

## Bringing you quality, affordable drinking water for over a century

For nearly 125 years, Saint Paul Regional Water Services has been bringing the residents of Saint Paul and the surrounding communities quality water at an affordable price.



### SPRWS meets all drinking water laws

We are proud to say that the drinking water we supply continues to be in full compliance with all state and federal laws governing drinking water.

We never stop looking for ways to improve the quality of the water we provide to our customers.

### Wetlands part of Clean Water Initiative



Our restoration work on the Lambert Creek Watershed area was selected by the Governor's Clean Water Initiative as one of two metro area clean water projects. The addition of a weir, pond, and ditch in the watershed will help us reduce the phosphorus levels of water coming into Vadnais Lake. High phosphorus levels contribute to algal growth, the main contributor to taste and odor.

## Bringing you quality, affordable water

We take pride in providing you with quality drinking water at a reasonable cost.

Every day, SPRWS produces an average of 50 million gallons of drinking water and distributes it through a thousand miles of water main to more than 417,000 residents of Saint Paul and 14 surrounding communities.

**SPRWS Customer Service** 651-266-6350  
**SPRWS Water Quality** 651-266-1635  
**EPA Safe Drinking Water Hotline** 800-426-4791  
**Minnesota Department of Health** 651-215-5800  
**Email:** [waterinquiries@ci.stpaul.mn.us](mailto:waterinquiries@ci.stpaul.mn.us)  
**Website:** [www.ci.stpaul.mn.us/water](http://www.ci.stpaul.mn.us/water)  
**Public Information:** Jodi L. Wallin 651-266-6308

*Informacion importante. Si no la entiende, haga que alguien se la traduzca ahora.*

*Nov yog ntaub ntawv ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.*

To participate in decisions that may affect the quality of the water supplied by SPRWS, the public may attend the Board of Water Commissioners meetings held at 5:00 p.m. the second Tuesday of each month at the Saint Paul City Hall.

To request additional copies of this report, please contact Customer Service at 651-266-6350.



**Saint Paul Regional  
Water Services**  
1900 Rice Street  
Saint Paul, MN 55113

# 2 0 0 5 Water Quality Report



## Saint Paul

## Regional Water Services



## *GAC filters to improve taste & odor*

In addition to tackling taste and odors issues at their source, we are in the process of constructing new granular activated carbon (GAC) filters for our treated water. GAC filters absorb taste and odor compounds, further reducing those problems. The process of rebuilding all 24 of our filter beds with GAC will be complete by the spring of 2006.

## *More wells to be drilled*

We also drilled two new wells, bringing our current number of wells to six. We will be drilling two new wells a year until we have a combined pumping capacity from all wells of 50 million gallons a day, the current average production rate. We use these wells to add water to our system on cold days to reduce the number of main breaks, and we draw water from them during seasonal algae blooms to reduce any possible taste and odor effects.

While working on improving the quality of our water, we also have improved the efficiency of our operations.



## *New campus completed*

For the first time in almost a century, nearly all of the staff of our water utility is located on one campus at the McCarrons Center on our water treatment plant site. This consolidation of utility operations promotes efficiency and easier communication between employees, facilitates workflow, and improves other operational needs.

For our customers who prefer to transact business with us in person, our customer service, cashiering, and permit operations are now at one convenient location on our new campus, where we offer ample free parking.

For several years, many of our customers have used the convenient credit card option to pay their bills. We have now added this option for paying plumbing permit fees. Within a week of offering this alternative payment method, nearly a third of the plumbers selected it to expedite the permit process.

## *Computer management system implemented*

We also implemented a Computerized Maintenance Management System throughout the utility, allowing information to be shared more easily by all departments, and improving management's ability to ascertain proper labor levels, track supplies, and keep a history of repairs and other work completed on mains, hydrants, and all other utility assets.

## *Miles of main installed*

We installed more than 22,300 feet—or four miles—of water mains last year, including mains for the new River Bluff and Gateway Village developments, three new state office buildings downtown, the new Minnesota Public Radio building, and new mains and service connections along Highway 61.

## *Land to become parks & soccer fields*

The Board of Water Commissioners is working with Anoka County to sell 610 acres within the park reserve to the county. It is also working with the city of Saint Paul Parks and Recreation department to convert 15 acres of land at Sandy Lake into six new soccer fields.

## *Area teachers to learn at McCarrons*

The McCarrons Center will be the site for the 2005 Minnesota Drinking Water Institute, a three-day workshop sponsored by the Minnesota Section of the American Water Works Association and the Minnesota Department of Health with participation from the Science Museum of Minnesota. The workshop is an opportunity for area teachers to learn more about water supply, treatment and distribution, and how to teach about these subjects in their classrooms.



## Important information from the EPA



According to the Environmental Protection Agency (EPA), 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. The EPA imposes regulations that limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. Food and Drug Administration regulations establish

limits for contaminants in bottled water that must provide the same protection for public health.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

By law, SPRWS must take corrective action and notify our customers immediately if it is ever in non-compliance with federal or state drinking water standards. We continue to comply with all regulations. If you have questions about SPRWS drinking water, please call our lab at 651-266-1635.



*Above, flasks filled with water await testing.*

*Left, water quality personnel and lab technicians test water samples for taste and odor at McCarrons Treatment Plant.*

## Know your water sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of people and animals.

Your water is regularly tested for the following contaminants:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations, and wildlife.

