

# City of Greeley Water & Sewer



## What it Means To Me

frequently asked questions

# New Regulatory Requirements

The City of Greeley, like other municipalities across the country, faces a growing number of environmental regulatory obligations. Two new regulatory programs, one under the Safe Drinking Water Act and one under the Clean Air Act will take effect in 1999. One or both programs will apply to the City's drinking water and wastewater operations, and will gen-

erally result in increased information available to the public. Over the next few months, Greeley will continue to develop and implement procedures to comply with these programs. In conjunction with this process, the City's Water and Sewer Department will attempt to educate its customers and neighbors about the new regulatory requirements.

## Clean Air Act

Congress extensively amended the Clean Air Act (CAA) in 1990, creating many new programs. One such program, created by CAA Section 112, is intended to prevent the accidental release of certain chemicals. This section of the Act requires the United States Environmental Protection Agency ("EPA") to create regulations designed to prevent and detect accidental chemical releases, and to minimize adverse consequences should such releases occur.

EPA published its final regulations in June 1996. The regulations require all entities (private businesses, institutions, governments) that handle more than a threshold quantity of a regulated chemical to create and implement a Risk Management Program ("RMP"). A majority of the RMP will consist of documentation and procedures to be used internally by each regulated entity. Certain information related to such programs will be made public.

## Why Is Greeley Subject To CAA Section 112



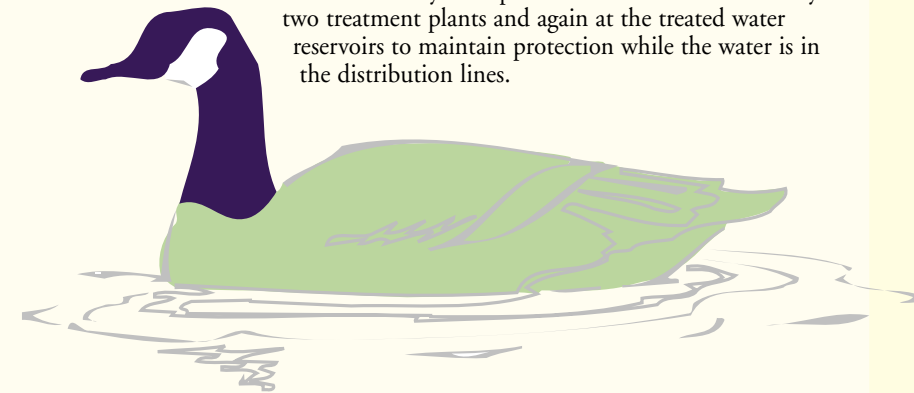
Greeley is subject to CAA Section 112 RMP requirements because it has chlorine above the threshold level (2,500 pounds) at three of its drinking water facilities and at its sewage treatment facility. The City must create and implement an RMP for each facility.

## Why Does Greeley Use Chlorine



Proper drinking water and wastewater treatment are essential services for every community. Chlorine plays an integral role in helping Greeley provide these services. The City uses chlorine at its wastewater treatment plant to eliminate harmful microorganisms prior to discharging treated water into the Cache la Poudre River. (The chlorine is actually added during the latter stages of the treatment process and then removed prior to final discharge into the Cache la Poudre so that it will not adversely affect plant and animal life in the River.)

The City uses chlorine in its drinking water facilities to eliminate harmful microorganisms before the water is sent to your tap. Chlorine is added at the City's two treatment plants and again at the treated water reservoirs to maintain protection while the water is in the distribution lines.



## How Safe Is Chlorine



The chlorine used by the City is stored in liquid form in special pressurized containers. The containers are pressure tested periodically to ensure their integrity. Greeley has used chlorine at its treatment facilities for decades and has never experienced a serious accident. Chlorine is, however, a potentially dangerous substance and must be handled carefully.

## Are There Alternatives To Chlorine



Alternative technologies may some day allow Greeley to reduce or eliminate the use of chlorine in its treatment processes. Currently, however, the City has determined that chlorine is the most cost effective way to ensure proper treatment of its drinking water and wastewater. Moreover, chlorine has been used for decades to disinfect drinking water and wastewater, and is safe when handled properly. The City will continue to monitor treatment alternatives to evaluate their effectiveness and overall potential for application in Greeley's treatment processes.

## How Will The New Regulations Affect Me



*As a practical matter*, the new regulations will have no noticeable effect on our customers or our neighbors, except that certain information about Greeley's facilities will be made available to the public. As explained above, the City has utilized safe chlorine handling practices for years. The regulations will largely require the City to formalize and document its practices. The regulations will not cause an increase in water or sewer rates.

## What Do The Regulations Require



*In a nutshell*, a facility must develop and implement a comprehensive RMP that will, among other things, outline how the facility will manage covered substances (in our case, chlorine) and how it will minimize the potential to release such substances into the surrounding community. The Rule requires a facility to develop "worst-case" and "alternative" release scenarios for purposes of community emergency planning; a five-year history of certain accidental chemical releases; a prevention program to manage risk (accident prevention); an emergency response program that is coordinated with local emergency responders; and an overall management plan to implement the program. When this process is complete, the facility must submit an Executive Summary and certain data elements of the Program to EPA and local emergency responders. The facility must update its RMP every five years, or whenever it changes or adds a process.

