

WYOMING WATER ASSESSMENT AND PROTECTION PROGRAM (SWAP)



SOURCE WATER ASSESSMENT PROGRAM EXECUTIVE SUMMARY

Source Water Assessment Prepared For:
General Chemical Corp

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June 30, 2004

SOURCE WATER ASSESSMENT SUMMARY FOR General Chemical Corp

PWS Source Water Assessment Summary

The General Chemical Corporation water system is classified as a non-transient non-community surface water supply. This industrial plant is located about 20 miles west of the City of Green River, and four miles north of I-80. Water is pumped from the Green River, treated at the facility's domestic water plant, and distributed through the plant site. Domestic water is provided to approximately 700 plant employees and to Church and Dwight Company, which is contiguous to General and is a consecutive PWS.

Source water for this facility is from the Green River, which is approximately seven miles east of the plant. Water taken from the Green River is pumped, via two 2,250 gpm pumps, through a 14-inch AC-pipe to the plant site. Most of the raw water terminates at the process water ponds. Water can be diverted as required by the domestic water system. The potable water treatment plant diverts water from the transmission line by tank level control. A conventional treatment process is used at this facility. Incorporated in the treatment process are flocculation, sedimentation, and filtration. Chemical pretreatment and disinfection is practiced.

The General Chemical Corporation water system scores low for land use susceptibility in Zone 1 and high in Zone 2 because of the forested areas. The corporation should be aware that several potential line source contaminants lie within the delineation zone.

Delineation Methods

The General Chemical Corporation system is a non-transient non-community surface water system that receives its entire supply from a surface water source. For that reason, Lidstone delineated the source water area using surface water methods.

Surface Water Sources

The General Chemical Corporation obtains all of its water from its intake on the Green River. The diversion structure consists of one intake that is protected with a screen. Additional information on this source is included on the enclosed Surface Water Information Sheet.

As shown on the enclosed delineation maps, the source water area includes the drainage basin of the Green River. Zone 2 extends 15 river miles upstream from the intake and includes a 1,000 foot buffer on both banks of the river and all perennial tributaries. Zone 3 includes the remaining watershed upstream from the intake.

Integrity Summary

The General Chemical Corporation's intake was constructed before 1983, when more stringent construction standards were not required by the State of Wyoming. Records also indicated that while the area around the intake is unrestricted, the intake is screened to protect against the infiltration of potential contaminants. As shown on the Integrity Summary Table, the facility's intake received an integrity score of 6. This value primarily resulted from the intake being completed before 1983, the intake area being unprotected, and the conveyance length being long.

Water Source Sensitivity Summary

As shown on the Source Sensitivity Summary Table, the General Chemical Corporation's intake received a sensitivity score of 10.

The intake received the maximum sensitivity score for two reasons. The first reason is because it obtains water from a surface water source. The second reason is that laboratory analysis of water samples from the system within the last five years detected several contaminants that are listed on EPA's primary and secondary drinking water standards. These include fluoride, sulfate, sodium trichloroacetic acid among others. Despite detection, these contaminants were generally detected at concentrations below the EPA's maximum contaminant levels. However, total haloacetic acids (HAA5) and total trihalomethanes (TTHMs) exceeded the EPA Maximum Contaminant Level (MCL).

Water System Susceptibility Rating

Susceptibility is defined as the potential for a public water supply to draw water contaminated at concentrations that would pose a threat or concern to human health. The General Chemical Corporation water system scores low for land use susceptibility in Zone 1 and high in Zone 2 because of the forested areas. A railroad and pipeline run through Zone 2. The intake was assigned a high susceptibility for the transportation corridor contaminants. Susceptibility ratings for each type of potential contaminant source are summarized on the attached susceptibility tables.

A review of your PWS's routine water analysis results revealed that one or more chemicals that are considered contaminants in drinking water were detected at some time within the last five years. Chemical detections have a large impact on your PWS's sensitivity score because it may indicate that there is a pathway for contaminants to reach the water supply. However, it is likely that these chemicals are present only in small amounts and are not a danger to your health. Some of these chemicals may also occur naturally in water.

For more information about which chemicals were detected, please contact the PWS for a copy of the most recent Consumer Confidence Report or water analysis results. Chemical detections at levels that are a concern to human health are reported on the EPA's website: http://www.epa.gov/enviro/html/sdwis/sdwis_query.html. To see if your PWS has exceeded the federal primary or secondary drinking water standards, just click on the State of Wyoming and then type in the name of your PWS. Consumer Confidence Reports are prepared by the PWS on a yearly basis. The reports should include information about any chemicals found in the

water, even those found at very low levels. Please contact Kim Parker at DEQ, 307-777-7781, or WARWS for assistance. You may also contact EPA to find out what contaminants were detected. You may have to fill out a Freedom of Information Act request to obtain the water test results for your PWS. Please call EPA's Safe Drinking Water Hotline at 1-800-426-4791.

**POINT SUSCEPTIBILITY SUMMARY TABLE
FOR General Chemical Corp
Point Source Susceptibility Summary**

It may appear from the results of this point source susceptibility summary table that your system has too many PSOCs influencing the final ratings. In some cases, a specific PSOC falls within a specific contaminant inventory zone shared by multiple wells or intakes. When this is the case, that PSOC will be scored for each intake. For example, an underground storage tank may appear within a contaminant inventory zone shared by four different wells. This would cause that single storage tank to be entered into the table four times, or once for each well or intake.

Point Source Type	Low	Medium	High
None Identified	N/A	N/A	N/A

- * Illustrates the number of PSOCs in a particular rating class for all water sources
- * N/A - Not Applicable