## CLEAN AIR ACT FINAL STATEMENT OF CONFORMITY DELAWARE RIVER MAIN CHANNEL DEEPENING PROJECT DECEMBER 2009

#### Introduction

The Delaware River Main Channel Deepening Project (Project) will deepen the main shipping channel from -40 feet to -45 feet mean low water (MLW). The 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 and 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 deepenings.

#### **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 Part 93, Subpart B, 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.

### **General Conformity Analyses and Mitigation Studies**

In 2004, the U.S. Army Corps of Engineers, Philadelphia District (Corps) performed an emissions analysis and mitigation study, entitled *Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, February 2004* (2004 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.

Because more than five years had elapsed since the preparation of the 2004 Report, and based on changes to the air quality status of the region and a reduction in the estimated amount of material to be dredged, the Corps prepared a new emissions analysis and mitigation study for the Project in August 2009, entitled *Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, August* 7, 2009 (August 2009 Report).

Based on comments received from the EPA, State and local agencies, and the public, and also due to adjustments to the project schedule, the Corps revised the August 2009 Report. The revised report is entitled *Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, November 2009* (November 2009 Report).

### **Notification and Public Participation**

In August 2009, as required by 40 CFR §93.155, the Corps transmitted copies of the "Draft Conditional Statement of Conformity" and the accompanying August 2009 Report to the appropriate EPA Regional Offices, State agencies, and Metropolitan Planning Organizations (MPOs). The transmittal letters are included in Attachment 1.

Also in August 2009, as required by 40 CFR §93.156, the Corps solicited comments from the public on the "Draft Conditional Statement of Conformity" and the August 2009 Report by placing advertisements in the Philadelphia Inquirer and The News Journal newspapers and by posting a Public Notice on the Corps' website and sending a notice via e-mail to a mailing list of interested parties. The Proof of Publication from the Philadelphia Inquirer, the Affidavit of Publication from The News Journal, and a copy of the Public Notice are included in Attachment 2. Copies of the comments received and the Corps' responses are included in Attachment 3.

In November 2009, the Corps transmitted copies of the "Draft Statement of Conformity" and the accompanying November 2009 Report to the appropriate EPA Regional Offices, State agencies, and Metropolitan Planning Organizations (MPOs). The transmittal letters are included in Attachment 1.

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#### **Emissions**

As indicated in the November 2009 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 ozone (precursors are nitrogen oxides (NOx) and volatile organic compounds (VOC)), two counties are in maintenance status for carbon monoxide (CO), and five counties are in non-attainment status for PM<sub>2.5</sub>. 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 NOx, 50 tons for VOC, and 100 tons for CO).

The November 2009 Report provides estimated emissions for each year over the duration of the Project. Based on these estimates, the Project is expected to exceed the *de minimis* threshold for NOx 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. As shown in the November 2009 Report and Attachment 4, total NOx emissions for the Project are estimated to be 3,038 tons with an annual peak of 607 tons occurring in Year 5 of the Project.

#### **Conformity Determination**

Since the estimated NOx emissions from the Project are expected to exceed the *de minimis* threshold of 100 tons of NOx every year of the Project, a conformity determination is required for NOx and the Project must demonstrate conformity by meeting one or more of the following:

- 1. Demonstrating that the total direct and indirect emissions are specifically identified and accounted for in the applicable SIP.
- 2. Obtaining a written statement from the state or local agency responsible for the SIP documenting that the total direct and total indirect emissions from the action along with all other emissions in the area will not exceed the SIP emission budget.
- 3. Obtaining a written commitment from the state to revise the SIP to include the emissions from the action.

- 4. Obtaining a statement from the metropolitan planning organization for the area documenting that any on-road motor vehicle emissions are included in the current regional emission analysis for the area's transportation plan or transportation improvement program.
- 5. Fully offset the total direct and indirect emissions by reducing emissions of the same pollutant or precursor in the same non-attainment or maintenance area.
- 6. Where appropriate, in accordance with 40 CFR 51.858(4), conduct air quality modeling that can demonstrate that the emissions will not cause or contribute to new violations of the standards, or increase the frequency or severity of any existing violations of the standards.

As explained in the November 2009 Report, Option 5 was the most appropriate means to demonstrate conformity for the Project. Thus, all NOx emissions for the Project will be offset so that there is no net increase in NOx emissions in the non-attainment area.

### **Mitigation Plan**

The November 2009 Report identified several options to achieve Clean Air Act conformity for NOx releases, evaluating the effectiveness and related costs of both onsite and off-site emission reduction strategies. Based on this analysis, all NOx emissions for the project will be offset by purchasing Emission Reduction Credits (ERCs). This plan is implementable and is the least costly and most efficient way to attain conformity for the Project.

ERCs will be purchased from within the nonattainment areas. Presently, there are roughly 2,000 tons of NOx credits available on the open market within the 10-county nonattainment area across the three states in which the project is located. All of the required credits for the project (607 tons) will be acquired after issuance of this Final Statement of Conformity and prior to the commencement of construction. Credits will be obtained from the three states on an equitable basis to the maximum extent practicable; however, the actual allocation of credits will be based on availability and cost.

The non-federal sponsor for the Project, the Philadelphia Regional Port Authority (PRPA), has entered into a brokerage agreement with Cantor CO2e, a firm that specializes in ERC trading. A copy of the brokerage agreement is provided in Appendix G of the November 2009 Report. The PRPA will acquire the credits as part of their cost-sharing obligations on the Project. In the event that some of the credits purchased have expirations, additional credits will be obtained prior to the expiration date so that at no time will there be net NOx emission increases. All required credits will be in place prior to the start of construction on the Project.

#### Summary

Based on a comparison of the estimated emissions for the Project to the *de minimis* limits for each of the criteria pollutants and precursors, a conformity determination for NOx is required. The Project will demonstrate conformity for NOx by fully offsetting all NOx emissions, which will be accomplished by purchasing Emission Reduction Credits (ERCs). All ERCs will be in place before the start of construction.

As required by 40 CFR §93.157 (c) and 40 CFR §93.160 (e), should the Project change such that there is an increase in the total of direct and indirect emissions, or should there be a change in the mitigation measures due to changed circumstances, the Corps will make a new conformity determination, subject to the reporting and public participation requirements of 40 CFR §93.155 and 40 CFR §93.156.

30 DEC 69

Thomas J. Tickner

Lieutenant Colonel, Corps of Engineers

District Engineer

### **Attachment 1**

Transmittal Letters to EPA, State Agencies, and MPOs

### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

Mr. Chris Salmi Assistant Director, Air Quality Management NJDEP P.O. Box 318 401 E. State Street, 7<sup>th</sup> Floor Trenton, New Jersey 08625-0418

Dear Mr. Salmi:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B, Section 93.155), I am requesting your concurrence with the attached *Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project.* I am enclosing an electronic copy (on CD) of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009. This report presents the analysis and results of the studies that were performed to support the statement of conformity. A hard copy of the report will be sent to you under separate cover.

Please provide your response by September 15, 2009. If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

1 / al.

Minas M. Arabatzis Chief, Planning Division

Enclosures

Copy Furnished:

Ms. Angela Skowronek, Bureau of Air Quality Planning, NJDEP

DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT, CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

Mr. Raymond Werner, Chief Air Programs Branch USEA, Region 2 290 Broadway New York, New York 10007-1866

Dear Mr. Werner:

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Sincerely

Minas M. Arabatzis

Chief, Planning Division

Enclosures

Copy Furnished:

Ms. Bonnie Weinbach, Division of Environmental Planning & Protection, Air Programs Branch

DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT, CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

Ms. Diana Esher Acting Director, Air Protection Division EPA, Region 3 – (3AP00) 1650 Arch Street Philadelphia, Pennsylvania 19103 - 2029

Dear Ms. Esher:

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Minas M. Arabatzis

Chief, Planning Division

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Mr. Brian Rehn, Air Protection Division, EPA

### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

Mr. Timothy Cheliues, Executive Director South Jersey Transportation Planning Organization 782 S. Brewster Road, Unit -6 Vineland, New Jersey 08361

Dear Mr. Chelius:

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Chief, Planning Division

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Planning Division

Ms. Mary K. Murphy, Executive Director NJTPA One Newark Center – 17<sup>th</sup> Floor Newark, New Jersey 07102

Dear Ms. Murphy:

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Planning Division

Mr. Ali Mirzakhalili Program Administrator, Air Quality Management Section DNREC 156 South State Street Dover, DE 19901

Dear Mr. Mirzakhalili:

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Minas M. Arabatzis

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Chief, Planning Division

Enclosures

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Mr. Philip Wheeler, Air Quality Management Section, DNREC



Planning Division

Ms. Juanita Wieczoreck, Executive Director Dover/Kent County MPO P.O. Box 383 Dover, Delaware 19903

Dear Ms. Wieczoreck:

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Planning Division

Mr. Tigist Zegeye, Executive Director WILMAPCO 850 Library Avenue, Suite 100 Newark, Delaware 19711

Dear Mr. Zegeye:

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Planning Division

Ms. Joyce E. Epps
Director, Bureau of Air Quality
PADEP
P.O. Box 8468
Rachel Carson State Office Building, 12<sup>th</sup> Floor
Harrisburg, Pennsylavnia 17105

Dear Ms. Epps:

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Ms. Kelly Matty, Chief, Mobile Sources Section, PADEP

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Planning Division

Mr. Barry Seymour, Executive Director Delaware Valley Regional Planning Commission 190 N. Independence Mall West, 8<sup>th</sup> Floor Philadelphia, Pennsylvania 19106 - 1520

Dear Mr. Seymour:

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Planning Division

Mr. Thomas Huynh, Director Air Management Services 321 University Avenue, 2<sup>nd</sup> floor Philadelphia, Pennsylvania 19104

Dear Mr. Huynh:

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PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Raymond Werner, Chief Air Programs Branch USEPA Region 2 290 Broadway New York, New York 10007-1866

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Minas M. Arabatzis

Chief, Planning Division

Enclosures

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Bonnie Weinbach
Division of Environmental Planning & Protection, Air Programs Branch
USEPA Region 2
290 Broadway
New York, New York 10007 - 1866



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

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Air Protection Division
EPA Region 3 – (3AP21)
1650 Arch Street
Philadelphia, Pennsylvania 19103 - 2029



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Enclosures

Copy Furnished: Kelley Matty Chief, Mobile Sources Section PADEP Rachel Carson State Office Building 400 Market Street Harrisburg, Pennsylvania 17105



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Barry Seymour, Executive Director Delaware Valley Regional Planning Commission 190 N. Independence Mall West, 8<sup>th</sup> Floor Philadelphia, Pennsylvania 19106 – 1520

Dear Mr. Seymour:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Thomas Huynh, Director Air Management Services 321 University Ave., 2<sup>nd</sup> Floor Philadelphia, Pennsylvania 19104

Dear Mr. Huynh:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

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Sincerely

Minas M. Arabatzis

Chief, Planning Division



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Chris Salmi Assistant Director, Air Quality Management NJDEP PO Box 418 401 E. State Street, 7<sup>th</sup> Floor Trenton, New Jersey 08625-0418

Dear Mr. Salmi:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division

#### Enclosures

Copy Furnished:
Angela Skowronek
Bureau of Air Quality Planning
NJDEP
PO Box 418
401 E. State St., 7<sup>th</sup> Floor
Trenton, New Jersey 08625-0418



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Timothy Chelius, Executive Director South Jersey Transportation Planning Organization 782 S. Brewster Road, Unit B-6 Vineland, New Jersey 08361

Dear Mr. Chelius:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Mary K. Murphy, Executive Director NJTPA One Newark Center-17th Floor Newark, New Jersey 07102

Dear Ms. Murphy:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Ali Mirzakhalili Program Administrator, Air Quality Management Section DNREC 156 South State Street Dover, Delaware 19901

Dear Mr. Mirzakhalili:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report,* dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosures

Copy Furnished: Philip Wheeler Air Quality Management Section DNREC 156 South State Street Dover, Delaware 19901



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Juanita Wieczoreck, Executive Director Dover/Kent County MPO P.O. BOX 383 Dover Delaware 19903

Dear Ms. Wieczoreck:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning/Division



PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

AUG 2 4 2009

Tigist Zegeye, Executive Director WILMAPCO 850 Library Avenue, Suite 100 Newark, Delaware 19711

Dear Mr. Zegeye:

As per my previous letter concerning the *Draft Conditional Statement of Conformity* for the Delaware River Main Channel Deepening Project, enclosed is a hard copy of the *Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report*, dated August 7, 2009.

If you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division



Planning Division

NOV 1 9 2009

Mr. Raymond Werner Chief, Air Programs Branch USEPA Region 2 290 Broadway New York, New York 10007 - 1866

Dear Mr. Werner:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

In August 2009, as required by 40 CFR §93.155, the Corps transmitted copies of the "Draft Conditional Statement of Conformity" and the accompanying report entitled, "Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report, August 7, 2009" to the appropriate EPA Regional Offices, State agencies, and MPOs. Also in August 2009, as required by 40 CFR §93.156, the Corps solicited comments from the public on the draft statement of conformity and report by placing advertisements in the Philadelphia Inquirer and The News Journal newspapers and by posting a Public Notice on the Corps' website and sending a notice via e-mail to a mailing list of interested parties.

Based on the comments received and adjustments to the project schedule, the Corps has revised the report and prepared a new draft statement of conformity. Enclosed (on CD) are copies of the "Draft Statement of Conformity – November 2009" and the revised report, "Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report, November 2009." Per the requirements of 40 CFR §93.160 (e), the Corps has initiated another 30-day public review period, which will commence on November 20, 2009 and end on December 20, 2009. As before, the Corps will place advertisements in the newspapers, publish a Public Notice on its website, and send a notice via e-mail to the list of interested parties.

If you want to obtain a hard copy of the report or draft statement, or if you have any questions, please contact Jerry Pasquale at (215) 656-6560 or Scott Evans at (215) 656-6680.

Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

Copy Furnished:

Ms. Bonnie Weinbach Division of Environmental Planning & Protection Air Programs Branch USEPA Region 2 290 Broadway New York, NY 10007 - 1866



Planning Division

NOV 19 2009

Ms. Judith M. Katz Director, Air Protection Division EPA Region 3 – (3AP00) 1650 Arch Street Philadelphia, PA 19103 - 2029

Dear Ms. Katz:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

Copy Furnished:

Mr. Brian Rehn Air Protection Division EPA Region 3 – (3AP21) 1650 Arch Street Philadelphia, PA 19103 - 2029



Planning Division

NOV 19 2009

Mr. Bill O'Sullivan Director, Office of Air Quality Management NJDEP PO Box 418 401 E. State Street, 7<sup>th</sup> Floor Trenton, New Jersey 08625-0418

Dear Mr. Sullivan:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

Copy Furnished:

Mr. Chris Salmi Assistant Director, Office of Air Quality Management NJDEP PO Box 418 401 E. State Street, 7<sup>th</sup> Floor Trenton, NJ 08625-0418

Ms. Angela Skowronek Bureau of Air Quality Planning NJDEP PO Box 418 401 E. State St., 7<sup>th</sup> Floor Trenton, NJ 08625-0418



Planning Division

NOV 1 9 2009

Mr. Timothy Chelius, Executive Director South Jersey Transportation Planning Organization 782 S. Brewster Road, Unit B-6 Vineland, New Jersey 08361

Dear Mr. Chelius:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis/

Chief, Planning Division

Enclosure



Planning Division

NOV 1 9 2009

Ms. Mary K. Murphy, Executive Director NJTPA One Newark Center-17th Floor Newark, New Jersey 07102

Dear Ms. Murphy:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely

Minas M. Arabatzis Chief, Planning Division

Enclosure



Planning Division

NOV 19 2009

Mr. Ali Mirzakhalili Program Administrator Air Quality Management Section DNREC 156 South State Street Dover, Delaware 19901

Dear Mr. Mirzakhalili:

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

Copy Furnished:

Mr. Philip Wheeler Air Quality Management Section DNREC 156 South State Street Dover, DE 19901



Planning Division

NOV 1 9 2009

Mr. Juanita Wieczoreck, Executive Director Dover/Kent County MPO P.O. Box 383 Dover Delaware 19903

Dear Ms. Wieczoreck:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure



Planning Division

NOV 19 2009

Mr. Tigist Zegeye, Executive Director WILMAPCO 850 Library Avenue, Suite 100 Newark, Delaware 19711

Dear Mr. Zegeye:

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Sincerely,

Minas M. Arabatzis Chief, Planning Division

Enclosure



Planning Division

NOV 19 2009

Ms. Joyce E. Epps Director, Bureau of Air Quality PADEP PO Box 8468 Rachel Carson State Office Building, 12<sup>th</sup> Floor Harrisburg, Pennsylvania 17105

Dear Ms. Epps:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5-mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

Copy Furnished:

Ms. Kelley Matty Chief, Mobile Sources Section PADEP Rachel Carson State Office Building 400 Market Street Harrisburg, Pennsylvania 17105



Planning Division

NOV 19 2009

Mr. Barry Seymour, Executive Director Delaware Valley Regional Planning Commission 190 N. Independence Mall West, 8<sup>th</sup> Floor Philadelphia, Pennsylvania 19106 – 1520

Dear Mr. Seymour:

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure



### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS

WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

Planning Division

NOV 19 2009

Mr. Thomas Huynh, Director Air Management Services 321 University Ave., 2<sup>nd</sup> Floor Philadelphia, Pennsylvania 19104

Dear Mr. Huynh:

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B), the U.S. Army Corps of Engineers, Philadelphia District, has conducted a conformity analysis for the Delaware River Main Channel Deepening Project, which will deepen the existing 102.5mile shipping channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay. In addition, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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Sincerely,

Minas M. Arabatzis

Chief, Planning Division

Enclosure

**Attachment 2** 

**Public Notices** 

### **Proof of Publication in The Philadelphia Inquirer** Under Act. No 160, P.L. 877, July 9, 1976

STATE OF PENNSYLVANIA COUNTY OF PHILADELPHIA

Anna Dickerson being duly sworn, deposes and says that The Philadelphia Inquirer is a daily newspaper published at Broad and Callowhill Streets, Philadelphia, Pennsylvania, which was established in the year 1829, since which date said daily newspaper has been regularly published and distributed in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of said daily newspaper on the following dates:

#### August 14, 2009

Affiant further deposes and says that she is an employee of the publisher of said newspaper and has been authorized to verify the foregoing statement and that she is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

anna Dickerson

Sworn to and subscribed before me this 14<sup>th</sup> day of August, 2009.

Mary anne Train

My Commission Expires:

NOTARIAL SEAL Mary Anne Logan, Notary Public City of Philadelphia, Phila. County My Commission Expires March 30, 2013

#### Copy of Notice of Publication

Army Corps solicits public comment on Clean Air Act compliance plans for Delaware River Deepening
The United States Army Corps of Engineers today released for public comment its plans to meet Clean Air Act requirements for the Delaware River Main Channel Deepening Project, specifically related to emissions from dredging activities.

As required by the General Conference of the Confer

cetivities.

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B, Secion 93,155), the Corps' Philadelphia District has completed the "Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project, for initial construction of the project, which will deepen the existing 102.5-mile ship channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay.

Printing of the channel deepening and sepa-naddition to the channel deepening and sepa-rately from the federal project, several berths at oil refineries and port facilities along the Dela-ware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take live years, with an additional year to deepen the adjacent berths.

berths.
To determine if the project would exceed at quality standards and, if so, how to bring it bac into conformity, the Corps performed an emissions analysis and mitigation study. The result are documented in the "Delaware River Mai Channel Deepening Project General Conformit Analysis and Mitigation Report, August

Channel Deepening Project General Contormity Analysis and Mitigation Report, August 7, 2009."
Detailed modeling of engine emissions during project construction, including the deepening of the berthing areas, predicts that releases of voltable organic compounds (VOCs) and other contaminants would be below the minimum thresholds for each of the states (Delaware, New Jersey and Pennsylvania) and all affected counties. However, the same modeling predicts above-threshold releases of nitrogen oxides (NOX) during all years of construction. The Corps' analysis identified several viable options to achieve Clean Air Act conformity for NOx releases, evaluating the effectiveness and related costs of both on-site and off-site emission reduction opportunities. The results of this analysis are being coordinated with all appropriate federal, state and local agencies as well as with the public.

This analysis concludes that the Delaware River Main Channel Deepening Project can comply with the Clean Air Act If excessive emission levels due to dredging and dredged material placement are offset through a combination of measures before or during construction.

Electronic copies of the two documents cited above can be downloaded from the Corps' website at www.nap.usace.army.mil. From the homepage, click on "Delaware River Main Channel Deepening Project" under Project Web Pages and then on "News & Updates" under Project Links. To request paper copies, please write or e-mail to the addresses below or call (215) 856-6515.

656-6515.
Comments may be submitted via regular mail to the Environmental Resources Branch, Philadelphia District, U.S. Army Corps of Engineers, Wanamaker Building, 100 Penn Square East, Philadelphia, PA 19107. Comments may also be submitted via e-mail to the Public Affairs Office at edward.c.voigt@usace.army.mll. Please submit all comments by September 14, 2009.

Mailing: The News Journal PO Box 15505 Wilmington, DE 19850

Street

The News Journal 950 W. Basin Road New Castle, DE 19720 (302) 324-2500 Sunday News Journal The News Journal

# The News Journal

### AFFIDAVIT OF PUBLICATION

STATE OF DELAWARE

COUNTY OF NEW CASTLE

Personally appeared before me this 14th day of August, 2009:

I, Kristin Segner, of the NEWS JOURNAL COMPANY, a daily newspaper printed and published in the County of New Castle County, State of Delaware, who, being duly sworn states that the advertisement of <u>U.S. ARMY CORPS OF ENGINEERS - Army Corps solicits</u> public comment on Clean Air Act compliance plans for Delaware River Deepening was published in THE NEWS JOURNAL on <u>August 14, 2009</u> and/or THE SUNDAY NEWS JOURNAL on N/A

Legal Coordinator

ame / Title

Sworn to before me this 14th day of August, 2009

Notary Public

Wanda James

Notary Public State of Delaware Commission expires 11/02/2012 Army Corps solicits public comment on Clean Air Act compliance plans for Delaware River Deepening

The United States Army Corps of Engineers today released for public comment its plans to meet Clean Air Act requirements for the Delaware River Main Channel Deepening Project, specifically related to emissions from dredging activities.

As required by the General Conformity Rule of the Clean Air Act (40 CFR 93, Subpart B, Section 93.155), the Corps' Philadelphia District has completed the "Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project' for initial construction of the project, which will deepen the existing 102.5-mile ship channel from 40 to 45 feet between Philadelphia and the mouth of the Delaware Bay.

In addition to the channel deepening and separately from the federal project, several berths at oil refineries and port facilities along the Delaware River (mostly upstream near Philadelphia and Camden) will also be deepened. Project construction is estimated to take five years, with an additional year to deepen the adjacent berths.

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This analysis concludes that the Delaware River Main Channel Deepening Project can comply with the Clean Air Act if excessive emission levels due to dredging and dredged material placement are offset through a combination of measures before or during construction.

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#### THIS IS NOT A PAID ADVERTISEMENT



### **Public Notice**

**CENAP** 

August 14, 2009

In Reply Refer To:

**Environmental Resources Branch** 

Internet Homepage: http://www.nap.usace.army.mil

### Army Corps solicits public comment on Clean Air Act compliance plans for Delaware River Deepening

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Thomas J. Tickner, Lieutenant Colonel

District Commander Philadelphia District

U.S. Army Corps of Engineers

### Proof of Publication in The Philadelphia Inquirer Under Act. No 160, P.L. 877, July 9, 1976

STATE OF PENNSYLVANIA COUNTY OF PHILADELPHIA

Anna Dickerson being duly sworn, deposes and says that The Philadelphia Inquirer is a daily newspaper published at Broad and Callowhill Streets, Philadelphia, Pennsylvania, which was established in the year 1829, since which date said daily newspaper has been regularly published and distributed in said County, and that a copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions and issues of said daily newspaper on the following dates:

November 20, 2009

Affiant further deposes and says that she is an employee of the publisher of said newspaper and has been authorized to verify the foregoing statement and that she is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

ana Dickerson

Sworn to and subscribed before me this 20<sup>th</sup> day of November, 2009.

Mary anne Tra

My Commission Expires:

NOTARIAL SEAL Mary Anne Logan, Notary Public City of Philadelphia, Phila. County My Commission Expires March 30, 2013

#### Copy of Notice of Publication

Army Corps solicits public comment on Clean Air Act compilance plans for Delaware River Deepening
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### AFFIDAVIT OF PUBLICATION

STATE OF DELAWARE

COUNTY OF NEW CASTLE

Personally appeared before me this 20<sup>th</sup> day of November, 2009:

I, Kristin Segner, of the NEWS JOURNAL COMPANY, a daily newspaper printed and published in the County of New Castle County, State of Delaware, who, being duly sworn states that the advertisement of <a href="The United States Army Corps of Engineers - Army Corps solicits">The United States Army Corps of Engineers - Army Corps solicits</a> public comment on Clean Air Act compliance plans for Delaware River Deepening was published in THE NEWS JOURNAL on <a href="November 20, 2009">November 20, 2009</a> and/or THE SUNDAY NEWS JOURNAL on <a href="November 20, 2009">N/A</a>

Mame Signer

Legal Coordinator

Title

Sworn to before me this 20th day of November, 2009

Notary Public

Wanda James

Notary Public State of Delaware Commission expires 11/02/2012 Army Corps solicits public comment on Clean Air Act compliance plans for Delaware River Deepening

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### **Public Notice**

Date: **Nov. 20, 2009** 

Contact: Ed Voigt

Phone: (215) 656-6515

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### **Attachment 3**

**Comment Letters and Responses** 

Responses to Comment Letters Received for August 2009 Draft General Conformity Analysis and Mitigation Report.

**Letter 01 - Comments from US Environmental Protection Agency, Region III** 

Number	Location	<b>Summary of Comment</b>	Final Comment Response
01-01	Para 3	Contains no specific combination of mitigation measures.	The conformity plan is found in Section 8 of the revised General Conformity Analysis and Mitigation Report (Report). The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity.
01-02	Para 5	Do not identify the source or state from which credits would come.	The potential source of emission credits within the non-attainment area is discussed in Section 7.15 of the Report.
01-03	Para 6	Total emissions from the action are fully offset within the same nonattainment or maintenance area, not with offsets obtained from sources within a different nonattainment area.	All emission credits will be obtained within the Philadelphia-Wilmington-Atlantic City 8-hour Ozone Area as stated in Section 7.15 of the Report.
01-04	Gen -1	The 2004 report had more detail in project description, as this needs to be a standalone document, incorporate supporting information from 2004 report.	The 2009 Report is a stand-alone report that includes: relevant and applicable data and documentation from the 2004 report; an updated construction schedule; the General Conformity analysis and plan selection; and, the implementation plan.
01-05	Gen-2	The report does not determine whether the project is "regionally significant" (i.e. >10% of a nonattainment area's emission inventory for that pollutant	A Regional significance test was performed for the project and can be found in Section 3, Table 3-2 of the Report.
01-06	Gen-3	Does not include specific plans for achieving conformity as NY-NJ did	The conformity plan is found in Section 8 of the revised General Conformity Analysis and Mitigation Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity.

