

Kolbo, Delaine

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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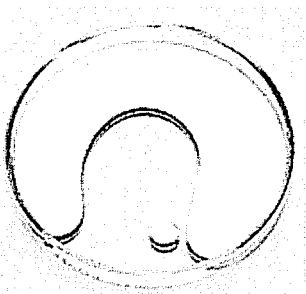
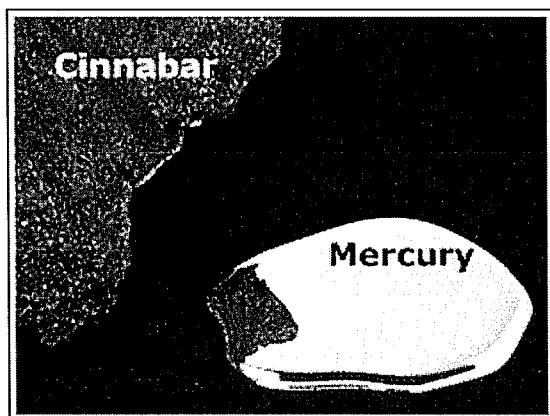
06/29/2006

Mercury and Coal Plant
An Overview

Mary Jo Stueve
Clean Water Action

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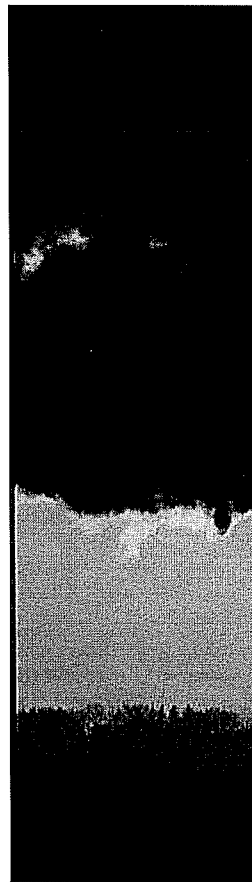
What is Mercury?



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

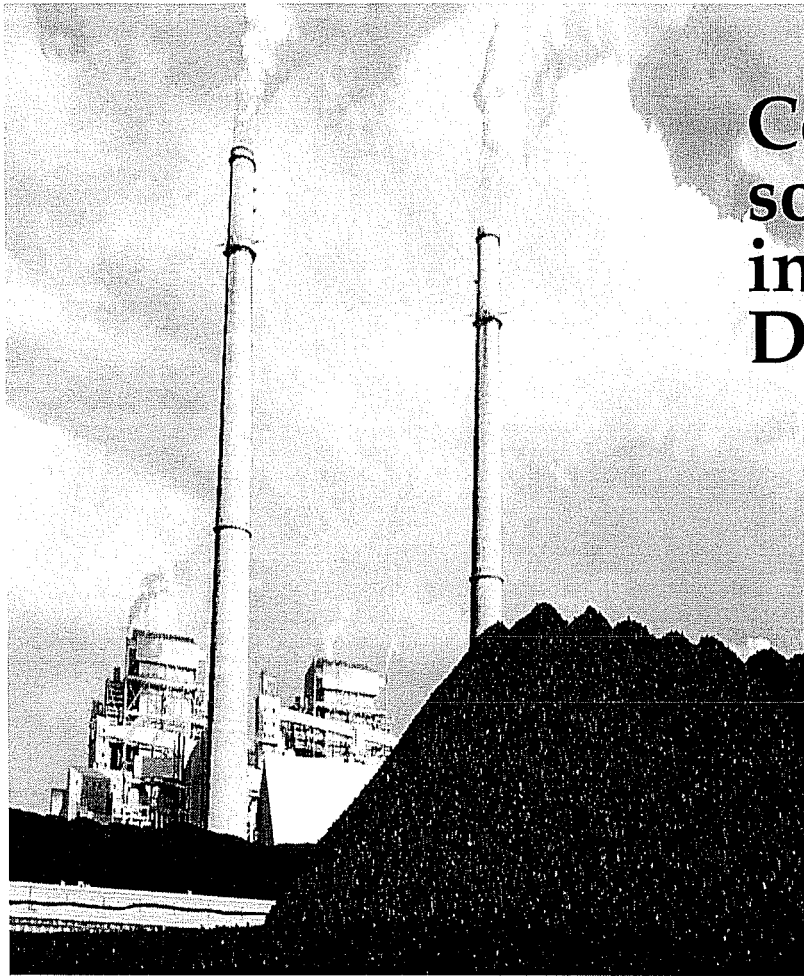
What are the sources of metal pollution in the region?

