



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

JUL 18 2008

Douglas Cotton, P.E.  
Project Manager – Local Projects Unit  
New York State Department of Transportation  
Eleanor Roosevelt State Office Building  
4 Burnett Boulevard  
Poughkeepsie, NY 12603

Dear Mr. Cotton:

The Environmental protection Agency has reviewed the **Revised Draft Design Report/Environmental Assessment (EA) for the Haverstraw/Ossining Ferry – Haverstraw Landside Improvements** project located in the Village of Haverstraw, **Rockland County**, New York. The **Haverstraw-Ossining** commuter ferry service was **initiated** as a demonstration project in August 2000, through a Metropolitan Transportation Authority (MTA) contract with New York Waterways, and transports passengers destined for the Metro North **Station** to Grand Central Terminal in Manhattan. Since its inception, ridership **has increased** from approximately 150 passengers per day to 240 passengers per day. Forecast commuter demand **is** anticipated to reach 450 passengers per day by 2009, which includes the new **Haverstraw-Yonkers-Lower Manhattan ferry service** that began in 2007.

The stated purpose and need of this project is to relocate the existing ferry landing **from** a temporary site to a new **permanent** site in the village to accommodate the proposed **service** expansion. The project includes construction of a permanent ferry pier, a temporary surface parking lot, a shelter for ferry passengers and future construction of a parking garage and terminal building. Parking capacity **would** be increased to accommodate 450 vehicles to meet future demand for **the ferry** service and for the waterfront, which is slated for redevelopment.

Currently, the ferry landing has insufficient water depth, as grounding and entrainment of sediments within the jet propulsion system have been reported. Dredging of 48,979 cubic yards of sediment from the Hudson River Navigation Channel is required to achieve a depth of 12 feet below mean low water (MLW) to enhance safety for year-round ferry operations. In addition, the current site has **berthing** capacity for one ferry, when two locations are required to meet the projected passenger trips.

The **Draft EA** presents an analysis of alternatives, including the No-Build Alternative, that compares variable pier locations, pier lengths, as well as navigation routes for each location. The

proponent has identified a Preferred Alternative in the report, yet it was noted that any feasible alternative could be selected at the conclusion of the environmental review process.

Haverstraw Bay has been designated as a significant coastal fish and **wildlife habitat**. The project proponent has held consultation meetings with the key resource agencies (New York State Department of Environmental Conservation, U.S. Army Corps of Engineers; National Marine Fisheries Service, **New York State Division of Coastal Resources**), and conducted sampling which indicated that there would be no significant impacts related to the dredging required for the Preferred Alternative. To mitigate the impacts of the proposed project, the **proponent** plans to provide a water quality basin, or other stormwater treatment **system, on** all discharges **from** the parking garage, site roads, ferry terminal building and pedestrian ways, prior to discharge to Haverstraw Bay **and** the Hudson River.

**Traffic** impact analysis results indicate that **project-related** vehicle volume will increase significantly primarily along Route 9W and Broadway during the morning and **afternoon** peak hours. **For example**, the Level of Service (LOS) at the **Route 9W/Short Clove Road unsignalized** intersection will deteriorate to LOS F during both the a.m. and p.m. peak hours for the 2010 Build scenario: The LOS F condition will also exist at **Broadway/West Street at Main/New Main Street** as well as **Broadway/Westside Avenue/Samsondale Avenue** during **the p.m.** peak hours. To mitigate the **traffic** impacts of the proposed project, each of these intersections **will** be signalized, which **will** result in an acceptable LOS. The proponent **also** plans to **widen** the southbound Route 9W approach to include an exclusive left-turn lane, **and** widen the **westbound** approach to provide an exclusive left-turn lane, and a **shared right-/left-turn** lane.

Air quality benefits may be achieved by this project through reducing single occupancy vehicle travel to Manhattan, as well as reducing **traffic** congestion and delay along surrounding roadways. To further promote alternative transportation, the proponent **will** install bicycle racks adjacent to the proposed ferry terminal. Pedestrian crosswalks will be installed to facilitate access to the project **site from** the adjoining streets.

