

WYOMING WATER ASSESSMENT AND PROTECTION PROGRAM (SWAP)



SOURCE WATER ASSESSMENT PROGRAM EXECUTIVE SUMMARY

Source Water Assessment Prepared For:
OCI Wyoming LP

Assessment Completed By:
Lidstone and Associates, Inc.
Engineering, Geology & Water Resource Consultants
4025 Automation Way, Building E
Fort Collins, CO 80525



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SOURCE WATER ASSESSMENT SUMMARY FOR OCI Wyoming LP

PWS Source Water Assessment Summary

The Oriental Chemical Incorporated (OCI Wyoming LP) water system is classified as a non-transient non-community surface water supply. This Soda Ash production facility provides potable water to 504 employees through 15 service connections year round. Source water for this facility is taken from the Green River. Of the average 1.5 MGD of water pumped to the plant that is chemically treated, clarified and filtered, only a small volume is further filtered, disinfected, and stored for potable water use. An estimated 17,600 gpd is used for drinking and washing, with the remaining water consumed by running eyewash and safety showers.

The OCI Wyoming LP water system scores high for land use susceptibility in zone 1 and medium in zone 2 because of the forested areas. The OCI should be aware that potential line source contaminates lie within the delineation zone.

Delineation Methods

The OCI Wyoming LP water 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

OCI Wyoming LP obtains all of its source water from its intake on the Green River. The diversion structure consists of a single intake point. The intake operates with a screened concrete collection chamber that is covered by a metal structure. The system uses three pumps that are housed within the structure to supply the plant's demand. Additional information on this source is included on the enclosed Surface Water Information Sheet.

As shown on the enclosed source water area delineation maps, the contaminant inventory zones include 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 OCI Wyoming LP water system obtains its surface water from the Green River. The intake was constructed before 1983, when less stringent construction standards were 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, OCI Wyoming LP's intake received an integrity score of 5. This value directly reflects the fact that the intake was constructed prior to 1983 and that the area around the intake is unprotected.

Water Source Sensitivity Summary

The OCI Wyoming LP water system obtains its surface water from the Green River. As shown on the Source Sensitivity Summary Table, the 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 nitrate, nitrite, fluoride, hexachlorocyclopentadiene, and sulfate among others. Despite detection, these contaminants were generally detected at concentrations below the EPA's maximum contaminant levels.

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 OCI Wyoming LP water system scores high for land use susceptibility in zone 1 and medium in zone 2 because of the forested areas. A railroad runs through zone 2 therefore assigning 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 OCI Wyoming LP
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