REQUESTING AN EXCEPTION
FOR BLENDING CHLORAMINATED AND CHLORINATED WATERS:

Until July 30, 2015, each public water system (PWS or system) using chloramines needed an exception. With the rule change effective July 30, 2015, **only systems that blend chloraminated and chlorinated water or use both free chlorine and chloramines as disinfectants in the distribution system are required to have an exception**. The monitoring, operation, notification, design, calibration, and record-keeping requirements for each PWS with a chloramine residual are included in the rules. An exception will need to be requested on behalf of each PWS to use chloramines in their system, as 30 TAC §290.42(e)(3)(G) states, **"if water containing chloramines and water containing free chlorine are blended**. " An exception may be requested by providing the following information to:

Technical Review and Oversight Team (MC 159)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Please provide the applicable information identified below for the design in which your system operates:

1. **Chloraminated and chlorinated water in the distribution system:** Mixing chlorinated and chloraminated water is not recommended. When the stream of water with free chlorine meets the stream of water with chloramines, the ratio of chlorine, ammonia, and monochloramine changes in an uncontrolled manner. If the system blends chloraminated and chlorinated water, they must request an exception and provide the following:
   a. ***Manage Controlled Blending:*** For this option, a PWS must develop a method that will ensure chlorine residuals will remain acceptable in a blended distribution system by injecting the appropriate amount of chlorine in one set of water sources to combine with free ammonia present in the chloraminated water. If the PWS wishes to pursue this option, they must provide the following information:
      - Documentation showing how the areas of blending were determined.
      - Documentation showing how the areas of blending will be determined during actual operations. As demands change this area can also change; therefore, the PWS must demonstrate where the blending area is during purchased water usage.
      - Documentation of the sampling type and frequency that the PWS will perform to ensure adequate chlorine/chloramine residuals.
      - Documentation of the sample type and frequency that the PWS will perform to ensure monochloramine, not di- nor tri-chloramine is being formed.
      - Documentation of the sample type and frequency that the PWS will perform to ensure nitrification is not present in the blending area.

- Documentation of the corrective actions to be taken if the sampling shows inadequate disinfectant residuals, taste and odor issues, bacteriological sample issues, or potential nitrification.

b. ***Physically isolate areas of the distribution with free chlorine from areas with chloramines.*** A PWS can eliminate blending in the distribution system by physically isolating the chlorinated and chloraminated water. Provide a schematic or drawing of the water treatment systems showing how the treatment systems will be divided. The PWS should indicate which area(s) will be disinfected by free chlorine and which area(s) will be disinfected by chloramines.

2. Blending chloraminated and chlorinated water in a tank: Mixing chlorinated and chloraminated water is not recommended. When the stream of water with free chlorine meets the stream of water with chloramines, the ratio of chlorine, ammonia, and monochloramine changes in an uncontrolled manner. If the system must blend chloraminated and chlorinated water in the tank, they must request an exception and provide the following:

a. ***Ensure Chloramine Formation after Mixing the Sources in the Tank:*** For this option, a PWS must develop a method that will ensure that chlorine residuals will remain acceptable in treated water leaving the tank by injecting the appropriate amount of chlorine and ammonia at all times. If the PWS wishes to pursue this option, they must provide the following information:

- Documentation showing that the tank is completely mixed.
- Documentation of the free chlorine, total chlorine, free ammonia, and monochloramine sampling locations and frequency that the PWS will perform to know the appropriate amount of chlorine and ammonia dose.
- Documentation of the calculations used to determine the dose of chlorine and ammonia to apply.
- Documentation of the sample type and frequency that the PWS will perform to ensure monochloramine--not di- nor tri-chloramine—is being formed.
- Documentation of the corrective actions to be taken if the sampling shows inadequate disinfectant residuals, taste and odor issues, bacteriological sample issues, or potential nitrification. This should be a part of the Nitrification Action Plan (NAP) required by 290.46(z).