

---

---

## 10. MAINTENANCE OF EXISTING FACILITIES

---

---

### **10.01 Maintenance and Testing of Private Sanitary Sewer Facilities**

The owner or their agent of a property served by the District's sanitary sewer shall be responsible for the operation and maintenance of the private sanitary sewer facilities, including all devices or safeguards required by this section, which are located upon said property. The owner of their agent's operation and maintenance responsibility is from the building to the connection at the sanitary sewer easement or property line.

The owner or their agent shall, at their own risk and expense, install, keep and maintain in good repair all *sanitary sewer facilities* (sanitary sewer pipelines, force mains, manholes, equipment, pump stations, and related appurtenances) situated on the premises so served. The District shall not be responsible for any loss or damage caused by improper or defective installation of sanitary sewer facilities, whether inspected and/or approved by the District. All such installations of sanitary sewer facilities shall conform with all federal, state, county, town and local laws, rules, regulations and ordinances.

The owner or their agent served by the District's sanitary sewer system shall be responsible and liable for all costs involved in the repair of all damages caused by the owner, customer, or agents thereof, to the District's sanitary sewer facilities, including but not limited to sewer obstructions, wherever located.

All sanitary sewer facilities found in need of repair as a result of testing procedures required by this chapter shall be repaired and/or installed to the standards set forth in the District Code.

### **10.02 Conditions Required Testing of Existing Sanitary Sewer Facilities**

It shall be unlawful for any owner of a house, building, or property connected to the District's sanitary sewer system to maintain private sanitary sewer facilities in a condition such that the tests contained herein cannot be successfully accomplished.

All private sanitary sewer facilities, including those serving residential, multiple residential, commercial, and industrial connected to the District's sanitary sewer system shall be tested when any of the following conditions occur:

- (a) remodeling of the house, building or property served to an extent of more than 50 percent of the assessed valuation, as determined by Nevada/Placer County or
- (b) installation of additional plumbing fixtures in the house, building or property served and/or installation of additional building lateral pipeline, or

- (c) change of use of the house, building or property serviced from residential to business or commercial, or from non restaurant commercial to restaurant commercial, or
- (d) repair or replacement of all or part of the building lateral(s), force main pipeline, or private lift station components, or
- (e) the addition of living quarters, such as guest cabins on the property served or conversion of garages into living quarters with plumbing fixtures, or addition of structures on the parcel that impact an existing building lateral or force main, or
- (f) prior to the close of escrow upon a sale of the house, building or property served, or
- (g) the transfer of ownership or interest in the parcel, the facility, or the business. (A transfer of ownership between immediate family members, shall not require testing), or
- (h) change in tenant of the facility or business, or
- (i) change of ownership (multiple owners) on the deed selling their portion to other partner/investors, or
- (j) an inspection by the District indicates reasonable cause, or
- (k) upon determination of the General Manager that testing or sanitary sewer facility replacement is required for the protection of the public health, safety and welfare.

### **10.03 Testing Procedures for Existing Sanitary Sewer Facilities**

The owner or their agent of a house, building, or property connected to the District's sanitary sewer system shall conduct all sanitary sewer facility upgrades and testing required at their sole expense and shall notify the District 48 hours prior to testing. Testing shall be witnessed by a District Inspector.

**Sanitary Sewer Pipelines:** All building laterals, joint laterals, and privately owned main pipelines shall be tested by either an air or water method, at the discretion of the District.

In the case of building and joint laterals, the test section shall be from the building cleanout to the District service connection point. The test section includes all private pipelines, including joint laterals, which provide sanitary sewer service to the parcel in question.

Privately owned main pipelines shall be tested their full length.

Testing shall be in accordance with one of the following (Note: test failures of non-metallic asphaltic composite pipe shall require entire replacement of the defective pipeline. Installation

and testing of the new pipeline shall be in accordance with Division 7, Installation of Sanitary Sewer Facilities, page 27):

- ▶ Air test consisting of plugging each end of the pipeline and applying a pressure of 3.5 pound per square inch to the section being tested. The pipeline shall be allowed a maximum loss in pressure of ½ pound per square inch in 5 minutes. If the loss exceeds ½ pound per square inch, the test may be attempted one additional time. A second loss of pressure constitutes a failure of the pipeline, whereupon the pipeline shall be replaced, as needed, and retested in accordance with this section.
- ▶ Water test consisting of plugging the downstream end of a pipeline, placing a section(s) of pipe in the vertical branch of the building cleanout and filling the test section with water. At least 8 vertical feet of water (measured from the highest point of the pipeline to the top of the water column on the upstream cleanout riser of the test section) shall be used for the test. In pipelines with minimal fall, cleanout risers may need to be temporarily extended above ground to achieve the 8 vertical foot static water level. In no case shall the vertical distance measured from the lowest point of the pipeline test section to the water surface in the cleanout riser exceed 15 feet. Additional cleanouts may have to be installed in steep pipelines and the pipeline tested in sections.

