San Antonio Water System

Revised Oct. 06

BACKFLOW PROTECTION FOR WATER HAULING EQUIPMENT AND/OR MIXING TANKS

1. PURPOSE

The following information is provided in the interest of protecting the potable water system from actual or potential contamination through cross connections and backflow situations. A cross-connection is any connection between the potable water supply and another water supply of unknown quality or any source, which may contain contaminating or polluting substances. All water hauling equipment and/or potable water mixing tanks using water from fire hydrants or any other type outlet must use one of the backflow prevention methods described herein to adequately protect the potable water system.

2. GENERAL REQUIREMENTS

a. The customer must contact the San Antonio Water System's Backflow Prevention section of the Pipeline Inspections Department at (210) 233-3332 prior to water usage to request an inspection of the on-site or vehicular backflow protection installed. Requests made between 8:00 am and 11:00 am, should normally result in same day inspections, otherwise the inspections will be made the following business day, consistent with operational requirements.

b. Customers electing to permanently install an air gap separation on water transporting vehicle(s) must have the air gap separation inspected and approved by the Inspections Division.

c. Customers electing to install a reduced pressure principle backflow assembly will be required to have the assembly tested by a Licensed backflow prevention assembly tester upon installation and minimum of annually thereafter.

3. BACKFLOW PREVENTION METHODS

The customer shall provide one of the approved methods for backflow protection described below and as further illustrated in the attached drawings marked as figures A through D. The customer shall also consult the San Antonio Water System list of approved assemblies and installation guidelines.

a. Air gap separation provided by a metallic pipe permanently installed on the water transporting vehicle which will serve as a fill line and also include a hose connection to the potable water outlet. Note figure A.

b. Air gap separation installed on the outlet side of the fire hydrant meter. Note figure B.

c. Reduced Pressure Principle (R/P) backflow prevention assembly installed at the fire hydrant meter. Note figure C.

d. Reduced Pressure Principle (R/P) backflow prevention assembly permanently installed on the water-transporting vehicle. Note figure D.

