

Attachment F
Rail Feasibility Review of USEPA FFS

**to the Comments on behalf of the Lower Passaic River Study Area Site
Cooperating Parties Group on the Proposed Plan for the Lower Eight Miles of
the Lower Passaic River Study Area Portion of the Diamond Alkali Superfund
Site**

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Background Information

This white paper was prepared by Paul K. Gessner, Principal, Gessner Transportation Consulting LLC. Mr. Gessner has over 35 years of extensive experience in multi-modal freight transportation planning, research and project management, specializing in rail operations and facility planning. Mr. Gessner spent over 20 years with The Port Authority of New York and New Jersey, where he provided technical expertise in the physical and operational planning and development of capital projects intended to increase intermodal rail service to their marine terminals. Prior to joining the Port Authority, Mr. Gessner consulted for several firms in Massachusetts, and participated in the major endeavor to determine the value of the rail assets conveyed to Conrail upon its creation in the late 1970's.

Summary

The FFS document has failed to demonstrate the feasibility of securing, developing and operating the rail infrastructure required to implement the dredged materials cleanup and disposal.

For context, the definition of "feasibility" (from the Merriam-Webster Dictionary) is:

"...the capability of being done, accomplished, or carried out; likelihood; suitability".

And from EPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA 1988):

“Technical feasibility refers to the ability to construct, reliably operate, and meet technology-specific regulations for process options until a remedial action is complete; it also includes operation, maintenance, replacement, and monitoring of technical components of an alternative, if required, into the future after the remedial action is complete. Administrative feasibility refers to the ability to obtain approvals from other offices and agencies, the availability of treatment, storage, and disposal services and capacity, and the requirements for, and availability of, specific equipment and technical specialists.”

Throughout the FFS report, there are many aspects of the cleanup process, including rail-related elements, where it is assumed that the feasibility will be determined by others at a later date, instead of actually performing the appropriate analyses. The following excerpts exemplify the general tendency of the FFS document to defer critical technical issues and analyses:

USEPA FFS, Section 3.5.4, p. 3-13:

“Transportation of dredged sediments via truck, rail, and barge is **retained for further consideration.**” (Emphasis added)

USEPA FFS, Section 4.4.4, p. 4-43:

“Depending on the facility location that is **eventually selected**, dewatering, water treatment, and transfer facilities with good rail access and suitable wharf facilities **are expected to be available or could be developed.**” (Emphasis added)

Appendix G, Dredged Material Management Assessments, p. 4-1:

“During the design phase, **additional due diligence evaluations would be needed** for actual disposal purposes.” (Emphasis added)

The Process as a “Supply Chain”

Rail infrastructure is a critical element of the LPR cleanup “supply chain”. In the same way that one determines the steps for manufacturing a finished product, the steps for determining a feasible process on this project needs to be done. For a manufactured good, raw materials are obtained and moved to a plant or facility (by rail, truck or barge) to be made into a finished product. Then the item is transported in bulk from the plant to a warehouse or distribution center for its final move to a location for customer purchase and use.

The process, clearly, is a bit different in this case, however, the approach is the same. The effectiveness of the supply chain is only as strong as the weakest link. The links for this project can be identified as barge to wharf, wharf to processing plant, plant to rail/truck, and rail/truck to final disposal site.

Key Question for Rail Feasibility

Considering the supply chain analysis methodology, the key question that the FFS needed to answer is:

Has EPA’s analysis of rail access and capability satisfactorily concluded that the dredged material can be efficiently transported?

The potential sites identified in the FFS for the processing facility were reportedly based on rail access (and other factors), but taken from an August 2007 report by the U.S. Army Corps of Engineers (“Site Evaluations for a Dredged Material Public Processing and Storage Facility”). No new analyses regarding the current rail capability (or any other parts of the supply chain for that matter) were undertaken, therefore, the standard of practice for a feasibility study was not met because no attempt was made to update the information from the 2007 report.

No new analyses were likewise undertaken to determine the feasibility and/or availability of the potential processing sites. For example, the Port Newark Container Terminal (PNCT) surprisingly remains as an option on the list as a “high” rated site. With its long term lease as a container handling facility, it is clearly not available as a potential site for a processing facility.

Key Shortcomings of the USEPA FFS as to Rail Access and Transportation

In order to determine the feasibility of the rail elements of the supply chain and the processes needed to be effective, the following methodology should have been, but was not, undertaken in the FFS.

The amount of the dredged material that would be the output of the processing facility should have been determined on a daily or weekly basis. That is difficult to estimate when you decide to wait to determine where the processing facility will be located and what its capability will be.

This output, in turn, will determine the number of rail cars required. An analysis of the availability of different types of rail cars in the current and future markets also needs to be undertaken as the demand for the types of cars that typically handle this kind of material can change. For example, it is common knowledge that the demand for gondolas/hopper cars has dramatically risen due to the need to move sand in these cars for fracking for oil in the Upper Midwest and other places in the United States.

