Polluted Legacy: Transportation Construction in Contaminated Sites of New York State

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A River Runs Through It: The Erie Canal

Erie Canal - completed in 1825
A River Runs Through It: The Erie Canal
Commerce flourished in New York in part because of rail lines, highways and bridges.
But activities along transportation corridors generated contaminated wastes.

- Coal gas plant – Utica Harbor
- Chemung Iron Works
- Cyanide (blue stains) from purifier waste
- Fresh Kills Landfill – Staten Island
We handle pollution differently today

- Transportation networks were essential for commercial growth
- Industries belched pollutants that were typically discarded nearby
- Cities burned garbage and filled the low areas with ashes
- We understand the consequences and do things differently now because we are smarter!
- Today’s transportation systems lie above and within contamination from the past

Solvay-process waste beds (orange) near Onondaga Lake and I-690
Federal and State environmental laws require changes in construction practices

- We map the types and extent of contaminants before construction
- We build remedial steps into our projects and protect worker health and safety
- Although transportation agencies didn’t create these problems, good transportation projects can help clean up our environment!

Lock repair in PCB-contaminated Hudson River
What has worked for us in NY?

- Contractors are given information about potential and known contamination discovered during design.
- Contractors must provide a materials handling plan before working in contaminated areas.
- DOT reviews and approves the plan.

ECOPAC

Environmental Commitments and Obligations Package for Construction
What has worked in NY ...

- Special specifications for underground fuel storage tanks, contaminated soil (petroleum, PCB’s, etc.)
- Identify on plans where special specs will be used
- Train our engineers-in-charge how to apply these special specs
- Requiring contractors to provide 40-hour OSHA 1910.120 HAZWOPER training for 20 DOT staff at project start

Drums of excavated hazardous waste staged along right-of-way
Improve awareness and understanding throughout NYSDOT

- Each NYSDOT region has a Construction Environmental Coordinator (CEC)
- CEC’s meet regularly for updated training, to share successes, and discuss problems
- CECs can ask environmental staff in the main office when help is needed
Develop trust relationships with staff in other agencies

- NYSDOT cooperates with regulatory and resource agencies
- We try to follow through on our commitments
- When things go wrong, we work with our contractors to fix them

Environmental groups, elected officials and the public INSIST upon an accountable and responsible transportation agency
What works in New York can work for you, too!

- Historical contamination should be expected on transportation projects
- These problems can be handled during construction
- Use special specs, training, and methods that worked elsewhere
- Partner with contractors and regulatory agencies
- ... and remember that New Jersey has more hazardous waste sites and New York has more lawyers only because New Jersey got to pick first!