Although the area is in attainment for the National Ambient **Air** Quality Standards, we encourage the proponent to consider the use of clean fuel ferries to reduce diesel **emissions** to the maximum extent feasible. In general, EPA supports mass transit options, but additional steps can provide services that are even more environmentally sound. For example, ultra-low sulfur diesel (**ULSD**) will not be required for marine use until 2012, but the ferry operators can opt to use ULSD ahead of schedule. No engine modifications are required to do so.

In addition, or alternatively, there are several EPA certified engine upgrades available to reduce emissions from the ferry operation. In many cases, a **repower** or engine upgrade allows the ferry to add an engine with increased horsepower, while still reducing emissions. Upgrading a ferry from a Tier 0 to Tier 1 engine could reduce nitrogen oxide (**NOx**) emissions by at least 30%. Please be aware that going **from** a Tier 1 to Tier 2 engine is more difficult because it requires an upgrade of a mechanically operated engine to **an** electronic system.

EPA's recently finalized marine **rulemaking** institutes remanufacturing standards for Tier 0 to Tier 2 marine vessels. The remanufacturing standards require at least 25% particulate matter (PM) reduction with no adverse affects on **NOx**. **Remanufacturing** kits meeting these requirements could be available as early as this year.

The **Staten Island Ferries** have received various engine upgrades and **emission control** technology. The Alice, Austen operates with selective catalytic reduction (SCR) technology and a diesel oxidation catalyst (DOC). SCR technology can effectively yield a conservative 75% **NOx** reduction, and is deemed suitable for the larger vessels. Employing SCR technology requires the use of urea, which presents additional maintenance **requirements**. **DOCs** target PM, carbon monoxide (CO) and hydrocarbon (HC) emissions. **Depending on** the DOC, PM emissions can be reduced between 25-50%. Diesel particulate filter (**DPF**) technology can provide reductions of **PM, HC** and CO of 85 % or more, but require the use of **ULSD**.

**According to** our records, New York Waterways is a participant in the New York State Energy **Research and Development Authority (NYSERDA)** transportation program, which is designed to provide **funding** opportunities for projects and innovative research and development initiatives that reduce emissions and improve air quality. However, none of the company's ferry **boats** have received a **retrofit** as of yet. We strongly encourage New York Waterways to initiate and complete the engine 'retrofits' at the Haverstraw-Ossining location. For further details regarding these technologies or additional information, please contact Reema **Loutan** of **EPA's Air** Programs Branch at (212) 637-3760.

**The Draft EA does not address the measures that the contractor will implement to minimize** adverse air quality impacts stemming **from** mobile source air toxics (MSAT) and equipment exhaust emissions during construction. The proponent **should utilize** all feasible construction and operational mitigation measures to minimize community exposures. Potential mitigation strategies to reduce PM and **NOx** include reducing construction equipment activity and shift times, and imposing an idling minimization policy. Other mitigation measures such as use of **ULSD** in all **non-road** equipment, **deployment** of clean diesel **equipment** through retrofits with a DPF or DOC, engine rebuilds, or repowering may be employed. The proponent can enforce these measures through the use of clean diesel specifications in the project's construction contracts. We **suggest** that a complete set of **committed** measures be developed and included in the Final EA.

Based on our review of the Draft EA, EPA does not anticipate that the proposed project would **lead to** significant adverse environmental impacts. Accordingly, EPA has no objections to the implementation of the proposed project, although we would **like to** see our recommendations incorporated into the final report as well as the project design.

Thank you for the opportunity to comment. Should you have any questions or **need** additional information, please contact **LeAndrea Dames of my staff** at (212) **637-3705**.

Sincerely yours,



Grace **Musumeci**, Chief  
Environmental Review Section  
Strategic Planning and Multi-Media Programs Branch

cc: Michael F. Kohut, Mayor - **Village** of Haverstraw

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