**FACILITY NAME RISK AND RESILIENCe ASSESSMENT**

**\*\*THIS DOCUMENT IS EXEMPT FROM FOIA\*\***

**\*\*DO NOT SHARE UNDER FOIA OR ANY OTHER REQUEST\*\***

5 ILCS 140/7 (From Ch. 116, par. 207)

 Sec. 7. Exemptions.

1. When a request is made to inspect or copy a public record that contains information that is exempt from disclosure under this Section, but also contains information that is not exempt from disclosure, the public body may elect to redact the information that is exempt. The public body shall make the remaining information available for inspection and copying. Subject to this requirement, the following shall be exempt from inspection and copying:

(v) Vulnerability assessments, security measures, and response policies or plans that are designed to identify, prevent, or respond to potential attacks upon a community's population or systems, facilities, or installations, the destruction or contamination of which would constitute a clear and present danger to the health or safety of the community, but only to the extent that disclosure could reasonably be expected to jeopardize the effectiveness of the measures or the safety of the personnel who implement them or the public. Information exempt under this item may include such things as details pertaining to the mobilization or deployment of personnel or equipment, to the operation of communication systems or protocols, or to tactical operations.

(w) (Blank).

(x) Maps and other records regarding the location or security of generation, transmission, distribution, storage, gathering, treatment, or switching facilities owned by a utility, by a power generator, or by the Illinois Power Agency.

**PURPOSE**

The purpose of this Risk and Resilience Assessment (RRA) is to fulfill the requirements of Section 2013 of the America's Water Infrastructure Act (AWIA). AWIA requires water systems serving more than 3,300 people to develop, or update, risk and resiliency assessments (RRA) and emergency response plans (ERPs). It further establishes components that the RRAs and ERPs must address and creates deadlines by which water systems must certify to the United States (US) Environmental Protection Agency (EPA) completion of the RRA and ERP.

**INTRODUCTION**

To aid in continuing the water system’s mission of providingsafe water of adequate quantity to meet the needs of our customers, this RRA contains the required six elements outlined in the AWIA. Specifically, this plan contains:

* Risk to the system from malevolent acts and natural hazards;
* The financial infrastructure of the system;
* Resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
* The monitoring practices of the system;
* The use, storage, or handling of various chemicals by the system; and
* the operation and maintenance of the system.

To accomplish this planning and documentation process, the attributes of the water supply have been systematically analyzed leading to the development of a comprehensive assessment.

**SYSTEM INFORMATION**

**Water System ID:**
**Water System Name:**
**County Served:**
**Population Served:**
**Address:**
**City State Zip:**
**Phone:**
**Fax:**
**Email:**

**PRIMARY EMERGENCY CONTACT INFORMATION**

**Contact Name:**
**Contact Title:**
**Daytime Phone:**
**Cell Phone:**
**Email:**

**SECONDARY EMERGENCY CONTACT INFORMATION**

**Contact Name:**
**Contact Title:**
**Daytime Phone:**
**Cell Phone:**
**Email:**

**RISK TO SYSTEM ASSETS AND POTENTIAL FINANCIAL IMPACT**

CWS staff have developed the following risk assessment of the assets of the system including relevant financial information. The following table summarizes this information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **State and Local ID** | **Description/Location** | **Insurance Value** | **List All Identified \***  | **Relative Priority High/Medium/Low** |
| *(List all sources of water* |  |  |  |  |
|  |  |  |  |  |
| *(Indicate Treatment plant with appropriate level of specificity)* |  |  |  |  |
|  |  |  |  |  |
| (Indicate storage and distribution system components to the appropriate level of specificity) |  |  |  |  |
| (Indicate backup generator(s)) |  |  |  |  |
|  |  |  |  |  |

**\*e.g. Malevolent Act, Flood, Tornado, Earth Quake, etc.**

**Resilience of assets**

To aid in the development of emergency planning documents, CWS staff evaluated the preceding assets to determine the systems ability to prevent or respond to damage that could inhibit or prevent the provision of adequate quantities of potable water to customers of the system.