01-07	Gen-4	Uncertainty regarding implementation schedulegiven the 5-year period that has elapsed since the USACE looked at some of these strategiesand the lack of commitment from 3 <sup>rd</sup> parties	The required emission credits for the project can be purchased in a timely manner prior to the start of the first construction contract. The purchased credits will subsequently be applied for each project year so that conformity is met. Therefore, the uncertainty surrounding the mitigation strategy selection/schedules for measures such as electrification and uncertainties on the level of participation by various as-yet selected contractors and off-site private parties and time frame to enact these measures would no longer apply.
01-08	ES-1	Report incorrectly states that the entire project area is in attainment of PM and CO. Two counties in are in maintenance for CO.	Both Camden and Philadelphia counties encompass Reach A or AA of the project and are in maintenance status for carbon monoxide (CO). There is no need for a comparison to de minimis or General Conformity for CO based on the projected emissions for this constituent; however, the Report has been revised where it inaccurately stated that the entire area is in attainment for CO.
01-09	ES-2	Report does not explain why the project scope has changedwhy higher horsepower.	The shift to the higher horsepower dredging was done to reflect the current project schedule and available dredging equipment anticipated to complete the various construction contracts.
01-10	ES-3	Vague commitment to offset/mitigate to zero does not meet GC rule (40 CFR 93.158).	The general conformity plan to mitigate project emissions through the purchase of perpetual/multi-year emission credits is found in Section 7.15 of the Report.
01-11	Bkg-4	It was not clear to EPA that berth deepening emissions are included.	All direct and indirect emissions, including non-federal berth dredging emissions, were included as part of the conformity analyses. Please see section 1.7 of the Report.
01-12	Srcs-5	Was not clear where the land-based emissions are included.	Land-based emissions were included as part of the conformity analysis and can be found in Section 1.7 of the Report. In addition, the estimated emissions from equipment operations at the disposal sites and employee commutes have been included under this category.

01-13	Sec5.1-6a	Use of peak emissions as a surrogate for calculation of annual NOx does not meet requirements.	Calculations of annual emission tonnage and mitigation requirements were used in the conformity analysis. These calculations can be found in Table ES-1 of the Report and in Appendix D. All mitigation strategies were compared based on their ability to reduce the peak year emissions comparable in dollars/ton to the purchase of emission credits.
01-14	Sec5.1-6b	If USACE specifies a suite of emission reduction measure and then later decides to revise scope or to alter project phasing they need to formally revise or issue a new CD consistent with 40 CFR 93.160(e).	Several emission reduction strategies were evaluated and the most appropriate mitigation measure, the purchase of emission reduction credits, was selected. If, in the future, the scope of the project changes, then the issuance of a new conformity determination consistent with appropriate guidance and regulations may be required.
01-15	Sec5.2-7	Figure 2 shows emission by contract. Need to show annual emissions (i.e. spread emissions over calendar years).	Calculations of annual emission tonnage and mitigation requirements were used in the conformity analysis. These calculations can be found in Table ES-1 of the Report. All mitigation strategies were compared based on their ability to reduce the peak year emissions comparable in dollars/ton to the purchase of emission credits.
01-16	Sec6-1	Why have USACE and PRPA not already selected strategies.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity.
01-17	Sect6-2	Strategy 1 – Dredge Electrification has been deemed "not viable" but continues to be shownshould be eliminated.	The dredge electrification mitigation strategy is not practical given the given the geographic extent of the project, real estate issues, and related scheduling concerns.
01-18	Sect6-3	Strategy 2 Not clear how contractors would respond to SCR requirement and/or when this could be implemented	The SCR mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.

01-19	Sect6-4	Strategy 3 Not clear how contractor or private entities would respond to dredge / tug repowers and/or when this could be implemented.	The repower mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-20	Sec7-1	Similar concerns with long lead times of offsite strategies.	Strategies 1 through 3 are no longer being considered. If in the future some strategies are deemed cost effective, then air quality impacts would be analyzed and implementation and enforcement would be defined.
01-21	Sec 7-2	Why use the same factors as 2004 for the Macfarland?	The McFarland mitigation strategies are no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-22	Sect7-3	Macfarland- Has any work been done towards this measure since it was presented in 2004? Is 12 month lead time reasonable.	The McFarland mitigation strategies are no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-23	Sec7-4	Macfarland repower- question the 18 month minimum lead timethis would include designing, building and installing the new engine around the duties of dredge.	The McFarland mitigation strategies are no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-24	Sec7-5	Macfarland Repower and SCR installation has same 18 month lead timeseems ambitious.	The McFarland mitigation strategies are no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-25	Sec7-6	Lewes Ferries- These were considered in the 2004 report but it is not apparent that the USACE has selected or commenced work to implement any of these measures. Again, question the 18 month lead time.	The Cape May-Lewes Ferry mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-26	Sec7-7	Repower Local Tugs- This was considered in 2004 report. Same issues as ferries.	The repower of local tugs mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.

01-27	Sec 7-8	Cold Ironing- 2 year lead time is optimistic.	The cold ironing mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
01-28	Sec7-9	40CFR 93.160 "any measures that are intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including the implementation schedule, containing explicit timelines for implementation". Further, if the USACE elects to demonstrate conformity using private partywritten commitments must be obtained from those parties.	The use of a private party would require a third party agreement; however, this action is not required for the selected emission reduction credit purchase plan.
01-29	Sec7.15-1	Purchase of Emissions Credits- EPA has reservations about the approach for offsets being discussed in this section In this case, the emissions offsets must be purchased from inside the Philadelphia- Wilmington-Atlantic City 8- hour ozone non-attainment area. Report should include where ERCs are going to be purchased including source name, location and quantity of offsets applied.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits from inside the Philadelphia-Wilmington-Atlantic City area which will be applied annually for the life of the project, thus attaining conformity.
01-30	Sec9-1	EPA disagrees that a general commitment to obtain NOx credits for the first phase and a general commitment to demonstrate conformity at a later date is acceptable.	A meeting between the USACE and the EPA was held on 6 October 2009 to discuss the emission reduction credit purchase strategy. It was determined that the purchase of perpetual/multi-year credits with a commitment to annual implementation was acceptable, and demonstrates conformity.

01-31	Sec9-2	Selection of measures by an	Several emission reduction strategies were
		advisory team after the	evaluated and the most appropriate
		USACE conformity	mitigation measure, the purchase of
		determination is contrary to	emission reduction credits, was selected. If,
		the rules. Should changes to	in the future, the scope of the project
		the identified measures later	changes, then the issuance of a new
		be required, they would be	conformity determination consistent with
		allowable consistent with the	appropriate guidance and regulations may
		procedures of 40 CFR	be required.
		93.160(e).	
01-32	Sec9-3	Given the timing, EPA	The required emission credits for the project
		recommends the USACE	will be purchased in a timely manner prior
		move immediately to obtain	to the start of the first construction contract.
		offsets for the first year of	
01.00	G 0.4	the project.	
01-33	Sec9-4	USACE draft conformity	Several emission reduction strategies were
		determination lacks	evaluated and the most appropriate
		specifically identified offsets	mitigation measure, the purchase of
		and mitigation measures.	emission reduction credits, was selected. If,
			in the future, the scope of the project
			changes, then the issuance of a new
			conformity determination consistent with
			appropriate guidance and regulations may
			be required.

<u>Letter 02 - Comments from New Jersey Department of Environmental Protection</u>

Number	Location	Summary of Comment	Final Comment Response
02-01	Letter – 1 <sup>st</sup> pph	Cannot concur with DCDOC	Comment noted. Please note the revised conformity plan found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining
02-02	Letter – 2 <sup>nd</sup> pph	Direct and indirect emissions need to be identified and mitigated.	conformity.  All direct and indirect emissions generated by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits.

02-03	Letter – Deficiency 1	Transport of dredge material emissions not addressed.	All direct and indirect emissions generated by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits. The federal action is complete when dredge material is placed in existing federal disposal areas. However, if placed material is then removed and transported by a separate entity elsewhere, it is considered a separate and independent action and not a part of the federal project. The responsibility for meeting all appropriate environmental requirements would be on the entity conducting the material removal and transport.
02-04	Letter – Deficiency 1	Additional indirect emissions.	All direct and indirect emissions generated by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits.
02-05	Letter – Deficiency 1	Segmenting the project to avoid conformity requirements.	The federal project has not been segmented. The federal action is complete when dredge material is placed in existing federal disposal areas.
02-06	Letter – Deficiency 1	Additional ship traffic emissions not included.	The economic basis for the federal project was to increase the efficiency of the fleet currently calling area ports. There is no anticipated induced tonnage as a result of the federal project. The future volume of cargo and the fleet is determined by macroeconomic factors that are not affected in any measureable way by channel depth.
02-07	Letter – Deficiency 2	Conformity must include actions to mitigate emissions.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity.

02-08	Letter – Deficiency 2	No mitigation measures are ready to implement.  No implementation schedule	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. The required emission credits for the first contract will be purchased in a timely manner prior to the start of the first construction contract.  All direct and indirect emissions generated
	Deficiency 3	or written commitments.	by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits.
02-10	Letter – Deficiency 4	Poor documentation of public participation.	Public participation requirements have been met.
02-11	Letter - Deficiency 5	The DCSOC recommends the comment period to remain open to allow air team to convene.	Several emission reduction strategies were evaluated and the most appropriate mitigation measure, the purchase of emission reduction credits, was selected. The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. Accordingly, additional convening of the air team is not needed.
02-12	Letter - Deficiency 6	Issue of a conditional statement of conformity not found in the regulations.	The conformity plan has been selected and a final Statement of Conformity for the project has been prepared.
02-13	Letter - Deficiency 7	Issue of the use of ERCs from another nonattainment area.	A meeting between the USACE and the EPA was held on 6 October 2009 to discuss the emission reduction credit purchase strategy. It was determined that the purchase of perpetual/multi-year credits with a commitment to annual implementation was acceptable, and demonstrates conformity. The required credits will be purchased from the same non-attainment areas encompassing the project.

02-14	Letter - Deficiency 8	De minimis levels used in evaluation were not correct.	The de minimis levels used in the Report are those mandated by air conformity regulations. The 1-hour ozone level does not apply to general conformity. Conformity determinations pursuant to section 176(c) of the Clean Air Act are no longer required for the 1-hour NAAQS. Therefore, the de minimis levels used in the evaluation of project are correct.
02-15	Letter - Deficiency 9	Report does not fully examine technological issues associated with the mitigation measures.	The mitigation strategies discussed in the Report sufficiently highlight the technological issues associated with each strategy. It should be pointed out that the referenced mitigation strategies are not the selected strategy. Conformity will be met through the purchase of emission reduction credits.
02-16	Letter – final pph	DCSOC does not concur.	Comment noted. The conformity plan is found in Section 8 of the revised Report.  The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. This plan satisfies the requirements of the General Conformity Regulations, State of New Jersey Implementation Plan (SIP) and Coastal Zone Determination Management rules on air quality.
02-17	Technical comment 1	Define "latest".	The use of the word "latest" refers to the most current project construction schedule available when the emission analysis was performed.
02-18	Technical comment 2	Must take CO emissions into account for 2013.	Due to availability of federal and non-federal construction funds, the schedule to initiate the first construction contract was moved from late 2009 to early 2010. As a result, the CO no longer exceeds 100 tons in any project year.

02-19	Technical comment 3	Need to use the 1-hour Ozone de minimis levels.	The de minimis levels used in the Report are those mandated by air conformity regulations. The 1-hour ozone level does not apply to general conformity. Conformity determinations pursuant to section 176(c) of the Clean Air Act are no longer required for the 1-hour NAAQS. Therefore, the de minimis levels used in the evaluation of project are correct.
02-20	Technical comment 4	Revise sentence regarding NAAQS for ground-level ozone.	Comment noted; however, the Report information remains correct. Non-attainment status in this area has improved since the 2004 report.
02-21	Technical comment 5	Confirm most recent operational information was used.	The most recent operational information was used to determine the emissions performing the work on this project.
02-22	Technical comment 6	Issue of contract basis versus annual basis.	The annual construction emissions summary for the project is provided in Table ES-1of the Report and was used as the basis for the conformity analysis.
02-23	Technical comment 7	Project will be above CO de minimis in 2013.	Due to availability of federal and non-federal construction funds, the schedule to initiate the first construction contract was moved from late 2009 to early 2010. As a result, the CO no longer exceeds 100 tons in any project year.
02-24	Technical comment 8	Should have used 1-hour Ozone de minimis.	The de minimis levels used in the Report are those mandated by air conformity regulations. The 1-hour ozone level does not apply to general conformity. Conformity determinations pursuant to section 176(c) of the Clean Air Act are no longer required for the 1-hour NAAQS. Therefore, the de minimis levels used in the evaluation of project are correct.
02-25	Technical comment 9	Explain the reason for change in load factor for clamshell dredge.	The change in the load factor for the clamshell dredge is attributed to the power requirements for the lifting portion of their cycle. The shift to the higher horsepower dredging was done to reflect the current project schedule and available dredging equipment anticipated to complete the various construction contracts.

02-26	Technical comment 10	Using project peak emissions is not the best method.	The metric chosen for comparison of cost was based on reduction of peak annual emissions. This metric provides a value comparative to the market value of emission reduction credits. Total emission reduction would not be comparable to emission reduction credits.
02-27	Technical comment 11	Why is dredge electrification included as a mitigation strategy if not viable?	The dredge electrification mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
02-28	Technical comment 12	Application of SCR.	The SCR mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
02-29	Technical comment 13	Include reference documentation regarding the success of SCR technology	Comment noted.
02-30	Technical comment 14	Clarify sentence regarding the strategy to repower dredges.	The natural turnover of engines does not ensure the installation of lower emitting engines. The replacement of engines as a mitigation strategy is not a viable strategy.
02-32	Technical comment 15	Time required for SCR installation concerns for dredges, boosters and towing.	Further evaluation deemed the SCR installation mitigation strategy as not cost effective or implementable given the timeframe of the project, and thereby is no longer being considered a viable mitigation strategy.
02-33	Technical comment 16	Time required for SCR installation concerns for Cape may-Lewes Ferries.	Further evaluation deemed the SCR installation mitigation strategy for the Cape May-Lewes Ferries as not cost effective or implementable given the timeframe of the project, and thereby is no longer being considered a viable mitigation strategy.
02-35	Technical comment 18	ERCs generated in New York cannot be used to satisfy conformity	The required credits will be purchased from the same non-attainment areas encompassing the project.
02-36	Technical comment 19	Using peak emissions is not the best method.	The metric chosen for comparison of cost was based on reduction of peak annual emissions. This metric provides a value comparative to the market value of emission reduction credits. Total emission reduction would not be comparable to emission reduction credits.

