City of Milpitas

2007 Report on Public Health Goals

For The Public Water System

(as required per Section 116470 of the Health & Safety Code)

July 1, 2007

City of Milpitas
2007 Public Health Goals (PHGs) Report

Table of Contents

EXECUTIVE SUMMARY

Every three years, the California Department of Public Health (DPH) requires public water systems serving more than 10,000 service connections to prepare a written report on any chemical, microbiological, or radiological contaminants at concentrations exceeding either a Public Health Goal (PHG) or a Maximum Contaminant Level Goal (MCLG). These goals are not regulatory drinking water standards (known as Maximum Contaminant Levels, or MCLs), but are values thought by either the federal or state government to have potential public health impacts. Reports cover three calendar years of water quality data and are to be completed by July 1st after the third year. The City is required to hold a public hearing to receive comment on the report at any regular public meeting scheduled "reasonably" after report completion. Subsequently, the City will then notify the State of the public hearing.

Staff completed the "City of Milpitas 2007 Report on Public Health Goals for the Public Water System," included in the Council agenda packet, by the July 1, 2007 deadline after reviewing all water monitoring data for the calendar years 2004 through 2006. This review identified the following exceedances of public health goals:

- Lead – The City analyzed 37 water samples from home taps in 2004 for lead; seven samples exceeded the PHG of 2 ppb. Lead detections resulted from the corrosion of lead solder in home plumbing. Suppliers can reduce lead concentrations from home plumbing by reducing the corrosivity of supplied water. However, DPH has determined that the City's wholesale suppliers have already implemented optimum corrosion controls and no further action is necessary. Customers with lead-solder plumbing can further reduce their exposure by not drinking or cooking with "first flush" water (water that sits overnight in home plumbing.)
- Copper – The City analyzed 37 water samples from home taps in 2004 for copper; three samples exceeded the PHG of 170 ppb. Copper detections resulted from the corrosion of copper piping in home plumbing. As with lead, corrosivity adjustment of supplied water is the preventative action, but as noted above, the City's suppliers have already optimized reduction of the corrosivity of their water.
- Coliform – Coliform bacteria are abundantly present in nature and so are considered a potential indicator of contamination. The City tested 3,925 water samples for coliform bacteria; two samples were positive. Subsequent re-sampling at both stations did not reproduce positive results. The two positive results exceeded the MCLG (greater than 0% positive), but did not exceed the MCL (greater than 5% positive of in a weekly sample batch).

Any questions regarding this report should be directed to:

City of Milpitas
Utility Engineering
455 E. Calaveras Blvd.
Milpitas, CA 95035

Phone: 408.586.3348
Fax: 408.586.3305

INTRODUCTION

Provisions of Section 116470 of the Health and Safety Code (see Appendix B) specify that public water systems serving more than 10,000 service connections must prepare a report to inform the public concerning any PHG exceedances that occur, and hold a public hearing for the purpose of accepting and responding to public comment. The report, due every three years, is required by July 1, 2007, and a public hearing must be held for the purpose of accepting and responding to public comment at any time subsequent to the report.

PHGs are set by the California Office of Environmental Health Hazard Assessment (OEHHA), which is part of the California Environmental Protection Agency and are based solely on public health risk considerations. None of the practical risk-management factors that are considered by USEPA or DPH in setting MCLs are considered in setting PHGs. These factors include analytical detection capability, treatment technology available, benefits and costs. PHGs are not enforceable and are not required to be met by any public water system. MCLGs are the federal equivalent to PHGs.

The purposes of this report are the following:

- Identify each contaminant detected in drinking water that exceeds the applicable PHG (or MCLG if a State PHG has not been adopted),
- Disclose the health risk associated for each contaminant identified,
- Describe the best available technology (BAT) to remove the contaminant or reduce the concentration of the contaminant,
- Estimate the aggregate cost and the cost per customer of utilizing technology to reduce the concentration of that contaminant to a level at or below the PHG (or MCLG), and
- Describe what action, if any, the City intends to take to reduce the concentration of the contaminant and the basis for that decision.

Although the City's supplies meet all drinking water requirements (see Appendix A - 2007 Consumer Confidence Report), three of the more stringent PHG levels were exceeded as described in the following sections. All of the water quality data collected by the City's water system from 2004 through 2006 for purposes of determining compliance with drinking water standards was considered.

FINDINGS

The City purchases water from the San Francisco Public Utility Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD) and maintains separate service areas for each. These service areas are shown in Figure 1 on the next page. Table 1 shows that the City exceeded the PHG for lead and copper in 2004 and the MCLG for coliform.

Table 1 - City Exceedances

Contaminant	PHG [1] or MCLG	MCL	Milpitas service area[2]	Comments
Lead	2 ppb	N/S	2.2 – 15 ppb	37 taps were sampled in 2004; 7 samples exceeded the PHG.
Copper	170 ppb	N/S	180 – 450 ppb	37 taps were sampled in 2004; 3 samples exceeded the PHG.
Coliform	0	>5% positive	2 (SFPUC)	3,925 samples were taken in 2004; 2 samples were positive.

