

Douglas, Tina (PUC)

From: PUC Docket Filings
Sent: Thursday, June 29, 2006 1:20 PM
To: Kolbo, Delaine; Zebroski, Carol; Douglas, Tina (PUC); Forney, Heather; Van Gerpen, Patty
Subject: FW: South Dakota CWA Public Comments Summary PWPT Presentation RE: EL05-022
Importance: High

From: Mary Jo Stueve[SMTP:MJSTUEVE@CLEANWATER.ORG]
Sent: Thursday, June 29, 2006 1:20:09 PM
To: PUC Docket Filings
Cc: maryjo-s@msn.com
Subject: South Dakota CWA Public Comments Summary PWPT Presentation RE: EL05-022
Importance: High
Auto forwarded by a Rule

From South Dakota Clean Water Action on behalf of its 7,791 household members please file the attached Power Point Summary Presentation in the following Docket:

EL05-022 - In the Matter of the Application by Otter Tail Power Company on behalf of Big Stone II Co-Owners for an Energy Conversion Facility Permit for the Construction of the Big Stone II Project.

Clean Water Action has a long history of supporting citizen efforts nation wide to protect water resources, promoting sound solid waste management, pushing for agriculture policies that strengthen rural communities, and working for a transition to clean renewable energy.

Sincerely,

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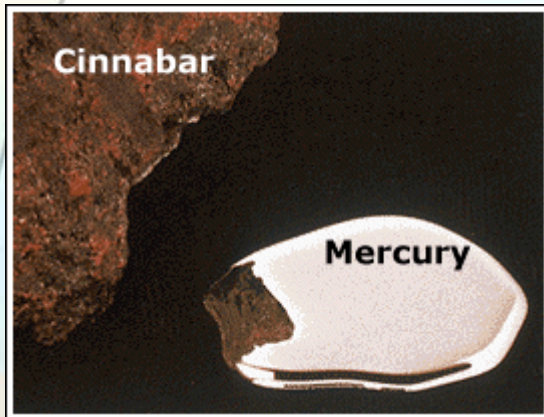
06/29/2006



Mercury and Coal Plants
An Overview

Mary Jo Stueve
Clean Water Action

What is Mercury?



1. Known as quicksilver.
2. A naturally occurring element in oceans, rocks & soils.
3. Liquid at room temperature.
4. Used in a variety of products.
5. Toxic & persistent in the environment.

What are the sources of mercury pollution in the region?

1. Energy: coal-burning power plants
2. Taconite processing (MN only)
3. Purposeful use:
 - Municipal solid waste combustion
 - Volatilization of disposed products
 - Smelters that recycle cars, appliances



Coal-burning power plant

Mercury pollution from coal plants



Coal plants are the largest source of mercury pollution in Minnesota and South Dakota.

MN: 1,700 lbs/year

**SD: Big Stone I plant emits 189 lbs/year;
Big Stone II would emit 210 lbs/year**



Number one
source of mercury
exposure for
humans is fish
consumption.

Bioaccumulation



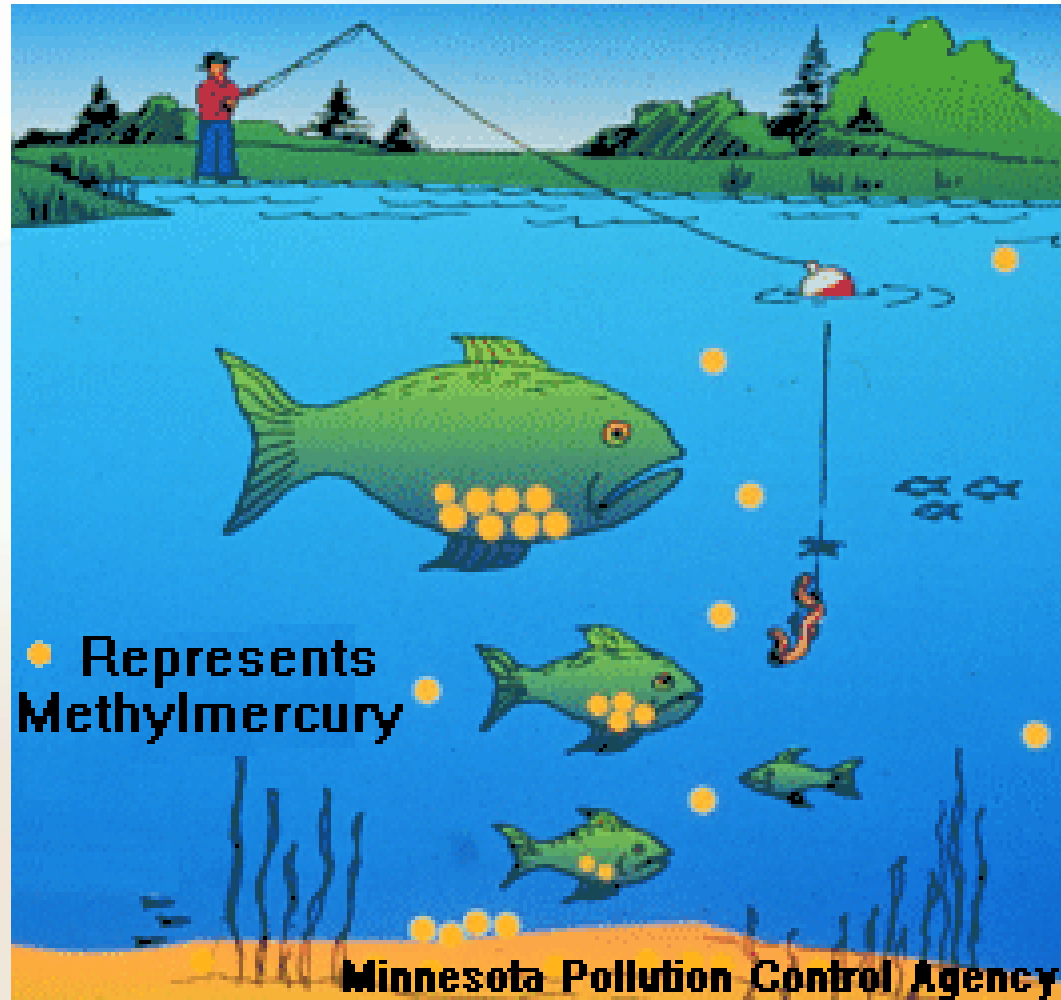
Mercury is deposited in lakes where bacteria convert it to toxic methylmercury (MeHg).

