WAC 173-219-310 Cross-Connection Control-King County Suggested Edits

(1.)   Applicability, purpose, and responsibility. Reclaimed water generators, distributors, users and potable water systems must take action to prevent cross-connections.

(a) The purpose of cross-connection control for reclaimed water must be to protect potable water systems, as defined in WAC 246-290-020, from contamination via cross-connections; and to protect reclaimed water systems from contamination via cross-connections with lower quality water.

(2)   Protecting potable water supplies from cross connections with reclaimed water.

(a) The local potable water purveyor is responsible for protecting the potable water distribution system from cross connections.

(b) Reclaimed water distributors must provide the local water purveyor written notification prior to providing reclaimed water service to any property within the potable water service area to ensure compliance with the Drinking Water Rules (WAC 246-290-490).

 (c) Reclaimed water generators and distributors must not provide service to any user before the user has installed the correct backflow preventer on the potable supply line, and the potable water supplier verifies it.

(d) Generators must notify their potable water purveyor of the proposed and ongoing reclaimed water treatment activity and facility location.

(e) Under the provisions of this section, reclaimed water generators and distributors are not responsible for eliminating or controlling cross-connections on the end-users property.

(f) Delineation of responsibility between potable water systems and reclaimed water generators and distributors on cross-connection at reclaimed water generation and distribution facilities shall be documented and included in the engineering plan and operations and maintenance manual.

(3) Protecting reclaimed water from lower water quality at reclaimed water generation and distribution facilities.

(a) The generator and distributor must protect reclaimed water from lower water quality via cross-connection control, starting in the generation facility, including all treatment storage, distribution facilities and ending at the point of delivery to the users' reclaimed water meter or other location on a use area property where responsibility of reclaimed water distribution is transferred to the user.

(b) Reclaimed water distributors must ensure that good engineering practices are used in the development and implementation of cross-connection control programs. Publications and

references, such as, but not limited to those listed below, may be used as guidance for cross-connection program development and implementation:

(i.)   Manual of Cross-Connection Control published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC Manual); or

(ii.)   Criteria for Sewage Works Design published by the Washington State Department of Ecology,

(iii.)   Cross-Connection Control Manual, Accepted Procedure and Practice published by the Pacific Northwest Section of the American Water Works Association (PNWS-AWWA Manual).

(d) Ensure that cross-connections between reclaimed water and lower quality water are eliminated, or controlled by the installation of approved backflow prevention assemblies at reclaimed water generation facilities and distribution system.

(e) Ensure the appropriate method of backflow prevention to eliminate or control cross-connections in the reclaimed water generation facility and distribution system.

(f) Take appropriate corrective action if a cross-connection or potential cross-connection exists that is not controlled by installation of an approved backflow prevent assembly. Correction action may include, but is not limited to:

(i) Diverting potentially contaminated reclaimed water or taking other action to prevent it from leaving the reclaimed water facility and entering the distribution system until the hazard is controlled or eliminated.

(ii) Denying or discontinuing reclaimed water service to a user's property until the cross-connection hazard is eliminated or controlled.

(iii) Requiring the user to install, repair, or replace an approved backflow prevent assembly for premises isolation of the reclaimed water system.

(g) Prohibit the intentional return of used water to the distribution system. Such water includes reclaimed water used for any purpose within the users' property.

(h) If the reclaimed water use on a property poses a high likelihood of contaminating the reclaimed water system, the reclaimed water distributor must ensure installation of an approved backflow prevention assembly at the meter or property line.

(i) Reclaimed water distributors may require backflow preventers to be installed at the meter or property line for properties with characteristics such as, but not limited to, the following:

(i.)   Complex piping arrangements or piping subject to frequent changes that make it impracticable to assess whether cross-connections exist;

(ii.)   A repeated history of cross-connections being established or reestablished; or

(iii.)   Cross-connections that are unavoidable or not correctable.

(4.)   Approved backflow preventer installation.

(a.)   The reclaimed water distributor must ensure that approved backflow preventers are installed in the orientation for which they are approved.

(b.)   The reclaimed water distributor must ensure that approved backflow preventers are installed in a manner that:

(i.)   Facilitates their proper operation, maintenance, inspection, and/or in-line testing using standard in-stallation procedures;

(ii.)   Ensures that the assembly will not become submerged due to weather-related conditions such as flooding; and

(iii.)   Ensures compliance with all applicable safety regulations.

(c.)   The reclaimed water distributor must ensure that bypass piping installed around any approved backflow preventer is equipped with an approved backflow preventer that affords at least the same level of protection as the approved backflow preventer that is being bypassed.

(5.)   Approved backflow preventer inspection and testing.

(a.)   The reclaimed water distributor must ensure that inspections and/or tests of approved air gaps and ap-proved backflow assemblies relied upon to protect the reclaimed water system are conducted:

(i.)   At the time of installation;

(ii.)   Annually after installation, or more frequently, if required by the reclaimed water distributor for connections serving premises or systems that pose a high health cross-connection hazard or for assemblies that repeatedly fail;

(iii.)   After a backflow incident; and

(iv.)   After an assembly is repaired, reinstalled, or relocated or an air gap is replumbed.

(b.)   The reclaimed water distributor must ensure that approved backflow prevention assemblies relied upon to protect the reclaimed water system are tested using procedures acceptable to Health.

(6.)   Recordkeeping and reporting.

(a.)   Reclaimed water distributors must keep cross-connection control records for the following timeframes:

(b.)   Records pertaining to the master list of reclaimed water users must be kept as long as reclaimed water is provided to the property;

(vi.)   Records regarding inventory information must be kept for five years or for the life of the approved backflow preventer whichever is shorter; and

(vii.)   Records regarding backflow incidents and annual summary reports must be kept for five years.

(b.)   Reclaimed water distributors may maintain records or data in any media, such as paper, film, or electronic format.

(c.)   The reclaimed water distributor must complete the cross-connection control program summary report and make all records and reports available to Health and Ecology or their representative upon request.

(d.)   The reclaimed water distributor must notify the lead agency, potable water purveyor, and local health jurisdiction as soon as possible, but no later than the end of the next business day, when a backflow incident is known by the reclaimed water distributor to have contaminated the reclaimed water system or the potable water system.