part.

MULTIPLE-UNIT – One or more residential dwelling units on a single parcel, whether joined or separate structures. One or more commercial, industrial or public use units on a single parcel, whether joined or separate structures.

NON-GRAVITY SEWER - The form for lot Owners that require individual pressurized services, also known as pumped system, pressure system or force main.

ORDINANCE - A statute or regulation of the Tahoe City Public Utility District.

OWNER - The person(s), corporation, partnership, or other legal entity that is shown as the owner of a particular parcel on the property tax rolls as maintained by the Counties of Placer or El Dorado. Also, any agent authorized by the Owner.

PARCEL - Any piece of land bounded, defined, or shown upon a map or deed, recorded or filed in the office of the County Recorder.

PERMIT - Any written authorization required pursuant to this or any other regulation of District for installation of or connection to District sewage system, including but not limited to, permit for temporary discharge into District sewer system.

PERMITEE – Any person, firm, association, corporation or trust that operates under the authority of a District Permit.

PERSON - The State, any individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate or any other legal entity whatsoever.

pH - The negative reciprocal of the logarithm of the ion concentration of hydrogen in plumbing and drainage work.

PLUMBING FIXTURE - Any sink, toilet, shower, tub, floor drain, urinal, drinking fountain, or appliance that collects and/or produces waste flow and introduces it into the sanitary sewer system.

PLUMBING INSPECTOR - The person designated by the county ordinance to inspect plumbing and drainage work.

PREMISE - Any lot, piece or parcel of real property, improved or unimproved, within the territorial limits of the District.

PRESSURE REDUCING VALVE (PRV) - An automatic device that reduces water pressure to acceptable levels by means of a pressure drop across the valve.

PRIORITY - When any building herein is given two or more classifications, the correct classification shall be that which returns the greatest amount of revenue to the District until and unless otherwise ordered by the Board of Directors.

PRIVATE SCHOOL - A school operated and supported by private individuals or a corporation rather than a public agency.

PRIVATE USE – Applies to plumbing fixtures in residences and apartments, to private bathrooms in hotels and motels and to restrooms in commercial , industrial, and public use establishments where the fixtures are intended for the sole use of the owner and four or fewer employees.

PUBLIC ENTITY - A city or county, any municipal water district, public utility district, sanitary district, sanitation agency, county water district, public school facility or California water district organized under the laws of the State of California or any other public corporation or agency of the State or Federal government having power to acquire, construct, and operate facilities for the collection, treatment and disposal of sewage, industrial waste and storm water of such entity and its inhabitants.

PUBLIC FIXTURES - Those fixtures that are intended for the use of the employees of a business or tenants of a commercial, industrial or public use establishment when the ratio of employees or tenants per toilet exceeds 5 to 1; or those fixtures in a business that are for unrestricted use by clients or customers of the business or members of the public; or those which are located in places to which the public is invited, or places which are frequented by the public without special permission, or other installations where fixtures are installed so that the use is similarly unrestrictive.

PUBLIC USE OCCUPANCY – All buildings or structures that are not defined as private use.

RESIDENCE - A living unit with kitchen and bathroom facilities, including single-family dwelling, multiple-family dwelling, apartment, timeshare unit, mobile home, trailer, condominium or townhouse.

RESTAURANT - INSIDE SEAT - Year-round, full-time seating.

RESTAURANT - OUTSIDE SEAT - Considered seasonal seating, and charged at 50% of the normal service charges for restaurant seats and 50% of the normal connection fee as that of inside seating.

SANITARY SEWER SYSTEM - The system of interceptors, trunks, mains, laterals, outfall lines and pumping stations for collection of normal sanitary sewage and to which storm, surface and groundwaters are not intentionally admitted.

SCHOOL – A building or group of buildings, either public or private, in which instruction is given and / students are trained or supervised.

SERVICE CHARGES - An amount paid by all users of District facilities, based upon the size of service. The charges are billed on a quarterly basis, and are further defined in Exhibit 10.01.

SERVICE FEE - An amount charged for specific District service, such as inspections, plan checking, and certain billable call-outs. The amounts are identified in Exhibit 10.01.

SERVICE STATION – A business where services, especially repairs, can be obtained.

SEWAGE TREATMENT PLANT - Any arrangement of devices and structures used by the District for treating sewage.

SEWER - A pipe or conduit for carrying sewage.

Building Sewer - That part of the piping of a drainage system which ends at a point five (5) feet outside the foundation of the building or structure and which receives discharge from the building to the house service sewer.

Combined Sewer - A sewer that receives and carries storm water.

House Service Sewer - That part of the sewer piping from the building sewer to the lateral sewer, including the foundation cleanout, property line cleanout and associated fittings.

Lateral Sewer - The sewer line beginning at the property line, terminating at the main sewer and connecting the house service sewer to the main sewer.

Main Sewer - A public sewer that receives wastewater from many branches and laterals, designed to accommodate more than one building.

Outside Sewer - A sanitary sewer outside the boundary of the District.

Private Sewer - A sewer serving an independent sewage disposal system not connected with a public sewer and which accommodates one or more buildings or industries.

Public Sewer - A sewer that is controlled by or under the jurisdiction of the District or other public entity within District boundaries.

Sanitary Sewer - A sewer that carries sewage and to which storm, surface and groundwaters are not intentionally admitted.

Storm Sewer - A sewer that carries only such drainage as storm water, surface water, street wash water and groundwater.

Trunk Sewer - A major sewer line that collects sewage from sewer mains and conveys it to an interceptor, influent outfall, pump station or treatment facility.

SEWERAGE WORKS - All District facilities for collecting, pumping, treating and disposing of sewage.

SEWER SERVICE CHARGE - A regular charge to a property Owner of designated premises for the use of the public sanitary sewage collection system.

SEWER SERVICE CRITERIA - The terms, conditions and limitations adopted from time to time by the District that establish and determine when gravity service is or is not available to a lot, parcel or premise.

SEWER USER FEES - A regular charge to a property Owner of designated premises for the use of the public sanitary sewage collection system.

SINGLE SERVICE KITCHEN - A fast-food establishment utilizing paper plates and disposable utensils where little or no grease is generated.

SLEEPING ACCOMMODATIONS - A room in a hotel, motel or boarding house without kitchen facilities.

SNACK BAR - An establishment that uses only disposable products for food service and does not provide seating for the use of its customers.

SOURCE CONTROL PLAN - A written plan of implementation that shall control at the source potential discharges into the sewer system.

STANDBY CHARGE - The fee established pursuant to §16478 of the California Public Utilities Code for availability of District sewage service facilities, whether such facilities are actually used or not. Sewage service shall be deemed available where District sewage collection lines (whether interceptor, trunk sewer or laterals) have been installed within a public street bordering said land, lot or parcel or to which land, lot or parcel a sewer service stub has been provided.

STREET - Any public highway, road, street, avenue, alley-way, public place, public easement or right of way.

STUB-OUT - Sewer connection on property line into which an Owner may connect his or her house service sewer; a connector from the District's sewer system for future sewer extension.

SUPPLEMENTAL SEWER CONNECTION FEE - The supplemental charge made by the District for connection to District's sewer system within a given service area.

SURGE - Any discharge into the collection system of water, sewage or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any

period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration of flows during normal operation.

SUSPENDED SOLIDS - Solids that either float on the surface or are in suspension in water, sewage or liquids and which are removable by filtering.