02-37	Technical comment 20	Recommends that comment period remain open for an unspecified period to allow the air team to convene.	Several emission reduction strategies were evaluated and the most appropriate mitigation measure, the purchase of emission reduction credits, was selected. The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. Accordingly,
			additional convening of the air team is not needed.
02-38	Technical comment 21	Spreadsheet does not include emission estimates for equipment used at disposal site.	The annual construction emissions summary for the project which includes emissions estimates for equipment used at the disposal sites is provided in Table ES-1 of the Report.

<u>Letter 03 - Comments from Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
03-01	2 <sup>nd</sup> pph	Analysis does not satisfy	All direct and indirect emissions generated by
	point 1	broad scope of indirect	the project, as specified in the regulations
		emissions.	governing air conformity, have been calculated,
			addressed and mitigated by the selected plan of
			the purchase of emission reduction credits. The
			economic basis for the federal project was to
			increase the efficiency of the fleet currently
			calling area ports. There is no anticipated
			induced tonnage as a result of the federal
			project. The future volume of cargo and the
			fleet is determined by macroeconomic factors
			that are not affected in any measureable way by
			channel depth.
03-02	2 <sup>nd</sup> pph	Report fails to acknowledge	Comment noted; however, PM2.5 was
	point 2	NOx emissions as a PM2.5	evaluated and determined to be below de
		precursor.	minimis levels. All emissions will be mitigated
			through the purchase of emission reduction
			credits.

03-03	2 <sup>nd</sup> pph	No details to the	The conformity plan is found in Section 8 of the
	point 3	implementation of emission	revised Report. The plan includes advanced
		reduction strategies.	purchase of perpetual/multi-year emission
			credits which will be applied annually for the
			life of the project, and thus attaining
			conformity.
03-04	3 <sup>rd</sup> pph	Have not fulfilled Regulation	The conformity plan is found in Section 8 of the
		1135 Section 3.12 regarding	revised Report. The plan includes advanced
		the identification and	purchase of perpetual/multi-year emission
		quantification of all emission	credits which will be applied annually for the
		reductions claimed.	life of the project, and thus attaining
			conformity.
03-05	4 <sup>th</sup> pph	Report does not demonstrate	The conformity plan is found in Section 8 of the
		conformity.	revised Report. The plan includes advanced
			purchase of perpetual/multi-year emission
			credits which will be applied annually for the
			life of the project, and thus attaining
			conformity.

# <u>Letter 04 – Comments from the Pennsylvania Department of Environmental Protection</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
04-01	Bullet 1	USACE needs to clearly	The conformity plan is found in Section 8 of the
		identify commitments to	revised Report. The plan includes advanced
		mitigation.	purchase of perpetual/multi-year emission
			credits which will be applied annually for the
			life of the project, and thus attaining
			conformity.
04-02	Bullet 2	Clarify scope of project to	All direct and indirect emissions generated by
		include berthing areas.	the federal project, including the non-federal
			dredging of the berthing areas, have been
			calculated, addressed and mitigated by the
			selected plan of the purchase of emission
			reduction credits. Please see Appendices A - C.
04-03	Bullet 3	Report should include the	The economic basis for the federal project was
		effects from increased	to increase the efficiency of the fleet currently
		navigation.	calling area ports. There is no anticipated
			induced tonnage as a result of the federal
			project. The future volume of cargo and the
			fleet is determined by macroeconomic factors
			that are not affected in any measureable way by
			channel depth.

04-04	Bullet 4	Clarify CO emission	Due to availability of federal and non-federal
		increases.	construction funds, the schedule to initiate the
			first construction contract was moved from late
			2009 to early 2010. As a result, the CO no
			longer exceeds 100 tons in any project year.

# <u>Letter 05 – Comments from the Delaware Riverkeeper</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
05-01	3 <sup>rd</sup> pph	Compliance document represents and improper process.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. The selected plan offsets the project emissions yearly as required. A final Statement of Conformity for the project has
05-02	4 <sup>th</sup> pph	Mitigation measures must be identified before the determination of conformity.	been prepared.  The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. A final Statement of Conformity for the project has been prepared.
05-03	5 <sup>th</sup> pph	Revising the 2004 document does not fulfill the requirement of the law.	The 2009 Report is a stand-alone report that includes: relevant and applicable data and documentation from the 2004 report; an updated construction schedule; the General Conformity analysis and plan selection; and, the implementation plan.
05-04	6 <sup>th</sup> pph first bullet	Report fails to address emissions from increased navigation.	The economic basis for the federal project was to increase the efficiency of the fleet currently calling area ports. There is no anticipated induced tonnage as a result of the federal project. The future volume of cargo and the fleet is determined by macroeconomic factors that are not affected in any measureable way by channel depth.
05-05	6 <sup>th</sup> pph second bullet	Impacts from construction at existing disposal areas should be included in the analysis.	Dike raising operations are deemed to be an insignificant amount of emissions and would be performed as part of the regular maintenance activities. As such, this maintenance activity is exempt from General Conformity regulation.

05-06	6 <sup>th</sup> pph third bullet	Discuss the use of dredge material for other purposes.	All direct and indirect emissions generated by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits. The federal action is complete when dredge material is placed in existing federal disposal areas. However, if placed material is then removed and transported by a separate entity elsewhere, it is considered a separate and independent action and not a part of the federal project. The responsibility for meeting all appropriate environmental requirements would be on the entity conducting the material removal and transport.
05-07	7 <sup>th</sup> pph	Mitigation options do not fulfill the requirement for an implementation schedule, timelines and enforcement process.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. A final Statement of Conformity for the project has been prepared.
05-08	8 <sup>th</sup> pph	It is questionable whether this report used the latest and most accurate emissions estimation techniques.	The most current information was used in the 2009 analysis. The only data used from the 2004 report was information that was either still current or no significantly improved information was available.
05-09	8 <sup>th</sup> pph first bullet	First example, use the most up to date information for section 7.2.	The McFarland mitigation strategies are no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
05-10	8 <sup>th</sup> pph second bullet	Second example, use most up to date information for construction costs.	The annual construction emissions summary for the project which includes emissions estimates for equipment used at the disposal sites is provided in Table ES-1 of the Report. All direct and indirect emissions generated by the project, as specified in the regulations governing air conformity, have been calculated, addressed and mitigated by the selected plan of the purchase of emission reduction credits.
05-11	9 <sup>th</sup> pph first bullet	Questions M&Ns knowledge.	Comment noted.
05-12	9 <sup>th</sup> pph second bullet	Low threshold of substantiation for email.	Comment noted; however, key reference data collected is sited in footnotes and was deemed to be acceptable to conduct the analysis.

05-13	9 <sup>th</sup> pph third bullet	Inappropriate used of ship size.	The cold ironing mitigation strategy is no longer being considered. The recommended mitigation plan is for the purchase of emission reduction credits.
05-14	10 <sup>th</sup> pph	Report does not supply the level of detail needed for proper agency review.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity.
05-15	11 <sup>th</sup> pph	Commitments need to be in place prior to conformity.	Several emission reduction strategies were evaluated and the most appropriate mitigation measure, the purchase of emission reduction credits, was selected. If, in the future, the scope of the project changes, then the issuance of a new conformity determination consistent with appropriate guidance and regulations may be required.
05-16	12 <sup>th</sup> pph	Segmented approach inhibits public monitoring and response.	The federal project has not been segmented. The federal action is complete when dredge material is placed in existing federal disposal areas.
05-17	13 <sup>th</sup> pph	Construction schedule must be tailored to accommodate regulatory approvals.	The conformity plan is found in Section 8 of the revised Report. The plan includes advanced purchase of perpetual/multi-year emission credits which will be applied annually for the life of the project, and thus attaining conformity. A final Statement of Conformity for the project has been prepared.
05-18	14 <sup>th</sup> pph first bullet	Issue of higher horsepower dredging.	The shift to the higher horsepower dredging was done to reflect the current project schedule and available dredging equipment anticipated to complete the various construction contracts.
05-19	14 <sup>th</sup> pph second bullet	Clarification on approach to emission reduction.	The metric chosen for comparison of cost was based on reduction of peak annual emissions. This metric provides a value comparative to the market value of emission reduction credits. Total emission reduction would not be comparable to emission reduction credits.

# $\underline{Letter~06-Comments~from~the~South~Jersey~Transportation~Planning~Organization} \\ \underline{(SJTPO)}$

Number	Location	<b>Summary of Comment</b>	Final Comment Response
06-01	Memo	Would like to be apprised of	Any information that is collected regarding
	item 1	actual NOx emissions.	actual emissions will be provided to your
			agency.
06-02	Memo	Would like to have	If, in the future, the scope of the project
	item 2	opportunity to comment on	changes, we will provide your office an
		revisions/supplementals/chang	opportunity to comment.
		es for the duration of project.	

# <u>Letter 07 – Comments from the North Jersey Transportation Planning Authority (NJTPA)</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
07-01	1 <sup>st</sup> pph	Project does not affect NJTPA	Comment noted.
		region.	

# <u>Letter 08 – Comments from the Wilmington Area Planning Council</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
08-01	2 <sup>nd</sup> pph	WILMAPCO decline to offer	Comment noted.
		official concurrence.	
08-02	3 <sup>rd</sup> pph	Strongly encourage	The conformity plan is found in Section 8 of
		implementation of mitigation	the Report. The plan includes advanced
		strategies.	purchase of perpetual/multi-year emission
			credits which will be applied annually for the
			life of the project, and thus attaining
			conformity.

Responses to Comment Letters Received for November 2009 Revised General Conformity Analysis and Mitigation Report.

<u>Letter 09 – Comments from the Delaware Riverkeeper</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
09-01	2 <sup>nd</sup> pph	USACE does not appear to be	The statement of conformity for the Project
		in compliance with Section	adheres to the implementing regulations and as
		176(c) of the CAA and its	such is in compliance with Section 176(c) of
	et	implementing regulations.	the CAA.
09-02	1 <sup>st</sup> bold	The revised draft is a	Please refer to responses to comments 01-04
	comment	repackaging of the 2004 Air	and 05-03.
00.00	and	Conformity Determination.	
09-03	2 <sup>nd</sup> bold	USACE fails to identify and	The conformity plan for the project was
	comment	articulate enforceable	identified and is enforceable. The plan
		mitigation measures.	includes the purchase of perpetual/multi-year
			emission reduction credits, which will be
			applied annually during initial construction of
09-04	Oth and	A mere statement of intent to	the project, thus attaining conformity.
09-04	9 <sup>th</sup> pph		Please refer to response to comment 09-03. Also, as stated in the Final Statement of
		purchase ERCs does not provide the level of detail	· ·
		required to ensure that	Conformity, all required ERCs will be obtained from within the 10-county
		emission reductions are	nonattainment area for NO <sub>x</sub> and all ERCs will
		quantifiable and consistent	be purchased prior to the commencement of
		with the SIP.	construction.
09-05	10 <sup>th</sup> pph	Unclear whether emissions	According to federal regulations, ERCs must
07-03	то ррп	will be fully offset within the	be "surplus, permanent, quantifiable, and
		same nonattainment or	federally enforceable." ERCs (usually
		maintenance area through a	measured in tons per year of a given pollutant)
		SIP revision or a similarly	can be generated by a source or facility in a
		enforceable measure.	variety of ways and are administered and
		Questions enforceability of	certified by the appropriate state agency.
		ERC approach.	Please refer to response to comment 09-04.
09-06	12 <sup>th</sup> pph	Issue of PRPA's brokerage	The enforceability of the mitigation plan is not
		agreement for the purchase of	predicated upon the brokerage agreement.
		ERCs and termination clause.	Please refer to response to comment 09-04.
09-07	3 <sup>rd</sup> bold	USACE fails to identify and	Please refer to responses to comments 01-11
	comment	fully offset total direct and	and 01-12.
		indirect emissions.	

09-08	14 <sup>th</sup> pph	Impacts from the Southport Project must be considered	The proposed Southport project, if and when implemented, will be a separate, independent action and is not part of the Congressionally-authorized Federal Project. Any and all environmental clearances required for that project are solely the responsibility of the project's proponents.
09-09	17 <sup>th</sup> pph	Impacts from disposal area containment levee height increase must be considered.	Emissions produced as a result of all disposal area activities, including any necessary dike construction to accommodate placement of dredged material during initial construction of the project, have been estimated and are included in Table ES-1 of the <i>Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report, November 2009</i> (November 2009 Report). Please refer to Sections 1.7, 1.8, and 2.2 of the November 2009 Report.
09-10	18 <sup>th</sup> pph	Agreement between the Governors of PA and NJ on final disposition of dredge material.	Please refer to response to comment 02-03.
09-11	19 <sup>th</sup> pph	USACE fails to address any increased emissions from maintaining the increased depth.	Per 40 CFR §93.153 (c) (2) (ix), the general conformity requirements do not apply to maintenance dredging.
09-12	4 <sup>th</sup> bold comment	USACE fails to articulate an enforceable mitigation strategy and implementation plan that complies with CAA regulations.	Please refer to responses to comments 09-03 and 09-04.
09-13	21 <sup>st</sup> pph	Use of ERCs was based on convenience to accommodate the USACE construction schedule.	The construction schedule for the project is based on many factors, including the Delaware River Basin Fish an Wildlife Management Cooperative's recommended dredging restrictions for protection of fishery resources in the Delaware River and Bay (please refer to the April 2009 Environmental Assessment). Several emission reduction strategies were evaluated and the least costly, most efficient mitigation measure, the purchase of ERCs, was selected.

