

PFBA
Frequently Asked Questions
Prepared by 3M – June 2008

What is PFBA?

PFBA, also known as perfluorobutanoate, was a product manufactured at 3M Cottage Grove for many years, and sold to an industrial customer for use in making photographic film. Production of this material at 3M Cottage Grove ended in 1998 due to decreased customer demand. PFBA was not part of 3M's global phase out of the production of PFOS and PFOA that began in 2000.

How much PFBA is in the water?

The amount of PFBA is extremely low. The detected amounts range from a low of 0.3 parts per billion (ppb) to a high of about 2.5 ppb depending on location. To put this in context, 1 ppb is the equivalent of 1 second in 32 years.

How did PFBA get into my water?

During the 1950's and 60's 3M disposed of various waste materials from 3M Cottage Grove in area landfills. The disposal sites were in Oakdale (late 1950's), Woodbury (early 1960's) and onsite at 3M Cottage Grove (early 1970's). This was a common and accepted practice. It is very likely that some of this waste contained PFBA which could have entered the groundwater from these sites.

Is my water safe to drink?

Yes, the trace amounts of PFBA in municipal wells are at safe levels and below the Minnesota Department of Health health based-value for PFBA (7 ppb).

Should I let my young children drink the water?

Yes. The trace amounts of PFBA detected in municipal wells do not alter the safety of the water for adults or young children.

How will PFBA affect my children?

At the trace levels found, PFBA will not affect the health of adults or children.

What is known about the long-term effects of PFBA?

3M's extensive research of related materials does not indicate any long-term effects in employees. Because PFBA is of lower toxicity and is eliminated from the body much faster than PFOA, we would not expect long-term effects from PFBA. Available data from an ongoing study in an EPA laboratory has shown no birth or development effects in laboratory animals exposed at very high doses.

Why hasn't 3M agreed to filter the water?

It's not needed. The water is safe and within government guidelines.

PFBA
Frequently Asked Questions
Prepared by 3M – June 2008

Will 3M provide bottled water?

It's not needed. The water is safe. Providing bottled water is unnecessary and could place a stigma on the community that is unwarranted.

Even if the water is safe what can I do to remove the PFBA?

Independent evaluations by the Department of Health (MDH) and 3M into effective home treatment or removal options of PFBA are continuing. MDH has published a fact sheet on point-of-use water treatment systems which can be found at:

<http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/water.html>

How unusual is it to find chemicals in water?

Advances in analytical chemistry have made it possible to detect materials at very low levels in water. Because of this, government agencies have set standards for allowable levels of materials in water. More information about other substances in your drinking water can be found in your municipality's annual water report and through the EPA, online at: <http://www.epa.gov/safewater/dwh/contams.html>

Municipal Water Supplies

Municipal drinking water supplies typically contain low levels of contaminants, both naturally occurring and man-made, and yet the water is still considered to be safe. The U. S. Environmental Protection Agency (EPA) has set allowable levels, known as Maximum Contaminant Levels (MCLs), for many contaminants found in municipal drinking water supplies. Those MCLs are set under the federal Safe Drinking Water Act. Where the EPA has not acted, the State of Minnesota can set Health Risk Limits (HRLs) for contaminants in drinking water under criteria set out in Minnesota law.

Annual water quality reports for many of the municipal drinking water supplies in the five-county Metro area (Anoka, Dakota, Hennepin, Ramsey and Washington Counties) are publicly available on the Internet. Based on a review of those reports in July 2007, the following contaminants regulated by the U. S. EPA have been found in one or more municipal drinking water supplies in the five-county Metro area:

PFBA
Frequently Asked Questions
Prepared by 3M – June 2008

Contaminant	Potential Health Effects	MCL	Highest Average Reported Level
Arsenic	Circulatory problems; increased risk of cancer	10 ppb	10.6 ppb
Barium	Increase in blood pressure	2,000 ppb	180 ppb
1,2 Dichloroethane	Increased risk of cancer	5 ppb	3.1 ppb
cis-1,2 Dichloroethylene	Liver problems	70 ppb	.9 ppb
Haloacetic acids	Increased risk of cancer	60 ppb	25.25 ppb
Radium	Increased risk of cancer	5 pCi/L	22.8 pCi/L
Thallium	Hair loss; changes in blood; kidney, intestine or liver problems	2 ppb	1.26 ppb
Trichloroethylene	Liver problems; increased risk of cancer	5 ppb	5.56 ppb
Total trihalomethanes	Liver, kidney or central nervous system problems; increased risk of cancer	80 ppb	33.43 ppb
Vinyl chloride	Increased risk of cancer	2 ppb	.8 ppb

Updated July 2007

If I have a private well, will 3M test my well water?

No. Tests of private wells are being conducted by the Minnesota Department of Health.

Why did 3M put in filters in Oakdale and not here?

First, it is important to point out that at the present levels your drinking water is safe and the levels of PFBA in municipal wells are below the State's health based-value. Filters were placed on Oakdale wells so that the levels of PFOS and PFOA would be reliably and consistently below the established HBVs for those two substances. The system in Oakdale was designed to treat PFOS and PFOA, not PFBA.

Why wasn't this problem discovered earlier?

3M's production of PFBA was intermittent over the years and ended in 1998 at 3M Cottage Grove. 3M stopped making PFBA due to a decrease in customer demand. 3M's environmental investigation of its historical manufacture and disposal practices of fluorochemical materials had been concentrated on PFOS and PFOA. The Department of Health began testing for PFBA in mid-2006 in some private wells in Lake Elmo and expanded the testing to municipal wells late in the year. The Department of Health has said it developed the analytical capability to measure for PFBA in drinking water in 2006.

PFBA
Frequently Asked Questions
Prepared by 3M – June 2008

Why didn't 3M clean this up earlier?

The discovery of these trace levels of PFBA is a recent finding by the Minnesota Department of Health (late 2006). 3M began a remedial action at the Woodbury site in the 1960's for other types of industrial waste. We feel the system installed has been effective in managing these wastes. 3M is assessing whether that system is effective for PFBA and additional work is underway to evaluate other containment measures. Work plans for three former 3M waste disposal sites in the east metro have been submitted to the MPCA for its review.

Why should taxpayers pay to clean this up?

3M has a history of taking responsible actions regarding our former disposal and manufacturing sites, including bearing the costs of any necessary remedial measures. We will do so here as well. 3M has submitted work plans to the MPCA for its review to identify potential sources and evaluate containment measures. 3M has reimbursed the state for its oversight and monitoring costs and will continue to do so. In May of 2007, 3M entered into a consent order with the MPCA to establish a framework for addressing and managing fluorochemicals at former disposal sites in the East Metro area of St. Paul. 3M will conduct field investigations and implement approved remedial measures at company expense. In addition to the work performed by 3M, the company has agreed to pay the state of Minnesota up to \$13 million for environmental research of fluorochemicals in the state and to assist the MPCA in its work at the closed Washington County Landfill near Lake Elmo.

Why should the tax payers pay for bottled water?

It's not needed. The water is safe. Providing bottled water is unnecessary and could place a stigma on the community that is unwarranted.

Is this problem going to affect my property value?

There should be no reason why property values would be affected.

Will 3M buy my property?

No.

Why didn't 3M tell us about this problem earlier?

The discovery of these trace levels of PFBA is a recent finding by the Minnesota Department of Health using newly developed analytical methods.

PFBA
Frequently Asked Questions
Prepared by 3M – June 2008

What are PFOS and PFOA?

PFOS and PFOA are part of a group of molecules known as fluorochemicals. In the late 1990's these materials were found to be widespread in the environment at low levels and also at low levels in the blood of the general U.S. population. 3M had been monitoring the presence of these materials in the blood of production employees for decades and the results of that research support the conclusion there are no adverse human health effects attributable to PFOS and PFOA. Additional information about 3M, PFOS and PFOA can be found on-line at: www.3M.com/pfos-pfoa.