

#### What was the NJ/NY Harbor Crisis?

- August 1997, the US EPA Region 2 promulgated a final rule which closed the Mud Dump Site
- Re-designated as the Historic Area Remediation Site" to be remediated with Category 1 material.

2-3 Million Cubic Yards of Dredged Material No Longer had a disposal location.

## State of New Jersey Response

- 1996 Joint Dredging Plan for NJ and NY
- 1996 Dredging and Harbor Re-vitalization Bond Act

Together this provided for over \$265 Million for dredging projects and dredged material management research

#### State of New Jersey Response

- 1998 \$18.2 million contract to evaluate the beneficial use of dredged material using a process referred to "Solidification and Stabilization" S/S.
- NJDOT, Office of Maritime Resources Sediment
   Decontamination Technology Demonstration Program
- 1999, 2008 –NY/NJ Harbor DMMP Published by NY District NJDEP/NJDOT strong involvement in steering the DMMP toward upland beneficial use of dredged material

# NJDEP Regulatory Changes to Promote Beneficial Use of Dredged Material in the Harbor Complex

- Dredged material deregulated as a solid waste Acceptable Use
   Determination Process (AUD) vs. BUD
- NJDEP Dredging Technical Manual Published in 1989
- Created NJDEP, Office of Dredging and Sediment Technology
- Developed uniform sampling protocol for upland placement of dredged material in both New Jersey and New York

# NJDEP Regulatory Changes to Promote Beneficial Use of Dredged Material in the Harbor Complex

- Risk Assessment on upland placement of dredged material –
   OENJ Elizabeth Fill Protocol
  - Then NJDEP implements "Alternative Fill Protocol" for contaminated sites/landfill closures
  - Final Outcome 2015 NJDEP Site Remediation Program's "Fill Material Guidance for SRP Sites" – the Like on Like Policy for SRP Site

http://www.nj.gov/dep/srp/guidance/srra/fill\_protocol.pdf?version\_3\_0

# Pugmill Processing Facility



- Two currently operating in the Harbor
- 3000 cy throughput daily
- 500,000 cy per year
- Rail and/or truck transport to end use site

# In - Barge Processing Facility



- One facility operational
- 6000 K + throughput daily
- 500,000 cy per year
- Barge or truck transport to end use site



Example of final product from processing facility

# Beneficial Uses of Processed Dredged Material

Mine Reclamation

- Brownfield Remediation Projects
- Landfill Closure/Redevelopment





# Bark Camp Mine Reclamation Project



- 500,00 cy of PDM
- Pre-processing in NJ and then final addition of additives at mine site



### **OENJ Elizabeth**



- Accepted 800K of PDM
- Used as grading material and low permeability cap – landfill closure
- End Use: Jerseys Garden Mall





### Bayonne Golf Club





- Accepted 2 MCY of PDM
- Used as grading material and low permeability cap in remediation of two sites
- End Use: Golf course

#### Prologis Port Reading Business Park



- 130,000 cy as grading material and low permeability cap in remediation of three brownfield remediation sites
- End Use: Warehouses
   (1 million square feet)

## **Burlington Neck LLC Site**





- 280,000 cy of PDM placed as grading material and cap material
- End Use: Warehouse
   (1.6 million sq. ft.)

#### **Brownfield Sites**

- Koppers Seaboard Site 1 MCY +
- Port Liberte Golf Course 200K
- FDP Enterprises 420K
- Elizabeth Seaport Park 260K
- Sayreville Seaport Site 500K +

#### Landfill Interim/Final Closure



- Meadowlands Landfills 2+ MCY
- Linden Landfill 500K
- Bellmawr Landfills 500K+
- Fresh Kills Landfill 1 MCY

# How Did We Move That Much Mud?

- NY/NJ Harbor Dredge Material Management Team Monthly Meetings
- Promote Beneficial Use With Developers
- Relationships with local government/NGOs where sites are proposed
- Ongoing involvement during construction
- Dredged material versus "Spoil"

## Questions?