1 PHGs adopted by OEHHA
2 ppb = parts per billion by weight.
N/S No Standard

Lead and Copper

The City water supply does not contain detectable levels of lead or copper. However, special samplings showed that lead and copper levels can increase within households due to leaching from household plumbing and fixtures. DPH requires the City to monitor for lead and copper once every three years. Out of 37 samples collected in 2004, seven samples exceeded the lead PHG of 2 ppb. Of these seven samples, three were in the SCVWD service area and four were in the SFPUC service area. From the same 37 samples in 2004, three samples exceeded the copper PHG of 170 ppb. These three samples were all in the SCVWD service area.

Coliform

The City took 3,925 samples from 2004 to 2006 throughout the distribution system and used a state-certified laboratory to analyze for coliform. In June 2004, one sample was coliform positive. Another sample was positive in November 2004. Subsequent resampling at each location and two other locations, one upstream and one downstream, were determined to be coliform negative. The State MCL for coliform is more than 5% positive per month and the City did not violate the coliform standard. However the Federal MCLG is 0% coliform, which the City did exceed.

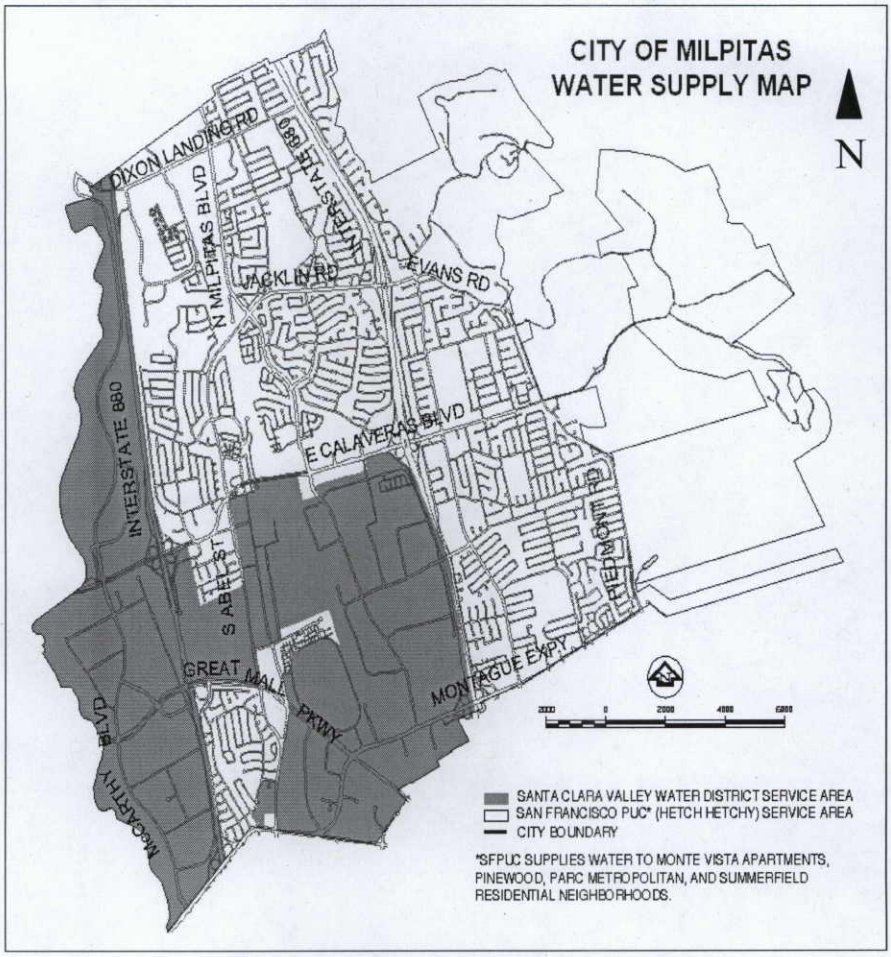


Figure 1 - Water Supply Service Areas

DISCUSSION

This section describes public health risks associated with lead, copper and coliform levels monitored within the City's system and the best available treatment technologies (BAT). This section also explains why cost estimates for treatment are not required for Milpitas.

Lead

Lead is a cumulative toxic substance with no known human benefits. It is a normally low level background component in the environment caused by extensive corrosion inhibitor use in paints, water piping and various alloys. In addition to drinking water, lead intake can also occur through air, house dust, and lead-based paints. Lead is considered to be a health risk at levels above 15 ppb. The PHG for lead is 2 ppb.

Lead has been linked to damage to kidneys or nervous system of humans (Report prepared by Pesticide and Environmental Toxicology Section of OEHHA, December 1997). Numerical health risk data on lead have not yet been provided by OEHHA. Lead can cause a variety of adverse health effects in humans. At relatively low levels of exposure, these effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in the attention span, hearing, and learning ability of children, and slight increases in the blood pressure of some adults (Section 64468.1, Chapter 15, Title 22, California Code of Regulations).

The City's water supply has no detectable levels of lead. Although there are no lead pipes in Milpitas, USEPA has determined that lead can enter drinking water primarily as a result of corrosion, or wearing away, of materials containing lead, such as lead solder in household plumbing. Any time the water in a faucet has gone unused for more than six hours, the City advises residents to flush the water from the tap (run the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds) before using it for drinking or cooking. The majority of Milpitas homes have a protective pipe coating on solder. Homes built after 1986 that were built with low lead solder.