SWIMMING POOL - All swimming or wading pools containing 2,000 gallons of water or more and all non-residential whirlpool baths and hot tubs.

TEE - A fitting for a branch on which the spur joins the barrel of the pipe at an angle of approximately 90 degrees.

TEMPORARY DISCHARGE – A temporary connection for discharge into the sanitary sewer system by permit only.

THEATRE – A building, room, or outdoor structure for the presentation of plays, motion pictures or other performances, lectures or demonstrations.

TOXIC WASTE - Any waste that is poisonous or hazardous to human, animal and/or plant life.

TRAFFIC BEARING AREA - Any area, paved or unpaved, in which traffic may travel over or be parked upon, including driveways, garages and parking pads.

TRAP - A fitting or device that provides a liquid seal to prevent the emission of sewer gas or air without materially affecting the flow of sewage or wastewater through it.

TTSA - Tahoe Truckee Sanitation Agency, a regional wastewater treatment facility.

UPC – Uniform Plumbing Code.

UNCLASSIFIED SERVICE - Industrial plants, commercial enterprises, public use facilities or businesses, premises and government lands which have unusual characteristics insofar as sewage disposition is concerned and do not appear on Exhibit 10.01 of this Ordinance as a classified service, and lands or premises served or to be provided with service but which lie outside the District boundaries. Service will be provided only through a contract.

WASTE includes sewage and any and all other waste substances, liquid, solid, gaseous or radioactive, associated with human habitation or of human or animal origin or from any producing, manufacturing or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to and for purposes of disposal.

WASTEWATER - The spent water of a community, which may be a combination of liquid and water-carried wastes from residences, commercial or public use buildings and industries.

WITHHOLD – An amount of money, usually held in escrow, equal to 125% of the estimated cost of replacing a house service sewer lateral, including cleanouts.

YEAR - The twelve (12) month period from January 1 of each calendar year and ending on December 31 of each succeeding calendar year thereafter.

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Exhibit 7-2. FSE Cleaning and Maintenance Log

**Food Service Establishment
Grease Trap Inspection**

APN _____

UB _____

Business Name: _____

Physical Address: _____ **Unit No.** _____

Contact Person: _____ **Title:** _____

Phone No.: _____ **Fax No.:** _____

Property Owner: _____

Date of Inspection: _____

Inspector: _____

Accompanied by: _____ **Title:** _____

	Description	Notes
1.	Grease trap(s) is cleaned regularly. Note and record the frequency of cleaning.	
2.	Grease trap cleaning frequency is documented on a maintenance log (obtain a copy of the document).	
3.	Each grease trap serves not more than four single compartment sinks of the same depth. Grease trap is sized based upon the number of fixtures discharging to it. See FAQs.	
4.	Grease trap(s) has a water seal of not less than two inches in depth or the diameter of its outlet, whichever is greater.	
5.	No food waste disposal unit or dishwasher is connected to or discharges into any grease trap.	
6.	Waste in excess of 140° F is not discharged to any grease trap. (Dishwasher with a minimum temperature of 160° F is not discharged to any grease trap.)	

7.	The vertical distance between the fixture outlets and grease trap weirs is as short as practical.	
8.	Each fixture connected to a grease trap is provided with an approved type flow control or restricting device installed in a readily accessible and visible location. Devices shall be designed so that the flow through the device or devices at no time exceeds the rated capacity of the grease trap or interceptor.	
9.	Each fixture discharging into a grease trap or interceptor is individually trapped and vented in an approved manner.	
10.	Each grease trap and interceptor is properly vented to allow air circulation throughout the entire drain system.	
11.	No water jacketed grease trap or interceptor is installed.	

Tahoe City Public Utility District Grease Interceptor Maintenance Log

Business Name: _____

Site Address: _____

Manager's Name: _____

List of Devices: _____

Note: Tahoe City PUD requires that you keep a record of all maintenance, repair and cleaning of grease reduction devices for 3 years.

Date	Pump out, maintenance or repair performed	Full Pump Out Y / N	Hauler or Maintenance Company Name	Record Keeper Name	TCPUD Inspector Initial

Haulers must pump your grease interceptor completely to the bottom of all separation chambers. Skimming and decanting are prohibited.

It is District policy to witness all pump outs. Please contact Brad Stocking 48 hours in advance of a pump out at 530-583-3796 ext. 44.

Food Service Establishment Compliance Inspection

APN _____

UB _____

Business Name: _____

Physical Address: _____ **Unit No.** _____

Contact Person: _____ **Title:** _____

Phone No.: _____ **Fax No.:** _____

Property Owner: _____ **Title:** _____

Date of Inspection: _____

Inspector: _____

Accompanied by: _____

	Description	Notes
1.	FSE has training program to ensure that the BMPs are followed. (sinks, dishwasher)	
2.	"No Grease" signs are posted in appropriate locations.	
3.	BMP poster(s) in kitchen.	
4.	Recycles waste cooking oil and can provide records of this.	
5.	Water temperatures at all sinks, especially the pre-rinse sink before the mechanical dishwasher or the sinks in the three-sink system are less than 140° F. Measure and record temperature.	
6.	Pots, pans, and dishwasher are dry-wiped prior to rinsing and washing.	
7.	Food waste is disposed of by recycling or solid waste removal and is not discharged to the grease traps or interceptors.	Garbage Disposal <input type="checkbox"/> Y <input type="checkbox"/> N

Food Service Establishment Compliance Inspection

APN: _____

8.	Outdoor grease and oil storage containers are covered and do not show signs of overflowing.	
9.	Grease and oil storage containers are protected from discharge to storm drains.	
10.	Absorbent pads or other materials (not free flowing material such as cat litter) are used to clean up any spills or leakages that could reach the storm drain.	

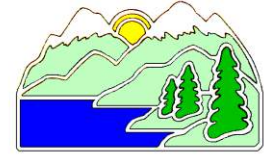
NOTES:

Exhibit 7-3. FSE Inventory

	#	NAME	ADDRESS	APN	GREASE RETENTION	SIZE	SAMPLE PORT
ZONE 1	1	Coffee Connexion	950 NLB	094-110-019	Interceptor	900 Gal	Yes
	2	Safeway	840 NLB	094-110-018	Interceptor	900 Gal	Yes
	3	Subway	950 NLB	094-110-019	Interceptor	900 Gal	Yes
	4	Chinese Cuisine	950 NLB	094-110-019	Interceptor, (2) Traps	900 Gal , 25 GPM Big Dipper, 20-25 GPM	Yes
	5	Dockside 700	700 NLB	094-090-063	(2) Traps	35 PGM Big Dipper, 25 GPM Estimated	Yes
	6	Hacienda Del Lago	760 NLB	094-090-029	(2) Traps	75 GPM Estimated, 25 GPM Estimated	Yes
	7	Jake's on the Lake	760 NLB	094-090-029	(2) Traps	(2) 25 GPM	Yes
	8	Christy Hill	115 Grove	094-090-048	Trap	30 GPM	Yes
	9	Gear N Grind	690 NLB	094-090-052	Trap	20 GPM	Yes
	10	Lakeside Pizza	840 NLB	094-110-018	Trap	25 GPM	Yes
	11	Tahoe City Sushi	690 NLB	094-090-052	Trap	25 GPM Estimated	Yes
	12	Wolfdale's	640 NLB	094-090-041	Trap	20 GPM	Yes
	13	Picnic	950 NLB	094-110-019	Exempt	N/A	Yes
	14	Syd's Bagelry	590 NLB	094-090-047	No	N/A	No
	15	Blue Agave	425 NLB	094-070-009	Interceptor	1,500 Gal	Yes
	16	Bridgetender	75 WLB	094-540-025	Interceptor	1,500 Gal	Yes
	17	Chambers Landing	6400 Chambers	098-330-023	Interceptor	224 Gal	Yes
	18	Granlibakken	725 Granlibakken	095-481-011	Interceptor	4,000 Gal	Yes
	19	Meeks Bay Resort	7901 HWY 89	016-041-101	Interceptor	Unknown	Yes
	20	River Grill	125 WLB	094-540-023	Interceptor	2,000 Gal	Yes
	21	Rosie's Café	571 NLB	094-080-004	Interceptor	1,000 Gal	Yes
	22	Savemart	100 River	094-540-009	Interceptor	1,000 Gal	Yes
	23	Sunnyside	1890 WLB	084-140-028	Interceptor	1,200 Gal	Yes
	24	Swiss Lakewood	5055 WLB	097-121-011	Interceptor	1,000 Gal Estimated	No
	25	West Shore Café	5160 WLB	097-130-031	Interceptor	3,000 Gal	Yes
	26	NTHS	2945 Polaris	093-010-015	(2) Traps	25 GPM Big Dipper, 25 GPM	Yes
	27	Tahoe City Cross Country	925 Country Club	093-350-010	(2) Traps	(2) 20 GPM	Yes
	28	Tahoe Mountain Brewing Co.	475 NLB	094-070-011	(2) Traps	(2) 15-20 GPM Estimated	Yes
	29	As You Wish Catering	2919 Lake Forest	093-052-013	Trap	35 GPM	Yes
	30	Bacchi's	2905 Lake Forest	093-052-001	Trap	35-50 GPM Estimated	Yes
	31	Cottage Inn	1690 WLB	083-107-009	Trap	10 GPM	Yes
	32	Fat Cat Deli	599 NLB	094-080-012	Trap	25 GPM	Yes
	33	Firesign	1785 WLB	083-106-003	Trap	25 GPM Big Dipper	Yes
	34	Front Street Station	205 River	094-540-024	Trap	25 GPM	Yes
	35	Homewood Ski Resort (North)	5155 WLB	097-130-034	Trap	50 GPM Estimated	Yes
	36	Homewood Ski Resort (South)	65 Tahoe Ski Bowl	097-050-072	Trap	30 GPM Estimated	Yes

#	NAME	ADDRESS	APN	GREASE RETENTION	SIZE	SAMPLE PORT
37	Jiffy's Pizza	265 NLB	094-070-002	Trap	20 GPM	No
38	Norfolk Woods Inn	6941 WLB	098-210-023, 024	Trap	7 GPM	Yes
39	Obexer's Market	5300 WLB	097-154-001	Trap	25-35 GPM Estimated	Yes
40	PDQ Market	6890 WLB	098-200-008	Trap	Unknown	No
41	Rideout	7400 Timberland	084-010-054	Trap	25 GPM	No
42	Sugar Pine Cakery	2919 Lake Forest	093-052-013	Trap	35 GPM	No
43	Sunnyside Market	1780 WLB	083-108-004	Trap	7 GPM	No
44	Tahoe City Golf Course	249 NLB	094-020-006	Trap	20 GPM	No
45	Tahoe City Theatre	475 NLB	094-070-011	Trap	Unknown	No
46	Tahoe House	625 WLB	094-240-007	Trap	3 GPM	Yes
47	Tahoe Lake Elementary	375 Grove	094-101-004	Trap	7 GPM Estimated	Yes
48	Thai Kitchen	255 NLB	094-070-001	Trap	35 GPM	No
49	West Side Pizza	7000 HWY 89	015-331-101	(2) Traps	15 GPM, 20-25 GPM	Yes
50	Where We Met	7000 HWY 89	015-331-101	Trap	20 GPM	No
51	Za's	395 NLB	094-070-006	Trap	35 GPM	Yes
52	Zia Lina	521 NLB	094-080-011	Trap	25 GPM	Yes
53	7-Eleven	3210 NLB	093-160-049	Exempt	N/A	Yes
54	Lakeview Wine & Spirits	599 NLB	094-080-012	Exempt	N/A	Yes
55	Pepper Tree Inn	645 NLB	094-110-009	Exempt	N/A	Yes
56	Rockwood Lodge	5295 WLB	097-140-031	Exempt	N/A	No
57	Shell Gas Station	300 River	094-190-025	Exempt	N/A	No
58	Dam Café	125 WLB	094-540-023	No	N/A	Yes
59	D'Lish Catering/Burrito Window	255 NLB	094-070-001	No	N/A	No
60	Poppy's	521 NLB	094-080-011	No	N/A	Yes
61	Spoon	1785 WLB	083-106-003	No	N/A	Yes
62	Tahoma Meadows B & B	6821 HWY 89	098-200-027	No	N/A	Yes
63	Uncommon Kitchen/New Moon	5050 WLB	094-240-010	No	N/A	Yes

Exhibit 7-4. TCPUD Fats, Oils and Grease (FOG) Reduction Program Frequently Asked Questions



TCPUD Fats, Oils and Grease (FOG) Reduction Program Frequently Asked Questions for Food Service Establishments

- **Why is grease control necessary?**
Grease can gather in the wastewater collection system causing blockage of sewer flows, resulting in sanitary sewer overflows. The California State Water Resources Control Board requires sewer utilities to develop and enforce a fats, oils and grease control program to help prevent these types of sewer spills. District Utility Department staff members' time is frequently diverted from normal maintenance and operations in order to clean sewer pump stations that are regularly blocked with grease.
- **How does grease from food service facilities cause sewer spills?**
When wastewater from food service facilities contains grease, the hot water and soap used in washing dishes and equipment emulsifies (breaks up) the grease, allowing it to flow freely through the sewer. As the wastewater cools, the grease congeals (hardens) causing backups and overflows of sewage. The spill may occur within a roadway or even in your own facility. Grease removal devices like traps and interceptors are designed to prevent grease-related overflows.
- **When is grease control required?**
Grease control is required on all facilities that may introduce grease into the sanitary sewer system. If grease control is warranted, based on the Uniform Plumbing Code and the California Plumbing Code, District Sewer Ordinance 255, Section 8 requires that a grease trap or interceptor be installed under the following conditions:
 - On all new or remodeled food service establishments
 - When a food service establishment sells
 - Following a wastewater backup or discharge due to grease
 - When samples of wastewater discharge exceed 400 mg/l of grease
- **Why do I need a wastewater discharge license?**
The license, issued annually, will identify the contact person for the food service establishment, and by their signature on the license, we know that they are informed of these grease control requirements. Annual renewal will ensure that the property owner and food service establishment are aware of any change in our regulations. The license application will provide information to District staff that will help us ensure that your grease control measures are adequate and current.
- **How much is a license and what is the money used for?**
The license fee for 2013 is either billed at \$23.05 monthly or \$69.14 quarterly and will appear on your regular billing statement. The money collected will help to defray District costs for providing staff to assist you with Kitchen Best Management Practices, funding for discharge sampling and funding towards televised inspections of the building sewer laterals.
- **When is a sample port required?**
All food service establishments (FSEs) must have a sample port located just outside of their structure. New or remodeled FSEs must install the sample port as a part of the permit process.