Prior to the evaluation of specific asset resilience, the water supply noted the following general precautions that aid in the security of staff and equipment:

* Per Illinois Law (Public Water Supply Operations Act, 415 ILCS 45), water supply operators must be license and receive continuing education to renew their license. Further, to receive a license, the individual cannot have a civil or criminal record that might indicate that he or she might pose a risk to the provision of safe water.
* Access to critical components of the water supply is restricted to operational staff and access to the critical components (e.g., wells, water treatment plant and storage tanks) is controlled by various means.
* Operational staff control locked portions of the system including wells, water treatment plant and storage facilities. Access to keys for the system is restricted by the water superintendent. When staff leave the employment of the water system, they must return keys to eliminate their access to the components of the water supply.
* Water supply operational staff inspect critical components of the water system on a daily basis and often more frequently. The local police department is familiar with the water system and operational staff.
* Operational staff maintain the grounds surrounding critical components of the system and can react to security vulnerabilities. Staff have been advised to report security vulnerabilities to the responsible operator in charge and to report potential security breaches to the local police department.
* Wells are maintained in accordance with state regulation (35 Il Adm Code) including, but not limited to, sanitary seals, vents, screens and source water monitoring (e.g., monthly bacteria monitoring).
* Water system staff, with assistance of local fire department staff, control the use of hydrants and valves.
* The water system has an Illinois EPA cross-connection control program and completes a triennial survey of its distribution system.
* In compliance with 35 Il Adm Code, the water supply distribution system maintains a minimum pressure of 20 psi. If pressure drops below 20 psi for any reason, immediate emergency procedures are instituted including issuance of a boil order.
* Security sensitive records including, but not limited to, Emergency Response Planning documents, maps and plans of the distribution system, and statutorily required reports are maintained in a secure location. Generally, this information is secured at the water plant or city hall. Employees follow Freedom of Information Act requirements and consult corporate council as necessary.

The following table provides an evaluation of the existing and needed enhancement to the resilience of the specific assets of the water system:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **State and Local ID** | **Existing Security Countermeasures** | **Existing protection against Natural Disasters** | **High Priority Countermeasure/ Disaster Protection Enhancements\*** | **Moderate Priority Countermeasure/ Disaster Protection Enhancements\*\*** |
| *(List all sources of water* | *(e.g., fencing, locks, cameras, lighting, warning signs, motion sensors, alarms)* | *(e.g., berms, levees, redundancy, generators, etc.)* | *(e.g., Install locks on the water plant door.)* | *(e.g., construction of a levee)* |
|  |  |  |  |  |
| *(Indicate Treatment plant with appropriate level of specificity)* | *(e.g., SCADA/Computer systems are password protected, critical information is not available through the WWW)* | *(e.g., water treatment plant can be bypassed and water piped directly to distribution system.)* |  |  |
|  |  |  |  |  |
| (Indicate storage and distribution system components to the appropriate level of specificity) |  | *(e.g., distribution system has redundant elevated storage tanks)* |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**\*High priority countermeasures/protection need to be acted upon regardless of cost considerations.**

**\*\*Moderate priority countermeasures/protection need to be acted upon as funds become available.**

**Monitoring Practices**

In evaluating the potential risk of pathogens or chemical contaminant to the CWS, the staff recognizes the importance of routine monitoring to detect the possibility of contamination of source water, treatment chemicals/process or the distribution system. The importance of monitoring water quality is demonstrated by the fact that a Community Water Supply (CWS) in Illinois must comply with the Illinois Environmental Protection Act (415 ILCS 5) and regulations found in 35 Il Adm Code. These state laws and regulations are generally more stringent (they must be at least as stringent) than the federal Safe Drinking Water Act (40 CFR).

The monitoring for contaminants of concern make up a substantial portion of the regulations passed from the federal level, to the state level and on to CWSs. In fact, the U.S. Environmental Protection Agency (EPA) has established protective drinking water standards for more than 90 contaminants, including drinking water regulations issued since the 1996 amendments to the Safe Drinking Water Act that strengthen public health protection.

Specifically, the Illinois EPA enforces the drinking water standards that include monitoring requirements found in 35 Il Adm Code Part 611 (Primary Drinking Water Standards) for treated water and 35 Il Adm Code Part 620 for groundwater. To ensure that water systems properly monitor for various contaminants, the Illinois EPA routinely issues sample demand letters, establishes special exception permits (see 35 IL Adm Code Part 604) and posts monitoring schedules on their Drinking Water Watch Website (<http://water.epa.state.il.us/dww/>).

At the current time, the FACILITY NAME complies with Illinois drinking water monitoring requirements.