09-14	5 <sup>th</sup> bold comment	USACE failed to provide accurate information regarding success and cost of mitigation options considered.	The only mitigation strategy that has an existing market and therefore an existing valuation system is emission reduction credits. Therefore, calculations for the other strategies were performed in such a way to be comparable to the way ERCs are priced (total cost per annual reduction).
			The annual NOx reductions are constant for off-site strategies and ERCs. They are not constant for on-site strategies. There was no attempt to skew the results by picking arbitrary year reductions for the on-site strategies. The total cost was divided by the reduction in peak year emissions in all cases.
			The metric was only intended to compare the relative cost of the alternatives covered. For off-site strategies and ERCs, the cost-effectiveness calculations all change in the same way (the numerator – cost – stays the same, and the denominator – tons of NOx reduced – is multiplied by 6). The on-site options vary a little in their relative cost-effectiveness when all six years are included, but not significantly.
09-15	35 <sup>th</sup> pph	No explanation for the use of the booster pump provided.	Please refer to response to comment 01-09.
09-16	36 <sup>th</sup> pph	Use of ERCs to offset air emissions for the entire project is not appropriate or legally defensible.	Please refer to response to comment 09-01.
09-17	6 <sup>th</sup> bold comment	USACE fails to use most up to date information for analyses.	The most current information, including project schedule, cost estimates, emission factors, and emission models, were used in the 2009 analysis. The only information used from the 2004 report was information that was either still current or no significantly improved information was available. Please refer to response to comment 01-04.

09-18	40 <sup>th</sup> pph	USACE failed to notice the	The lack of email notification was inadvertent
		action via its email notification	and was not an attempt to evade review and
		system.	comment by the public. A public notice was
			posted on the Corps' website and notices were
			published in two local daily newspapers as
			required by 40 CFR §93.156.
09-19	41 <sup>st</sup> pph	Riverkeeper request that the	Comment noted. Responses to comments will
		USACE document its	be made available within 30 days of the final
		responses to all comments and	conformity determination.
		make available within 30 days	
		of the final conformity	
		determination.	
09-20	42 <sup>nd</sup> pph	The Statement of Conformity	Please refer to response 09-01.
		and the General Conformity	
		Analysis and Mitigation	
		Report fail to comply with the	
		CAA.	

# <u>Letter 10 – Comments from the New Jersey Department of Environmental Protection</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
10-01	1 <sup>st</sup> pph	Report does not conform to	Please refer to responses to comments 02-01
		the NJ SIP.	and 09-01.
10-02	2 <sup>nd</sup> pph	All direct and indirect	Please refer to responses to comments 02-02
		emissions from the Project	and 02-04.
		must be identified and	
		mitigated.	
10-03	1 <sup>st</sup> bold	USACE failed to consult with	Comment noted.
	comment	the State of New Jersey.	
10-04	2 <sup>nd</sup> bold	The mitigation plan fails to	Please refer to responses to comment 09-01.
	comment	meet CAA requirements, thus	
		preventing NJ from attaining	
		the NAAQS for ozone.	
10-05	3 <sup>rd</sup> bold	The report does not include	Please refer to responses to comments 02-03
	comment	all the emissions for the	and 02-04.
		Project.	
10-06	1 <sup>st</sup> pph on	Agreement between the	Please refer to response to comment 02-03.
	page 4	Governors of PA and NJ on	
		final disposition of dredge	
		material not addressed.	
10-07	3 <sup>rd</sup> pph on	New ship and support vessel	Please refer to response to comment 02-06.
	page 4	activity not addressed.	

10-08	4 <sup>th</sup> bold comment	Report misstates how ERCs were used in NY/NJ Harbor Deepening Project.	The November 2009 Report merely states that the NY/NJ Harbor Deepening project "used a conditional statement of conformity along with a menu of mitigation measures including emission offsets for early phases of the work." The report does not state or imply that ERCs were the sole mitigation measure used. The NY/NJ Harbor Deepening Project successfully used ERCs on a temporary basis until other mitigation measures could be implemented.
10-09	5 <sup>th</sup> bold comment	Requests the USACE to perform a new cost benefit analysis to include the impact to the regional economy from the purchasing of credits and thus the removal of said credits from the market.	Please refer to response to comment 09-01.
10-10	6 <sup>th</sup> bold comment	Requests the USACE to develop a plan that relies on mitigation measures and not ERCs	Several emission reduction strategies were evaluated and the least costly, most efficient mitigation measure, the purchase of ERCs, was selected. Please refer to response to comment 09-01.
10-11	7 <sup>th</sup> bold comment	Clarify relationship between project scope changes over time and recent representation of maintenance dredging to 45 feet in Reach C.	There is no relationship between the reduction in estimated dredging quantities to complete construction of the 45-foot channel and the ongoing maintenance dredging of the existing 40-foot channel. As stated in the Corps' December 17, 2008 Public Notice, quantity changes are the result of significant advancements in hydrographic survey equipment and methodologies for obtaining data, advancements in methods used for calculating quantities, change in datum levels for the Delaware River and Bay due to sea level rise, and past mining operations by others.  Advanced maintenance is authorized by ER-1130-2-307, "Dredging Policies and Practices". The advanced maintenance performed in the last five years has been conducted exclusively in the Marcus Hook and New Castle Ranges of the Delaware River and has varied from 42 feet to 44 feet.

10-12	8 <sup>th</sup> bold comment	USACE should emulate the success of the NY/NJ Harbor Deepening Project.	Comment noted. Please refer to response to comment 09-01.
10-13	9 <sup>th</sup> bold comment	To prevent backsliding, the de minimis emissions levels for a severe non-attainment area should be used and identified for the public understanding.	Please refer to response to comment 02-14.
10-14	conclusion	NJDEP does not concur with the USACE determination.	Comment noted. Please refer to response to comment 09-01.
10-15	Final pph	The USACE must revise its conformity statement and mitigation plan to conform to the CAA.	Comment noted. Please refer to response to comment 09-01.
10-16	Technical comnt 1.	Severe nonattainment for one hour ozone pursuant to the anti-backsliding provisions of the CAA.	Please refer to response to comment 02-14.
10-17	Technical comnt 2.	Clarify emission estimates, and include the total over depth in analysis.	Emission estimates were based on total estimated dredging quantities for initial construction (approximately 16 million cubic yards), which include overdepth dredging.
10-18	Technical comnt 3	Future change in shipping characteristics must be addressed.	Please refer to response to comment 02-06.
10-19	Technical comnt 4	Should address the emissions for the transport of dredged material to final destination based on Governors agreement.	Please refer to response to comment 02-03.
10-20	Technical comnt 5	Define the dates of the project construction schedule used to develop emission analysis.	The project schedule used in the emissions analysis is dated November 2009. The schedule is depicted in Attachment 4 of the Draft Statement of Conformity and Appendix D of the November 2009 Report.

10-21	Technical comnt 6	Applicability analysis must be completed for CO.	Both Camden and Philadelphia counties encompass Reach A or AA of the project and are in maintenance status for carbon monoxide (CO). The CO de minimis level of 100 tons/year is properly shown in Tables ES-1, 3-1, and 8-1. The project does not exceed the de minimis threshold in any year; therefore, a conformity determination for CO is not required. The report has been revised where it inaccurately stated that the entire area is in attainment for CO.
10-22	Technical comnt 7	Appropriate de minimis level should be identified for the public.	Please refer to response to comment 02-14.
10-23	Technical comnt 8	Recommends the use of total project costs and tons of pollutant reduced instead of using Project peak emissions.	Please refer to response to comment 09-14.
10-24	Technical comnt 9	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-25	Technical comnt 10	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-26	Technical comnt 11	Severe nonattainment for one hour ozone pursuant to the anti-backsliding provisions of the CAA.	Please refer to response to comment 02-14.
10-27	Technical comnt 12	Cite source for latest literature.	The phrase "according to the latest literature" has been deleted. The balance of the sentence is based on the consultant's experience and expertise within the dredging industry and familiarity with dredging equipment.
10-28	Technical comnt 13	Clarify emission estimates, and include the total overdepth in analysis.	Please refer to response to comment 10-17.
10-29	Technical comnt 14	Future change in shipping characteristics must be addressed.	Please refer to response to comment 02-06.
10-30	Technical comnt 15	Should address the emissions for the transport of dredged material to final destination based on Governors agreement.	Please refer to response to comment 02-03.

10-31	Technical comnt 16	USACE did not define indirect emissions correctly as per the Federal General Conformity regulation 40CFR93.153.	Please refer to responses to comments 02-02, 02-03, and 02-04.
10-32	Technical comnt 17	Provide information regarding berth deepenings.	No, the Corps has not contacted any facilities other than the Project benefitting facilities.  The benefitting facilities were identified in the 2002/2004 Comprehensive Economic Reanalysis.
10-33	Technical comnt 18	Severe nonattainment for one hour ozone pursuant to the anti-backsliding provisions of the CAA.	Please refer to response to comment 02-14.
10-34	Technical comnt 19	Note the USEPA announcement to reconsider the 2008 NAAQS and provide this information in the report.	Comment noted. Information, including a proposed schedule, regarding EPA's reconsideration of the national standards for ground-level ozone can be obtained from the EPA's website at the following link: http://www.epa.gov/groundlevelozone/
10-35	Technical comnt 20	Clarify the assumption that there are no changes to the berth deepening scope from the 2004 study.	The work activities associated with the deepening or modification of the berthing areas has not changed.
10-36	Technical comnt 21	Applicability analysis must be completed for CO.	Please refer to response to comment 10-21.
10-37	Technical comnt 22	Appropriate de minimis level should be identified for the public.	Please refer to response to comment 02-14.
10-38	Technical comnt 23	Recommends the use of total project costs and tons of pollutant reduced instead of using Project peak emissions.	Please refer to response to comment 09-14.
10-39	Technical comnt 24	Provide breakdown of unmitigated NOx emissions by year and not by contract. Table ES-1 is in tons/yr. Figure 5-1 is by contract.	Annual estimated NOx emissions are shown in Tables ES-1, 3-1, and 8-1 and Appendix D of the November 2009 Report.
10-40	Technical comnt 25	Cite source for 92%.	Section 6.3 has been revised.

10-41	Technical comnt 26	Provide basis for the statement thatthere is no reason to expect major difficulty	Repowering of dredges is a regular matter of equipment maintenance and upgrade. There is no reason why the use of Tier 2 engines would materially complicate such a process. An entire repowering with Tier 2 engines has not occurred in the industry yet due to the relatively recent availability of such engines as compared to the engine replacement cycles on dredges.
10-42	Technical comnt 27	Cite source for 92%.	Section 7.3 has been revised.
10-43	Technical comnt 28	For the NY/NJ Project, ERCs were utilized to keep project on schedule and used on a limited basis.	Comment noted.
10-44	Technical comnt 29	ERCs listed in the NY/NJ Project as a Tier IV strategy.	Comment noted.
10-45	Technical comnt 30	Issue of coordination with the NJDEP	Comment noted.
10-46	Technical comnt 31	Revise table 8-1 to provide the construction contracts as well as calendar year emissions.	The description of Table 8-1 has been revised.
10-47	Technical comnt 32	Change the use of "compensate" to "fully offset".	Concur. The report has been revised.
10-48	Technical comnt 33	Emissions from an action must be fully offset to zero and not to the de minimis level.	Concur. The report has been revised.
10-49	Technical comnt 34	Change the use of "reduce" to "fully offset". Emissions must be fully offset to zero and not to the de minimis level.	Concur. The report has been revised.
10-50	Technical comnt 35	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-51	Technical comnt 36	Please define the term "compensate" in the sentence "1. Completeness – does the plan compensate for all pollutants that exceed the de minimis levels?"	The report has been revised – "compensate for" has been replaced with "fully offset".

10-52	Technical comnt 39 (a)	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-53	Technical comnt 37	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-54	Technical comnt 38	The USACE mitigation plan provides no real mitigation and will delay the area from attaining NAAQS.	Please refer to response to comment 09-01.
10-55	Technical comnt 39 (b)	Emissions from the equipment from disposal are must be addressed. Please provide an annual breakdown of the emissions from the equipment.	Emissions from disposal site equipment are shown as separate line items in Appendices A and B.

# <u>Letter 11 - Comments from Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management</u>

Number	Location	<b>Summary of Comment</b>	Final Comment Response
11-01	1 <sup>st</sup> bold	Report does not provide	Please refer to responses to comments 09-01,
	comment	required information on	09-03, and 09-04.
		acquisition and use of ERCs.	
11-02	4 <sup>th</sup> pph	Information not sufficient to	Please refer to responses to comments 09-01,
		determine whether ERCs	09-03, and 09-04.
		purchased are surplus to the	
		State's ozone and fine	
		particulate matter SIP.	
11-03	5 <sup>th</sup> pph	A conservative approach	Comment noted. The Corps and the non-
		would be to ensure all ERCs	federal sponsor will take this recommendation
		are obtained from the portion	into consideration during the acquisition of
		of the area that is designated as	ERCs.
		non-attainment for PM <sub>2.5</sub> rather	
		than obtaining ERCs from the	
		broader ozone area as	
		indicated.	

