

## **Leakage Testing Procedures**

### **Gravity Sewers**

1. All tests shall be conducted under the supervision of the engineer.
2. Sewers may be tested either hydrostatically using an infiltration or exfiltration test or with a low pressure air test
3. Leakage shall not exceed 100 gallons per mile of pipe per day per inch of nominal pipe diameter.
4. Calculations clearly indicating compliance are required. Low-pressure air tests must conform to NYSDEC pamphlet TIP 15 (4/19/89).

### **Force Mains**

1. All tests shall be conducted under the supervision of the engineer.
2. Pressure tests shall be made after completion of backfilling operations and at least 36 hours after any concrete thrust blocks have been cast.
3. The test must be hydrostatic. The allowable leakage shall be calculated using AWWA Standard C600.
4. Test pressure shall be at least 50 psi or 1 ½ times the maximum system operating pressure, whichever is greater.
5. The duration of the test will be two (2) hours.

### **Manholes**

Both vacuum testing and hydrostatic testing are acceptable. If a manhole fails a vacuum test, after repair it must be tested hydrostatically. Vacuum testing must conform to NYSDEC TIP 15 (4/19/89).

### **References**

All testing shall be performed in accordance with NYSDEC Technical Information Pamphlet No. 15 dated April 19, 1989. ASTM C-828 for clay pipe, ASTM C-924 for concrete pipe, ASTM F-1417 for plastic pipe.