

**CLEAN AIR ACT
DRAFT CONDITIONAL STATEMENT OF CONFORMITY
DELAWARE RIVER MAIN CHANNEL DEEPENING PROJECT
AUGUST 14, 2009**

Introduction

The Delaware River Main Channel Deepening Project will deepen the main channel from -40 feet to -45 feet mean low water (MLW). The proposed Project extends from the Ports of Camden, New Jersey, and Philadelphia, Pennsylvania, to the mouth of the Delaware Bay, and follows the alignment of the existing federally-authorized channel. In addition to the channel deepening, several berths at the various oil refineries and port facilities along the Delaware River will also be deepened. A majority of the berths are located in the upstream reaches of the river near the Philadelphia/Camden area. The Project is scheduled to be constructed over a period of five years for the channel deepening and an additional year for the completion of the adjacent berth deepening.

Federal Clean Air Act

Section 176 (c) (42 U.S.C. 7506) of the Clean Air Act (CAA) requires federal agencies to ensure that their actions conform to the applicable State Implementation Plan (SIP) for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). The U.S. Environmental Protection Agency (EPA) published two sets of regulations to implement section 176 (c) because certain provisions apply only to highway and mass transit funding and approval actions. The transportation conformity regulations address federal actions related to highway and mass transit funding and approval actions. The General Conformity regulations, codified at 40 CFR 93.150, cover all other federal actions. The Project is subject to the General Conformity regulations.

The EPA has established *de minimis* emission levels for criteria pollutants based on the type and severity of the non-attainment problem in an area. Before any action can be taken, federal agencies must perform an applicability analysis to determine whether the total direct and indirect emissions from their action would be below or above the *de minimis* levels. If the action is determined to create emissions at or above the *de minimis* level for any of the criteria pollutants, federal agencies must conduct a conformity determination for the pollutant. If the emissions are below all of the *de minimis* levels, the agency does not have to conduct a conformity determination. When the applicability analysis shows that the action must undergo a conformity determination, federal agencies must first show that the action will meet all SIP control requirements and then must demonstrate conformity by meeting one or more of the methods specified in the regulations.

Mitigation Studies

In 2004, the U.S. Army Corps of Engineers (USACE) performed an emissions analysis and mitigation study (*Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, February 2004* (2004 Conformity Report)) to determine if the Project would exceed air quality thresholds, and, if so, how to mitigate so that the Project could achieve conformity with the CAA requirements.

Based on changes to the air quality status of the region, a reduction in the estimated amount of material to be dredged, and other factors, USACE updated the emissions analysis and mitigation study for the Project in August 2009 (*Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, August 7, 2009* (2009 Conformity Report)). While the 2004 Conformity Report identified one preferred plan for emissions reductions, the 2009 Conformity Report evaluates and ranks multiple approaches to emissions reductions.

Conformity

Based on the analyses in the 2009 Conformity Report, I have determined that the Project can meet General Conformity provided that the impacts generated as a result of dredging and dredged material management activities (for main channel and berths) are mitigated before or during construction of each phase of the project. Mitigation measures are outlined in this statement.

Emissions

As indicated in the 2009 Conformity Report, the Project will contribute pollutants of concern within ten counties in three states (Delaware, Pennsylvania and New Jersey). All ten counties within the Project limits are in non-attainment status for both nitrogen oxides (NO_x) and volatile organic compounds (VOC), and two counties are in maintenance status for carbon monoxide (CO). Because there is more than one non-attainment area for the Project, discussions with the regulatory agencies resulted in the determination that the Project emissions could be characterized as taking place in a single, combined non-attainment area. This area would take on the most severe classification (annual *de minimis* threshold) for each of the pollutants of concern (e.g. 100 tons for NO_x, 50 tons for VOC, and 100 tons for CO).

The 2009 Conformity Report provides estimated emissions for each year (and each construction contract) over the duration of the Project. Based on these estimates, the Project is expected to exceed the *de minimis* threshold for NO_x every year of the Project, whereas the emissions of other criteria pollutants are expected to be less than *de minimis* limits for each year of the Project. Therefore, NO_x emissions must be mitigated for each year of the Project.

Mitigation Strategies

The 2009 Conformity Report identifies emissions reduction strategies that are appropriate for use in the Project area. For each strategy, the report quantifies the amount of NOx reduced and provides estimates of cost per ton of NOx reduced per year.

The emissions reduction strategies evaluated in the report are as follows (presented in the order of the report):

- Electrify Dredges.
- Install SCR on Dredges, Boosters and Towing
- Repower Dredges, Boosters, and Towing Tugs
- SCR installation on USACE Dredge McFarland
- Repower USACE Dredge McFarland, with and without SCR
- SCR installation on Cape May - Lewes Ferries
- Repower Cape May - Lewes Ferries, with and without SCR
- Repower local harbor tugs.
- Cold Iron (ship shore power) berthing at Philadelphia Port Packer Ave. Terminal and at Pier 82.
- Electrify Dock Cranes at Philadelphia Port Packer Ave. Terminal.
- Purchase Emission Reduction Credits

Selection and Implementation of Emissions Reduction Strategies to Achieve Conformity

The Mitigation Strategies listed above (and described in the 2009 Conformity Report) require various lead times to implement, depending on the specific technology and equipment to be installed. For the first construction contract of the Project (Reach C), which is currently scheduled to begin in the Fall of 2009, the purchase of emission reduction credits (ECRs) is the only mitigation strategy that can be implemented prior to the start of construction. Therefore, for the first construction contract, purchased ECRs will be used to attain conformity.

For subsequent construction contracts, the mitigation plan for the Project will be selected from a combination of emissions offset strategies specific to each Project year and construction contract. USACE and the Project's sponsor, the Philadelphia Regional

Port Authority (PRPA) will establish an Air Quality Team to evaluate and select the strategies for each year and contract. As part of this process, USACE and PRPA will solicit ideas to achieve compliance from the dredging industry and port facility operators as well as the regulatory community. USACE and PRPA will also examine logistical alternatives such as revised schedules and other project management options that may help reduce overall emissions.

For all project years, the 2009 Conformity Report will provide the technical basis for emissions amounts and the selection of the specific emissions reduction strategies. The combined strategies selected for each year and each contract will provide emission reduction amounts sufficient for conformity. In addition, all of the construction contracts for the Project will include data reporting requirements sufficient to document compliance with conformity.

Summary

Based on the analyses in the 2009 Conformity Report, I have determined that the Delaware River Main Channel Deeping Project can meet General Conformity provided that the NO_x emissions generated from construction activities are mitigated before or during construction of each phase of the project. The USACE will achieve conformity for NO_x by mitigating emissions through the use of emission control technologies, logistical/schedule changes, and/or emission reduction credits, as appropriate.

For the first construction contract, scheduled to begin in the Fall of 2009, emission reduction credits will be the methodology used to attain conformity. The USACE will not proceed to construction on subsequent portions of the Project until such time that the particular phase or contract of the Project can demonstrate an acceptable level of conformity under the General Conformity Rule. To continue to update and distribute the information collected as part of this ongoing conformity determination effort, USACE and PRPA will perform supplemental conformity determinations, with detailed mitigation plans as necessary, for each element of construction of the six-year project and release Public Notices to notify interested parties and regulatory agencies of any changes to this conditional proposal.

Date

Thomas J. Tickner
Lieutenant Colonel, Corps of Engineers
District Engineer