

CONSUMER CONFIDENCE REPORT

OUR WATER

A WATER QUALITY REPORT FOR THE WATER USERS OF CITY OF SHELBY WATER DEPARTMENT

DATE REPORT WAS COMPLETED: MARCH 27, 2011

In compliance with the 1996 Safe Drinking Water Act Amendments City of Shelby Water Department is providing our water users with this report on the quality of our drinking water. This report presents data compiled during the past twelve months from **January 1, 2010 to December 31, 2010.**

Terms and Definitions

- AL = Action Level, the concentration of a contaminant which triggers treatment or other requirement which a water system must follow
- MCL = Maximum Contaminant Level, the highest allowable amount of a contaminant that is allowed in drinking water
- MCLG = Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health
- ppm = parts per million, or milligrams per liter (mg/l)
- ppb = parts per billion, or micrograms per liter ($\mu\text{g/l}$)
- TT = Treatment Technique
- Variances and Exemptions = Permission granted by the State not to meet an MCL or treatment technique under certain conditions
- Treatment Technique = A required process intended to reduce the level of a contaminant in drinking water

You Should Know

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Did You Know?

Contaminants that may be present in source water include:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Our Water Source

Our water comes from 12 groundwater wells located 7 miles south of the City of Shelby, Montana, in Township 31 North, Range 2 West, Section 21: S1/2SW1/4, SW1/4SE1/4. It is pumped to the 4 city water tanks through one 1.6" water line.

Treatment

Our system is presently required to treat its water with UV.

Source Water Assessment

A Source Water Assessment will be performed by the State to determine our water system's susceptibility to contaminants. When the assessment is completed and becomes available, we will make it available to our users. The State will also make available a brief summary of the susceptibility of the system.

Bacteriological Monitoring

Bacteriological monitoring is performed monthly to test for the presence of coliform bacteria, fecal coliform and E. coli. Our system is required to collect 3 samples per month. No bacteriological contamination has been found in the period covered by this report.

Lead and Copper Monitoring

Date Last Sampled for Lead: September 19, 2002
90th Percentile for Lead: less than 1 ppb (Action level = 15 ppb)
Number of Sites Exceeding Lead Action Level: 0

Date Last Sampled for Copper: September 19, 2002
90th Percentile for Copper: .26 MG/L (Action level = 1.3 MG/L)
Number of Sites Exceeding Copper Action Level: 0

Chemical Monitoring

Note to our water users: The state requires us to monitor for certain contaminants less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, such as organic contaminants, though representative, is more than one year old.

VOCs (VOLATILE ORGANIC CHEMICALS) – 19 REGULATED, 7 UNREGULATED

Our sampling detected the presence of: **No detects**

Required Sampling Frequency: **Once every three (3) years.**

Date Last Sampled: **July 7, 2008**

SOCs (SYNTHETIC ORGANIC CHEMICALS) – 27 REGULATED, 10 UNREGULATED

Our sampling detected the presence of: **No detects**

Required Sampling Frequency: **Once every nine (9) years.**

Date Last Sampled: **July 7, 2008**

IOCs (INORGANIC CHEMICALS)

See Table E - Detected Regulated Inorganic Chemicals. See Table F – Detected Unregulated Inorganic Chemicals.

Required Sampling Frequency: **Waived**

Date Last Sampled: **July 7, 2008**

RADIONUCLIDES

Our sampling detected the presence of: **No detects**

Required Sampling Frequency: **Once every nine (9) years.**

Date Last Sampled: **August 3, 2009**

Additional Information

If you would like additional information regarding our water system, feel free to contact:

William Moritz

Public Works Director

50 City Shop Road

Shelby, MT 59474 434-5564

The Shelby City Council meets on the first and third Mondays of each month at 7:30 p.m. at the:

Shelby City Council Chambers

112 1st Street South

Shelby, MT 59474

Public meetings are held occasionally to address water and sewer issues throughout the year. Watch the Shelby Promoter for more information

TABLE E

DETECTED REGULATED IOCS (INORGANIC CHEMICALS)

| Regulated IOCs | | | | | | | | | |
|----------------------|-------------|-----------------------|------------------------|-------|-------|---------|-----------------------|---------------------|----------------|
| Detected Contaminant | Sample Date | Lowest Detected Level | Highest Detected Level | MCL | MCLG | Average | Violation (Yes or No) | Period of Violation | Likely Source* |
| Fluoride | 7/18/08 | .3 MG/L | .3 MG/L | 3 PPM | 3 PPM | .3 MG/L | No | N/A | N/A |
| Nitrates as N | 8/4/10 | .02 MG/L | .02 MG/L | 5 PPM | 5 PPM | .5 MG/L | No | N/A | N/A |
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Potential Health Effects: None

Corrective Steps Taken: None required.