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-burn

Mercury pollution from coal



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

MN: 1,700 lbs/yr

**SD: Big Stone I emits 189 lbs/yr
Big Stone II will emit 210 lbs/yr**



Number
source of m
exposure
humans is
consump

Bioaccumulation



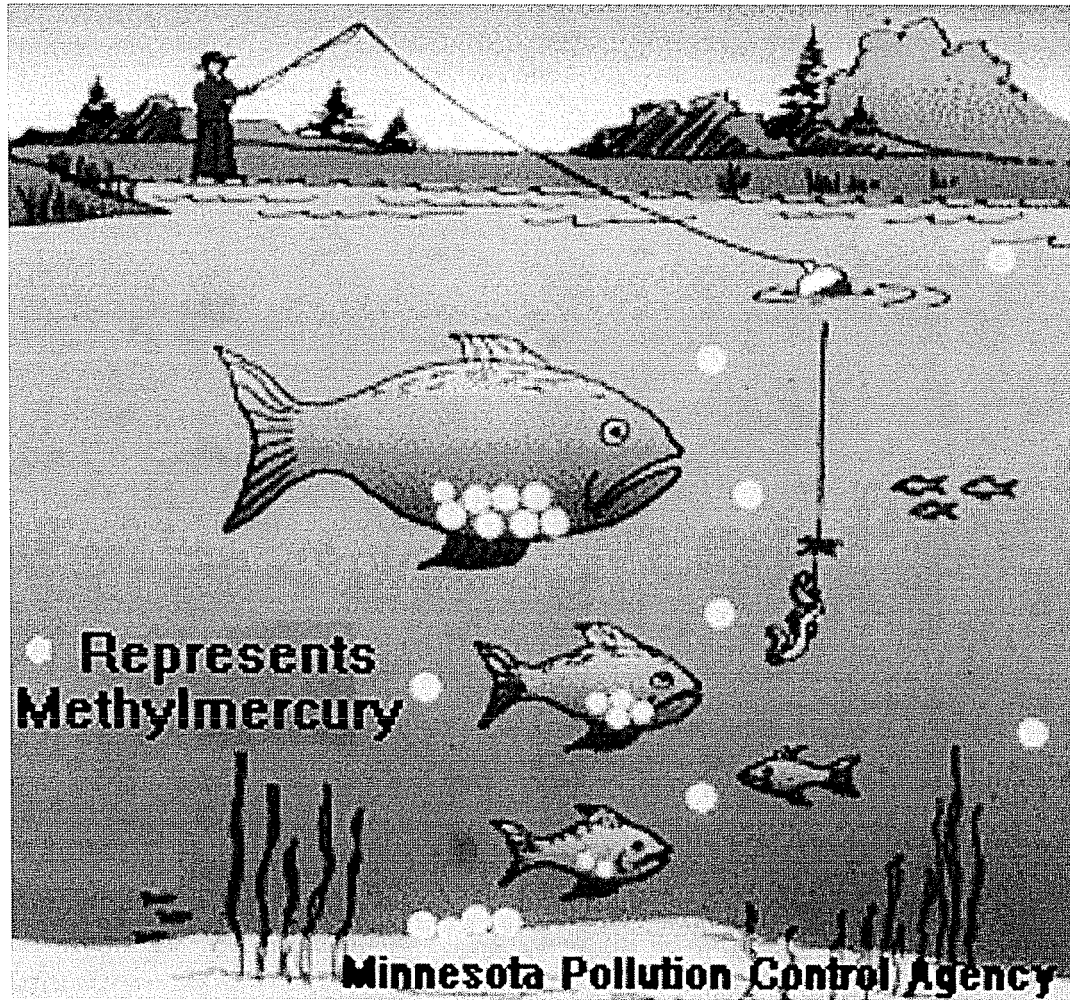
Mercury is deposited in lakes where bacteria convert it to toxic methylmercury (MeHg).

MeHg is taken up by tiny animals and plants.

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

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

Who is at the top of the food chain



Fish Consumption Adviso

- All Minnesota waters are contain
- MN Dept. of Health has issued a wide fish consumption.
- SD has advised against consumi from 10,000 acres of its lakes.
- Fish consumption advisories for 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 esti