Discharge collected from sample ports will be analyzed to determine if existing grease control measures are keeping kitchen wastewater below the limit of 400 mg/l of grease, as set by District Sewer Ordinance 255, Section 8.

- **What are Kitchen Best Management Practices?**

Also known as “Kitchen BMPs,” these are practices, procedures and maintenance activities performed by establishments to reduce fats, oils and grease in the wastewater discharge. They include:

- Collecting all cooking grease and liquid oil from pots, pans and fryers in covered grease containers for recycling
- Scraping or dry-wiping excess food and grease from dishes, pots, pans and fryers
- Installing drain screens on all kitchen drains
- Having spill kits readily available
- Properly maintaining and cleaning exhaust filters, grease traps and interceptors
- An on-going employee training program

- **Is my existing grease trap or interceptor adequate?**

The size of your grease control device depends upon the number of fixtures connected to it and the maintenance schedule. District staff will help you to determine if your existing trap(s) or interceptor is properly sized. If properly sized and frequently cleaned, you should be able to meet the discharge limit of 400 mg/l of grease. If your discharge exceeds this limit, you may be required to install alternative or additional grease control devices.

- **How often should I clean my grease trap or interceptor?**

Our staff will help you determine the optimum frequency for grease trap and interceptor service based upon your specific facility. As a reference, grease traps are often cleaned twice a month and grease interceptors pumped out one time per month.

- **Are garbage disposals allowed?**

Commercial garbage disposals that discharge into the public sewer system are not allowed. Screens should be installed in all sinks receiving food waste, and all collected material shall be placed into the garbage.

- **Can I use chemical or biological agents to reduce grease?**

No, the use of chemical and/or biological agents to dissolve fats, oils and grease is not allowed. They simply move the grease into the sewer collection system. If you have been using these materials, you will be required to discontinue their use. Contact the District to learn about alternative grease control measures.

- **How do I dispose of the grease?**

Grease traps can be cleaned by the food service establishment, and you may either contract with a grease hauler to remove the waste or, once properly bagged and mixed with kitty litter, the sanitary landfill may accept it. Grease interceptors must be pumped by a pumping service that you contract with.

- **Who do I contact for more information?**

- For more information, please contact Phillip Tapia, Construction Inspector, (530) 580-6046.

Exhibit 7-5. Grease Interceptor Cleaning and Disposal Sites

FOG HAULERS

The following companies may be available for grease interceptor and grease trap cleaning and disposal.

<u>Hauler</u>	<u>Phone</u>	<u>Cell</u>	<u>Fax</u>
• Alpine Septic Service Dave Brewer PO Box 13345 South Lake Tahoe, CA 96151	530-577-7867	530-416-8831	530-573-0990
• Easy Rooter	530-587-0404		
• Reno Rendering 1705 N. Wells Ave Reno, NV 89512	800-733-6498	775-830-9098	
• Roto-Rooter	530-582-9007		
• Rooter Man Plumbing	530-542-9090		
• Summit Plumbing Co.	530-544-5514		
• Waters Vacuum Service	888-909-7867		775-825-1692

The District provides the above listed companies as a courtesy and does not specifically endorse any of them. Check the yellow pages for a complete list of companies who perform grease interceptor cleaning.

It is your responsibility to determine whether the hauler is qualified and possesses the necessary licensing to perform the work. A copy of the hauler manifest must be retained for our records.

If you have any questions regarding grease interceptor cleaning, grease disposal or any other questions related to our FOG (Fats, Oils and Grease) abatement program please feel free to contact Phillip Tapia at 530-580-6046 or via email at ptapia@tcpud.org.

Exhibit 7-6. Sewer Cleaning Activities in Areas of Known FOG Sources



TCPUD Utilities Department

Cleaning

ID <input type="text"/>	Logged By <input type="text"/>	Status <input type="text"/>	Priority <input type="text"/>
Service Request <input type="text"/>	Type <input type="text" value="NA"/>	Begin Date / Time <input type="text"/>	End Date / Time <input type="text"/>
Activity Description	Department <input type="text" value="Sewer"/>		
Work Type <input type="text" value="Underground Preventative"/>			
<input type="text" value="High Frequency Cleaning - 1 month"/>			
Location <input type="text"/>			

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	Date Completed
1	<input type="checkbox"/>	Clean all lines shown on work order		
2	<input type="checkbox"/>	Create new work order if necessary		
3	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Lines To Be Cleaned

Facility ID	Cleaning ID	Cleaning Zone	Map Drawer
10000	Edgewater Drive	Zone 2	U4-1-24
10001	Edgewater Drive	Zone 2	U4-1-23
10002	Edgewater Drive	Zone 2	U4-1-23
10003	Edgewater Drive	Zone 2	U4-1-23
10004	Edgewater Drive	Zone 2	U4-1-23
10005	Edgewater Drive	Zone 2	U4-1-22
10006	Edgewater Drive	Zone 2	U4-1-22
10164	Edgewater Drive	Zone 2	U4-1-24
10165	Edgewater Drive	Zone 2	U4-1-24
10295	Coast Guard	Zone 2	U18-1-17
10296	Coast Guard	Zone 2	U18-1-17
10528	Boatworks-Roundhouse	Tahoe City	U31-12-2
10558	Marina-Mackinaw	Tahoe City	U1-2-1
10561	Golf Course	Tahoe City	U1-2-1
10562	Golf Course	Tahoe City	U1-2-1
10563	Golf Course	Tahoe City	U1-2-1
10564	Golf Course	Tahoe City	U1-2-1
10565	Golf Course	Tahoe City	U1-2-1
10566	Golf Course	Tahoe City	U1-2-1
10567	Golf Course	Tahoe City	U1-2-1
10568	Golf Course	Tahoe City	U1-2-1
10569	Golf Course	Tahoe City	U1-2-1
10659	Boatworks-Roundhouse	Tahoe City	U31-12-2
10664	Marina-Mackinaw	Tahoe City	U31-23-2
10665	Marina-Mackinaw	Tahoe City	U1-2-1
10702	Boatworks-Roundhouse	Tahoe City	U31-12-2
10950	Firesign	Zone 4	U6-1-29
10951	Firesign	Zone 4	U6-1-29
11240	John Cain	Zone 4	U36-9-3
11559	South Street-Hwy 89	Zone 7	U8-1-55
11562	South Street-Hwy 89	Zone 7	U8-1-55
11674	6th Ave-Tahoma	Zone 8	U10-1-32
11676	6th Ave-Tahoma	Zone 8	U10-1-32
11768	Lagoon	Zone 7	U9-1-36
12854	Marina-Mackinaw	Tahoe City	U1-2-1



TCPUD Utilities Department

Cleaning

ID <input type="text"/>	Logged By <input type="text"/>	Status <input type="text"/>	Priority <input type="text"/>
Service Request <input type="text"/>	Type <input type="text" value="NA"/>	This is a Recurring Work Order See Schedule	
Department <input type="text" value="Sewer"/>	Work Type <input type="text" value="Underground Preventative"/>		
Activity Description High Frequency Cleaning - 3 months			
Location <input type="text"/>			

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Clean all lines shown on work order		
2	<input type="checkbox"/>	Create new work order if necessary		
3	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Lines To Be Cleaned

Facility ID	Cleaning ID	Cleaning Zone	Map Drawer
10034	Bacchis	Zone 2	U4-1-13
10084	Bacchis	Zone 2	U4-1-14
10648	Wolfdales	Tahoe City	U31-10-3
10697	Harbor Master	Tahoe City	U31-33-2
11153	Black Bear Tavern	Zone 5	U7-1-24
11437	Tallac	Zone 6	U8-1-26
11546	Swiss Lakewood	Zone 7	U8-1-50
11547	Swiss Lakewood	Zone 7	U8-1-50
12224	Gold Coast	Zone 10	U12-1-31