TABLE F

DETECTED UNREGULATED IOCS (INORGANIC CHEMICALS)

| Detected Contaminant | Sample Date | Highest Detected Level | Lowest Detected Level | Average | Significance of Results |
|----------------------|-------------|------------------------|-----------------------|------------|--|
| Alkalinity | 2/17/99 | 238 MG/L | 238 MG/L | 238 MG/L | No known health risk, and not due to be regulated. |
| Calcium | 7/7/08 | 152 MG/L | 152 MG/L | 152 MG/L | " " " " " " |
| Magnesium | 7/7/08 | 28 MG/L | 28 MG/L | 28 MG/L | " " " " " " |
| Hardness | 7/7/08 | 498 MG/L | 498 MG/L | 498 MG/L | " " " " " " |
| PH | 2/17/99 | 7.5 Units | 7.5 Units | 7.5 Units | " " " " " " |
| Conductivity | 2/17/99 | 729 UMHOS | 729 UMHOS | 729 UMHOS | " " " " " " |
| Sodium | 2/17/99 | 16 MG/L | 16 MG/L | 16 MG/L | " " " " " " |
| Chloride | 2/17/99 | 1 MG/L | 1 MG/L | 1 MG/L | " " " " " " |
| Iron | 2/17/99 | <0.03 MG/L | <0.03 MG/L | <0.03 MG/L | " " " " " " |
| Manganese | 2/17/99 | <0.01 MG/L | <0.01 MG/L | <0.01 MG/L | " " " " " " |
| Sulfate | 10/24/96 | 180 | 180 | 180 | Proposed to be regulated. |

These unregulated IOCs generally pose no health risk and are indicators of the quality of the water.

TABLE A

DETECTED REGULATED VOCs (VOLATILE ORGANIC CHEMICALS)

| Regulated VOCs Detected Contaminant | Sample Date | Lowest Detected Level | Highest Detected Level | MCL* | MCLG * | Average | Violation (Yes or No) | Period of Violation | Likely Source* |
|--|-------------|-----------------------|------------------------|------|--------|---------|-----------------------|---------------------|----------------|
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*The MCL, MCLG and Likely Source can be found in Appendix B – Regulated Contaminants.

Potential Health Effects

(In this space copy the mandatory health effects language for each detected contaminant. This language can be found in "Appendix C- Health Effects Language.")

Corrective Steps Taken

(In this space describe the steps you have taken to correct the contamination such as "We have installed an aerator to off-gas the benzene detected through our sampling.")

(Include this sheet in your report only if you have detected regulated VOCs.)

TABLE B

DETECTED UNREGULATED VOCS (VOLATILE ORGANIC CHEMICALS)

| Detected Contaminant | Sample Date | Highest Detected Level | Lowest Detected Level | Average | Significance of Results |
|----------------------|-------------|------------------------|-----------------------|---------|--|
| | | | | | (Here you should note if the detected unregulated contaminant poses a health risk or if it is proposed to be regulated.) |
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(Include this sheet in your report only if you have detected unregulated VOCs.)

TABLE C

DETECTED REGULATED SOCS (SYNTHETIC ORGANIC CHEMICALS)

| Regulated SOCs | Sample Date | Lowest Detected Level | Highest Detected Level | MCL * | MCLG * | Average | Violation (Yes or No) | Period of Violation | Likely Source* |
|----------------|-------------|-----------------------|------------------------|-------|--------|---------|-----------------------|---------------------|----------------|
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*The MCL, MCLG and Likely Source can be found in Appendix B – Regulated Contaminants.

Potential Health Effects

(In this space copy the mandatory health effects language for each detected contaminant. This language can be found in "Appendix C- Health Effects Language.")

Corrective Steps Taken

(In this space describe the steps you have taken to correct the contamination such as "We have installed an aerator to off-gas the benzene detected through our sampling.")

(Include this sheet in your report only if you have detected regulated SOCs.)

TABLE D

DETECTED UNREGULATED SOCS (SYNTHETIC ORGANIC CHEMICALS)

| Detected Contaminant | Sample Date | Highest Detected Level | Lowest Detected Level | Average | Significance of Results |
|----------------------|-------------|------------------------|-----------------------|---------|--|
| | | | | | (Here you should note if the detected unregulated contaminant poses a health risk or if it is proposed to be regulated.) |
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(Include this sheet in your report only if you have detected unregulated SOCs.)

TABLE G

DETECTED RADIONUCLIDES INORGANIC CHEMICALS)

| Detected Radionuclides | | | | | | | | | |
|------------------------|-------------|-----------------------|------------------------|------|-------|---------|-----------------------|---------------------|--------|
| Detected Contaminant | Sample Date | Lowest Detected Level | Highest Detected Level | MCL* | MCLG* | Average | Violation (Yes or No) | Period of Violation | Likely |
| | | | | | | | | | |
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| | | | | | | | | | |

*The MCL, MCLG and Likely Source can be found in Appendix B – Regulated Contaminants.

Potential Health Effects

(In this space copy the mandatory health effects language for each detected contaminant. This language can be found in "Appendix C- Health Effects Language.")

Corrective Steps Taken

(In this space describe the steps you have taken to correct the contamination such as "We have installed an aerator to off-gas the benzene detected through our sampling.")

(Include this sheet in your report only if you have detected Radionuclides.)