11-04	2 <sup>nd</sup> bold	USACE should estimate future	Based on the definitions for "reasonably
	comment	emissions of increased ship	foreseeable emissions" and "indirect
		traffic, employment and other	emissions" in 40 CFR §93.152, the Corps has
		associated increases and	identified and quantified all direct and indirect
		include them in the analysis.	emissions for the project and will fully offset
			these emissions by purchasing ERCs. Also,
			please refer to responses to comments 02-06,
			03-01, and 09-11.
11-05		Although there is no specific	Comment noted. Please refer to response to
		prohibition for using ERCs as	comment 09-01.
		proposed, the failure to provide	
		real mitigation measures does	
		not assist the region in	
		attaining ozone and fine	
		particulate standards.	





# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street

# 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

Lieutenant Colonel Thomas J. Tickner Philadelphia District Commander U.S. Army Corps of Engineers The Wanamaker Building 100 Penn Square East Philadelphia, Pennsylvania 19107-3390

SEP 15 2009

RE: Comments on the Main Channel Deepening Project General Conformity Analysis and Mitigation Report (DRAFT) dated August 7, 2009

### Dear Lieutenant Colonel Tickner:

I am writing to provide comments from the U.S. Environmental Protection Agency (EPA) on the "Delaware River Main Channel Deepening Project – General Conformity Analysis and Mitigation Report", dated August 7, 2009, and prepared for the US Army Corps of Engineers (USACE) by Moffatt & Nichol. I am also providing comments on the "Draft Conditional Statement of Conformity", dated August 14, 2009. Both documents were submitted to EPA for review on August 21, 2009.

The August 2009 "General Conformity Analysis and Mitigation Report" (hereafter referred to as the Conformity Analysis and Conformity Determination, or simply the Conformity Determination) supersedes the prior "General Conformity Analysis and Mitigation Report", dated February 2004, and prepared for the USACE by Moffatt & Nichol. As indicated in EPA's letter to the USACE on July 1, 2009, the February 2004, per 40 CFR 93.157(a), the conformity determination has automatically lapsed as more than five years elapsed since the February 2004 determination and the federal action did not commence. Any new conformity demonstration must itself satisfy the requirements of the conformity regulations without relying on the lapsed determination to supply missing context or data.

The USACE 2009 draft Conformity Analysis and Demonstration indicates that a conformity determination is applicable and that a conformity demonstration is required for each year of the project (calendar years 2009-2014), as the direct and indirect annual nitrogen oxide (NOx) emissions for the project exceed the precursor applicability emissions rates specified in federal conformity rules, at 40 CFR 93.153. However, the draft Conformity Determination lacks a demonstration that conformity is met for the project. While there is ample information about the expected direct emissions from the project, the draft Conformity Demonstration contains no 01-01 description of the specific combination of mitigation measures and offsets that will be used to demonstrate conformity for this action. The General Conformity rule requires that for an applicable federal action (i.e., where criteria or precursor emissions that exceed the *de minimus* annual emissions thresholds listed at 40 CFR 93.153) the USACE, as the lead federal agency, must demonstrate conformity for each project year for the life of the federal action.

Since the USACE has elected to mitigate or offset annual project emissions to demonstrate conformity, the USACE's demonstration must show that annual project emissions are mitigated or offset to zero over the entire project life cycle. Conformity cannot be demonstrated via a suite of measures, project schedule changes, or offsets to be selected after the conformity determination has been made, as you have indicated in your August 14, 2009 draft Conditional Statement of Conformity.

Neither is it adequate to state that the first project phase/contract will demonstrate conformity via emissions offsets/emission reduction credits, to be identified and later purchased after the final conformity determination, as you indicate in the same draft Conditional Statement of Conformity. Your draft Statement of Conformity also indicates that the USACE and the project sponsor (i.e., Philadelphia Regional Port Authority, or PRPA) will convene an air quality team to evaluate and select conformity strategies for each project contract after the final conformity determination and after project construction has begun. You indicate that NOx emissions from the first construction contract will be offset, although you do not identify the source or even the state from where such offsets will be obtained. You proceed to indicate that 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." The General Conformity Rule specifies criteria for determining conformity at 40 CFR 93.158 and requires that the relevant analysis be performed prior to determining conformity and further requires that any mitigation measures must be identified, described and be made subject to an implementation schedule with explicit timelines and written commitments, before the determination of conformity is made. 40 CFR 93.160(a), (b).

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Finally, the draft Conformity Demonstration indicates that NOx emissions offsets (for use in the first project contract/year) are expected to be available in the Pennsylvania and New Jersey portions of the Philadelphia ozone nonattainment area, although no specific information aside from expected cost and availability is provided. Emissions Reductions Credits from the New York Channel Deepening Project are discussed. The Conformity Rule requires (for ozone or NOx) that the total emissions from the action be fully offset within the same nonattainment or maintenance area, not with offsets obtained from sources within a different nonattainment area. 40 CFR 93.158(a)(2).

It is EPA's conclusion, based on these comments and those additional comments attached to this letter, that USACE has not sufficiently demonstrated conformity for this project under the requirements of the General Conformity Rule. If you have further questions with regard to these comments, please contact me or Cristina Fernandez, Chief, Air Quality Planning Branch.

Sincerely,

nanna Esher, Acting Direct

Air Protection Division

Enclosure

cc: John H. Estey, Esquire Chairman, Philadelphia Regional Port Authority

William Baker, Senior Policy Advisor Environmental Planning & Protection Division, EPA Region II

Joyce Epps, Director Bureau of Air Quality, Pennsylvania DEP

Ali Mirzakhalili, Administrator Air Quality Management Section, Delaware DNREC

Bill O'Sullivan, Director Office of Air Quality Management, New Jersey DEP

#### Enclosure 1 -

Comments from the Environmental Protection Agency
RE: Delaware River Main Channel Deepening Project
DRAFT General Conformity Analysis and Mitigation Report, dated August 7, 2009

#### **General Comments:**

# 1. Level of Project Description/Documentation

In general, the level of documentation for the August Draft Conformity determination is of a lesser detail than that of the February 2004 conformity determination. For example, the description of the project itself, as well as the introductory/background discussion of each of the mitigation measures, is less detailed. Some discussion about the measures has been omitted, for example a discussion on why measures to reduce emissions from the US Army Corps of Engineers (USACE) maintenance dredge McFarland is considered "off-site". This descriptive narrative of the 2004 Conformity Demonstration provides a more meaningful explanation of the plan and the measures contained therein to address conformity. The August 2009 Draft Conformity Determination instead contains a great deal of focus on costs and cost-effectiveness, which although important for the USACE to evaluate mitigation and offset alternatives, does not fully describe to the public an understanding of the project with respect to the conformity determination. Per 40 CFR 93.157(a), the February 2004 determination has automatically lapsed, and EPA urges the USACE to incorporate all supporting information about the project from the 2004 demonstration (that is still relevant) into the 2009 determination, so that the 2009 determination stands alone without reference to the 2004 report.

While the stated purpose for this new report was to recalculate and to update emissions estimates, in light of the revised project scope, the document must also serve as a standalone document to demonstrate conformity, format that will allow for meaningful public participation as contemplated by the General Conformity Rule at 40 CFR 93.156.

### 2. Regional Significance Test

The Conformity Determination does not determine whether the project is "regionally significant". Under the General Conformity Regulations, a federal action is regionally significant if its total direct and indirect emissions for any pollutant exceed 10 percent or more of a nonattainment or maintenance area's emission inventory for that pollutant, per the definition at 40 CFR 93.152. For pollutants and their precursors where the project net emissions fall below the general conformity *de minimus* levels set at 40 CFR 93.153, an action would still be subject to a conformity determination if it was determined to be regionally significant, per 40 CFR 93.154(j).

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# 3. Reference to the NY/NJ Harbor Project Conformity Demonstration

In past meetings, the USACE and PRPA have expressed an interest in pursuing a flexible approach to achieving conformity, following a precedent set in the NY/NJ Harbor Deepening Project. The USACE and PRPA have indicated that they would model their

conformity demonstration on that prepared for that project. However, the plan submitted appears to vary in important ways from the NY/NJ example.

In particular, for that project, conformity was demonstrated on an annual basis, for all applicable pollutants, over the life of the project as part of the final conformity demonstration prepared for the project. The Harbor Air Management Plan for the NY and NJ Harbor Deepening Project (HAMP Report) contains a clearly identified mix of strategies to demonstrate conformity. Specifically, the NY District US Army Corps of Engineers (NY District Corps) identified seven mitigation alternatives that would offset the project emissions to zero in each year, with each mitigation alternative containing a combination of mitigation strategies. For example, Alternative 1 included fuel emulsification, dredge electrification, ferry SCR, tug repower and purchase of offset credits. In each year of the project, the NY District Corps estimated the offsets that would be generated by each strategy and compared the annual total with the expected project emissions (for example, see Figure 5.1 and Table 5.2 in the HAMP Report). In this way, the NY District Corps was able to demonstrate that they would offset all project emissions in each year where emissions exceeded the *de minimus* level, for the lifetime of the project.

The Draft Conformity Demonstration for the Delaware River Deepening Project does not specifically list strategies to demonstrate conformity, instead committing to do so at a future date. Also, it does not contain a description of the detailed process outlined in the NY/NJ Project, which was a critical component of the framework of that project.

The General Conformity Rule requires that construction cannot begin on (any portion of) the project until a final conformity determination is issued for the entire project.

# 4. <u>Uncertainty Surrounding Mitigation Strategy Selection/Schedules</u>

01 - 07

There is a great deal of uncertainty surrounding the selection of mitigation measures for this project in the 2009 Draft Conformity Demonstration. Given that the USACE has set an ambitious project schedule (already slated to have begun), and that the 5-year period that has elapsed since the USACE looked at a number of these strategies, it is unclear why the USACE has not moved to choose which strategies it intends to use. Section 6 of the 2009 Draft Conformity Demonstration evaluates three strategies which have been studied in the past. Dredge electrification is ruled out by Moffatt & Nichol (M&N) as "not viable for this project", yet emissions estimates and cost-effectiveness for this strategy are scattered throughout and it continues to be listed under mitigation strategies in the Draft Conformity Statement.

The remaining strategies evaluation in Sections 6 and 7 of the 2009 Conformity Determination are shown to have uncertainty due to a number of factors, the least of which are unknowns about the expected level of participation by various as-yet selected contractors and off-site private parties. No indication is presented that any work has been on-going to negotiate agreements with any off-site vendors, although the same mitigation strategies are being considered on the same vessels that were presented in the 2004

Conformity Determination. Furthermore, 40 CFR 93.160 requires that written commitments in support of the mitigation measures must be obtained prior to determining conformity (including those measures that will be undertaken by third parties). 40 CFR 93.160(b), (c).

Time frames presented in the 2009 Conformity Determination to enact these measures range from 18-24 months, including negotiation with outside parties, design, acquisition, and installation of equipment. Some of these estimates are extremely ambitious, given the limited prior use of the technologies on the application in question (e.g., SCRs/repowers on applications specific to this project, such as ferries not designed for SCR), or the technical difficulties in putting together some of the complex strategies in a short timeframe (e.g., adding shore power to the Packer Avenue Terminal and retrofitting 25 ships in a 24-month period).

Nearly all the evaluated mitigation strategies are estimated to need at least 18-months or more, yet the Draft Conformity Determination and Conditional Statement of Conformity give no indication that any measure has been selected or that work has begun. Yet, the USACE continues to contend that offsets will be needed for the first contract segment/year, and that the remainder of the project emissions reductions will be in the form of mitigation. On an annual basis, this would mean that beginning in 2011 (or even part of 2010), enough of these mitigation measures would need to be in place to offset the substantial annual NOx emissions listed in Table 5 for those years.

# EPA Comments on Specific Sections of the Conformity Analysis and Mitigation Report, by Section

**Executive Summary** 

01-08

1. The "Emission Estimates Results" section indicates that the entire area is attainment for the national ambient air standards for particulate matter less than 10 microns (PM10) and for carbon monoxide (CO). The introduction to Chapter 3 of the Conformity Determination makes a similar statement that the entire area is in attainment of CO and PM10, and that general conformity does not apply.

To clarify, the project area was classified nonattainment (in part), and those former nonattainment areas have since met the standard and are now maintenance areas. It should be noted that Table 1 of the report shows that the CO de minimus threshold for maintenance areas is exceeded in the year 2013. Philadelphia County, PA and Camden County, NJ are now considered limited CO maintenance areas, and as such are subject to only limited conformity requirements. However, it is inaccurate to characterize these areas as attainment. The introduction to Chapter 3 of the Conformity Determination makes a similar statement that the entire area is in attainment of CO and PM10, and that general conformity does not apply. The NAAQS designations for the project area are defined at 40 CFR Part 81, Subpart C. Further detail on classification and maintenance area information can be referenced at EPA's "Greenbook Nonattainment Areas for Criteria Pollutants," online at: http://www.epa.gov/air/oaqps/greenbk/index.html. EPA's

Office of Air Quality Planning and Standards issued guidance on October 6, 1995 outlining its policy for limited maintenance plan options for nonclassifiable CO nonattainment areas in a memorandum from Joseph Paisie, Group Lead, Integrated Policy and Strategies Group, to EPA Regional Air Division Directors.

- 2. The executive summary does not describe the reason for the change in scope of work, nor does it explain why the revised project shifted work to higher horsepower dredging. EPA suggests the USACE add a discussion explaining in detail why the project scope was revised, and how that changed the number and location of dredge spoil sites, and significant changes in project activities that result in overall changes to project emissions (aside from the revised emission factors and load factors for marine equipment, that are described in clear detail).
- 3. The "General Conformity Strategy" indicates that NOx emissions must be offset to zero, but the report does not specify how that goal is achieved in each year of the project. Instead this section indicates that emissions from the first project contract will be offset via emission reduction credits (ERCs), and that subsequent contract emissions in future years can be offset via a mix of the identified mitigation measures. This vague commitment to offset/mitigation emissions at a future date (after the final conformity demonstration) using an unspecified mix of measures on an evolving basis does not meet requirements of the General Conformity Rule at 40 CFR 93.158.