TCPUD Utilities Department

ID <input type="text"/>	Logged By <input type="text"/>	Status <input type="text"/>	Priority <input type="text"/>
Service Request <input type="text"/>	Type <input type="text" value="NA"/>	Begin Date / Time <input type="text"/>	End Date / Time <input type="text"/>
Department <input type="text" value="Sewer"/>	Work Type <input type="text" value="Underground Preventative"/>		
Activity Description High Frequency Cleaning - 6 months			
Location <input type="text"/>			

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	Date Completed
1	<input type="checkbox"/>	Clean all lines shown on work order		
2	<input type="checkbox"/>	Create new work order if necessary		
3	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Assets			
Asset ID	Layer or Facility	GIS Location	Label / Name
11580	ssSewerMain	U9-1-5	Zone 7
11586	ssSewerMain	U9-1-7	Zone 7
11587	ssSewerMain	U7-1-16	Zone 7
11588	ssSewerMain	U9-1-7	Zone 7



TCPUD Utilities Department

Cleaning

ID <input type="text"/>	Logged By <input type="text"/>	Status <input type="text"/>	Priority <input type="text"/>
Service Request <input type="text"/>	Type <input type="text" value="NA"/>	This is a Recurring Work Order See Schedule	
Department <input type="text" value="Sewer"/>	Work Type <input type="text" value="Underground Preventative"/>		
Activity Description <input type="text" value="High Frequency Cleaning - 3 months"/>			
Location <input type="text"/>			

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Clean all lines shown on work order		
2	<input type="checkbox"/>	Create new work order if necessary		
3	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Lines To Be Cleaned

Facility ID	Cleaning ID	Cleaning Zone	Map Drawer
10034	Bacchis	Zone 2	U4-1-13
10084	Bacchis	Zone 2	U4-1-14
10648	Wolfdales	Tahoe City	U31-10-3
10697	Harbor Master	Tahoe City	U31-33-2
11153	Black Bear Tavern	Zone 5	U7-1-24
11437	Tallac	Zone 6	U8-1-26
11546	Swiss Lakewood	Zone 7	U8-1-50
11547	Swiss Lakewood	Zone 7	U8-1-50
12224	Gold Coast	Zone 10	U12-1-31



TCPUD Utilities Department

Cleaning

ID <input type="text"/>	Logged By <input type="text"/>	Status <input type="text"/>	Priority <input type="text"/>
Service Request <input type="text"/>	Type <input type="text" value="NA"/>	Begin Date / Time <input type="text"/>	End Date / Time <input type="text"/>
Department <input type="text" value="Sewer"/>		<input type="text"/>	
Activity Description	Work Type <input type="text" value="Underground Preventative"/>		
<input type="text" value="High Frequency Cleaning - 12 months"/>			
Location	<input type="text"/>		

Enter Time Below:

Date	Employee Name	Hours	Vehicle ID	Equipment ID	Notes

Tasks				
Order	Completed	Description	Notes	DateCompleted
1	<input type="checkbox"/>	Clean all lines shown on work order		
2	<input type="checkbox"/>	Create new work order if necessary		
3	<input type="checkbox"/>	Enter labor, vehicle & equipment used		

Lines To Be Cleaned

Facility ID	Cleaning ID	Cleaning Zone	Map Drawer
11329	Gstaad	Zone 5	U36-15-9
11330	Gstaad	Zone 5	U36-15-9
12370	Meeks Bay Ave	Zone 10	U11-1-11
12371	Meeks Bay Ave	Zone 10	U11-1-11
12372	Meeks Bay Ave	Zone 10	U11-1-11
12381	Meeks Bay Ave	Zone 10	U11-1-12
12382	Meeks Bay Ave	Zone 10	U11-1-13
12697	Mountain Dr-Hwy 89	Zone 10	U17-1-15
12822	Truckee River Siphon	Zone3	U33-A-6-3
12823	Truckee River Siphon	Zone3	U33-A-6-3
12824	McKinney Siphon	Zone7	U16-1-20
12825	McKinney Siphon	Zone7	U16-1-20

Exhibit 7-7. FOG Reduction Public Outreach Materials

Fats, Oils, and Greases aren't just bad for your arteries and your waistline; they're bad for sewers, too.

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. An increasingly common cause of overflows is sewer pipes blocked by grease. Grease gets into the sewer from household drains as well as from poorly maintained grease traps in restaurants and other businesses.

Where does the grease come from?

Most of us know grease as the byproduct of cooking. Grease is found in such things as:

- Meat fats
- Lard
- Cooking oil
- Shortening
- Butter and margarine
- Food scraps
- Baking goods
- Sauces
- Dairy products

Too often, grease is washed into the plumbing system, usually through the kitchen sink. Grease sticks to the insides of sewer pipes (both on your property and in the streets). Over time, the grease can build up and block the entire pipe.

Home garbage disposals do not keep grease out of the plumbing system. These units only shred solid material into smaller pieces and do not prevent grease from going down the drain.

Commercial additives, including detergents, that claim to dissolve grease may pass grease down the line and cause problems in other areas.

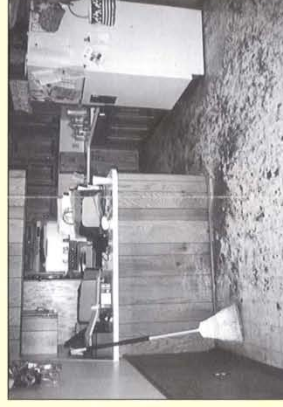


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The results can be:

- Raw sewage overflowing in your home or your neighbor's home;
- An expensive and unpleasant cleanup that often must be paid for by you, the homeowner;
- Raw sewage overflowing into parks, yards, and streets;
- Potential contact with disease-causing organisms; and
- An increase in operation and maintenance costs for local sewer departments, which causes higher sewer bills for customers.



© NIDEP



What we can do to help

The easiest way to solve the grease problem and help prevent overflows of raw sewage is to keep this material out of the sewer system in the first place.

There are several ways to do this.

- 1) Never pour grease down sink drains or into toilets.
- 2) Scrape grease and food scraps from trays, plates, pots, pans, utensils, and grills and cooking surfaces into a can or the trash for disposal (or recycling where available).
- 3) Do not put grease down garbage disposals. Put baskets/strainers in sink drains to catch food scraps and other solids, and empty the drain baskets/strainers into the trash for disposal.

- 4) Speak with your friends and neighbors about the problem of grease in the sewer system and how to keep it out. Call your local sewer system authority if you have any questions.

What Restaurant and Building Owners Need to Know About Grease Traps or Interceptors

Restaurants, large buildings, such as apartment complexes, and other commercial establishments may have grease traps or interceptors that keep grease out of the sewer system. For a grease trap or interceptor to work correctly, it must be properly

- 1** Designed (sized and manufactured to handle the amount that is expected),
- 2** Installed (level, vented, etc.), and
- 3** Maintained (cleaned and serviced on a frequent basis).

Solids should never be put into grease traps or interceptors. Routine, often daily, maintenance of grease traps and interceptors is needed to ensure that they properly reduce or prevent blockages.