Copper

At low levels, copper is a nutrient essential for enzymatic reactions. Acute exposure can cause liver damage or hemolytic anemia. Copper is considered to be a health risk at levels above 1,300 ppb. The PHG for copper is 170 ppb.

Copper in drinking water is primarily due to copper pipe corrosion, from brass and bronze fixture leaching, erosion of natural deposits, and from additives used to control algae growth at some water supply reservoirs. The Department of Water Resources uses small doses to control summer algae blooms in the South Bay Aqueduct, the water supply for the SCVWD water to Milpitas, which can result in very low levels of copper. Corrosion control for copper would be integrated into the lead facilities described on the next page.

Corrosion Control Treatment Optimization

Corrosion control through water chemistry and adjustment is the best available technology (BAT) for lead and copper control. The two wholesalers, SFPUC and SCVWD, have conducted evaluations to determine what could be done on a regional basis to minimize corrosiveness of water, termed optimization, thus reducing the tendency of lead and copper to leach into water. SCVWD has optimized their system by adding phosphoric acid to their water. SFPUC has optimized their system by increasing pH levels to decrease corrosion. There is no further action needed by the City.

Although corrosion control is considered to be the BAT for reducing both lead and copper in drinking water, consumers can take additional measures to reduce lead and copper leaching at the tap. One such measure is to replace household brass fixtures with "lead-free" fixtures installed in homes built prior to 1996. The 1996 Safe Drinking Water Act was amended to include the regulation of leaded plumbing fittings and fixtures and prohibited the use of fittings and fixtures that contain more than 4.0 percent lead. Consumers can take the following steps to reduce lead levels at their taps:

- Flush the taps for about 15-30 seconds before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours.
- Use cold water for cooking as hot water can dissolve lead and copper faster than cold water.

Coliform

The MCL for coliform is more than 5% positive samples of all samples per month and the MCLG is zero. The reason for the coliform drinking water standard is to identify the possibility of the water containing pathogens, which are organisms that cause waterborne disease. Because coliform is only a surrogate indicator of the potential presence of pathogens, it is not possible to state a specific numerical health risk. While USEPA normally sets MCLGs "at a level where no known or anticipated adverse effects on persons would occur," they indicate that they cannot do so with coliform.

Coliform bacteria are an indicator organism that are ubiquitous in nature and are not generally considered harmful. They are used because of the ease in monitoring and analysis. If a positive sample is found, it indicates a potential problem that needs to be investigated and follow up sampling done. It is not at all unusual for a system to have an occasional positive sample.

DPH has identified certain technologies, treatment techniques and other means that can be used in achieving compliance with total coliform MCL as BAT for coliform bacteria in Section 64447, Title 22, CCR. These include:

- Protection of wells from coliform contamination by appropriate placement and construction,
- Maintenance of a disinfectant residual throughout the distribution system,
- Proper maintenance of the distribution system, and
- Filtration and/or disinfection of approved surface water, or disinfection of groundwater.

In addition to the BAT listed above, the City has implemented the following: an effective cross-connection control program, water main flushing program, an effective monitoring and surveillance program and maintenance of positive pressures in the distribution system

The water that the City receives from its regional water suppliers is disinfected by chloramination and ozonation. The City occasionally adds chlorine to the reservoirs to maintain optimal disinfection. The chlorine residual levels are carefully controlled to provide the best health protection without causing the water to have undesirable taste and odor or increasing the disinfection byproduct level.

The City has implemented a program to control microbiological contamination to the maximum extent possible. There are no additional actions to feasibly further reduce coliform results.

CONCLUSIONS

SFPUC and SCVWD are implementing corrosion control treatment in order to minimize corrosiveness of the water, thereby minimizing lead and copper concentrations at household taps. The City's water system is in full compliance with DPH drinking water standards.

In general, optimizing corrosion control is considered to be the BAT for corrosion issues and lead or copper findings. The City continues to monitor water quality parameters that relate to corrosivity. Simple practices on the part of the consumers, such as flushing the taps and using cold water for cooking or drinking, may reduce the amount of lead and copper in the drinking water.

Since the City is meeting the "optimized corrosion control" requirements, it is not necessary to initiate additional corrosion control treatment. Thus, no cost estimate is needed.

Coliform is an indicator organism used to determine the potential of pathogenic organisms in water. Ongoing efforts such as disinfection, maintenance of disinfectant residual, cross-connection control, water main flushing, monitoring and surveillance programs and maintenance of positive pressures in the City's distribution system will minimize occurrence of microbiological contamination in the City's water. The City system complies with BAT for coliform as described in Section 64447, Title 22, CCR and with the State MCL for coliform. Thus, no cost estimate is needed.

