

# Introductions and Comments from the States

## Concerns and opportunities.

Great Lakes Regulatory Forum on Ballast Water Action  
September 24, 2009

*Jeff Stollenwerk, Supervisor  
Industrial Water Quality Permits*



# Why are states involved?

- Legal responsibility under the Clean Water Act
  - Eliminate discharge of pollutants to surface waters
  - Fishable and swimmable waters
  - NPDES Permits to regulate discharges
  - Companion / supplementary state regulations
- Public Expectations

# Public Expectations - Background

Late 2007 to November 2008

- Merrill Lynch & Citigroup losing \$10's of billions quarterly
- Bear Stearns, the U.S.'s fifth largest investment bank, collapses and is taken over by JP Morgan
- Ex-Bear Stearns fund managers arrested by FBI for their role in subprime mortgage collapse
- Fannie Mae and Freddie Mac nationalized by the U.S. Treasury
- Lehman Brothers files for bankruptcy
- Stock markets plummet
- AIG Corp bailed out by the U.S. Federal Reserve
- US Congress passes \$700 billion bank bail-out
- Unemployment rates on the rise
  
- **November 4, 2008: Election Day**

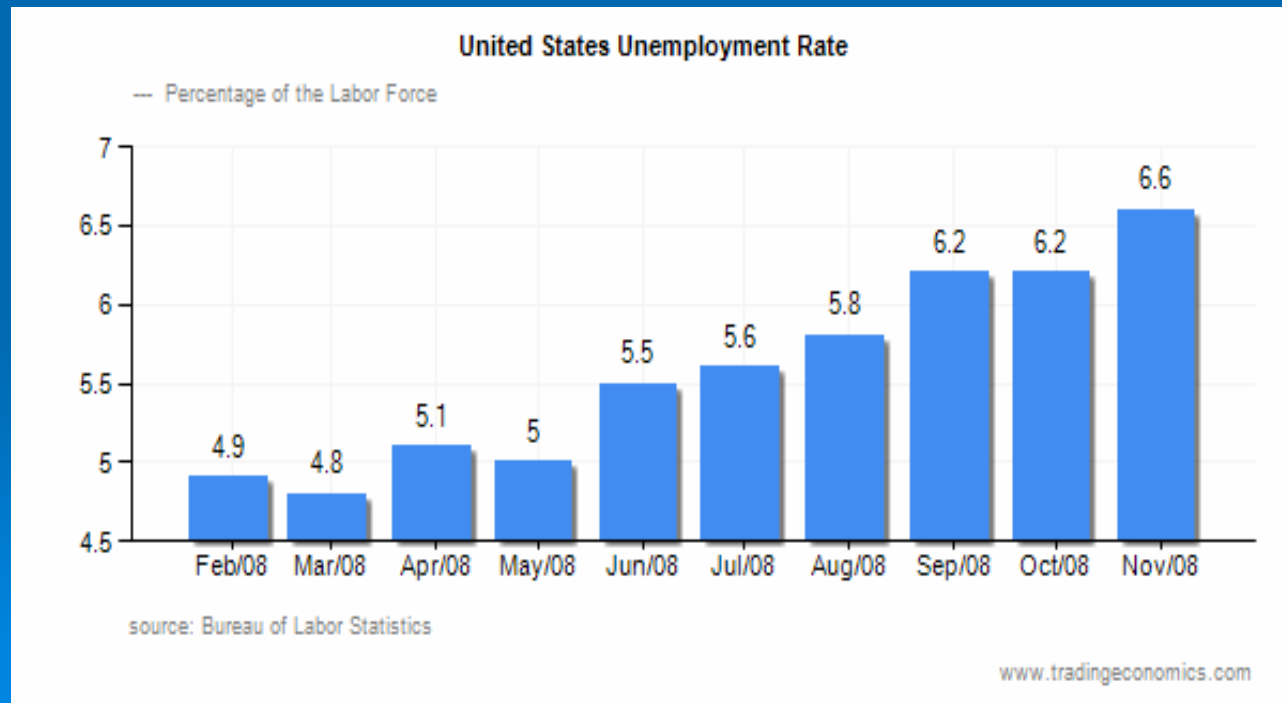
# Clean Water, Land and Legacy Amendment