# Section 1.1 - Background

4. EPA recommended, and the USACE agreed, that emissions from the berth deepenings, although not directly part of the USACE project, should be included in the conformity analysis as "indirect" emissions. However, there is very little discussion of the berth deepenings. There is a notation in another section of the report that marine emissions comprise 2,820 of the 3,038 tons of NOx. Beyond that, there is no further discussion of the berth deepening emissions - with the exception of a list of the facility owners responsible for those reaches (Section 1.6). There is also a single table in Appendix B of total berth deepening emissions, by contractor segment. Since the USACE states that these emissions are not part of the USACE contracts, the presentation of the data in this form without explanation is confusing. For conformity purposes, it would be more useful to list annual berth dredging estimates, by pollutant, by project year. Additionally, a breakout by facility segment, with a more detailed explanation of the emissions from each berth segment, would be useful.

### Section 1.7 – Emission Sources

5. This section indicates that the report includes land based emissions, including highway and off-road equipment, including employee vehicles and on-road trucks. However, the remainder of the report does not address emissions other than marine categories. The report appendices also do not specifically address non-marine project emissions. Although the inventory approach to modeling these emissions using EPA's NONROAD and MOBILE models is described, there is no summary data of the

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emissions inventory, nor is there supporting information about equipment/vehicle types, hours/miles of operation, emissions factors, etc. It is unclear from the report if those emissions are included in the overall direct and indirect net emissions, or what contribution they contributed to total project emissions.

#### Section 5.1 - Introduction

6. The use of peak annual emissions as a replacement or surrogate for calculation of actual annual net NOx emissions (for each year of the project) does not meet the requirements for determining general conformity at 40 CFR 93.158. Project emissions must be mitigated to zero for each year of the project for which the *de minimus* threshold is exceeded. The combination of mitigation strategies and their implementation dates is critical in determining conformity over the entire project span. For projects that phase-in or ramp-up reductions, their net emissions remaining should be determined for each year of the project and the life of the mitigation measure. The General Conformity Demonstration cannot "float" emissions mitigation or offset measures with indeterminate start and end dates and time span and avoid demonstrating conformity for each year of the project. However, if the USACE specifies a suite of emission reduction measures in the conformity determination, and then later decides to revise the project scope, or to alter the project phasing, or to change the reduction measures or their implementation dates; the USACE could then formally revise or issue a new Conformity Demonstration, in adherence to General Conformity Rule requirements, consistent with 40 CFR 93.160(e).

# Section 5.2 - Unmitigated NOx Emissions

7. Figure 2 of the Draft Conformity Demonstration show the unmitigated marine emissions by contract phase, which then show emissions by marine category. For purposes of conformity, it would be more relevant to show how these contracts and the related annual NOx emissions are to be apportioned across the project years. For contracts that span multiple calendar years, unmitigated (and net mitigated) emissions could be broken down by their expected contribution to each year of the project. While Figure 2 shows the relative size of each project contract, it does not list net annual emissions, which is necessary to demonstrate project conformity. Without this annualized emissions information, it is not possible to show that for each year of the project subject to conformity, NOx emissions are mitigated or offset to zero.

# Section 6 - On-site Strategies

It is difficult to understand how the on-site mitigation strategy analysis for the three strategies analyzed in Section 6 factor into the overall Conformity Determination, or which (if any) are ultimately to be selected as mitigation strategies selection. Given that the project is scheduled to begin immediately and that there are long lead times associated with these strategies, it is difficult to ascertain why the USACE and the PRPA have not already selected and commenced mitigation strategies.

#### 01 - 14

Specific issues with the three on-site strategies presented include:

 Strategy 1 – Dredge Electrification has been deemed "not viable", yet continues to be presented as a potential mitigation measure in the Draft Conformity Demonstration and the Conditional Statement of Conformity. This measure should be removed from the mitigation strategy list in the Conformity Demonstration and Statement of Conformity.

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- Strategy 2 SCR on Dredges, Boosters, and Tow Tugs is dependent on how contractors (not yet selected) can be convinced to add SCR or if any current SCR-equipped vessels can be contracted, or if the application is feasible in practice. This measure has been ruled out for the first segment, but it is unclear whether and how many of these applications (i.e., what portion of the maximum expected reductions) are available in project year 2010 or thereafter.
- Strategy 3 Repower Dredges, Boosters, and Tow Tugs is relatively new, and according to M&N has not yet been tried with Tier 2 engines. Again, the schedule is aggressive given the lateness of the date, the need to negotiate with private parties/contractors, and the lead time to obtain and install the equipment.

  Again, this measure has been ruled out for the first segment, but it is unclear whether and how many of these applications (i.e., what portion of the maximum expected reductions) are available in project year 2 or thereafter.

# Section 7 - Off-Site Strategies

EPA has similar concerns with the off-site strategies. Again, long lead times are associated with each, and although they have been studied in the past, selection of particular strategies has not commenced, with the result being long lead times stretching to at least project year 2010 (and potentially beyond). Comments specific to each include:

- Strategy 4a McFarland SCR Install, was listed as a strategy in the prior Conformity Demonstration 5 years ago. The operating data (1999-2003) is dated. The use of the 2004 Conformity Determination's load and emissions factors is odd, given that other marine load factor information has been updated in this report. Although M&N states that they are "reasonably consistent", it is not explained why the factors were analyzed in comparison with 2004, but the new factors were not then incorporated in the new analysis. No justification is provided for the use of a 92% reduction from SCR, but given the age of the McFarland and potential difficulties in adding SCR to this application, some further discussion of the assumption may be warranted. Also, is a 12-month lead time reasonable, and has any work been done towards this measure since it was presented in the 2004 Conformity Demonstration?
- Strategy 4b McFarland Repower (no SCR), is listed with an 18-month minimum lead time. However, that would include designing, building, and installing the new engine, and like the other options, installation would need to be scheduled around the maintenance dredge duties for this regional dredge.
- Strategy 4c- McFarland Repower and SCR Installation, is listed with the same 18-month lead time as the repower only option, requiring concurrent work on both the repower and SCR design, acquisition, and install. Given the additional complexity,

the scheduling seems ambitious. Again, these reductions would not be available until project year 2011, even if selected as a mitigation strategy, with work beginning immediately.

- Strategy 5a, b, c Cape May-Lewes Ferries, SCR, repower, and SCR/repower options, were also considered in the 2004 Conformity Demonstration. It is not apparent that the USACE has selected or commenced work to implement any of these measures. It is also unspecified whether negotiations have begun with the private owners of the ferries to enact the mitigation strategy. Once again, lead times are an issue, with 18-month lead times projected for all three options. Again, reductions would not be available before project year 2011, even if work commenced immediately.
- Strategy 6 Repower Local Tugs, again was considered in the 2004 analysis. The same 18-month lead time and private party negotiation issues exist as do for the Cape May Ferries.
- Strategy 7 Install Shore Power (Cold Ironing), presents a number of issues with respect to the scale of the project. Projected lead times of two years for each of the terminals evaluated is optimistic, given the need to also retrofit a large number of ships to make use of the shore power (e.g., 25 ships for the Packer Avenue Terminal). These reductions would likely not be available for mitigation until project year 2012. Logistical complexities with retrofitting the large number of vessels involved would seem to make these timeframes unduly optimistic.

With respect to the mitigation strategies presented in both Sections 6 and 7, the requirements of 40 CFR 93.160 apply, specifically: "any measures that are intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including the implementation schedule, containing explicit timelines for implementation." Also, under this provision of the Conformity Rule, the lead federal agency must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures identified as conditions for making a conformity demonstration. Further, persons committing to implement mitigation measures must be bound to comply with the obligations of these commitments. If the USACE elects to demonstrate conformity using private party and contractor-owned equipment retrofits, written commitments must be obtained from those parties. Also, per 40 CFR 93.160(d), approval by the federal agency must be conditioned upon the fulfillment of these commitments.

### Section 7.15 – Strategy 9 – Purchase of Emissions Credits

EPA has reservations about the approach for offsets being discussed in this section of the 2009 Draft Conformity Demonstration and the Draft Conditional Statement of Conformity. Conformity must be demonstrated on an annual basis for each year of the project. The Conformity Rule, at 40 CFR 93.158(a)(2) states that for ozone and NOx, conformity is met if "the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area through the SIP or a similar enforcement measure that effects emissions reductions so that there is no net increase in

01-29

emissions of that pollutant." In this case, emissions offets must be purchased from inside the Philadelphia-Wilmington-Atlantic City 8-hour ozone nonattainment area.

The Conformity Rule, at 40 CFR Section 51.858(d), requires that "Any analyses required under this section must be completed, and any mitigation requirements necessary for a finding of conformity must be identified before the determination of conformity is made." With regard to identifying emission reduction credits (ERCs) for NOx, this analysis should include identifying where the required ERCs are going to be purchased (including the source name, location and quantity of offsets applied).

The 2009 Draft General Conformity Demonstration discusses offsets only in general. Detailed location and quantities of NOx offsets are not identified in the report. The report instead states that several hundred credits are expected to be readily available in the Philadelphia area and that specific availability of credits are subject to negotiation. The report should detail more specifically where the offsets will be purchased and the quantity to cover the NOx emission increases described in Table 5. Emissions offsets should be specified for each project calendar year that NOx offsets will be required.

## Section 9 - General Conformity Strategy

As indicated elsewhere in these comments, EPA agrees with the USACE's contention that the Conformity Demonstration must show that NOx emissions are offset to zero in all project years, as each year of the project exceeds the *de minimus* criteria for ozone nonattainment area. However, EPA disagrees that a general commitment to obtain NOx emissions offsets for the first project phase, and a general commitment to demonstrate conformity at a later date for the remainder of the project is acceptable. The conformity demonstration, showing that emissions are mitigated or offset to zero is required as part of the conformity demonstration, prior to commencement of the project, not afterwards.

01-30

The USACE's Draft Conformity Statement indicates that an advisory team will select measures at a future date to demonstrate conformity – long after the final USACE conformity determination and commencement of construction. This is contrary to the General Conformity Rules, which, as pointed out above, require that mitigation measures be identified prior to conformity being determined. 40 CFR 93.160(a). Should changes to the identified measures later be required, they would be allowable consistent with the procedures of 40 CFR 93.160(e).

01-31

The Conformity Rule at 40 CFR 93.160 requires a written commitment from the source of the offsets as part of the conformity demonstration. Offsets used to demonstrate conformity must be obtained prior to commencement of the federal action (i.e., before commencing the first contract phase). Due to the late timing of the expected final Conformity Determination for this project (in light of Fall 2009 projected construction start dates), EPA recommends the USACE move immediately to obtain offsets for the first year of the project.

The USACE's 2009 draft Conformity Demonstration contained insufficient data and context to demonstrate conformity for the entire project. The draft conformity Demonstration lacks specifically identified offsets and mitigation measures to show that net NOx emissions increases from the project are reduced to zero for each project year. No information is provided as to which measures have been selected, or whether work has commenced on any of the mitigation measures. Similarly, no specific information with respect to NOx emissions offsets/ERC's is provided.





# State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
AIR QUALITY MANAGEMENT
P.O. BOX 418
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MARK N. MAURIELLO

Acting Commissioner

TEL: (609) 292-6710 FAX: (609) 633-6198

September 15, 2009

Mr. Minas M. Arabatzis Chief, Planning Division Department of the Army Philadelphia District Corps of Engineers Wanamaker Building, 100 Penn Square East Philadelphia, Pennsylvania 19107-3390

#### Dear Mr. Arabatzis:

JON S. CORZINE

Governor

In response to your letter to me dated August 14, 2009, the New Jersey Department of Environmental Protection (Department) reviewed the Draft Conditional Statement of Conformity (DCSOC) and the General Conformity Analysis and Mitigation Report (August 7, 2009) for the Delaware River Main Channel Deepening Project (Project). Based on our review, the Department cannot concur with the DCSOC as the Project does not conform to New Jersey's State Implementation Plan (SIP). Nor does the Project satisfy the Coastal Zone Management rules, N.J.A.C. 7:7E-8.10 (air quality issues).

02-01

The oxides of nitrogen (NOx) emissions from this Project are some of the highest among the recent Federal projects in New Jersey. Since the entire State of New Jersey is in nonattainment for ozone and Camden and Gloucester counties are in nonattainment for the Fine Particulate (PM 2.5) standard, all the direct and indirect emissions from this Project must be identified and mitigated with contemporaneous emission reductions as required by the Federal Clean Air Act and the United States Environmental Protection Agency's (EPA's) General Conformity regulations, 40 CFR Part 93.

02-02

This letter documents the deficiencies that the Department has identified at this time, as needing correction before the Department can concur with a conformity determination for this Project. In addition, a technical review of the General Conformity

Analysis and Mitigation Report is attached. The deficiencies of the DCSOC are enumerated below.

1. The Conformity Analysis and Mitigation Report (August 7, 2009) is incomplete as it does not include all the emissions for the Project. The General Conformity rule 40 CFR Part 93 requires that all reasonably foreseeable emissions must be included for the project as a whole in determining applicability. The emissions associated with the transport of the dredged materials to their final placement/location in Pennsylvania, as indicated in Governor Rendell's May 15, 2009 letter, must be included as a component of the Project emissions and the report does not discuss the impact of the deepening on future ship and support vessel travel.

The Conformity Analysis and Mitigation report does not include the emission estimates for transportation of the dredged material to their final placement in Pennsylvania. At the very least, Governor Rendell's May 15, 2009 letter states that the Commonwealth of Pennsylvania would accept all dredged material from the project for beneficial use after they have been dewatered in the existing Federal placement sites located in New Jersey. The transportation of the dredged materials to their final placement is an activity that generates additional indirect emissions for the Project. The Federal General Conformity regulations state that "...a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emission of the criteria pollutant or precursor in a nonattainment or maintenance area caused by the Federal action" exceeds the applicable de minimis threshold. 40 CFR 93.153 ("Applicability"). Indirect emissions as defined by the Federal General Conformity regulation, 40 CFR 93.152, "occur later in time and/or may be further removed in distance ...but are still reasonably foreseeable; and the Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency." If it were not for this Project, the transportation and placement of the dredged materials in Pennsylvania would not be necessary.