Be cautious of chemicals and additives (including soaps and detergents) that claim to dissolve grease. Some of these additives simply pass grease down pipes where it can clog the sewer lines in another area.

Fat-Free Sewers

How to Prevent Fats, Oils, and Greases from Damaging Your Home and the Environment

This brochure was prepared under Cooperative Agreement Assistance #C8324505-01-0 between the Water Environment Federation (WEF) and the U.S. Environmental Protection Agency. For more information, contact your local sewer system authority or the

Water Environment Federation

601 Wythe Street
Alexandria, VA 22314-1004
Phone: 703/684-2400
Fax: 703/684-2492

Web site: <http://www.wef.org>

For additional copies of this brochure, contact WEF at
1-800-666-0206, 1-703-684-2452 or <http://www.wef.org>



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04/03

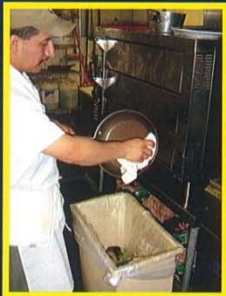
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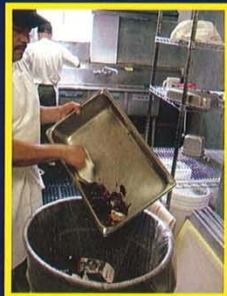
如何正確處理 廢油膏、污油和廢油脂

請貼於清理及工作的地方

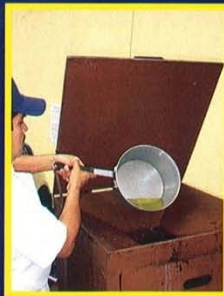
正確的做法



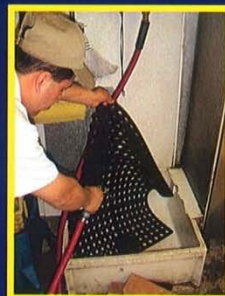
1 先將鍋，盆和工作地方擦淨後才進行沖洗。



2 將食物餘渣直接倒入垃圾桶。



3 將污油收集儲存以便回收。



4 將地板墊子放進洗滌槽內洗滌。用抹乾的方法清理濺出的污物。

錯誤的做法



1 不要把烹調的剩餘物直接倒入排水槽。



2 避免使用廚房廢物絞碎機。將餘渣倒入垃圾桶。



3 不要將污油直接倒入排水槽，停車場和街道上。



4 不要在戶外澆洗地板墊子，以免污水流入防洪渠中。不要將濺出的污物沖洗至街道上。

For more information call Tahoe City Public Utility District (530) 583-3796



Tahoe City Public Utility District

CALIFORNIA
Restaurant
ASSOCIATION

Courtesy of

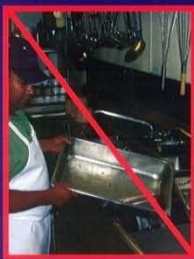
SANITATION DISTRICTS OF LOS ANGELES COUNTY

www.lacsd.org

Managing FATS, OIL and GREASE

“It’s Easier than YOU Think!”

THE **WRONG WAY** La Forma Incorrecta



1
Do not pour cooking residue directly into the drain.

No vierta residuos de cocinar directamente en el desagüe.



2
Do not dispose of food waste into the garbage disposal.

No ponga desperdicios de comida en el triturador de comida.



3
Do not pour waste oil directly into the drain.

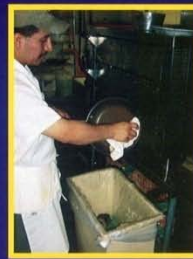
No ponga aceite usado directamente en el desagüe.



4
Do not wash floor mats where water will run off directly into the storm drain.

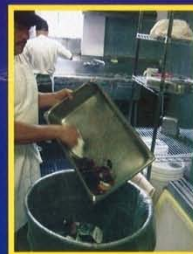
No lave tapetes de piso en un lugar donde el agua corra hacia el desagüe.

THE **RIGHT WAY** La Forma Correcta



1
Wipe pots, pans, and work areas prior to washing.

Limpie con una toalla las ollas, sartenes, y áreas de trabajo antes de lavarlos.



2
Dispose of food waste directly into the trash.

Deseche los desperdicios de comida en el bote de basura.



3
Collect waste oil and store for recycling.

Junte el aceite usado y guardelo para que sea reciclado.



4
Clean mats inside over a utility sink.

Limpie los tapetes de piso dentro de una tina o fregador.

For more information call Tahoe City Public Utility District (para más información llame al) (530) 583-3796

Exhibit 10-1. System Management Plan Annual Audit Checklist

GENERAL DISTRICT INFORMATION

Item	General District Information Detail	Response
1.	Name of District	Tahoe City PUD
2.	Date of Audit	04/30/2014
3.	Name of Auditor	Tony Laliotis
4.	System Overview	
5.	Linear Feet of Gravity Sewer Mains	792,000
6.	Linear Feet of Force Mains	21,120
7.	Total Linear Feet of All District Sewer Lines	813,120
8.	Number of Pump Stations	21
9.	Linear Feet of Private Sewer Mains (excluding laterals)	0
10.	LF of Private Sewer Laterals	369,600
11.	Total Population Served by District	7,800 Connections
12.	Current Average Monthly Single Family Residential Sewer Rate	\$36.34

GOALS

Item	Goals Detail	Response
13.	Are Goals Stated in the Risk-Based SSMP Still Appropriate and Accurate? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

ORGANIZATION

Item	Organization Detail	Response
14.	Reference Material: <ul style="list-style-type: none"> Organizational Chart Phone List 	
15.	Is the Risk-Based SSMP up-to-date with agency organization and staffing contact information? <i>If NO, describe content and schedule for necessary changes, or provide additional comments for YES response.</i> <u>Updated in March 2012</u>	Yes

LEGAL AUTHORITY

Item	Legal Authority Detail	Response
16.	Reference Material <ul style="list-style-type: none"> • Municipal code(s) • Enforcement action(s) 	
17.	Does the Risk-Based SSMP contain up-to-date information about the District's legal authority? <i>If NO, describe content and schedule for necessary changes, or provide additional comments for YES response.</i>	Yes
18.	Does District have sufficient legal authority to control sewer use and maintenance? <i>If NO, describe content and schedule for necessary changes, or provide additional comments for YES response.</i>	Yes

OPERATIONS AND MAINTENANCE

Item	Operations and Maintenance Detail	Response
19.	Reference Material <ul style="list-style-type: none"> • Collection system map 	
20.	Does the Risk-Based SSMP contain up-to-date information about the District's maps? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
21.	Are District's collection system maps complete, up-to-date and sufficiently detailed? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

RESOURCES AND BUDGET

Item	Resources and Budget Detail	Response
22.	Reference Material <ul style="list-style-type: none"> • Current Capital Improvement Plan (CIP) • Current operating budget 	
23.	Does Risk-Based SSMP contain up-to-date information about District's resources and budget? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> <u>Updated in April 2014</u>	Yes
24.	Are District's resources and budget sufficient to support effective sewer system management? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
25.	Do District's planning efforts support long-term goals? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