The pipeline shall be allowed a maximum loss of water level of 1 inch in 5 minutes for a 4-inch or 6-inch pipeline per 100 feet in length. If the loss exceeds the allowable, the pipeline may be retested one additional time. A second loss exceeding the allowable constitutes a failure of the pipeline, whereupon the pipeline shall be replaced, as needed, and tested in accordance with this section.

If a cleanout has not been installed at the easement/property line, a cleanout shall be installed prior to testing. If there is no cleanout located outside the building foundation (within five feet of the foundation wall), then a cleanout shall be installed. If the building lateral exits the foundation under an existing deck or concrete patio, the location of the building cleanout near the foundation may be modified on a case-by-case basis as determined by the General Manager. The Cleanouts shall be installed and boxed as specified in Installation of Cleanouts, Section 7.10, page 31. The owner or their agent shall be responsible for such installation. A cleanout underneath the house is not acceptable.

**Manholes, Grease Interceptors, Sand/Oil Interceptors:** Testing shall be in accordance with one of the following:

- ▶ Water test 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. Manholes, 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. All failures shall be retested after the necessary repairs have been completed.

- ▶ Vacuum test by using acceptable equipment approved by the District. Vacuum test equipment shall be user per the manufacturers specification. A vacuum of 10-inches mercury should be drawn on the manhole. The time, in seconds, for the vacuum to drop to 9-inches mercury shall be measured and shall not be less than the time listed below for various manholes and interceptors.

Time	Manhole Diameter	Interceptor Size
(sec)	(in.)	(gal.)
60	48	
75	60	
90	72	
80		500 to 999
120		1,000 to 1,499
150		1,500 to 1,999
180		2,000 to 2,499

Note: Grease interceptors and sand/oil interceptors shall be completely drained and cleaned before initiation of the water or vacuum test.

**Pump System Testing, Pump Station Outside The Building Foundation:** The gravity portion of the pipeline from the building to the holding tank shall be tested in accordance with Section 10.03, Testing Procedures for Existing Sanitary Sewer Facilities, Sanitary Sewer Pipelines, page 52.

A visual inspection of the pump system will be performed to check for:

- ▶ soundness of the wastewater holding tank.
- ▶ proper venting of the holding tank.
- ▶ acceptable weather proof, insulated box with adequate waterproof insulation below the box lid directly above the holding tank.
- ▶ a weather tight seal on the holding tank lid and at all pipe or conduit penetrations.
- ▶ a properly functioning check valve on the discharge pipeline.

In the event that there is no check valve and/or pressure test port installed on the existing discharge pipeline, a check valve and a valved 1/4 -inch pressure test port shall be installed in accordance with Section 7.15, Residential Pump Systems, page 35.

A pressure gage shall be connected to the test port and the pressure test port valve shall be opened. The pump shall be started and the holding tank pumped down to allow a visual inspection of the holding tank to check it for leaks. The check valve shall also be inspected for proper operation.

Immediately after the holding tank is pumped down and the pump turned off, the gage pressure shall be noted in the discharge pipeline. The pressure shall remain constant for 10 minutes. Any drop in pressure shall constitute a test failure and the check valve and/or the discharge pipeline shall be repaired and/or replaced.

After the check valve and/or the discharge pipeline is repaired and/or replaced, another test shall be attempted. A subsequent loss of pressure constitutes a failure of the check valve and/or discharge pipeline, whereupon the defective check valve and/or discharge pipeline section shall be replaced and tested as described above.

The alarm system, if so equipped, shall be checked for proper function of audio and visual alarms.

In the event that the holding tank or the force main needs replacement the pump and controls must be updated to meet District Code. In the event that the controls need replacement an alarm system must be installed as specified in Residential Pump System, Section 7. 15, page 35.

Septic tanks and concrete vaults converted for use as holding tanks shall be air, water or vacuum tested. The test shall be the same as specified for sanitary sewer pipelines, manholes, and grease and sand/oil interceptors. If the converted septic tank/concrete vault fails the test, it shall be abandoned and a new holding tank meeting the requirements for residential pump systems shall be installed in its place.

#### **10.04 Time Limits for Completion of Testing Procedures**

Testing shall be completed in a timely manner as follows:

- ▶ Prior to the close of escrow upon the sale of the residence, building, or property, or transfer of ownership or interest in the parcel, the facility, or the business, or
- ▶ Within 30 days of standard notification by the District, or
- ▶ Immediately if it is determined by the General Manager that testing and repair are necessary to protect public health and the integrity of the sanitary sewer system.