REFERENCES

1. Association of California Water Agencies. (2001) "Suggested Guidelines for Preparation of Required Reports on Public Health Goals (PHGs) to Satisfy requirements of California Health and Safety Code Section 116470 (b)"
2. Pesticide and Environmental Toxicology Section of OEHHA
3. Section 64468.1, Chapter 15, Title 22, California Code of Regulations
4. Section 116470(b), California Health and Safety Code

APPENDIX A

2007 Consumer Confidence Report

APPENDIX B

Section 116470 of the Health and Safety Code

Health and Safety Code
Section 116470

(a) As a condition of its operating permit, every public water system shall annually prepare a consumer confidence report and mail or deliver a copy of that report to each customer, other than an occupant, as defined in Section 799.28 of the Civil Code, of a recreational vehicle park. A public water system in a recreational vehicle park with occupants as defined in Section 799.28 of the Civil Code shall prominently display on a bulletin board at the entrance to or in the office of the park, and make available upon request, a copy of the report. The report shall include all of the following information:

(1) The source of the water purveyed by the public water system.

(2) A brief and plainly worded definition of the terms "maximum contaminant level," "primary drinking water standard," and "public health goal."

(3) If any regulated contaminant is detected in public drinking water supplied by the system during the past year, the report shall include all of the following information:

(A) The level of the contaminant found in the drinking water, and the corresponding public health goal and primary drinking water standard for that contaminant.

(B) Any violations of the primary drinking water standard that have occurred as a result of the presence of the contaminant in the drinking water and a brief and plainly worded statement of health concerns that resulted in the regulation of that contaminant.

(C) The public water system's address and phone number to enable customers to obtain further information concerning contaminants and potential health effects.

(4) Information on the levels of unregulated contaminants, if any, for which monitoring is required pursuant to state or federal law or regulation.

(5) Disclosure of any variances or exemptions from primary drinking water standards granted to the system and the basis therefor.

(b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:

(1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.

(2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.

(3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief plainly worded description of these terms.

(4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely at its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.

(5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.

(6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.

(c) Public water systems required to prepare a report pursuant to subdivision (b) shall hold a public hearing for the purpose of accepting and responding to public comment on the report. Public water systems may hold the public hearing as part of any regularly scheduled meeting.

(d) The department shall not require a public water system to take any action to reduce or eliminate any exceedance of a public health goal.

(e) Enforcement of this section does not require the department to amend a public water system's operating permit.

(f) Pending adoption of a public health goal by the Office of Environmental Health Hazard Assessment pursuant to subdivision (c) of Section 116365, and in lieu thereof, public water systems shall use the national maximum contaminant level goal adopted by the United States Environmental Protection Agency for the corresponding contaminant for purposes of complying with the notice and hearing requirements of this section.

(g) This section is intended to provide an alternative form for the federally required consumer confidence report as authorized by 42 U.S.C. Section 300g-3(c).

City of Milpitas 2007 Consumer Confidence Report

The City of Milpitas is pleased to provide our consumers with pertinent information about the quality of our drinking water. This report provides information on our water sources, water quality test results, and water conservation. Safe drinking water is our top priority. In 2006, the City's Utility Maintenance staff collected over 2,200 drinking water samples and about 7,000 tests were analyzed in State-certified laboratories. The water we provide to you meets all water quality standards of the State Department of Health Services (DHS) and the U.S. Environmental Protection Agency (USEPA).

Water Sources

In 2006, the City supplied an average of 10.27 million gallons of water per day to approximately 15,800 homes and businesses in Milpitas for indoor and outdoor use. An additional 0.73 million gallons per day of recycled water was used for landscape irrigation primarily in the industrial areas of the City.

Milpitas purchases drinking water from two wholesalers: about 64 percent from the San Francisco Public Utilities Commission (SFPUC) and 36 percent from the Santa Clara Valley Water District (District). We also distribute recycled water to a limited number of industrial and commercial users for landscape irrigation. The majority of the water from SFPUC is from the spring snowmelt that flows from the Tuolumne Reservoir into the Hetch Hetchy Reservoir located in Yosemite National Park. This supply is supplemented with water from the Alameda watershed. The Alameda watershed, located in Alameda and Santa Clara Counties, contributes surface water supply by storing rainfall and runoff in two reservoirs, Calaveras and San Antonio. This surface water source is blended with groundwater from Sunol Filter Galleries near the Town of Sunol. The SFPUC treats and filters these local water sources prior to delivery.

The District provides treated surface water from two water treatment plants. The surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir which all draw water from the Sacramento - San Joaquin Delta watershed. The District's local water sources include Anderson and Calero Reservoirs. Milpitas normally receives District water from the Penitencia Water Treatment Plant, and occasionally from the Santa Teresa Water Treatment Plant. Milpitas received water from the Santa Teresa Plant between 2/21/06 – 3/1/06 when the Penitencia Plant was shut down.

The City does not blend SFPUC and District supplies under normal operating conditions. However, the service areas can be physically interconnected to provide emergency water supply if needed. Generally, the City provides SFPUC water to residential areas and District water to industrial areas. Refer to the Water Source Map to view the water service areas.

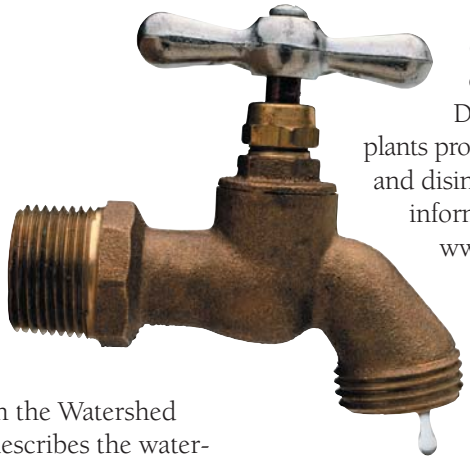
The City also has emergency interties with Alameda County Water District to the north and San Jose Water Company to the south. The Pinewood Well, located in the southern portion of the City, is also available as an emergency water supply. In 2006, there were no emergencies necessitating any use of the Pinewood well water, blending of the SFPUC or District sources, or supply from other sources via the emergency interties.