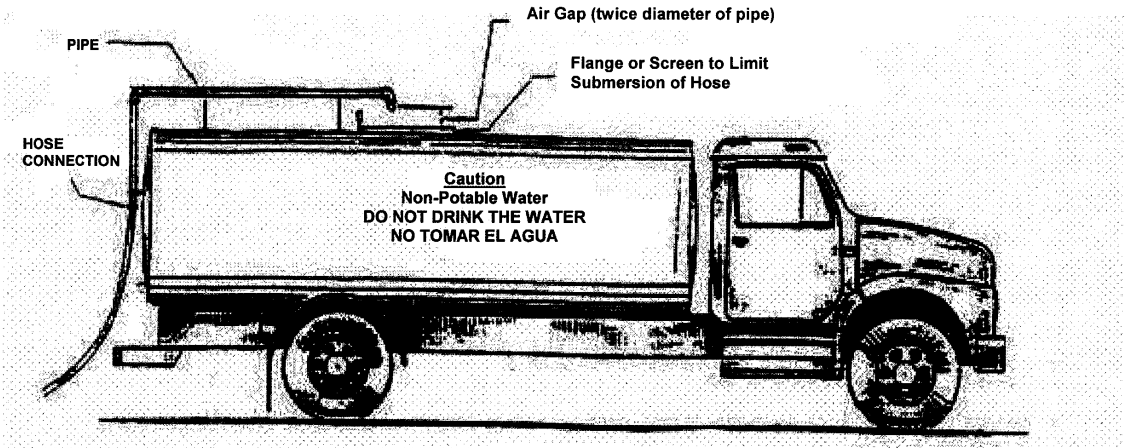


Figure A

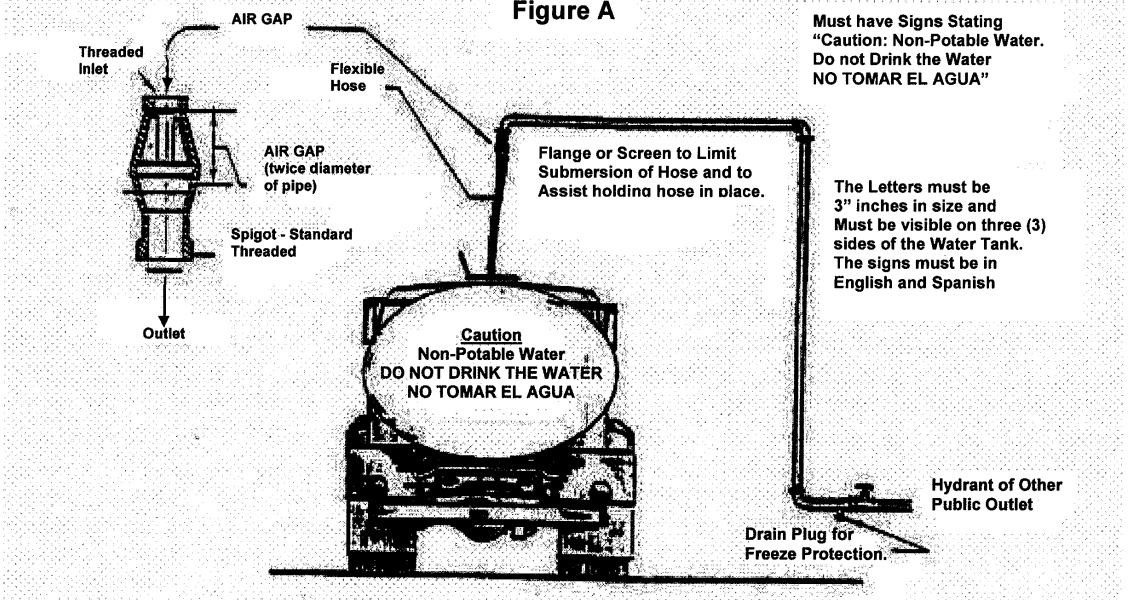
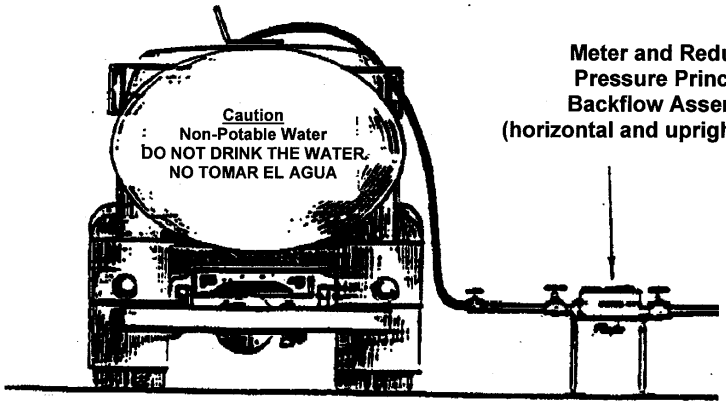


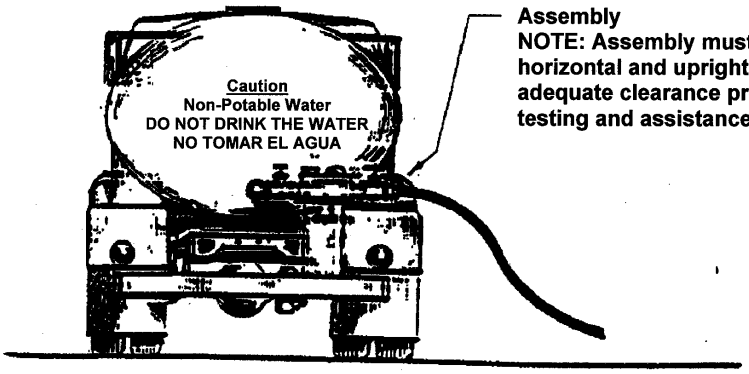
Figure B



Meter and Reduced Pressure Principle Backflow Assembly (horizontal and upright position)

Hydrant or Other Public Water Outlet
Note: Fire Hydrant Meter will not support backflow assembly – RIGID SUPPORT MUST BE PROVIDED

Figure C



Reduced Pressure Principle Backflow Assembly
NOTE: Assembly must be installed in horizontal and upright position with adequate clearance provided for testing and assistance.