Further, during an emergency, water supply staff will monitor the situation through treatment plant and distribution system controls (e.g., process control testing, chemical usage, tower elevations, system pressures and disinfectant residuals will give an indication of the status of the safety and capacity of the water system). The water system maintains adequate testing equipment to evaluate these areas of concern and the safety of the water supply. Upon resolution of the emergency condition and repair to the affected asset(s), the responsible operator in charge will conduct an evaluation of the water system. Should water quality monitoring be necessary, the operational staff will coordinate with the Illinois EPA and County Health Department as well as its contractual laboratory to ensure the safety of the water.

**Chemical Use, Storage and Handling**

Chemical use, storage and handling is also regulated by the Illinois EPA under 35 IL Adm Code. At the current time, the FACILITY NAME complies with Illinois regulations governing use, storage and handling of chemicals under this regulation. Specifically, all chemicals are stored in a secure location and are properly isolated. Additionally, chemical usage is evaluated on an ongoing basis by the Illinois EPA through monthly operational reporting as required by 35 IL Adm Code Part 604. Should it be necessary to employ a “new” chemicals or modify chemical addition practices, the Illinois EPA requires that a licensed professional engineer obtain a construction permit and subsequent operating permit for NSF 60 certified chemical per 35 IL Adm Code Part 602.

With respect to additional chemical handling practices, chemical deliveries are made in the presence of operational staff and controlled accordingly. Further, chemical suppliers have a longstanding relationship with the CWS and understand operational procedures. Material Safety Data Sheets (MSDS) are maintained in the water treatment plant for all hazardous chemicals and operational staff are afforded proper personal protective equipment (PPE) for their safety. Finally, the Illinois Department of Labor routinely inspects the CWS to ensure worker safety concerns are addressed.

**Operation/Maintenance of the System**

The operation and maintenance of CWSs is regulated by the Illinois EPA under 35 IL Adm Code. Routine inspections of the water system are made by the Illinois EPA to confirm compliance with 35 IL Adm Code Part 604. The most recent inspection report is maintained at the water treatment plant/city hall. This report identified points of concern with respect to compliance with the regulations as well as recommendations to enhance the design, operation and maintenance of the water system.

At the time of the last inspection (and subsequent follow-up action by the water system), the FACILITY NAME has taken all necessary action to comply with Illinois regulations governing the design, operation and maintenance of the CWS. (Note: the Illinois EPA has confirmed that the inspections conducted by their staff conform to the guidelines for Sanitary Surveys. Illinois EPA’s primary enforcement authority is routinely reviewed by the U.S. EPA Region 5 for conformity with Safe Drinking Water Act requirements.)

To further ensure the safety of the water system, the water supply provides annual consumer confidence reports to its customers, triennial cross-connection control surveys, flushing notice and other periodic educational materials through news media and direct mailings. Through these materials, customers should be aware where their water originates, how it is treated and its expected quality.

This customer education should provide a sound platform for the additional surveillance of water quality changes in the distribution system. Customer concerns in this regard are investigated immediately. When necessary, operational staff contact the Illinois EPA, Illinois Rural Water Association, consulting engineers, and other technical service providers in addressing these consumer concerns. In the event that a contaminant of concern is discovered, operational staff immediately coordinate with Illinois EPA to ensure that State regulations are followed in the event that public notification of contamination or suspected contamination of the water has occurred. (Note: the regulatory requirement are identified in 35 Il Adm Code Part 611 and the Illinois Sample Collector Handbook, <https://www2.illinois.gov/epa/topics/compliance-enforcement/drinking-water/Pages/sample-collectors-handbook.aspx>)

in the event of an emergency, the water system has identified the following critical customers. These customers will be afforded special attention should a water quality or water quantity emergency occur.

**Critical Customer Inventory**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Customer** | **Contact Name** | **Location** | **Customer Type** | **Phone Number(s)** | **Relative Priority High/Medium** |
|  |  |  | **Hospital** |  |  |
|  |  |  |  |  |  |
|  |  |  | **School** |  |  |
|  |  |  |  |  |  |
|  |  |  | **Nursing Home** |  |  |
|  |  |  |  |  |  |
|  |  |  | **Food Processing** |  |  |
|  |  |  |  |  |  |
|  |  |  | **Health Care** |  |  |