There was no analysis of whether any of the proposed sediment processing facility sites currently has, or could be developed to include, sufficient track infrastructure to enable an efficient operation of inbound and outbound car placement, loading and storage. Based on a review of the highest potential processing facilities identified in the FFS, it appears that many do not have rail access or the site could not be easily expanded to accommodate appropriate rail infrastructure due to area constraints or other factors. Examples include the Military Ocean Terminal Bayonne (MOTBY) and Prall's Island Reach, where other conflicting uses or problems (e.g., residential development, cruise terminal, passenger light rail use, terrain and remediation) could inhibit their use as a processing facility site with rail included.

Many questions besides those of car availability and management are unanswered, e.g., unit trains vs. daily blocks; turnaround times; operational windows; switching requirements; and future regional rail projections and their impacts. There is no evidence that discussions with rail carriers were undertaken to determine the optimal operation, route(s), and costs for this link of the supply chain.

Example of a “Rail Served” Processing Facility

The FFS relies on a list of “high” rated sites from the 2007 report which used data from a 2006 tabletop screening. As an example, a review of the CleanEarth processing facility in Jersey City, used for the RM10.9 early action, indicates that there are indeed some tracks that once were used to move output by rail. The operations, however, were complex, and too expensive and onerous to continue to be rail served. The existing rail tracks, in poor condition, cannot be expanded into something more appropriate because the plant sold some of their property to enable the construction of the adjacent Liberty National Golf Course, which opened in 2006.

This is why the sludge was processed, put in Epic containers, and trucked to Brills Yard, where the containers were put on rail flatcars for final movement to the disposal site instead of being loaded to rail directly. Thus, “rail served” is not sufficient as a criteria to screen sites for appropriateness. A more comprehensive examination is necessary.

The peninsula which includes PNCT, referenced earlier, does have rail access, primarily for the non-intermodal tenants who handle commodities such as bulk metal waste, road salt, and consumer goods on pallets in boxcars. Being able to handle bulk materials similar to processed sludge materials by rail does not necessary mean the location is appropriate for a processing facility. This is another reason, in addition to the existing long-term lease, that the inclusion of this location as a “rail-served” option, and hence a potential facility site, is disingenuous. The list of “high” rated sites includes other locations with similar flaws where the usability/expandability of the rail infrastructure were not examined and verified.

Conclusion

Although the criteria used in the FFS report for identifying a “desirable” processing facility location, from a rail access and transportation perspective, are appropriate, no determination using reasonable analyses has been undertaken, from a rail access and transportation perspective, to test any options for siting the processing facility. Analyses of the feasibility of rail siting/access and the transportation requirements of the supply chain have been deferred. Therefore, it cannot be confirmed that the entire process is feasible, i.e., has the “capability of being done, accomplished, or carried out.”

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Port and Intermodal Transportation Professional who utilizes proven multi-modal expertise in freight transportation project planning and management, strategic analysis and policy development in support of infrastructure project studies and implementation, and operational effectiveness.

BACKGROUND SUMMARY

Extensive and progressively responsible consulting experience has included:

- Marine Highway Project Development
- Intermodal Project Management
- Intermodal Service Development
- Rail Operations
- Rail Facility Planning
- Rail Traffic Forecasting
- Terminal Capacity Analysis
- Commercial Vehicle Operations
- System Performance
- Regulatory and Legislative Compliance
- Strategic Market Planning
- Grant Application and Proposal Writing

PROFESSIONAL ACCOMPLISHMENTS

- Awarded the Port Authority (PA) Port Commerce Department (PCD) Director's Team Project Award for developing an innovative research approach that was instrumental in obtaining legal authorization from the Surface Transportation Board (STB) to construct the Chemical Coast Connector. This \$52 million project was vital to restoring rail freight service to the Howland Hook Marine Terminal on Staten Island in 2007 after an absence of 16 years.
- Key member of the Port Authority team tasked with negotiating the terms of support with the two Class I railroads when they applied to the STB to acquire and split the assets of the Consolidated Rail Corporation (Conrail). Reviewed and evaluated legal submissions, especially the operational proposals, to ensure that the Port Authority's marine terminals would receive the appropriate level of competitive rail service to handle the Port's anticipated growth in marine container traffic.
- Performed financial and operational transactions analyses and drafted testimony as part of the litigation filed on behalf of the Trustees of the bankrupt Penn Central Transportation Company against the United States Railway Association. The claim, to determine the value of the rail assets transferred to Conrail in 1976, was settled for \$2.1 billion in 1980.

PROFESSIONAL EXPERIENCE

Gessner Transportation Consulting (GTC), LLC, Westfield, NJ (2007 - present)

- As Principal of GTC, prepared a comprehensive grant application seeking \$19.5 million in Federal Stimulus (TIGER Grant I) funding to redevelop an unused pier to serve a large logistics park in New Jersey using the Marine Highway network and on-dock rail service.
- Performed a rail intermodal freight analysis and developed a white paper as part of a large transportation planning study for a Metropolitan Planning Organization (MPO) client.
- Produced a complex rail intermodal shipping plan analysis as part of a major logistics strategy review for a Midwest consumer products manufacturer.