**1 in 10 U.S. wor
mercury body b
that could put h
risk for adverse
development.**

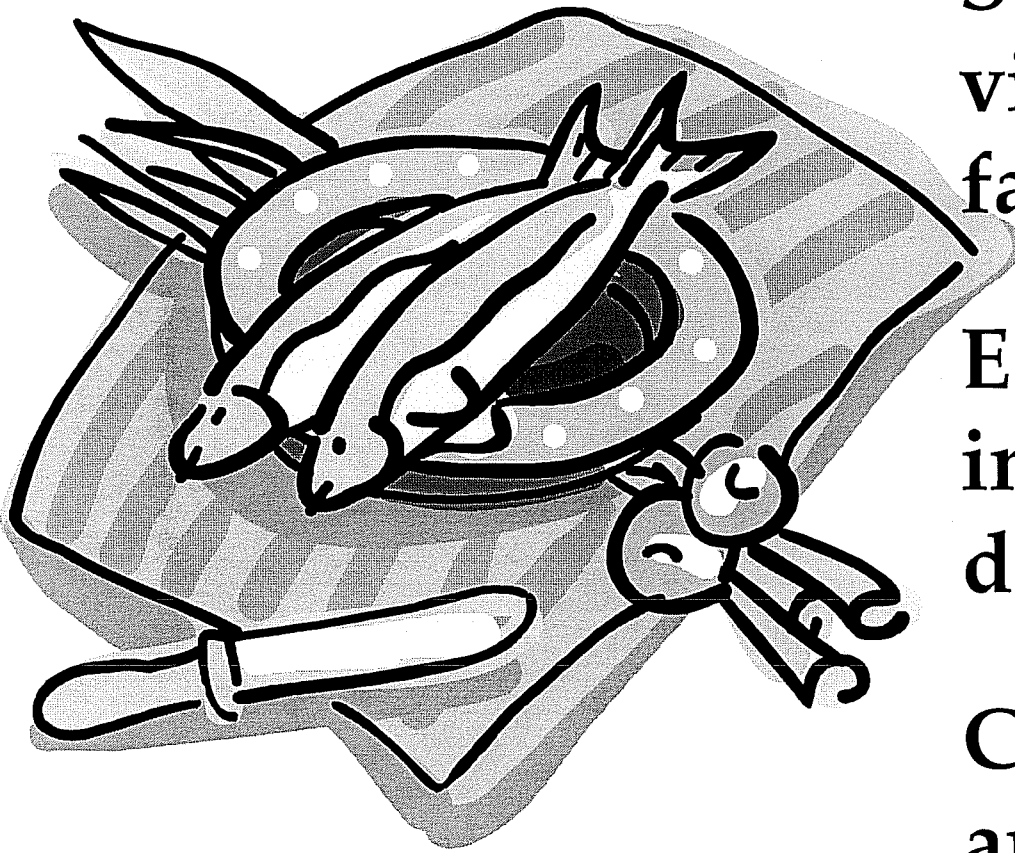
**Could affect an
630,000 newborn**

Fish are Healthy

Source of protein
vitamin D &
fatty acids

Essential for
infant brain
development

Contributes to
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 Solution

1. Smart Fish Choices
2. Clean Energy

Smart Fish Choices

Follow these guidelines:

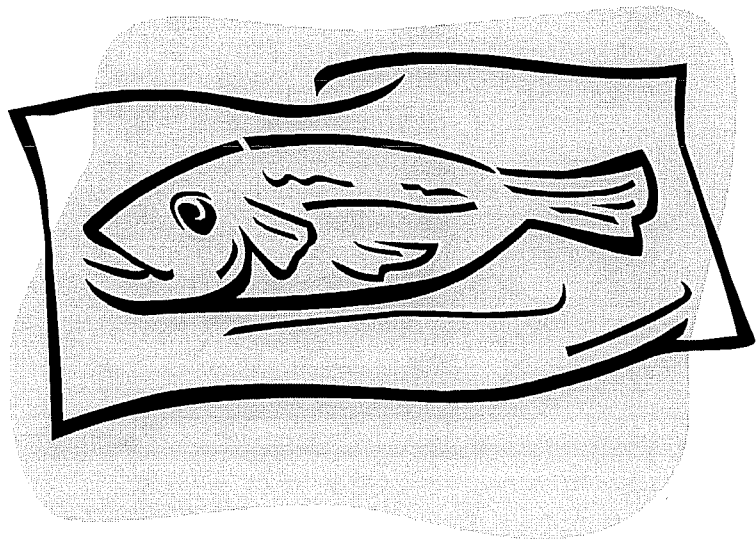
- Eat smaller fish and panfish rather than predator fish.
- Consider total fish consumption.
- Limit intake of some fish for pregnant/nursing women and young children.
- Trimming fat and cooking will not reduce mercury in fish.



IATP's Smart Fish Calculator

Tool to estimate "safe" consumption level per EPA guidelines

Go to www.iatp.org/foodandhealth



Clean Energy: Buy Wind P



Replace fossil-fue
energy with renew
sources like solar

Support renewabl
by choosing wind
from your local u

The “Saudi Arabia of W

- South Dakota ranks 4th in the U.S. renewable energy potential.
- But as of January 2004, the state has only 44.48 megawatts of installed wind energy capacity, far below its projected wind energy capacity, and several 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 statewide.**



We must prevent mercury pollution
to protect our children!