Preinstallation Testing Instructions for Septic Tanks Factory-Equipped for Pressure-Testing

1. BEFORE TESTING THE TANK

Do not conduct preinstallation testing while the tank is on a trailer. Failure to follow this warning could result in death or serious injury.

1.1. Xerxes testable septic tanks are tested prior to shipment, but the tank may be retested at the site prior to installation in order to verify the absence of shipping and handling damage.

1.2. The tester is responsible for verifying that all of the test equipment is in good working condition, and is properly configured and calibrated.

1.3. Construct a test manifold with two air-supply gauges *as shown in FIGURE 1-1*. Each air-supply gauge must have a maximum full-scale reading of 15 psig with 1/4-lb. or 1/10-lb. increments, and a pressure-relief device set at 6 psig [4 psig for 12-foot-diameter tanks].



FIGURE 1-1

1.4. In air tests, temperature change could be a factor in changes in gauge readings.

1.5. If the tank has threaded fittings, it is the installer's responsibility to select a thread sealant that is compatible with the product being stored. Some sealants cannot be used with some products. Remove, clean and redope all factory-furnished temporary plugs with appropriate thread sealant. Install permanent plugs in all openings where piping will not be installed.

1.6. When checking the tank for leaks during an air/soap test, rotate the tank to check the bottom.

1.7. Before rotating the tank during an air/soap test, place protective material on the area on which the tank will be rotated. Make sure the area is flat and is free of large or sharp objects, such as rocks, which may damage the tank.

1.8. Rotate the tank slowly and carefully to avoid developing too much momentum. Momentum can grow because fittings on top of the tank make it top heavy. Make sure the tank's fittings and access

openings never touch the ground. Do not rotate the tank more than 120 degrees from the initial starting point.

WARNING

Always secure the tank before moving, rotating or lifting it. This is commonly done by connecting a crane or backhoe to the lifting lugs. Failure to do so could result in death or serious injury.

WARNING

While moving or lifting the tank, do not position any part of your body underneath the tank. This could result in death or serious injury.

WARNING

Do not lift or hoist a tank under pressure. This could result in death or serious injury.

1.9. If damage is detected, do not attempt repairs. Contact the UST coordinator at the Xerxes plant nearest you. Telephone and fax numbers are found on the back cover of this manual.

1.10. After installation and before backfilling to grade, testing may be repeated to verify that no damage has occurred during installation.

WARNING

When the tank is under pressure, the access openings and/or fittings may dislodge, or the tank could rupture and result in death or serious injury. Before beginning the test, notify all people on the test site to remain in a safe location. ALWAYS ATTEND TO THE TANK DURING THE TEST. Stand clear of access openings, fittings and tank ends during the test.

WARNING

The maximum test pressure is 5 psig [3 psig for 12-foot-diameter tanks]. Position the pressure gauge so that the pressure readings can be clearly read at all times. Failure to follow this warning could result in death or serious injury. (See FIGURE 1-2.)



FIGURE 1-2



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WARNING

The pressure-relief device or regulated air source must be rated at a maximum of 6 psig [4 psig for 12-foot-diameter tanks] to reduce the risk of overpressurizing the tank. Failure to follow this warning could result in death or serious injury.

2. TESTING THE TANK

2.1. Remove all temporary threaded fitting plugs.

2.2. Redope threaded fittings and install plugs in all threaded openings, except one service fitting (needed for the test manifold). *Follow instructions in Point 1.5.*

2.3. Install the test manifold in the NPT threaded coupling of the influent pipe. Use an NPT reducer bushing as necessary. Connect the pressure source to the test manifold. *See FIGURE 1-1 and FIG-URE 2-1*.





2.4. Pressurize the tank to 5 psig [3 psig for 12-foot-diameter tanks]. Allow the pressure to stabilize by adding or removing air as necessary.

2.5. Close the air-supply valve on the test manifold. Disconnect the air-supply line.

2.6. Soap the entire exterior of the tank, checking for leaks. (Follow instructions in Points 1.6. through 1.8., including Warnings following 1.8.) Watch for active air bubbles, which indicate a leak. Pay special attention to fittings and access openings.

2.7. Monitor the pressure for one hour.

2.8. When the test is complete, carefully release the air pressure from the tank by opening the air-supply valve.

2.9. When airflow stops, remove the test manifold.

3. AFTER TESTING THE TANK

3.1. To put the tank in service, both the caps and/or threaded coupling on each pipe end must be cut off. The domed cap inside the access riser may need to be cut out.

Note: The tank cannot be pressure-tested after the openings are cut. Therefore, complete all tests before cutting the openings.

3.2. If not needed, cut off the cap or threaded coupling from each pipe end so that service pipes can be added. Cut as close as possible to the pipe cap or threaded coupling. See FIGURE 2-1.

Note: The testable access riser cap is designed to allow the opening inside the testable access riser to have either an internal flange or no flange at all.

3.3. On the domed cap inside the **testable** access riser, mark a circle to signify the area that needs to be cut out. See FIGURE 3-1.



FIGURE 3-1

3.4. Drill a one-inch hole at the marked circle and insert the blade of an appropriate saw into the hole.

3.5. With the saw, cut out the domed cap of the testable access riser, leaving a minimum of 1/2 inch around the inside rim of the access riser (two inches for an internal flange).