*"Shall the Minnesota Constitution be amended to dedicate funding to protect our drinking water sources; to protect, enhance, and restore our wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve our arts and cultural heritage; to support our parks and trails; and to protect, enhance, and restore our lakes, rivers, streams, and groundwater by increasing the sales and use tax rate beginning July 1, 2009, by three-eighths of one percent on taxable sales until the year 2034?"*

# Minnesota Election Results

John McCain 44%  
Barack Obama 54%

Tax increase to  
Protect Water **56%**



# State Perspectives

- Minnesota – Jeff Stollenwerk
- Wisconsin – Susan Sylvester
- Michigan – Barry Burns
- Illinois – Darin LeCrone
- Ohio – Eric Nygaard
- New York – Dave Adams

# Minnesota's Vessel Discharge Regulation Work Plan

- Encourage/support federal action on Great Lakes shipping
- Develop state regulatory program for vessel discharges
- Communication and coordination
- State legislative activities
  - LCCMR-Partnership opportunities (Great Ships Initiative)
  - Potential budget initiative in 2009 for implementation of state ballast water program
  - Information sharing
- Project management / Program Development



# Wisconsin's Ballast Water Program

Susan Sylvester  
September 24,  
2009



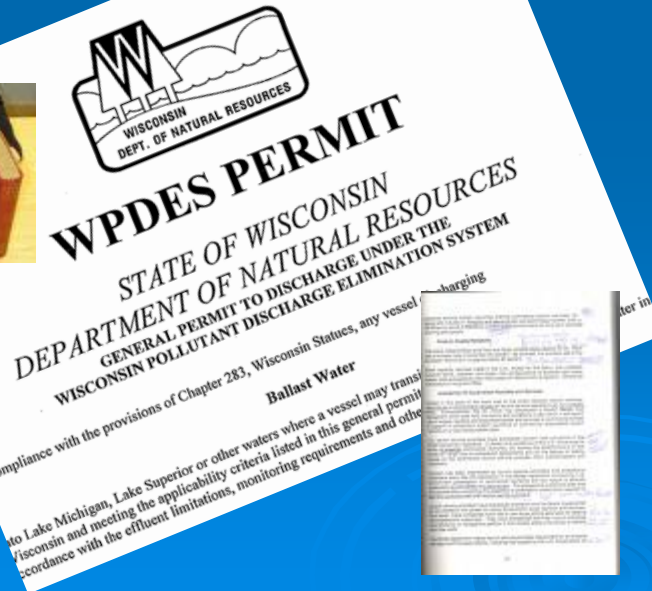


# 401 Certification

- Oct. 23, 2008, Wisconsin issued state 401 certification requiring IMO for existing salties and lakers by 2016, IMO for new vessels by 2012
- 3 challenges, state law requires holding contested case hearing
- Dec. 15, 2008, Wisconsin withdrew it's 401 certification, intending to issue a state permit instead

# Ballast Water General Permit

- Public Noticed February 23-March 30
- Public Hearing March 23 in Milwaukee
  - 75 attendees, 27 oral statements
  - 395 comments received
  - 26 categories





# Vessels covered

- Ocean going vessels
- Great Lake vessels
- Which: have at least ballast tank capacity 2,114 gallons (8 cubic meters) and are at least 164 feet in length



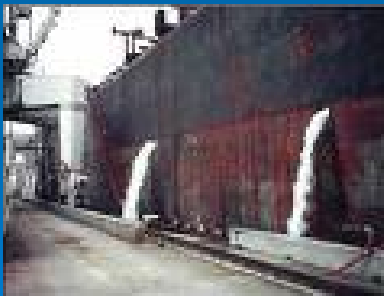
➤ Discharge of ballast water containing sea water is prohibited, unless vessel can demonstrate in compliance with Wisconsin Chloride limits

➤ Maximum daily limit for :

chloride 1,514 mg/L

salinity 2.7 ppt

seawater 35 ppt



# Public Comments



- 395 total comments received
  - 249 identical comments from National Wildlife Federation members
  - 27 oral comments at public hearing
- 26 categories of comments
- Preparing response to comments now
  
- New permit to be issued Fall '09

# General Permit

- Notice of Final Determination
- Response to Comments
- Permit still evolving, maybe September