In the event that testing would be required during the period from October 15 to April 15 or during such other periods when such work would be impractical due to weather conditions, the General Manager may defer such requirement upon posting of a performance bond with the District. The posting of the performance bond is intended to assure funds are available to repair

and replace the sanitary sewer facilities in question when weather conditions permit. The amount of the performance bond shall be based on the lineal footage of the building lateral, the number of cleanouts and other related appurtenances to be installed, as well as the removal and replacement of existing physical obstacles and structures affected by the test.

In place of a performance bond, the owner may choose to hold an equal amount of funds in an escrow account, if the property or business is being sold or transferred. Funds held in escrow will not be released without written notification by the District to the Title company holding such funds. In such case, the testing must be performed by the following June 15.

If a sanitary sewer facility fails any of the above described tests, the owner or their agent shall cause corrective work and retesting to be performed within 30 days from the date of the original test. All repairs shall be approved by the District.

Repairs or replacement of 50 percent or more of a sanitary sewer pipeline or force main may be cause for total pipeline replacement as determined by the District. In the case of total pipeline replacement, the pipeline shall be installed in accordance with the requirements of new pipeline installation as outlined in Division 7, Installation of Sanitary Sewer Facilities, page 27.

After a second failure of any sanitary sewer facility, the owner shall be charged an additional inspection fee for further inspections.

In the event that a sanitary sewer facility has not been tested within the required time period, the District shall initiate procedures for sewer disconnection.

### **10.05 Waiver of Testing Requirements**

The General Manager shall have the power to waive testing requirements if:

- (a) the sanitary sewer facility has been installed and tested within a prior 8 year period, or
- (b) the existing sanitary sewer facility was tested within a prior 5 year period and there is good reason to believe that such testing is not necessary, or
- (c) the sanitary sewer pipeline or force main is of such a length that testing is not practical, or
- (d) the sanitary sewer facilities are part of a central private sanitary sewer system as described in Shared Use Facilities, Section 10.06, page 57, and the District has an established written agreement concerning specific testing requirements.

Nothing herein shall constitute a warrant by the District of the soundness or ability of the sanitary sewer facility to accomplish its purpose or remain in compliance with the District Code.

## 10.06 Shared Use Facility

The District may choose to allow the owner or their agent of a ***Shared-Use Facility*** (common interest subdivisions, commercial shopping centers, mini malls, apartment complexes, condominium complexes, schools, office buildings, and hospitals, etc.) one of the following option agreements for the maintenance and testing of sanitary sewer facilities. The use of a Shared-Use Facility agreement for testing purposes is allowed by the District on a case-by-case basis. Qualification for use of such agreement is determined solely by the District and is based on the size, layout, and complexity of the sanitary sewer facilities serving the Shared-Use Facility. Any agreement must be in writing and acceptable to the District and the owner or their agent of the Shared-Use Facility.

**Option No. 1:** The owner or their agent of the Shared agrees to complete required testing, repair or replacement of ***all*** the sanitary sewer facilities servicing the Shared-Use Facility upon notification by the District that testing is required. Under this option, sales, leases, or changes in tenant/ownership of individual units or suites are allowed to proceed prior to testing and without approval from the District.

After 5 years from the latest test date, ***all*** the sanitary sewer facilities servicing the Shared-Use Facility shall be retested when any of the conditions outlined in Section 10.02, page 51 occur ***or*** Option No. 2 may be chosen and applied.

**Option No. 2:** The owner or their agent of the Shared-Use Facility agrees to complete required testing, repair or replacement of ***all*** the sanitary sewer facilities servicing the Shared-Use Facility upon notification by the District that testing is required, and will complete said testing over a 5 year period of time. The owner or their agent of the Shared-Use Facility shall be required to test a minimum of 20 percent of the total number of sanitary sewer facilities per year, beginning at the time of initial notification by the District that such testing is required. Under this option, sales, leases, or changes in tenant/ownership of individual units or suites are allowed to proceed without approval from the District *if the conditions of the agreement have been fully honored by the owner or their agent of the Shared-Use Facility.*

After 3 years from the latest test date associated with the 5 year testing period, 20 percent of the total number of sanitary sewer facilities servicing the Shared-Use Facility shall be retested when any of the conditions outlined in Section 10.02, page 51 occur, ***or*** Option No. 1 may be chosen and applied.

If the conditions of the Option No. 2 Shared-Use Facility Agreement have not been fully honored by the owner or their agent, the Shared-Use Facility shall be retested when any of the conditions outlined in Section 10.02, page 51 occurs within 8 years of the earliest test date associated with the unfulfilled Shared-Use Facility Agreement.

Testing or sanitary sewer facility replacement may be required at any time upon a determination of the General Manager for the protection of the public health, safety and welfare.

### **10.07 Cleaning Manholes**

When septic tank contents are dumped into a specified manhole under permission from the General Manager, it shall be discharged through a pipe or hose in such a manner that none of the contents shall be left adhering to the sides or shelf of the manhole.