MeHg is taken up by tiny animals and plankton.

MeHg then accumulates in the tissues of fish and other organisms.

Wildlife like eagles, osprey, loons, turtles, mink, otters and other fish-eaters are also affected.

Who is at the top of the food chain?



Fish Consumption Advisories

- All Minnesota waters are contaminated.
- MN Dept. of Health has issued a state-wide fish consumption.
- SD has advised against consuming fish from 10,000 acres of its lakes.
- Fish consumption advisories for specific SD waters at Dept. of Health.

Problem with Methylmercury

- **Potent neurotoxin.**
- **Like lead, mercury effects are being detected at lower and lower levels.**
- **MeHg passes through the placenta to the developing fetus and is also passed on to nursing infants in breast milk.**
(Breastfeeding is still best for babies.)

Newborns at Risk



Per EPA estimates:

1 in 10 U.S. women has mercury body burden that could put her baby at risk for adverse effects on development.

Could affect an estimated 630,000 newborns a year.

Fish are Healthy

Source of protein,
vitamin D & omega-3
fatty acids

Essential for fetal and
infant brain
development

Contributes to heart
and mental health

Don't stop eating fish!



What can we do?

Heed Early Warnings

Choose the Safest Solutions

Exercise Democracy

Heed Early Warning Signs

1. MN and SD have fish consumption advice.
2. Mercury is a known neurotoxin and rates of children with learning disabilities are on the rise.
3. There should be more public awareness about the risks of eating certain fish and more efforts to eliminate the contamination.

Choose the Safest Solutions

1. Smart Fish Choices
2. Clean Energy

Smart Fish Choices

Follow these guidelines:

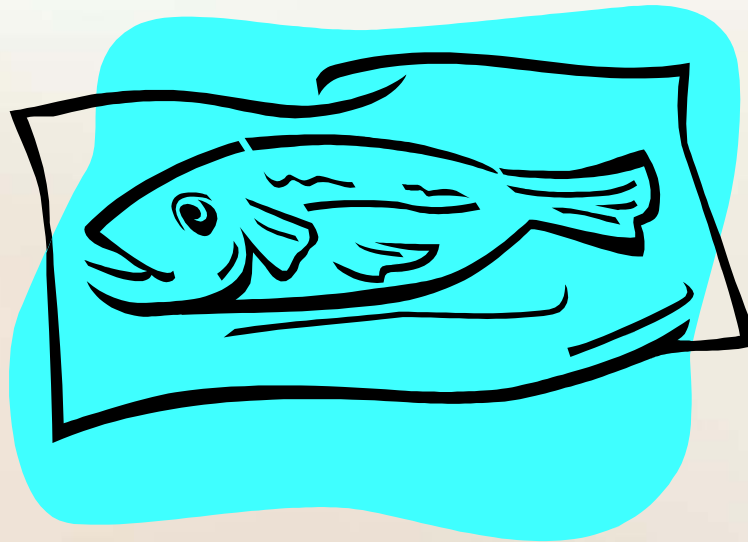
- Eat smaller fish and panfish rather than predator fish.
- Consider total fish consumption.
- Limit intake of some fish for pregnant/nursing women and young children.
- Trimming fat and cooking will not reduce mercury in fish.



IATP's Smart Fish Calculator

Tool to estimate "safe" consumption level per EPA guidelines

Go to www.iatp.org/foodandhealth



Clean Energy: Buy Wind Power



Replace fossil-fuel based energy with renewable sources like solar & wind.

Support renewable energy by choosing wind power from your local utility.

The “Saudi Arabia of Wind”

- South Dakota ranks 4th in the U.S. in renewable energy potential.
- But as of January 2004, the state had only 44.48 megawatts of installed and projected wind energy capacity, and no new wind projects planned.
- A new coal plant eliminates the potential for economic development from renewable energy.

Exercise Democracy

- 1. Submit comments on Environmental Impact Statements.**
- 2. Attend public hearings.**
- 3. Send a letter to your local paper.**
- 4. Vote! SD Public Utility Commissioners are elected state-wide.**



**We must prevent mercury pollution
to protect our children!**