

# Public Health Policy and Actions Taken in Communities

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May 30, 2007

Perfluorochemicals Workshop  
Minnesota Department of Health

# Public Health Policy - PFOS & PFOA

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- ★ PFOA and PFOS water values and PFOS fish tissue values are considered levels that are protective of the public's health
- ★ When the concentration of these chemicals in drinking water and fish exceed the HBVs there is a cause for concern and action

# Policy – Guidelines for Other PFCs

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- ★ Other PFCs, primarily PFBA, are present in the groundwater and drinking water of these east metro communities
- ★ Data are insufficient to develop HBVs for these PFCs, **but MDH must respond**
- ★ Develop guidelines based on policy
- ★ This policy decision evolves from our understanding of the relative risks of these chemicals compared PFOA/PFOS.

# Policy – Guidelines for Other PFCs

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- ★ The guideline for PFBA and other carboxylic acid PFCs is -
  - 1.0 ppb for PFBA, PFHxA, PFPeA
  
- ★ The guideline for the sulfonic acid PFCs is -
  - 0.6 ppb for PFHxS, PFBS

# Policy – PFCs and Additivity

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- ★ Often there are multiple PFCs present
- ★ Frequently they occur at concentrations below exposure guidelines
- ★ Affect same health endpoint
- ★ Standard risk assessment policy and practice is to apply the additivity model (cumulative risk)
- ★ Sum Hazard Quotients
- ★ If Hazard Index  $> 1$  cause for concern and action

# Policy – Guidelines & Additivity

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- ★ The guideline and additivity policies are a means of providing protective measures in the absence of adequate data
- ★ The policies and risk assessments are routinely reviewed and modified as additional data become available

# Public Health Actions - Partners

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- ★ MDH develops advice and recommendations
- ★ Response is accomplished by many
  - MPCA
  - Washington and Dakota Counties
  - Affected local communities
  - Affected residents (personal action)
- ★ Response as a result of collaboration and negotiations with 3M

# Actions - Pathways

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## ★ Routes of Exposure

- Ingestion

- Drinking water
- Fish consumption

- Inhalation

- Not considered a likely pathway

- Dermal

- Not considered an important pathway

# Actions - Oakdale Drinking Water

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- ★ Public water supply
- ★ Some Oakdale wells are contaminated with PFOA, PFOS and PFBA at levels above MDH guidelines
- ★ Public wells regulated by MDH
- ★ City of Oakdale negotiated an agreement with 3M to install GAC treatment system
- ★ GAC treatment went online Oct 30, 2006
- ★ The system is fully removing PFOA & PFOS, but PFBA has begun to break through at trace levels

# Oakdale - Drinking Water Treatment



# Actions - Lake Elmo Drinking Water

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- ★ Depending on location, residents are served by public water or private water supplies.
- ★ No detects of PFCs in public water supplies
- ★ 100's of wells tested, 148 exceeded MDH guidelines for PFOA, PFOS, PFBA or additivity

# Actions - Lake Elmo Drinking Water

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- ★ Bottled water/carbon filtration provided as an interim measure
- ★ Through a 3M grant, city has expanded city water to about 200 homes
- ★ Remaining homes on private wells that exceed the drinking water advisory guidelines have been supplied with whole-house GAC filters

# Actions - Communities South of I-94 – Drinking Water

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- ★ Cottage Grove, Newport, St. Paul Park, Woodbury, Hastings, South St. Paul
- ★ All public wells have been sampled and are on a monitoring schedule
- ★ Extensive sampling of private well and non-community wells
- ★ Some public wells contain PFBA >1ppb
- ★ Many private wells contain PFBA >1ppb

# Actions - Communities South of I-94 – Drinking Water, Cont.

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- ★ Cities have been provided with information on PFBA, and appraised of the MDH PFBA guideline
- ★ Residents with private wells have received guidance on ways to reduce exposure until a PFBA HBV is developed
- ★ Many public water and private well water consumers are purchasing small point-of-use filters or bottled water

# Actions - PFC Fish Consumption Advice

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- ★ Concern is for long term exposure
- ★ Same advice for everyone – women, men, kids
- ★ Consumption advice is based on concentrations of PFOS in fillets

# 2006 Consumption Advice - PFOS

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- ★ Spring 2006 - 1<sup>st</sup> Advisory Issued
  - One meal per week for Bluegill from Mississippi River Pool 2
  - DNR Catch & Release regulations for other species provides protection

# 2007 Consumption Advice - PFOS

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- ★ Mississippi River Pools 2 – 6
  - Advice ranges from 1 meal/week to 1 meal/month
  - Bluegill, carp, largemouth bass, northern, smallmouth bass, walleye, white bass
- ★ Brownie, Cedar, Isles, Calhoun, Harriet
  - Bluegill = 1 meal/month

# Communications

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- ★ Sharing of information is essential
- ★ Frequent multi-agency meetings & communications
- ★ Meetings with community leaders
- ★ Public meetings with every community
- ★ Communications with the media
- ★ Many technical communication tools
  - Information Sheets
  - Web pages
  - E-mail list

# MDH Perfluorochemicals Workshop

## May 30, 2007

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Thank you