Continued on page 2

In This Issue

Continued from page 1

Water Quality



Protecting the Water Sources

The SFPUC protects the natural water resources by continuously monitoring Hetch Hetchy watershed weather conditions, water turbidity levels, microbial contaminants and aqueduct disinfectant levels, and by complying with monitoring and reporting requirements. A 2005 annual update on the Watershed Control Program and Sanitary Survey describes the watersheds and water supply system, identifies potential sources of contamination in the watersheds, discusses the existing and recommended watershed management practices that protect water quality, and summarizes the water quality monitoring conducted. The 2005 assessment showed that SFPUC watersheds have very low levels of contaminants, and those contaminants found are associated with wildlife and, to a limited extent, human recreational activity.

In 2003, the District completed a vulnerability analysis, as its source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildland fires in open space areas. In addition, local sources are also vulnerable to potential contamination from commercial horse stables and historic mining practices. However, no contaminant associated with any of these activities has been detected in the District's treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the District's website at www.valleywater.org.

The City of Milpitas completed a drinking water source assessment of Pinewood Well (emergency backup source) in 2000. Following DHS procedures, the well is classified as vulnerable due to a nearby dry-cleaning establishment and the local sewer collection system. However, the well, which is about 590 ft. deep, is protected by clay layers, which prevent contaminants from entering the water supply. No drinking water standards have been exceeded in the well water. To obtain copies of the assessment, please call (408) 586-3345.

Important Note for Fish Owners

Both SFPUC and District water supplies contain chloramines for disinfection. Consult your pet store about treatment you can add to your aquarium water to protect your fish. Chloramines as well as chlorine needs to be removed before placing fish in tap water.

SFPUC Water Supply Is Now Fluoridated

SFPUC supplies fluoridated water to the City. As a result, fluoride supplements are no longer necessary for residents in the SFPUC service area (see map at left), who are receiving fluoridated water.

For information about fluoride, visit the City of Milpitas website, or visit the SFPUC website at www.sfwater.org/fluoride. Local county health departments are also a good source of information about fluoride.

- City of Milpitas Water Hotline: (408) 586-2605
- SFPUC Fluoride Information Line: (866) 668-6008
- County of Santa Clara Health Department: (408) 885-3980

Hydrant and Water Main Flushing

Our maintenance crews routinely flush hydrants and water mains to remove sediment and keep the distribution system refreshed. City crews maintain nearly 203 miles of water lines and 1,756 fire hydrants. As a result, residents in the immediate vicinity may experience temporary discoloration of their water. This discoloration does not affect the safety of the water. If you experience discoloration in your water after crews have been flushing in your neighborhood, clear the water from your home pipes by running water faucets for a few minutes.

Recycled Water - Preserving Drinking Water for the Future

Customers that use recycled water for irrigation and industrial purposes instead of potable water increase the availability of potable water for drinking. Recycled water from the San Jose/ Santa Clara Water Pollution Control Plant undergoes an extensive treatment process including filtration and disinfection and is delivered to landscape irrigation and industrial process consumers in San Jose, Santa Clara and Milpitas. For more information, please visit the South Bay Water Recycling Program's web site at www.sanjoseca. gov/sbwr.

Lead and Copper Testing – Extra Steps to Make Water Safe for Residents

In 1991, the USEPA adopted the Lead and Copper Rule requiring all cities, including Milpitas, to perform lead and copper testing. The City's public water supply system does not have detectable levels of lead or copper; however, these metals may leach into the water from home plumbing. The City monitors lead and copper from residents' taps every three years, with the next monitoring scheduled to occur in Fall 2007.

How Can I Get Involved?

Regular City of Milpitas Council meetings occur on the first and third Tuesdays of every month at 7:00 p.m. and are held in the City Hall Council Chambers located at 455 E. Calaveras Boulevard in Milpitas. City Council Agendas are posted prior to each meeting at City Hall and on the City's web site at www.ci.Milpitas.ca.gov.

The City is a member of the American Water Works Association, and the Bay Area Water Supply and Conservation Agency.

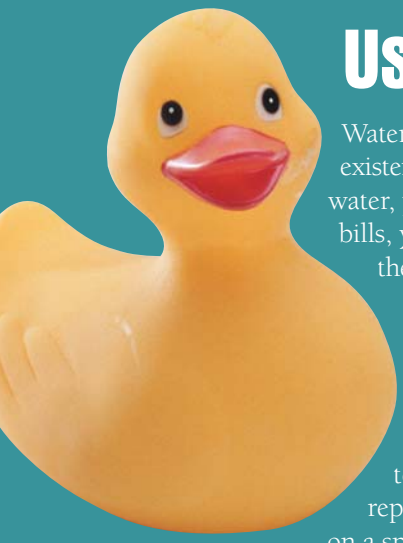
Borrow Water Meters — Identify Conservation Opportunities

Businesses can borrow water meters from the City to help track water use and identify water conservation opportunities. There is a $50 deposit per meter with a maximum 1-year loan period. Full deposit is returned upon verification that the meter is returned in proper working order.