### Tell Me More About

## The Worst-Case & Alternative Release Scenarios

*In developing an RMP*, a facility must complete a "worst-case" release scenario based on a computer model. The assumptions of this model are defined by the regulation and are very conservative. (For instance, the model assumes the almost instantaneous release of the entire contents of the largest container of a regulated substance, that all active safety systems will fail, and the existence of very light winds that result in slow dispersal of the substance.) Applying the regulatory assumptions, a facility will identify a surrounding zone (a circle around the facility) that will be accounted for by local emergency planners.

The alternative release scenario is supposed to represent an event that is more likely to occur than the worst-case scenario. While the model that helps to define such a scenario also uses conservative assumptions, the facility may assume that active safety systems function properly. The alternative scenario will also identify a zone surrounding the facility for consideration by local emergency planners.

It is important to understand the context of such release scenarios because the results, if not properly understood, could cause undue alarm in surrounding communities. The scenarios are to be used for local planning purposes and are not intended to identify a likely release event, or to predict the likely impact or extent of such an event.

## What Does It Mean If I Am Within The Worst-Case or Alternative Release Radius of Any of the City's Facilities



*First of all*, Greeley has not changed its operations with respect to its chlorine processes at any of its facilities, other than to add safety equipment (i.e., chlorine scrubbers). Thus, nothing has happened to increase the potential risk posed by the City's water and wastewater treatment facilities since they began operations years ago. The release scenarios are largely defined by regulation and regulatory guidance, and are used primarily for planning purposes. Living within the regulatory release radius does not mean that you face imminent harm. The distance to the endpoint estimated under the worst-case or alternative release scenarios is not to be considered a zone in which the public would likely be in danger. Rather, it is intended to estimate the maximum possible area that might be affected in the unlikely event of certain catastrophic conditions. EPA intends the estimated distances to provide a basis for discussion among the regulated community, emergency responders, and the public, instead of a basis for any specific actions.

This is not to play down the potential dangers of chlorine and the need to carefully manage it, a job which the City takes very seriously. Indeed, our safety record speaks for itself. The new regulatory requirements will only increase safety by formalizing safe management practices and ensuring regular review and improvement of such practices.

## What Will Greeley Do To Prevent A Chlorine Release At Its Facilities



*Greeley will follow standard operating procedures*, most of which it has implemented for years. This includes proper training and periodic testing of personnel whose jobs involve working with the chlorine processes, utilizing equipment and replacement parts that are compatible with chlorine, maintaining only the chlorine inventory on-site that is necessary to properly operate the facilities, performing regular preventive maintenance to reduce the potential for equipment breakdowns, and reviewing chlorine processes to ensure their proper operation. As noted above, one major difference between past operations and operating under the new EPA rule will be that the City's operating procedures will be more formalized and documented.

In addition, though not required by the new rule, Greeley has installed, or plans to install, chlorine scrubbers at each of its chlorine handling facilities. Such scrubbers are state-of-the-art safety equipment and are designed to safely contain the release of the entire contents of a one-ton chlorine container. The scrubbers provide an added measure of security to the City's existing safe track record. Greeley also utilizes a vacuum system, rather than a pressurized system, in its chlorine processes, which further minimizes the potential for a serious leak.

Finally, Greeley is coordinating with the relevant local emergency responders for each facility to ensure an efficient and proper response in the event the City does experience a release. This includes bringing the emergency response personnel into the City's facilities to familiarize them with the plant layout and the relevant processes.

## Where Can I Get Further Information



*EPA will eventually provide Internet access* to the Plans submitted by all entities subject to the rule, including Greeley's. The City also plans to make its submittal accessible through its web site at [www.ci.greeley.co.us/](http://www.ci.greeley.co.us/). Finally, you can request copies of the City's submittals once they are completed by calling 350-9811. The plans must be submitted by June 21, 1999.

## Safe Drinking Water Act

In August 1998, EPA issued a final rule implementing certain changes that Congress made in 1996 to the Safe Drinking Water Act (SDWA). This rule will require most water systems (who collectively serve the vast majority of Americans) to provide customers with an annual report on the quality of their drinking water. The rule is intended to increase customer awareness of the water they consume and thereby allow customers to make personal health-based decisions regarding such consumption.

The first annual report is due in October 1999. (However, Greeley plans to distribute its report in the summer.) The reports form the centerpiece of the public right-to-know aspects of the SDWA. The information provided by the reports should raise the public's awareness of the source of its water, increase the public's understanding of how safe water is provided to their homes, educate the public about the need for preventive measures (such as source water protection), and thereby, help ensure a safe drinking water supply. The increased information should also help the public better participate in decisions affecting its water supply.



## How Will The Reports Affect Me



*They will not require any action on your part*. The reports will merely provide you with information about the water you receive from the City of Greeley. The reports will not cause an increase in your water rates.

## How Do I Get More Information



*Greeley plans to distribute the report to all its water customers*. The report itself will contain considerable information. This information is important to you; please take the time to review it. The City also plans to make the report accessible through its web site at [www.ci.greeley.co.us/](http://www.ci.greeley.co.us/). You can also request a copy of the report, when it is completed, by calling 350-9811.