PRIORITIZED PREVENTATIVE MAINTENANCE

Item	Prioritized Preventative Maintenance Detail	Response																													
26.	Reference Materials <ul style="list-style-type: none"> • Cleaning schedules • List or map of potential problem area • Work orders • Incident reports • Customer feedback • Annual Preventative Maintenance Activities 																														
27.	Annual Preventative Maintenance Activities Summary <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Maintenance Activities</th> <th colspan="4">Linear Feet/Year</th> </tr> <tr> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> </tr> </thead> <tbody> <tr> <td>CCTV</td> <td>95,000</td> <td>90,000</td> <td>218,064</td> <td>214,368</td> </tr> <tr> <td>HydroClean/Flush</td> <td>422,000</td> <td>264,000</td> <td>445,632</td> <td>246,048</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Maintenance Activities	Linear Feet/Year				2010	2011	2012	2013	CCTV	95,000	90,000	218,064	214,368	HydroClean/Flush	422,000	264,000	445,632	246,048											
Maintenance Activities	Linear Feet/Year																														
	2010	2011	2012	2013																											
CCTV	95,000	90,000	218,064	214,368																											
HydroClean/Flush	422,000	264,000	445,632	246,048																											
28.	Does Risk-Based SSMP contain up-to-date information about District's preventative maintenance activities? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Updated activities to date.	Yes																													

SCHEDULED INSPECTIONS AND CONDITION ASSESSMENT

Item	Scheduled Inspections and Condition Assessment Detail	Response
29.	Reference Material <ul style="list-style-type: none"> • Inspection reports • Infiltration and Inflow (I/I) monitoring studies and reports • Pipe and manhole condition data 	
30.	Does Risk-Based SSMP contain up-to-date information about District's inspection and condition assessment? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Updated condition assessment procedures and GIS information	Yes
31.	Are District's scheduled inspections and condition assessment system effective in locating, identifying, and addressing deficiencies? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

CONTINGENCY EQUIPMENT AND REPLACEMENT INVENTORIES

Item	Contingency Equipment and Replacement Inventories Detail	Response
32.	Reference Material <ul style="list-style-type: none"> Funds spent on equipment and materials Equipment and parts inventory 	
33.	Does the Risk-Based SSMP contain up-to-date information about equipment and replacement inventories? <i>If NO, describe content and schedule for necessary arrangements, or provide additional comments for YES response.</i>	Yes
34.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance? <i>If NO, describe content and schedule for necessary arrangements, or provide additional comments for YES response.</i>	Yes

TRAINING

Item	Training Detail	Response
35.	Reference Material <ul style="list-style-type: none"> Employee training records 	
36.	Does the Risk-Based SSMP contain up-to-date information about the District's training expectations and programs? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes
37.	Do supervisors believe that their staff is sufficiently trained? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes
38.	Are staff satisfied with the training opportunities and support offered to them? <i>If NO, describe content and schedule for improvements, or provide additional comments for YES response.</i>	Yes

OUTREACH TO BUILDING CONTRACTORS

Item	Outreach to Building Contractors Detail	Response												
39.	Reference Material <ul style="list-style-type: none"> • Fliers/mailings • Mailing lists 													
40.	<p><i>Summary of Number of Permits Issued to Plumbers or Contractors</i></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Number of Permits*</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>9</td> </tr> <tr> <td>2011</td> <td>8</td> </tr> <tr> <td>2012</td> <td>7</td> </tr> <tr> <td>2013</td> <td>9</td> </tr> <tr> <td>2014</td> <td></td> </tr> </tbody> </table> <p>*Specifically permits that could impact District facilities</p>	Year	Number of Permits*	2010	9	2011	8	2012	7	2013	9	2014		
Year	Number of Permits*													
2010	9													
2011	8													
2012	7													
2013	9													
2014														
41.	Does the Risk-Based SSMP contain up-to-date information about the District's outreach to plumbers and building contractors?	Yes												
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>													
42.	Has the District conducted or participated in any outreach activities to plumbers and building contractors?	Yes												
	<i>If NO, describe content and schedule for future activities, or provide additional comments for YES response.</i>													

DESIGN AND CONSTRUCTION STANDARDS

Item	Design and Construction Standards Detail	Response
43.	Reference Material <ul style="list-style-type: none"> • Design and construction standards • Ordinances 	
44.	Does the Risk-Based SSMP contain up-to-date information about the District's design and construction standards?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	
45.	Are design and construction standards, as well as standards for inspection and testing of new and rehabilitated facilities sufficiently comprehensive and up-to-date?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	

OVERFLOW EMERGENCY RESPONSE PLAN

Item	Overflow Emergency Response Plan Detail	Response				
46.	Reference Material <ul style="list-style-type: none"> Data submitted to CIWQS Service call data 					
47.	<i>Annual SSO Statistics Summary</i>					
	Indicator	2010	2011	2012	2013	2014
	Number of SSOs (total)	1	3	2	2	
	Wet season SSOs	0	1	0	1	
	Dry season SSOs	1	2	2	1	
	Number of SSOs by volume (gallons)					
	<10	0	0	0	0	
	10 – 99	1	3	0	1	
	100 – 999	0	0	1	1	
	1000 – 9999	0	0	1	0	
	>10,000	0	0	0	0	
	Total SSO Volume	20	170	1300	180	
	Volume reaching waters of the State	0	0	0	0	
	Volume not contained but not reaching waters of the State	0	0	0	0	
	Volume recovered	0	170	220	105	
	Net volume (total minus recovered)	20	0	1080	75	
	Number of Mainline SSOs per 100 mile of sewer per year	0.52	1.58	0.65	0	
	Volume of Mainline SSOs per 100 mile of sewer per year	10.5	89.4	199.9	0	
	Total Volume conveyed to the plant (million gal)	256	315	258	238	
	Total volume SSO / Total volume conveyed (gal)	0	0	0	0	
	Number of SSOs (by Cause)					
	Blockages:					
	Roots	0	1	0	1	
	Grease	0	0	0	0	
	Debris	0	1	0	1	
	Debris from Laterals	0	0	0	0	
	Animal Carcass	0	0	0	0	
	Construction Debris	0	0	2	0	
	Multiple causes	1	0	0	0	
	Infrastructure Failure	0	1	0	0	
	Inflow & Infiltration	0	0	0	0	
	Electrical Power Failure	0	0	0	0	
	Flow Capacity District Deficiency	0	0	0	0	
	Natural Disaster	0	0	0	0	
	Bypass	0	0	0	0	
	Cause Unknown	0	0	0	0	
	Average Emergency Response Times, Minutes	50	21	29	86	
	Business Hours					
	Notification to arrival on site	NA	10	21	52	
	Notification to complete clearance	NA	30	10	70	
	Non-business hours	50	27	NA	NA	
	Notification to complete clearance	NA	45	NA	125	
	Number of locations with multiple SSOs	0	0	0	0	

Item	Overflow Emergency Response Plan Detail	Response
48.	Does the Risk-Based SSMP contain an up-to-date version of the District's Overflow Emergency Response Plan?	Yes
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Updated in March 2012	
49.	Considering the information in Item 47, is the Overflow Emergency Response Plan effective in handling SSOs?	Yes
	<i>If NO, describe content and schedule for necessary revisions and implementation, or provide additional comments for YES response in the space below.</i>	