Call (408) 586-2605 for additional information.

10% Voluntary Water Conservation Request

The City of Milpitas joins other Bay Area water purveyors in asking all consumers to voluntarily cut back water use by 10% this year to help conserve storage in the Hetch Hetchy reservoir system. The winter of 2006 was one of the driest on record for the State of California and the Sierra snow pack storage is depleted. And with global climate change upon us, scientists tell us that we can expect these drier winters to become more common. Today, more than ever, it's important to conserve our water supply. Conserving water now may help avoid more serious rationing later if we continue to experience dry winters.



Use Water Wisely... It's a Way of Life!

Water is a precious resource vital to the existence of all living things. By conserving water, you will not only reduce your utility bills, you will help protect and preserve the environment for future generations.

Water Conservation Programs

The City has several programs to assist consumers in saving water and becoming more aware of how to protect the environment. Use the reply card below to request information on a specific program.

Be Aware. Report and Fix Leaking Fixtures

Did you know plumbing leaks account for 14% of indoor water use in the United States? If you suspect a leak or faulty water fixture in your home, please fix it. If you are a renter, notify your landlord or property manager. A faucet leaking a small stream wastes 2,000 to 2,700 gallons of water per month.

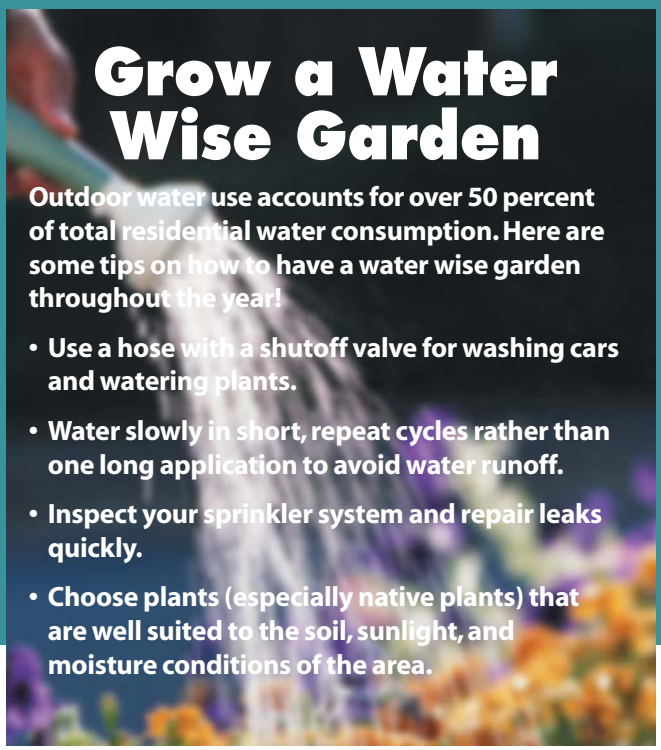
A "running" toilet can waste two gallons of water per minute, up to 7,000 gallons per month.

You can also use your water meter to check for leaks. First, turn off all faucets and appliances that use water. Next, read your water meter. Wait half an hour, then read your water meter again. If the reading changes, you have a leak and the most likely source is your toilet. Test for leaks by putting ten drops of food coloring in the toilet tank. Wait 15 minutes and if the colored water shows up in the toilet bowl, the tank is leaking.

Wasteful Irrigation Systems

Many landscapes are over-watered or have leaking sprinkler heads and pipes. The District offers FREE Water-Wise House Calls. For more information, or to set up an appointment, call 1-800-548-1882.

For more information on water conservation visit the Santa Clara Valley Water District's website at www.valleywater.org.



City of Milpitas Information Request Form

Name: _____

Address: _____

Milpitas, CA 95035

Daytime Phone #: _____ Email Address: _____

Please send me the following: (check all that apply):

- ❑ Faucet Aerator (FREE–2 max)
- ❑ Low Flow Showerheads (FREE–2 max)
- ❑ Less Toxic Gardening Tips
- ❑ Water Wise House Call Program
- ❑ Clothes Washer Rebate Information
- ❑ High Efficiency Toilet Rebate Information
- ❑ Water Efficient Landscape Rebate Information
- ❑ Irrigation System Hardware Rebate Information
- ❑ Water Efficient Landscaping Workshop Information
- ❑ Weather Based Irrigation Controller Installation Information
- ❑ Non-Residential Water Conservation Information (Various Programs)

Return form to: City of Milpitas / Utility Engineering Section
455 E. Calaveras Blvd./ Milpitas, CA 95035

How Do Drinking Water Sources Become Polluted?

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 animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive contaminants**, that 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, the USEPA and the DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

What Else Should I Know?

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Important Health Information

Some people may be more vulnerable to contaminants 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 individuals should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or on USEPA's website www.epa.gov/safewater.

Be the Solution to Water Pollution

Ever wonder where that storm drain goes? Unlike indoor plumbing, the storm drain carries water and urban pollution directly to your neighborhood creeks and eventually to the San Francisco Bay without treatment!

