

# Disposal of Mine Waste in Lakes, Wetlands, Rivers, and Oceans

Present Situation in the United States

# 1972 – CLEAN WATER ACT PASSED

- EPA regulates the discharge of pollutants to Waters of the US
- EPA focuses on the “effect” of the discharge
- Army Corps of Engineers regulates the discharge of dredged or fill material to Waters of the US
- Corps focuses on the “primary purpose” of the discharge

# 1972 – CLEAN WATER ACT PASSED

- Typical Corps reference to an approval to place fill material:

“This activity is regulated by the U.S. Army Corps of Engineers under ... the project would include *clean fill* material obtained in the local...”

This is the way the regulatory system operated for more than 30 years

# 2002 REGULATORY CHANGE

## Purpose:

- “Corps and EPA Clarify Clean Water Act Definition; New Environmental Improvements also to be made in Appalachian Mining Rules”
- regulate the placement of dirt and rock from mountaintop mining in streams
- Discharges ... may only be authorized in compliance with environmental standards that include mitigation for unavoidable impacts to the aquatic environment.

# 2002 REGULATORY CHANGE

## Regulatory Result:

- the 2002 revised definition of fill material eliminated language contained in the Corps' previous regulation which had excluded "any pollutant discharged into the water primarily to dispose of waste" from Section 404 authorization.
- New definition of fill allows the "...placement of overburden, slurry, or tailings or similar mining-related materials; ..." into Waters of the United States

# LEGAL CHALLENGE

- **Overburden** – A number of legal challenges have been brought against permits for coal mine valley fills, and Federal district courts have ruled in support of the plaintiffs in several of these cases, but the rulings have subsequently been reversed on appeal.
- **Tailings** – Kensington gold mine in Alaska.

# LEGAL CHALLENGE

- 2005 – SEACC appeals Kensington §404 permit
- 2006 – Federal District Court rules for Corps, SEACC appeals
- 2007 – 9<sup>th</sup> Circuit Court of Appeals rules for SEACC

# LEGAL CHALLENGE

- 2007 – 9<sup>th</sup> Circuit Court of Appeals rules for SEACC

“... the Clean Water Act ... is unambiguous ... and (requires) performance standards ... to discharges from the froth-flotation mill at ... Kensington Gold Mine into Lower Slate Lake.”

“Furthermore, the federal agencies’ clear statements at the time they adopted the current regulatory definition of the term ‘fill material’ demonstrate that they did not intend for waste products subject to effluent limitations and performance standards to be regulated as ‘fill material’.”

# LEGAL CHALLENGE

- Coeur (a party to the litigation) appeals to the US Supreme Court
  - 2009 – Supreme Court rules in favor of Coeur/Corps
- “Because Congress has not “directly spoken” to the “precise question” of whether an EPA performance standard applies to discharges of fill material, the statute alone does not resolve the case.”

# LEGAL CHALLENGE

## JUSTICE KENNEDY, FOR THE MAJORITY:

“If the tailings did not go into the lake, they would be placed on nearby wetlands. The resulting pile would rise twice as high as the Pentagon and cover three times as many acres.”

“... the Corps concluded that placing the tailings in the lake will cause less damage to the environment than storing them above ground: The reclaimed lake will be ‘more valuable to the aquatic ecosystem than a permanently filled wetland . . . that has lost all aquatic functions and values’.”

## JUSTICE BREYER, CONCURRING:

“... to forbid the use of any of these substances as “fill,” even when, say, they constitute no more than trace elements in dirt, crushed rock, or sand that is clearly being used as “fill” to build a levee or to replace dirt removed from a lake bottom may prove unnecessarily strict ...”

# LEGAL CHALLENGE

## JUSTICE GINSBERG, DISSENTING:

“.... Congress enacted the Clean Water Act in 1972 “to restore and maintain the chemical, physical, and biological integrity” of the waters of the United States. ‘The use of any river, lake, stream or ocean as a waste treatment system,’ the Act’s drafters stated, ‘is unacceptable.’ ....”

“.... The Court’s reading, in contrast, strains credulity. A discharge of a pollutant, otherwise prohibited by firm statutory command, becomes lawful if it contains sufficient solid matter to raise the bottom of a water body, transformed into a waste disposal facility. Whole categories of regulated industries can thereby gain immunity from a variety of pollution-control standards. The loophole would swallow not only standards governing mining activities, ... but also standards for dozens of other categories of regulated point sources, ....”

# LEGAL CHALLENGE

## JUSTICE GINSBERG, DISSENTING:

“.... Providing an escape hatch for polluters whose discharges contain solid matter, it bears noting, is particularly perverse; the (Clean Water) Act specifically focuses on solids as harmful pollutants. ....”

“.... Congress, we have recognized, does not “alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes. ... Would a rational legislature order exacting pollution limits, yet call all bets off if the pollutant, discharged into a lake, will raise the water body’s elevation? To say the least, I am persuaded, that is not how Congress intended the Clean Water Act to operate.”

# WHERE FROM HERE?

- **Legislative** – ‘Clean Water Protection Act’ (H. R. 1310)

Section 502 of the Federal Water Pollution Control Act (33 U.S.C. 1362) is amended by adding at the end the following: FILL MATERIAL

“The term ‘fill material’ means any pollutant which replaces portions of the waters of the United States with dry land or which changes the bottom elevation of a water body for any purpose. The term does not include any pollutant discharged into the water primarily to dispose of waste.”

# WHERE FROM HERE?

... BUT, many coal mining states have Democratic party legislators, so this issue is not drawn on traditional party lines

- **Administrative** – The US Supreme Court said that the Agencies are free to determine the definition of “fill.”

The Bush administration determined that fill included mine waste. The Obama administration can return the definition of fill to where it was for over 30 years.

# WHAT DOES THE TECHNICAL LITERATURE SAY?

## **MEND Initiative**

(Mine Environmental Neutral Drainage)

- A program of Natural Resources Canada
- Extensive research on Sub-Aqueous waste disposal from 1997 to present
- Focus of the research is on the disposal of Potentially Acid Generating (PAG) waste

# WHAT DOES THE TECHNICAL LITERATURE SAY?

## RESULTS

- Putting PAG waste under water is the best way to avoid ARD
- WRT the bioavailability of metals in sediments:  
“It is still a challenge to predict metal bioavailability and toxicity in sediments.” (2008)

Questions?