\* changing effective dates and discharge limits

State budget passed adopting fees for ballast water General Permit and 3 staff

\* \$1,200 application fee

\* \$345 annual fee



# AB 360

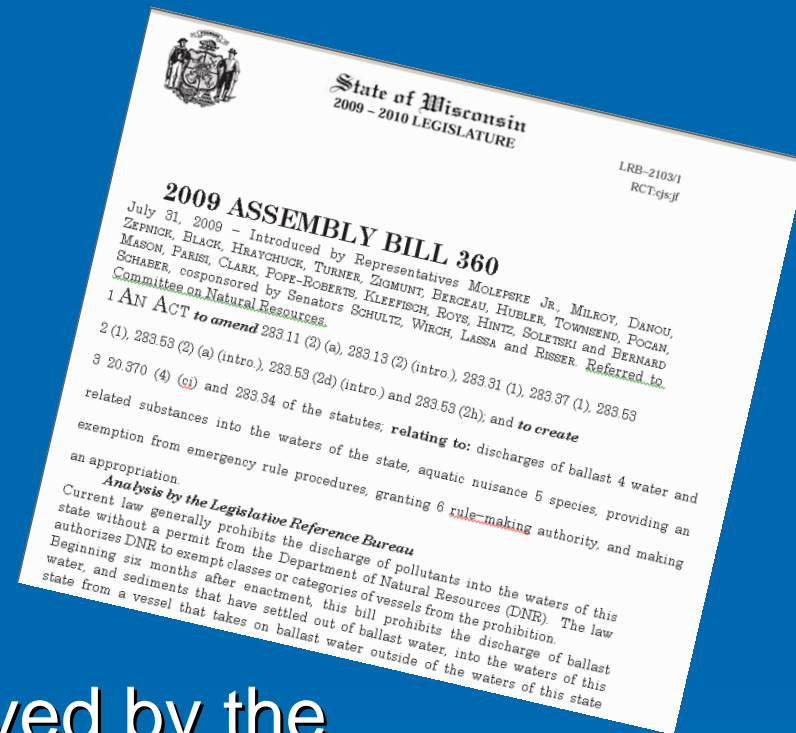
- Proposal: AB-360 (09-2103)
- Bill History:  
<http://www.legis.state.wi.us/2009/data/AB360hst.html>
- Relating to: discharges of ballast water and related substances into the waters of the state, aquatic invasive species.
- Public Hearing by Assembly Committee on Natural Resources.
  - September 2, 2009 at 10:00 AM & 1:00PM



# Review of AB 360


## ➤ Prescribes 4 treatments

- Filtration
- Thermal methods
- Ultraviolet light
- Biocides
- Another technique approved by the Department





# Concerns

- DNR doesn't want to approve technology
  - Rather have discharge performance standard than "treatment techniques"
  - Reporting or Record Keeping provisions absent
  - Limits permit term to 5 years
- 



Susan Sylvester, Permits Chief  
Bureau of Watershed Management

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608-266-1099

# Michigan's Ballast Water Program

Barry Burns, MDEQ

September 24,  
2009

The logo for the Michigan Department of Environmental Quality (DEQ) is positioned on the left side of the banner. It consists of the letters 'DEQ' in a bold, white, sans-serif font. To the right of the letters is a circular emblem containing a stylized white silhouette of the state of Michigan. The banner itself features a background image of a sandy beach at sunset or sunrise, with the sun low on the horizon and its light reflecting on the water. The text 'Department of Environmental Quality' is written in a white, sans-serif font across the middle of the banner.

**DEQ** Department of Environmental Quality

# Illinois' Ballast Water Program

Darin LeCrone

September 24,  
2009



Illinois Environmental  
Protection Agency

# Ohio Ballast Water Regulations

Eric Nygaard  
September 24, 2009

401 Certification  
of Federal VGP



# Ohio 401 Certification

- Exotic Species – Meet IMO standards
  - Salties – New ships by 1/1/2012
    - Existing ships by 1/1/2016
  - Lakers – New ships by 1/1/2016
    - Existing ships exempt

# Basis – Ohio WQS

- “To every extent practical and possible....waters shall be .... Free from substances entering the waters....in such a degree as to create a nuisance”.