Here are a few simple things you can do to prevent pollution of our creeks and Bay:

- Call (408) 299-7300 to make an appointment to dispose of household hazardous wastes such as batteries, paints, fluorescent lamps, and used motor oil to your local hazardous waste facilities..
- Wash your car on a lawn that will allow runoff to percolate into the soil. Better yet, use a commercial car wash that recycles water.
- Sweep up leaves, dirt, and waste near curbs and place in the proper bins for recycling or garbage collection.
- Keep pet waste away from neighborhood streets and storm drains.
- Learn to control pests the less-toxic way. Visit www.watershedwatch.net

For more ways to prevent pollution of Milpitas' creeks and the Bay, call the Water Hotline at (408) 586-2605.

Water Quality Test Results

We are pleased to report that the water supplied in Milpitas did not exceed any water quality standards in 2006. The following table lists all drinking water constituents that were detected during the 2006 calendar year. Many other constituents were monitored but were not detected in the water. Unless otherwise noted, the data presented in this table is for testing done between January 1 and December 31, 2006.

Important Definitions for Understanding this Water Quality Report

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. MCLs are set by the State Department of Health Services.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk of health. MRDLGs are set by the USEPA.

Notification Level (NL): These are health-based advisory levels established by DHS for chemicals in drinking water that lack MCLs.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

2006 Water Quality Data[1]

DETECTED CONSTITUENTS	Unit	MCL	PHG or [MCLG]	District Water[2]		SFPUC Water		Typical Sources in Drinking Water
				Range	Avg. or [Max]	Range[3]	Avg. or [Max]	
Microbiological								
Total Coliform Bacteria[4]	%	≤5% positive	[0]	ND	ND	ND	ND	Naturally present in environment
Turbidity[5]								
UnFiltered Hetch Hetchy Water, max 5 NTU	–	TT	NS	NA	NA	0.22–0.93[6]	[4.4][7]	Soil runoff
Filtered Water – SVWTP, max 1 NTU	–	TT	NS	NA	NA	–	[0.18]	Soil runoff
Filtered Water – SVWTP, more than 95% of measurements < 0.3 NTU	–	TT	NS	NA	NA	100%[8]	–	Soil runoff
Filtered Water– PWTP, max 1 NTU	NTU	TT	NS	–	[0.07][7]	NA	NA	Soil runoff
Filtered Water – STTWTP, max 1 NTU	NTU	TT	NS	–	[0.10][7]	NA	NA	Soil runoff
Filtered Water – PWTP and STWTP, more than 95% of measurements < 0.3 NTU	–	TT	NS	100%[8]	–	NA	NA	Soil runoff
Inorganic Constituents								
Aluminum	ppb	1000	600	ND-52	52 ND	<50–70	<50	Erosion of natural deposits
Chlorine Residual[4]	ppm	MRDL=4	MRDLG=4	1.00–3.40	2.04	0.90–3.00	2.17[6]	Disinfection treatment
Fluoride (naturally occurring)	ppm	2	1	ND–0.1	0.1 ND	<0.1–0.2	0.1	Erosion of natural deposits
Fluoride (with additive)	ppm	2	1	NA	NA NA	0.1–1.5	1.0[9]	Water additive promotes strong teeth
Nitrate (as NO_3)	ppm	45	45	ND–4	4 4	ND	ND	Fertilizer runoff; erosion of natural deposits
Organic Constituents								
Total Organic Carbon[10]	ppm	TT	NS	0.82–2.21	1.72 1.73	1.1–2.9	2.4	Various natural and man-made sources
Secondary Standards								
Chloride	ppm	500	NS	9–81	29 81	3–22	12	Runoff, leaching from natural deposits
Color[4]	Unit	15	NS	<5	<5	<5–8	<5	Naturally-occurring organic materials
Odor Threshold[4]	TON	3	NS	<1	<1	<1	<1	Naturally-occurring organic materials
Specific Conductance	μS/cm	1600	NS	199–484	317 484	24–376	195	Substances that form ions when in water
Sulfate	ppm	500	NS	28.5–52.5	39.5 51.9	0.8–44.0	22.0	Soil runoff, leaching from natural deposits
Total Dissolved Solids (TDS)	ppm	1000	NS	114–450	255 286	20–190	112	Runoff, leaching from natural deposits
Turbidity[4]	NTU	5	NS	0.03–0.61	0.36	0.17–2.28	0.49	Soil runoff

KEY		
<	=	Less Than
AL	=	Action Level
Max	=	Maximum
NA	=	not applicable

ND	=	Non-detect
NS	=	No Standard
NTU	=	Nephalometric Turbidity Units
ppb	=	parts per billion
ppm	=	parts per million

PWTP =	Penitencia Water Treatment Plant
STWTP =	Santa Teresa Water Treatment Plant
SVWTP =	Sunol Valley Water Treatment Plant

TT	=	Treatment Technique
µS/cm	=	microSiemens/ centimeter
TON	=	Threshold Odor Number