Figure D

Backflow Prevention Method-Reduced Pressure Principle Assembly

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

RECYCLE WATER
12" X 10" METER AND
DOUBLE CHECK VALVE
BACKFLOW PREVENTER

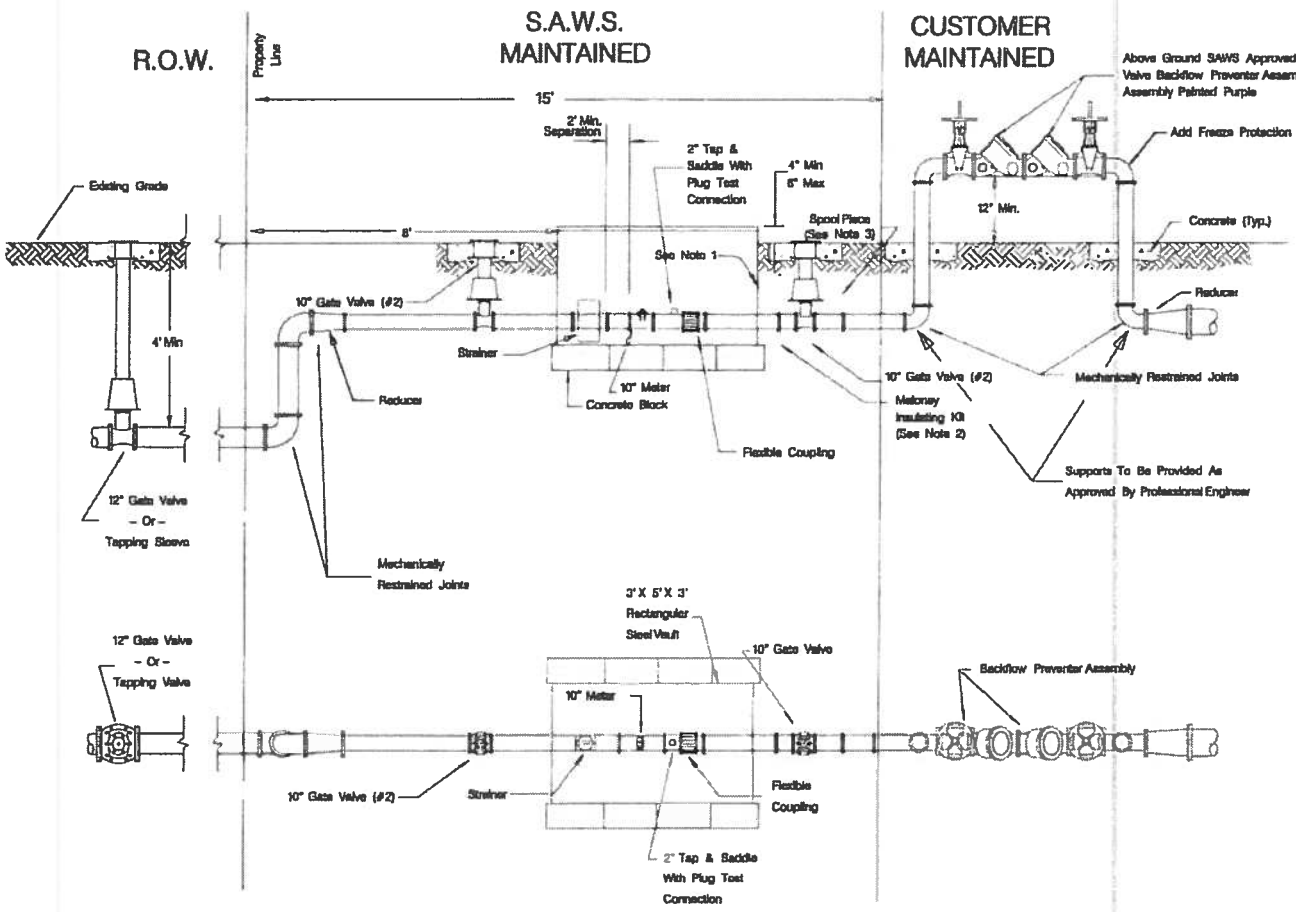
APPROVED
March 2008

REVISED

DD-110-01

SHEET 1 OF 1

12" pipe, 10" meter
TRAFFIC AREA



NOTE 1: NON-DEGRADABLE COVER OVER OPENING REQUIRED TO PREVENT BACKFILL FROM ENTERING VAULT

NOTE 2: REQUIRED WHEN UTILIZING DISSIMILAR METALS

NOTE 3: MINIMUM LENGTH OF SPOOL PIECE IS AS FOLLOWS:

GATE VALVE SIZE (#2), IN.	SPOOL LENGTH, IN.
3	8
4	8
6	12
8	15
10	18

NOTE 4: VALVES OPEN LEFT

NOTE 5: VALVES CAPS SQUARE