Union County College (UCC), Cranford, NJ (2010 - 2012)

- Adjunct Mathematics Professor teaching Elementary Statistics and Intermediate Algebra.
- Tutor Supervisor at UCC's Academic Learning Center, a peer tutoring service.

US Department of Transportation (USDOT), Maritime Administration (MARAD), North Atlantic Gateway Office (NAGO), New York, NY (2008 - 2009)

- As a Port and Intermodal Specialist (contracted GS-13 equivalent), worked closely with MARAD headquarters, project stakeholders, MPOs, State and City Departments of Transportation (DOTs), the I-95 Corridor Coalition, and other maritime industry representatives to identify, develop, analyze and advance projects to move goods efficiently in an environmentally and cost-effective manner using short sea shipping via Marine Highways to reduce highway congestion and promote economic development.
- Organized, reviewed, and evaluated project applications to receive Federal funding, both Annual and Stimulus Programs, for security enhancements from the Port Security Grant Program as a participant on Area Maritime Security Committees; made recommendations to the appropriate Northeast US Coast Guard Captains of the Port.
- As part of the NAGO, the day-to-day presence throughout the Northeast section of the Maritime Transportation System (MTS), developed a comprehensive outreach strategy to proactively advance the transportation policies and infrastructure improvements supported by USDOT and MARAD. My network of stakeholders is based on more than 30 years of cultivating important contacts in the port, rail and intermodal industries as well as within public sector transportation and economic development agencies.
- Assisted in the organization and implementation of protocol for visiting government and industry officials; e.g., while the Director of the NAGO was on leave, working cooperatively with headquarters staff, served as the local liaison for the successful development and execution of a Merchant Marine Award Ceremony in May 2009, presided over by USDOT Secretary Ray LaHood and the (then) Governors of New York and New Jersey.
- On behalf of the Director of the NAGO, in a timely fashion, prepared required administrative reports, substantive responses to official inquiries from headquarters and other Gateway Offices, and outside research requests. Developed and monitored the budget, time-keeping, leave reporting, and expense reports. Effectively managed the NAGO while the Director was on leave during two of the twelve months of employment. Updated the material for three Gateway Offices on MARAD's official website.
- Participated in required Agency and USDOT online training courses, including a portion of the Emergency Preparedness and Response Program.

Port Authority of New York and New Jersey, New York, NY (1987 - 2007)

- As Senior Freight Specialist, contributed specialized technical expertise for the Port Commerce Department's \$600 million intermodal rail capital plan in support of the physical and operational planning and development of projects intended to increase existing, and initiate new, rail services to Port Authority marine terminals.
- Advanced the planning and implementation of a regional rail freight agenda intended to increase the capacity and efficiency of the region's rail system, especially those projects and policies which would benefit and complement PA marine and intermodal facilities.
- Analyzed and assessed regional and national intermodal rail traffic data and trends in support of management decision-making.
- Provided expertise to PCD industry relations unit and other PA departments on operational, regulatory, and legislative issues related to commercial vehicle operations, such as truck safety, truck routes, size and weight regulations, hours of service, and technology.
- Advised other PA departments and external transportation agencies, e.g., MPOs and State and City DOTs, on regional freight studies and planning and policy issues.

DNS Associates, Lexington, MA (1981 - 1987)

- As Senior Rail Analyst, applied the proprietary Operations and Costing Methodology (OCM) computer programs to analyze rail traffic trends, diversions, operations and costs for a railroad client who was trying to reorganize following bankruptcy. The client successfully merged with another railroad.

Charles River Associates, Boston, MA (1978 – 1981)

- As a Research Associate, prepared a handbook describing eligible projects and the application process for municipalities interested in pursuing Federal funding of transportation systems management initiatives.

Princeton University, Princeton, NJ (1976 – 1978)

- As a Research Assistant, utilized statistical software packages to perform aircraft collision risk analysis for low-flying aircraft traveling to and from offshore oil rigs on behalf of the Federal Aviation Administration.

EDUCATION

- MSE, Civil Engineering, Transportation Program, Princeton University, Princeton, NJ (1978).
- BS, Applied Mathematics and Statistics (with a double major in Economics), State University of New York at Stony Brook, Stony Brook, NY (1976).

PROFESSIONAL ASSOCIATIONS

Transportation Research Forum (TRF):

- Member, New England Chapter (1981 - 1986), New York Chapter (1987 - present).
- Secretary, National (2008 - present).
- Vice President, Public Relations, National (1998 - 2008).
- President, National (1995).
- Secretary-Treasurer, New York Chapter (1990 - present).

Women's Transportation Seminar (WTS):

- Member, Greater New York Chapter (2009 - present).

Council of Supply Chain Management Professionals (CSCMP):

- Member and Officer, New York City Roundtable (1988 - 1998, 2010 - present).

HONORS AND AWARDS

- Recipient, Herbert O. Whitten TRF Service Award (2000).

VOLUNTEER ACTIVITIES

Literacy Volunteers of Union County, Roselle, NJ (2009 - present):

- GED Mathematics Tutor.

Community FoodBank of New Jersey, Hillside, NJ (2000 - present):

- Food and clothing sorting and packing.