# Chlorine Limits

- 200 ug/l (less than 2 hour/day)
- 38 ug/l (greater than or equal to 2 hour/day)
  - Compliance level = QL of 50 ug/l



# Other Biocides

- Must meet Final Acute Value / Inside Mixing Zone Maximum criteria.

# Basis – Ohio WQS

- “To every extent practical and possible....waters shall be .... Free from substances entering the waters.... in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone;”
- FAV a measure of rapid lethality - GLI

# New York State Ballast Water Update

## Great Lakes Forum

September 24, 2009



**David Adams**  
[djadams@gw.dec.state.ny.us](mailto:djadams@gw.dec.state.ny.us)

# History and Future Interests

- Certified EPA VGP with conditions to meet State water quality standards.
- Willing to facilitate improved communication between treatment technology developers and vessel operators.
- GLRI should facilitate 1) pilot shipboard treatment installation, 2) GSI testing of pilot shipboard treatment systems, 3) advancement of technology testing protocols for 100X IMO/ 1000X IMO, 4) needs assessment for shore-based treatment facilities.
- Exploring options for EPA/ CG/ DEC collaboration.

# Vessels Operating in NY Waters en Route to Upstream States or Canada

- Vessel activities permitted under the VGP must meet the water quality requirements of *all states affected by vessel discharges*.
- Authorizes *downstream* states such as New York, through their Certifications, to condition the VGP with water quality-based limits for AIS.
- Such limits are enforceable provisions of the VGP.
- Discharges in upstream Canadian waters affect NY waters.
- Boundary Waters Treaty (1909), “. . . the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.”

# Technical Basis for NY Certification

- IMO Study Group on Ballast Water and Other Ship Vectors (MEPC 49/2/21, 2003)
- U.S. government recommendation to IMO (BWM/CONF/14, 2004)
- CA Advisory Panel on Ballast Water Performance Standards (incl. G. Ruiz of SERC, other federal/state agency staff, environmental NGOs, shipping interests, etc. – 2005 report)
- CA State Lands Commission Advisory Panel (incl. R. Albert of EPA, R. Everett of USCG, E. Lemieux of Naval Research Laboratory, G. Ruiz of SERC, other federal/state agency staff, environmental NGOs, shipping interests, etc. – 2007 report)

# Effective Immediately

## Condition 1 (BWE)

Vessels entering NY waters from outside EEZ exchange/flush to meet VGP requirements

Vessel entering NY waters from within the EEZ exchange/flush to meet 401 WQC requirements

### Exemptions

- Great Lakes/St Lawrence Seaway system
- NY Harbor and LI Sound
- entering NY waters from ports of call within New Jersey or Connecticut
- have ballast water treatment already installed

# Exclusions for

## Conditions 2 (100X IMO)

## & 3 (1000 X IMO)

Vessels that can't meet the 1/1/2012 or 1/1/2013 deadlines may apply for time extensions:

- unavailability of technology
- shortage of supply
- vessel specific engineering constraints
- exhausted all other options

Extensions may be applied for up to 18 months prior to the deadline

Safety exemption for ballast water exchange/flushing

# NYS Certification Conditions

Standards	Condition #2 By 2012, existing vessels operating in NY shall have ballast water treatment systems that meet the following standards	Condition #3 Vessels constructed on or after 2013 operating in NY shall have ballast water treatment systems that meet the following standards
Organisms $\geq$ 50 micrometers	<1 living organism/ 10 cubic meters	0 detectable living organisms
Organisms <50 and >10 micrometers	< 1 living organism/ 10 milliliters	< 0.01 living organisms per milliliter
Indicator microbes	<ul style="list-style-type: none"> <li>• <i>Vibrio cholera</i> &lt;1 cfu/ 100 ml . . . or &lt;1 cfu/ g wet weight</li> <li>• <i>E. coli</i> &lt;126 cfu/ 100 ml</li> <li>• Enterococci &lt;33 cfu/ 100 ml</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Vibrio cholera</i> &lt;1 cfu/ 100 ml . . . or &lt;1 cfu/ g wet weight</li> <li>• <i>E. coli</i> &lt;126 cfu/ 100 ml</li> <li>• Enterococci &lt;33 cfu/ 100 ml</li> </ul>
Bacteria		< 1,000 per 100 ml
Viruses		<10,000 per 100 ml



# Summary from the States

