SOURCE WATER ASSESSMENT
EXECUTIVE SUMMARY
FOR
Meadow Vista MHP

June 30, 2004

PROJECT: 424-001

ASSESSMENT COMPLETED BY: TRIHYDRO CORPORATION

1252 Commerce Drive, Laramie, WY 82070

ENGINEERING SOLUTIONS. ADVANCING BUSINESS.

Home Office | 1252 Commerce Drive | Laramie, WY 82070 | phone 307/745.7474 | fax 307/745.7729 | www.trihydro.com

SOURCE WATER ASSESSMENT SUMMARY
FOR Meadow Vista MHP

PWS Source Water Assessment Summary

Meadow Vista Mobile Home Park maintains a community groundwater system that serves 120 people through 43 connections. Facilities include one well, a 120,000-gallon concrete storage tank, and the distribution system. No treatment or disinfection is practiced at this facility. The water source scored medium with respect to the combined integrity and aquifer sensitivity ratings. The system scored low with respect to land use and transportation corridor susceptibility, and medium with respect to point source susceptibility.

Delineation Methods

This water system is a community system that draws water from a porous sedimentary formation. Groundwater modeling methods were implemented to estimate the 2-year and 5-year time of travel zones for the groundwater flow system. An additional buffer zone was mapped.

U.S. EPA's Wellhead Analytic Element Model or WhAEM method was used for community water systems that derive their sources from alluvial or shallow bedrock aquifers. The WhAEM model uses well and limited hydrogeologic data to estimate time-of-travel capture zones in relatively simple hydrogeologic settings for either confined or unconfined aquifers. For the source water assessment, the WhAEM model was used to develop 2 year and 5 year groundwater capture zones. Due to this methodology, the delineated source water areas may be larger than the true capture zones for each well. However, use of this method typically results in source water protection areas that can be used to more reliably protect the water supply.

Groundwater Sources

The Meadow Vista Mobile Home Park draws water from the Wasatch Formation. Groundwater flow within the Wasatch is through porous media flow and is generally from southeast to northwest. Additional information on this well is included on the attached Well Information Sheet. As shown on the enclosed source water area delineation map, contaminant inventory zones 2 and 3 were delineated using WhAEM modeling methods. Zones 2 and 3 represent 2-year and 5-year groundwater travel times, respectively. These capture zones extend southeast from the wellhead. An additional buffer zone was delineated and encompasses an immediate section of the Wasatch formation, terminating on the south Coyote Creek, and on the east at an unnamed fault and Glasscock Hollow.

Integrity Summary

Meadow Vista MHP uses one well that is approximately 260 feet deep to supply its water. The well was constructed prior to 1983 when less stringent construction standards were required by the State of Wyoming. Records show that the well was properly sealed to protect against surface infiltration of potential contaminants and flooding around the wellhead. However, the well lacks adequate protection from flood and protection of the vicinity immediately around the wellhead from contaminant sources. Therefore, as shown on the Integrity Summary Table, the Ray Cook #2 well received a score of 5.

Water Source Sensitivity Summary

As shown on the Source Sensitivity Summary Table, the well received a sensitivity score of 6. The well received a score of 1 for aquifer sensitivity because it draws water from a confined aquifer through porous media flow. The well received the score of 5 for chemical sensitivity due to documented chemical detections in the groundwater.

Water System Susceptibility Rating

Susceptibility is defined as the potential for a public water supply to draw contaminated water at concentrations that would pose a threat or concern to human health. In general, the Meadow Vista scores low for land use susceptibility. The system received score of medium with respect to point source contaminant susceptibility because underground tanks and oil and gas wells are located within the delineated zones. The well scored low with respect to transportation corridor susceptibility because of nearby pipelines.

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 Meadow Vista MHP

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
Underground Tank	N/A	4	N/A
Oil & Gas Well	N/A	5	N/A

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