TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

WSD PROGRAM STAFF GUIDANCE

EXCEPTION CRITERIA FOR PRESSURE MAINTENANCE FACILITIES - INDUSTRIAL APPLICATIONS

Rules Affected: 30 TAC §290.45(d)(2)(A)(ii), §290.45(d)(2)(B)(v), and §290.45(d)(3)(F)

Background:

In applying for an exception to the minimum pressure maintenance capacity requirements for a public water system, the system must provide equal or greater protection of the public health than meeting the minimum requirements would provide (30 TAC §290.39(l)). For the purpose of this document, "Industrial Applications" refers to those systems classified as non-transient, non-community systems as defined in 30 TAC §290.38(51). Per 30 TAC §290.45(d), all non-transient, non-community systems providing groundwater, surface water, or groundwater under the influence of surface water must have a pressure tank of 220 gallons or greater. In the case of pressure capacity requirements, non-community systems are treated differently than community systems due to their ability to discontinue service in the event of pressure maintenance issues. The purpose of this Staff Guidance Document is to provide assistance to TCEQ staff evaluating exception requests to these requirements.

Guidance:

Exception requests to 30 TAC §290.45, Minimum Water System Capacity Requirements, for noncommunity public water systems must be made in writing by the public water system or its representative to the Plan and Technical Review Section. Staff will review the request and develop a written response. A request for an exception to the minimum capacity requirements for pressure maintenance facilities at an industrial facility must include:

1. A water system test conducted under the supervision of a knowledgeable certified operator or engineer, which includes:
   a. Identification of the critical points in the distribution system with respect to the distance and elevation difference from the source of supply. The system must place a pressure recorder at these points and record the pressure drops during the course of the system test. Normal operating pressures must not be below 35 pounds per square inch (psi) at any time during the test. Pressure drops associated with operating pressures above 60 psi should be carefully evaluated for the potential for back-siphonage. Operating pressures must not be below 20 psi at any time during the test.
   b. The system must run various tests to show the pressure drop, if any, at the critical distribution system points selected. The test must include recording the pressures during: change over from one pump to another; addition of pumps; change over to auxiliary power or an additional power source; or any other method proposed for maintaining pressure during an emergency or loss of normal pressure. All lag times during changeovers must be recorded and correlated with the pressure changes recorded in the distribution.

c. The water system must be aware that the testing being conducted may compromise the integrity of the water distribution system. Measures must be in place to address any adverse effects during the planning for the pressure test.
d. The TCEQ may require that a professional engineer certify that the tests conducted indicate no adverse effects on the water system integrity.

2. The system must have a proactive cross-connection control program with at least one person trained in a TCEQ-approved 10-hour customer service inspector course.
3. The system must have a certified water operator on call at all times the plant is in operation. In addition, the system must be equipped with an automatic alarm to alert the operator in the event that a sudden pressure loss is experienced

Finalized and Approved by:

Ada Lichaa

Ada Lichaa P.G., Manager, 6/12/2013

If no formal expiration date has been established for this staff guidance, it will remain in effect until superseded or canceled.

Revision History:

Date	**Action**	**Action by**
4/1/2004	Approved	Buck Henderson
6/10/2013	Revised	Katherine Quinlan/ Kenneth Dykes
6/12/2013	Approved	Ada Lichaa