- **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.

- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production; they can also come from gas stations, urban storm water runoff, and septic systems.



- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

We draw a large percentage of our water from the Mississippi River, which travels through a chain of lakes, including Deep, Charles, Pleasant, Sucker, and Vadnais before reaching our treatment plant.

Groundwater from four deep wells, ranging from 438 to 463 feet in depth, that tap into the Prairie du Chien-Jordan aquifer, provides a small percentage of our water supply. A Minnesota Department of Health assessment of our water sources indicates that, while susceptible to contamination, SPRWS has consistently and effectively treated our source water to meet drinking water standards.

For a copy of the source water assessment, call the Minnesota Department of Health: 651-215-0800 or 800-818-9318 (press #5).

*Left, the Mississippi River.*

### Seeking advice in special cases

*Some people may be more vulnerable to contaminants found in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants,*

*people with HIV/AIDS or other immune system 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. Environmental Protection Agency/Centers*

*for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).*

# Substances detected in SPRWS water in 2004

No contaminants were detected at levels that violated federal drinking water standards during the testing period from Jan. 1, 2004 to Dec. 31, 2004. Some contaminants were

detected in trace amounts that were below legal limits. These substances are shown on the table below. Some contaminants are sampled less frequently than once a year; as a result, not all

contaminants were sampled for 2004. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date the detection occurred.

## Regulated substances controlled prior to distribution

Substance (units)	Highest Level Allowed (MCL)	Highest Level Detected	Range Detected	Average Level*	Recommended Maximum (MCLG)	Typical Source
Combined Radium (pCi/l) (12/12/02)	5.4	—	n/a	0.18	0	Natural deposits
Total Coliform bacteria	Present in ≤ 5% of monthly samples	1.0%	0.0 – 1.0%	1%	0 present	Naturally present in the environment
Nitrate as nitrogen (ppm)	10	0.08	n/a	0.08	10	Fertilizer, sewage, natural deposits
Trihalomethanes (Total TTHM) (ppb)	80	46.7	24.8 – 46.7	33.43	0	Disinfection by-product
Haloacetic acids (HAA5) (ppb)	60	24.8	13.6 – 24.8	22.08	0	Disinfection by-product
Fluoride (ppm)	4.0	1.3	1.2 – 1.3	1.25	4.0	State mandated dental health additive; fertilizer, aluminum factory discharge

  

Substance (units)	Maximum Residual Disinfectant Level Goal	Maximum Residual Disinfectant Level	Highest/Lowest Monthly Average	Highest Quarterly Average	Typical Source
Chlorine (ppm)	4.0	4.0	2.8/3.5	3.28	Microbe control additive

## Regulated substances controlled at the customer's tap

Substance (units)	Action Level (AL) (90 percent of samples must be at or under this level)	Number of sites over AL	90% of samples were below this level	Typical Source
Lead (ppb)	15.0	2 out of 50	8	Corrosion of home plumbing
Copper (ppm)	1.3	0 out of 50	0.05	Corrosion of home plumbing

## Turbidity (NTU)

Highest Level Allowed	Lowest Monthly percent of samples meeting the limits	Highest single measurement	Average Level	Typical Source
TT	100 %	0.123 NTU	0.039	Soil runoff

## Unregulated substances\*\*

Substance (units)	Average Level Detected	Recommended Maximum or HRL	Typical Source
Sodium (ppm)	13.0	200	Natural deposits
Sulfate (ppm)	23.0	250	Natural deposits

## Unregulated substances pending regulation

Substance (units)	Range detected	Average Result	Typical Source
Radon (pCi/l)(2002)*	n/a	7.5	Natural deposits

**MCLG:** Maximum Contaminant Level Goal. The concentration of a contaminant in drinking water below which there is no known or expected risk to health. **MCLGs** allow for a margin of safety. **MCL:** Maximum Contaminant Level. The highest level allowed in drinking water. **MCLs** are set as close to the **MCLGs** as feasible using the best available treatment technology. **AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment methods or other requirements that the utility must follow. **PPB:** parts per billion. **PPM:** parts per million. **PCi/l:** PicoCuries per liter (a measure of radioactivity). **ND:** not detected at testing limits. **NTU:** Nephelometric Turbidity Unit. Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the US EPA. **TT:** treatment technique. The EPA has two requirements: 1) that the maximum level found must be less than 1 NTU, and 2) that the level must be under 0.3 NTU 95% of the time. **SPRWS** met both requirements. **HRL:** Health Risk Limit. **N/A:** Not applicable (Does not apply).

\* This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

\*\* Some contaminants do not have Maximum Contaminant Levels (MCL) established for them. These "unregulated contaminants" are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated contaminant are found, the response is the same as if an MCL has been exceeded; the water utility must inform its customers and take corrective actions.

## Concerning lead levels

Please note that infants and young children tend to be more vulnerable to lead in drinking water than the general population. The lead levels in the SPRWS water system continue to be in compliance with drinking water standards and we

continue to monitor these levels carefully. However, it is possible that lead levels in your home might be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead levels in

your water, run your tap for 30 seconds to 2 minutes before using the water. Or, you may wish to have your water tested. For additional information, call the Safe Drinking Water Hotline at 800-426-4791.