FATS, OILS, AND GREASE (FOG) CONTROL PLAN

Item	Fats, Oils and Grease (FOG) Control Plan Detail	Response																	
50.	Reference Material <ul style="list-style-type: none"> • List or map of FOG sources in service area • List or map of potential problem areas • Cleaning schedules • Restaurant inspection reports or summaries • Data submitted to CIWQS • Service call data 																		
	51.		FOG Control Statistics <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Statistic</th> <th style="background-color: #cccccc;">2010</th> <th style="background-color: #cccccc;">2011</th> <th style="background-color: #cccccc;">2012</th> <th style="background-color: #cccccc;">2013</th> <th style="background-color: #cccccc;">2014</th> </tr> </thead> <tbody> <tr> <td>Number of SSOs caused by FOG</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>Number of FOG inspections completed</td> <td style="text-align: center;">73</td> <td style="text-align: center;">45</td> <td style="text-align: center;">17</td> <td style="text-align: center;">34</td> <td></td> </tr> </tbody> </table>	Statistic	2010	2011	2012	2013	2014	Number of SSOs caused by FOG	0	0	0	0		Number of FOG inspections completed	73	45	17
Statistic	2010	2011	2012	2013	2014														
Number of SSOs caused by FOG	0	0	0	0															
Number of FOG inspections completed	73	45	17	34															
52.	Does the Risk-Based SSMP contain up-to-date information about the District's FOG program?	Yes																	
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response.</i>																		
53.	Considering the information Item 51, is the FOG program effective in documenting and controlling FOG sources?	Yes																	
	<i>If NO, describe content and schedule for updates, or provide additional comments for YES response.</i>																		

CAPACITY MANAGEMENT

Item	Capacity Management Detail	Response												
54.	Reference Material <ul style="list-style-type: none"> Capacity assessment reports CIP SSO data 													
55.	Number of SSOs Caused by Hydraulic Limitations <table border="1"> <thead> <tr> <th>Year</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>2010</td> <td>0</td> </tr> <tr> <td>2011</td> <td>0</td> </tr> <tr> <td>2012</td> <td>0</td> </tr> <tr> <td>2013</td> <td>0</td> </tr> <tr> <td>2014</td> <td></td> </tr> </tbody> </table>	Year	Number	2010	0	2011	0	2012	0	2013	0	2014		
Year	Number													
2010	0													
2011	0													
2012	0													
2013	0													
2014														
56.	Does Risk-Based SSMP contain up-to-date information about District's capacity assessment? <i>If NO, describe content and schedule for necessary activities, or provide additional comments for YES response.</i>	Yes												
57.	Has District completed a capacity assessment and identified and addressed any hydraulic deficiencies in the system? <i>If NO, describe content and schedule for necessary activities, or provide additional comments for YES response.</i>	Yes												

MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

Item	Monitoring, Measurement and Program Modifications Detail	Response
58.	Does the Risk-Based SSMP contain up-to-date information about District's data collection and organization? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Updated in 2012	Yes
59.	Is District's data collection and organization sufficient to evaluate the effectiveness of the Risk-Based SSMP? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

SSMP AUDITS

Item	SSMP Audits Detail	Response
60.	Will this Audit be completed annually and filed with the Risk-Based SSMP report? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Completed April 2014	Yes

COMMUNICATION PROGRAM

Item	Communication Program Detail	Response
61.	Reference Material <ul style="list-style-type: none"> • Mailings and mailing lists • Website • Other communication records such as newspaper ads, site postings, or other outreach • Customer feedback 	
62.	Does the Risk-Based SSMP contain up-to-date information about the District's public outreach activities? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i> Updated in March 2012	Yes
63.	Does the Risk-Based SSMP contain up-to-date information about the District's communications with satellite and tributary agencies? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes
64.	Has the District effectively communicated with the public and other agencies about the Risk-Based SSMP, and addressed feedback? <i>If NO, describe content and schedule for updates, or provide additional comments for YES response in the space below.</i>	Yes

Exhibit 11-1. SSMP Approving Resolution and Notice of Public Hearing

RESOLUTION No. 10-13

**RESOLUTION OF THE TAHOE CITY PUBLIC UTILITY DISTRICT
APPROVING THE FINAL SEWER SYSTEM MANAGEMENT PLAN (SSMP)
AS REQUIRED BY THE STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003 STATEWIDE GENERAL WASTE DISCHARGE
REQUIREMENTS (WDR) FOR SANITARY SEWER SYSTEMS**

WHEREAS, on May 2, 2006, the State Water Resources Control Board Order No. 2006-0003 - Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems was adopted and implemented; and

WHEREAS, the purpose of the WDR is to develop a regulatory mechanism to provide a consistent statewide approach for reducing sanitary sewer overflows; and

WHEREAS, the WDR requires preparation of a Sewer System Management Plan (SSMP) with 11 separate elements; and

WHEREAS, Tahoe City Public Utility District produced a Draft SSMP document with all appropriate elements included; and

WHEREAS, the Draft SSMP document was made available for a 30-day public review period and also posted on the Tahoe City Public Utility District Website; and

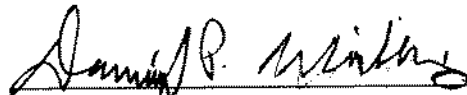
WHEREAS, a public hearing was held on April 23, 2010 to review and receive public comments on the Draft SSMP; and

WHEREAS, the final SSMP must be approved by the agency's governing board for certification upon its completion.

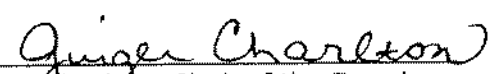
NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Tahoe City Public Utility District approves the final SSMP as required by the State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

PASSED AND ADOPTED at a regular meeting of the Board of Directors at Tahoe City, CA this 23rd day of April, 2010, by the following vote:

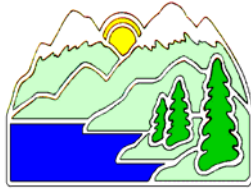
- AYES:** Wilkins, Treabess, Reinkens, Friedman, Henrikson
- NOES:** None
- ABSENT:** None
- ABSTAIN:** None



Dan Wilkins, President of the Board

ATTEST:


Ginger Charlton, Clerk of the Board



**NOTICE OF PUBLIC REVIEW PERIOD AND AVAILABILITY
OF THE
TAHOE CITY PUBLIC UTILITY DISTRICT SEWER SYSTEM
MANAGEMENT PLAN (SSMP)**

The State Water Resources Control Board has adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order Number 2006-0003. All public-owned sewer collection systems in the State greater than one mile in length must develop a comprehensive SSMP. The SSMP is a written document that describes the districts efforts and commitment to operate, maintain and manage the sewer system to reduce the number of preventable overflows. It is a proactive document to formalize the tasks necessary to accomplish this goal.

The Tahoe City Public Utility District (TCPUD) has completed a final draft of all elements of its Sewer System Management Plan (SSMP). Beginning March 23, 2010, copies of the SSMP will be available for public review during regular business hours at the TCPUD offices, 221 Fairway Drive Tahoe City, CA. The SSMP will also be available on the TCPUD website at: www.tahoecitypub.com

The public review period for the SSMP extends for a 30-day public review period from **March 23, 2010 to April 22, 2010**. All interested persons are invited to send written comments prior to the expiration of the public comment period on **April 22, 2010** to:

Tahoe City Public Utility District
Attn: Tony Laliotis
PO Box 5249
Tahoe City, CA 96145
Email: tlaliotis@tcpud.org

Following the public review period, the Tahoe City Public Utility District will hold a public hearing to consider all comments received and adoption of the SSMP. This hearing will be held at the regularly scheduled TCPUD Board of Directors Meeting scheduled for **April 23, 2010 at 8:30 AM** at 221 Fairway Drive, Tahoe City CA.

Questions on the SSMP can be directed to Tony Laliotis, Director of Utilities at 530-583-3796, ext 36 or email: tlaliotis@tcpud.org