2006 Water Quality Data(1)

Other Constituents – Not Enforceable	Unit	MCL	PHG or [MCLG]	District Water(2) Range(2)	District Water(2) Avg. or [Max]	SFPUC Water Range(3)	SFPUC Water Avg. or [Max]	Typical Sources in Drinking Water
Alkalinity (as $CaCO_3$)	ppm	NS	NS	49–94	61 75	6–114	58	Physical characteristic of water
Boron	ppb	1000	NS	ND–206	150 157	<100–161	<100	Natural deposits
Bromide	ppm	NS	NS	<0.05–0.07	<0.05 0.07	NA	NA	Natural deposits
Calcium	ppm	NS	NS	13–27	18 21	3–28	15	Natural deposits
Calcium (as $CaCO_3$)	ppm	NS	NS	32–69	44 52	NA	NA	Natural deposits
Chlorate	ppm	NS	NS	0.01–0.22	0.17 0.14	NA	NA	By-product of drinking water chlorination
Free Ammonia	ppm	NS	NS	0.06–0.14	0.09 0.07	NA	NA	Disinfection treatment
Hardness (as $CaCO_3$)	ppm	NS	NS	52–111	75 103	6–146	66	Physical characteristic of water
Magnesium	ppm	NS	NS	6–16	10 14	<0.2–11.5	6.3	Natural deposits
PH(4)	Unit	NS	NS	7.39–8.05	7.69	7.22–9.47	8.78	Determines acid content of water
Phosphate	ppm	NS	NS	1–1	1 1	ND	ND	Natural deposits, anticorrosive additive
Potassium	ppm	NS	NS	1.5–3.1	1.9 3.1	0.2–1.8	1.0	Natural deposits, soil runoff
Silica	ppm	NS	NS	7–16	11 16	3.8–7.2	5.0	Natural deposits, treatment
Sodium	ppm	NS	NS	17–61	32 61	2–24	14.3	Natural deposits
Total Ammonia	ppm	NS	NS	0.32–0.50	0.41 0.41	NA	NA	Disinfection treatment
Vanadium	ppb	50	NS	ND–4	4 ND	ND	ND	Natural deposits
Disinfectant Byproducts				Citywide Range	Highest Running Annual Average			Source
Total Trihalomethanes (TTHMs)(4)	ppb	80	NS	17.0–64.0	52.2(11)			By-product of drinking water chlorination
Total Haloacetic Acids(4)	ppb	60	NS	4.2–46.0	23.0(11)			By-product of drinking water chlorinaton
Lead and Copper(12)	**Unit**	**AL**	**PHG**	**Range**	**90th Percentile**	**# sites(13)**	**# sites above AL**	**Typical Sources in Drinking Water**
Copper(4)	ppb	1300	170	15–450	150	37	0	Corrosion of household plumbing
Lead(14)	ppb	15	2	ND–15	3.4	37	1(14)	Corrosion of household plumbing

NOTES:

(1) All results met State and Federal drinking water regulations.

(2) Water quality data in the District's transmission system. The City of Milpitas received water from the Santa Teresa WTP (STWTP) between 2/21/06 – 3/1/06 when the Penitencia WTP (PWTP) was shut down for maintenance. The range for District data is based on the range of test results at PWTP for 2006 and STWTP for the 1st quarter of 2006. The 'average' shows the PWTP data first, and then the STWTP data second.

(3) Water quality data in the SFPUC's transmission system.

(4) Water quality data in the City's distribution system.

(5) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

(6) This is the highest quarterly running annual average value.

(7) This is a single, maximum measurement event.

(8) This is the minimum percentage of time that the filtered water turbidity was equal to or less than 0.3 NTU.

(9) The City started receiving fluoridated water from SFPUC in November 2005.

(10) Precursor for disinfection byproduct formation.

(11) The reported data is the highest running annual average.

(12) 2004 data. City has a waiver to monitor every three years. The 90th percentile level of lead or copper must be less than the AL.

(13) 28 of these sites were in the SFPUC service area and 9 in the District's service area.

(14) The highest lead level, 15 ppb was detected at only one site. This was not considered to exceed the AL of 15 ppb.

Visit our web site at **www.ci.Milpitas.ca.gov**

To find out more about drinking water treatment, quality and regulations visit these internet sites:

American Water Works Association
www.awwa.org

California Department of Health Services
www.dhs.ca.gov/ps/ddwem/

Santa Clara Valley Water District
www.valleywater.org

San Francisco Public Utilities Commission
www.sfwater.org

People Behind the Water
www.drinktap.org

United States Environmental Protection Agency
www.epa.gov/safewater/

At Your Service

The City of Milpitas is Here for You

We value our consumers and work hard to ensure service and satisfaction. If you have any questions or comments about this report, please call the appropriate number below.

Billing Questions	(408) 586-3100
Water Conservation Hotline	(408) 586-2605
Water Emergencies 8-5, M-F	(408) 586-2600
Water Emergencies (after hours)	(408) 586-2400
Water Quality Questions	(408) 586-3345
EPA Safe Drinking Water Hotline	(800) 426-4791

Printed on Recycled Paper

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

此份有关你的食水报告,内有重要资料和讯息,请找他人为你翻译及解释清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

City of Milpitas
455 E. Calaveras Blvd.
Milpitas, CA 95035

PRSRT STD
U.S. POSTAGE
PAID
Milpitas, CA
Permit No. 4

Postal Customer

2007 Consumer Confidence Report