

# NORTHEAST CLEAN PORTS WORKSHOP

Paul Pathy, Vice-President and General Manager  
Federal Marine Terminals Inc.  
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# Introduction to Fednav Ltd.

- ◆ Incorporated 1944
- ◆ Privately held
- ◆ Largest Canadian ocean, dry bulk shipping group
- ◆ Headquartered in Montreal
- ◆ 275 employees
- ◆ Offices on all continents

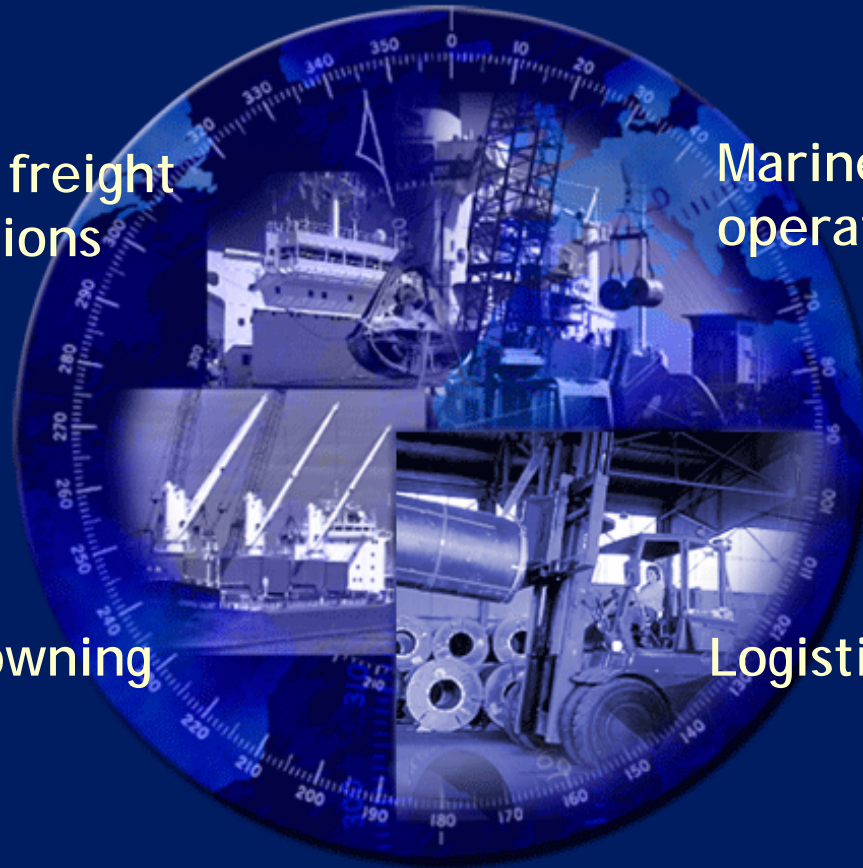
# Main Lines of Business

Ocean freight  
operations

Marine terminal  
operations

Shipowning

Logistics



# FMT

## Federal Marine Terminals

- ◆ 8 operations covering 10 ports in the USA and Canada
- ◆ 2 groups of terminals
  - Great Lakes
  - US East and Gulf Coasts
- ◆ Wide variety of break-bulk and bulk commodities

# Federal Marine Terminals

## Locations

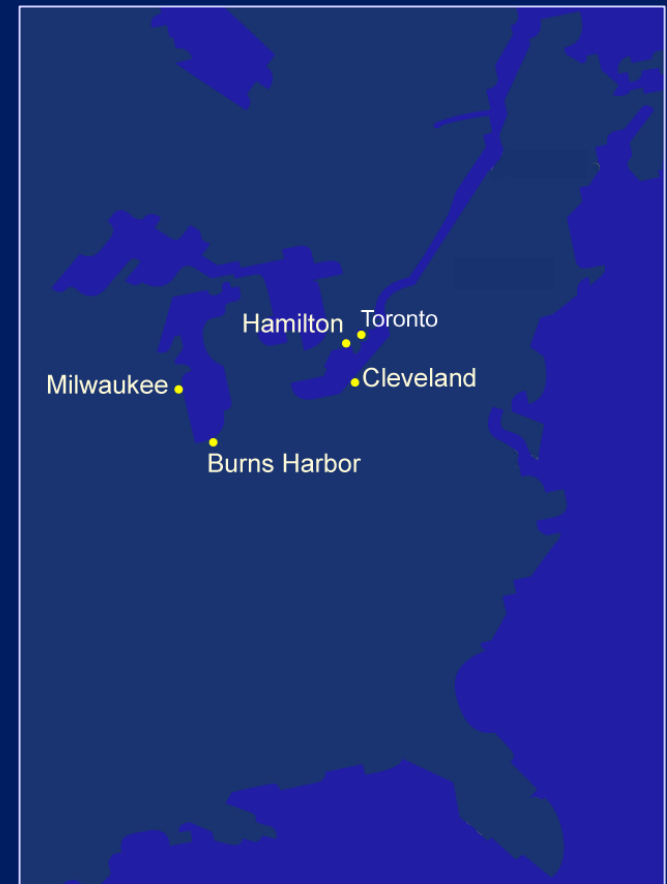
- Hamilton
- Toronto
- Cleveland
- Burns Harbor
- Milwaukee
- Eastport
- Albany
- Richmond
- Tampa
- Port Manatee



# Lakes Terminals and Operations

## FMT Cleveland

- ◆ Sole break-bulk stevedore in Port of Cleveland
- ◆ Handling 500,000 tons of imported steel annually
- ◆ Heavy coils, wire rod, plate from Corus, Arcelor, Swedish Steel



# The Fleet

- ◆ 3 Manitowoc model 4100 cranes
- ◆ 6 light forklifts, assorted
- ◆ 17 Taylor forklifts, from 36,000lbs to 65,000lbs
- ◆ Mostly newer models, 1997 and later

# The Project

- ◆ Approached by Caterpillar in October 2005
- ◆ Installation of diesel emission reduction retrofit equipment, or diesel oxidation catalysts
- ◆ Equipment and installation were donated as part of Caterpillar's participation in Ohio Senator Voinovich's Diesel Emissions Reduction program

# Project Facts

- ◆ Technology was selected by Caterpillar
- ◆ FMT provided detailed technical information with cooperation from local Cummins representative
- ◆ To date 12 of 26 installations complete, holidays and smaller models caused delays

# Project Facts

- ◆ Installation: Each machine is out of service for 2-3 hours
- ◆ Similar to muffler replacement, no special knowledge or tools required
- ◆ No additional costs or changes in performance noted so far - no fuel study completed

# Conclusions

- ◆ No immediately measureable results - expecting 20% reduction in particulate matter and 90% of hydrocarbons and carbon monoxide
- ◆ Normal cost estimated at \$1000-\$1500?
- ◆ Looking at similar technology for other locations



# Contact

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