In addition, by not including the emission estimates for the transportation of the dredged materials to the final placement, the Draft conformity analysis could be considered as segmenting the project to avoid the conformity requirements. This is also not allowed. The USEPA's July 13, 1994 General Conformity Guidance: Questions and Answers, indicates that a project cannot be broken down into segments in order for each segment to be below the de minimis levels and that all reasonably foreseeable emissions must be included for the project as a whole in determining applicability.

The Conformity Analysis and Mitigation Report (August 2007) does not mention the emissions from the additional or different ship traffic that would occur as a result of the deepening of the harbor. The emissions from the additional ship traffic must be addressed in the report.

2. In 2004 the ACOE and Project Sponsors were aware of the need to address the mitigation of the increased emissions from the deepening of the Delaware River. To our knowledge no actions were taken to identify measures, plan, and implement them in order to mitigate the emission from the project once it begins. The Statement of

02 - 04

02-03

02-05

<sup>1</sup> http://www.epa.gov/air/genconform/documents/gcgqa 940713.pdf

Conformity must include actions to mitigate the emissions. Five years is more than enough time to be ready to implement measures to meet these requirements. The air quality and citizens breathing it in the region should not suffer because of the lack of action.

02-07

The February 2004 General Conformity Analysis and Mitigation Report indicated that significant emission reductions would be needed in order for the project to proceed. That report states that, "The NO<sub>x</sub> emissions from the project exceed the "de minimis" threshold limit in every year of the Project. The NO<sub>x</sub> emissions from the Project varied from 102 tons per year (tpy) to 849 (tpy)" The General Conformity Analysis and Mitigation Report (August 7, 2009) states, "Annual NO<sub>x</sub> emissions range from a low of roughly 130 tons to a high of roughly 905 tons." To our knowledge, no mitigation measures have been identified, developed, and are ready to be implemented to allow the Project to proceed.

02-08

3. The DCSOC does not define a specific plan to mitigate the emissions for the Project, does not include an implementation schedule with an explicit timeline for implementation and does not include written commitments from the appropriate persons or agencies to implement the mitigation measures for this Project.

02-09

The DCSOC lists potential strategies that can be utilized to mitigate the emissions for this Project. The General Conformity Analysis and Mitigation Report (August 7, 2009) states, "As the project schedule and the development of the mitigation projects evolve, the application of the various mitigation measures can be selected and managed to offset the project emissions on an annual basis." This approach to mitigation, including listing potential mitigation strategies in the DCSOC, does not satisfy the requirements of the Federal General Conformity regulations. In addition, the Department has concerns regarding the feasibility and timing of many of the potential mitigation strategies. Some of the Department's concerns will be raised in the technical attachment.

4. The public participation requirements of the Federal General Conformity regulation, 40 CFR 93.156, were not documented in the cover letter or the DCSOC and may not have been met. Section 93.156(b) requires that "a federal agency must make public its draft conformity determination under Section 93.158 by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the action and by providing 30 days for written public comment prior to taking any formal action on the draft determination."

02-10

5. As begun in 2004 and as suggested in July of this year, the current situation might have been avoided if an Air Quality Team was convened and had an opportunity to address the outstanding issues on this Project. The experience gained from the New York/New Jersey Harbor Deepening project could have provided successful strategies to satisfy the conformity requirements for this Project. The Department recommends, as indicated in Commissioner Mauriello's September 3, 2009 letter, that the comment period remain open for an unspecified period of time to allow the Air Team to convene to further discuss the project's conformity determination with New Jersey and the other states' State Implementation Plans. In fact, my staff received a letter from the Army Corps, dated March 9, 2009, inviting the Department to participate in the Air Quality

Team, however, this team met only once in April 2009 which was only a beginning attempt to address the conformity issues.

- 6. The Department is concerned that a *Conditional* Statement of Conformity was issued for this Project. It does not appear that a *Conditional* Statement of Conformity is allowed by the Federal General Conformity regulation. 40 CFR Part 93. If the Air Team had been convened, we may have been able to address this concern before the DCSOC was issued. A Conditional Statement of Conformity was used on the New York/New Jersey Harbor Deepening Project after an agreement was reached between the states and the USEPA. In that case, the DCSOC facilitated the signing of the Record of Decision and the Project Cooperation Agreement, which released the funding for the Project. Subsequently, a Final Statement of Conformity was issued for the project prior to the start of construction. If the Air Team had been convened, this could have been discussed and if appropriate agreed to by all parties.
- 7. Using Emission Reduction Credits (ERCs) from another nonattainment area, especially one that is downwind, to satisfy the requirements of the Federal General Conformity regulation, 40 CFR Part 93, is not acceptable. In general, the Department prefers ERCs not to be used to satisfy the requirements of the Federal General Conformity regulation, 40 CFR Part 93 as they are intended to facilitate growth at major stationary sources. Additionally, the use of ERCs is not appropriate given the nonattainment of the ozone and fine particle National Ambient Air Quality Standards (NAAQS) in the region.

The General Conformity Analysis and Mitigation Report (August 7, 2009) states that, "M&N understands the use of emissions credits as a conformity strategy has been discussed with the EPA and relevant state agencies." However, at a meeting held on July 15, 2009, the Division of Air Quality staff informed the USACE that they would need to discuss the use of ERCs for this Project with the Department's Air Quality Management. To date, the Department's Air Quality Management personnel have not been contacted concerning the use of ERCs for this Project.

The DCSOC indicates that the USACE will utilize ERC to satisfy the requirements of the Federal General Conformity regulation, 40 CFR Part 93, for the first contract which spans two years. The Conformity Analysis and Mitigation Report (August 7, 2009) states that, "as a result of a Memorandum of Understanding between Pennsylvania and New York, it is also possible to use credits generated in New York as offsets in the Philadelphia area." 40 CFR 93.158, which sets forth the criteria for determining conformity of general Federal Actions, requires that "for ozone or nitrogen dioxide, the total of direct and indirect emissions from the action are fully offset within the same nonattainment area or maintenance area ...so that there is no net increase in emissions of that pollutant."

8. Additionally, the de minimis levels used in the evaluation for the project are not correct; again this could have been addressed if the Air Team had been convened. The 1-hour Ozone de minimis levels should have been used. Effectively, this will require additional mitigation of VOC emissions in 2010 and 2013. The use of the 1-hour Ozone de minimis levels is required by the anti-backsliding provisions of the Clean Air Act 42

02-14

U.S.C. 7502(c). The DCSOC indicates the project is above the de minimis levels for  $NO_x$  for all years and Carbon Monoxide (CO) in 2013.

9. The General Conformity Analysis and Mitigation Report (August 7, 2009) fails to fully examine the technological issues associated with the mitigation measures listed on the DCSOC. For instance, the report identifies using Selective Catalytic Reduction (SCR) technology for use on the dredges, boosters, towing tugs and ferries as a potential mitigation measure. However, on the New York/New Jersey Harbor Deepening project, using the SCR technology on the Staten Island ferries proved to be not a viable option. 02-15 In addition, the DCSOC lists electrification of dredges as a possible mitigation measure but the General Conformity Analysis and Mitigation Report (August 7, 2009) indicates that this is not a viable option for this Project. These issues need to be resolved to formulate a successful plan to mitigate the emissions from this Project.

Based on the deficiencies in the DCSOC the Department does not concur the project mitigation plan conforms with the SIP and the Coastal Zone Management Plan, N.J.A.C. 7:7E-8.10 (air quality issues) and believes the current analysis does not satisfy the requirements of the Federal General Conformity regulations. The Department believes that the Air Quality Team should be convened so that the deficiencies may be discussed and satisfactorily resolved enabling the project to conform with the New Jersey SIP.

Sincerely,
Chin M. M.

Chris N. Salmi Assistant Director 02-16

c: Raymond Werner, USEPA Region II Diana Esher, USEPA Region III Suzanne Dietrick, NJDEP Attachment - New Jersey Department of Environmental Protection
Technical Review of Delaware River Main Channel Deepening Project
General Conformity Analysis and Mitigation Report August 7, 2009

#### **Executive Summary**

The report states, "Detailed emission estimates were developed based on the latest USACE construction estimates."

#### Comment

02-17

Please define what is meant by the "latest" in the above statement.

The report states that, "Because the entire area is in attainment of the PM10 and CO standards, General Conformity does not apply to those pollutants and there is no need to compare them to a de minimis threshold."

#### Comment

Camden County, New Jersey and Philadelphia County, Pennsylvania are maintenance areas for carbon monoxide (CO). Section 93.153 (b)(2) (Applicability) of the Federal General Conformity regulation must be applied to this Project. The Project will be above the de minimis level for CO in 2013. The CO emissions must be mitigated to zero for 2013.

The report states that, "The de minimis levels for ozone precursors, NOx and VOCs, are 100 and 50 tons per year respectively."

#### Comment

02 - 19

The de minimis levels used in the evaluation for the project are not correct; this could have been addressed if the Air Team had been convened. The 1-hour Ozone de minimis levels should have been used. The use of the 1-hour Ozone de minimis levels is required by the anti-backsliding provisions of the Clean Air Act 42 U.S.C. 7502(c). Effectively, this will require additional mitigation of Volatile Organic Carbon (VOC) emissions in 2010 and 2013. The Project as analyzed remains above the de minimis levels for NO<sub>x</sub> for all years and carbon monoxide (CO) in 2013.

#### 1.6 Local Setting

The report states, "In 2004, this area was in severe non-attainment of the 8-hour ozone standard. The ozone problem has abated somewhat in the intervening years."

#### Comment

While ambient levels of ozone have been generally declining, the entire State of New Jersey continues to be in nonattainment of the 8-hour ozone standard. On March 12, 2008, the United States Environmental Protection Agency (USEPA) significantly strengthened its NAAQS for ground-level ozone to a level of 0.075 parts per million. Please revise the above sentence accordingly.

02-20

#### 1.8 Emission Estimate Approach

The report states, "Operational information and estimates for the equipment performing the work was obtained by the Corps of Engineers Dredge Estimating Program (CEDEP) provided by the USACE Philadelphia District." "CEDEP estimated information on the channel deepening was provided by USACE in two emails, dated 2-9-09 and 3-4-09."

#### Comment

Please confirm if the most recent operational information was used to determine the emissions for the equipment performing the work on this Project.

02 - 21

The report states that, "M&M developed monthly emissions profiles and total emissions for each calendar year by applying the total daily emission of each project element (as shown in Appendices A &B..."

#### Comment

It appears that the emission profiles in Appendix A (Construction Emissions Summary) and Appendix B (Berth Deepening Emissions) are provided on a contract basis. The de minimis requirements for General Conformity are on an annual basis. The 2004 General Conformity Analysis and Mitigation Report provided a Summary Emissions Table (3.1-1) on an annual basis. Please provide the Construction Emissions Summary in Appendices A and B on an annual basis.

02-22

#### 3.0 General Conformity Results

The report states, "Because the entire area is in attainment of the PM10 and CO standards, General conformity does not apply to those pollutants and there is no need to compare them to a de minimis threshold."

#### Comment

02-23

Camden County, New Jersey and Philadelphia County, Pennsylvania are maintenance areas for carbon monoxide (CO). Section 93.153 (b)(2) (Applicability) of the Federal General Conformity regulation must be applied to this Project. The Project will be above

<sup>1</sup> http://www.epa.gov/air/ozonepollution/pdfs/2008 03 factsheet.pdf

the de minimis level for CO in 2013. The CO emissions must be mitigated to zero for 2013.

The report states that, "The area is in non-attainment for ozone, however. The de minimis levels for ozone precursors, NOx and VOCs, are 10 and 50 tons per year respectively."

#### Comment

The de minimis levels used in the evaluation for the project are not correct; again this could have been addressed if the Air Team had been convened. The 1-hour Ozone de minimis levels should have been used. The use of the 1-hour Ozone de minimis levels is required by the anti-backsliding provisions of the Clean Air Act 42 U.S.C. 7502(c). Effectively, this will require additional mitigation of Volatile Organic Carbon (VOC) emissions in 2010 and 2013. The Project as analyzed remains above the de minimis levels for NO<sub>x</sub> for all years and carbon monoxide (CO) in 2013.

#### 4.3 Changes to Emissions Calculation Factors

The report indicates that in Table 9, the load factor for the clamshell dredge is 30% in 2009 compared to 80% in 2004.

#### Comment

Please explain the reason for the significant change in the load factor for the clamshell dredge.

#### 5.0 NOx Mitigation – Introduction

The report states, "However, for on-site measures (#1-3 above), the NOx emissions and reductions are different from year to year. For these strategies, the annual NOx reduction used to calculate cost effectiveness was the reduction in project peak emissions."

#### Comment

The Department does not believe that using project peak emissions is the best method to determine cost effectiveness for a mitigation measure. A more effective approach would be to use the total tons of pollutant reduced. In the Preliminary Emission Reduction Strategy Report (July 2003) for this project, it states that "the best metric to evaluate comparative technologies is to calculate and compare the cost per ton of pollutant avoided. This is an effective means of not only comparing on-site mitigation reduction technologies, but also comparing off-site emission reduction opportunities and emission credits to each other to ascertain the most cost effective solution to addressing emission impacts."

#### 6.2 Strategy 1 – Electrify Dredges

The report states that, "Although this mitigation measure is technically feasible, as evidenced by its application elsewhere, M&N concluded that it is not viable for this project."

#### Comment

02 - 27

Please explain why this is included as a mitigation strategy in the Draft Conditional Statement of Conformity (DCSOC) even though M&N concluded that it is not viable for this project.

### 6.3 Strategy 2 - Install SCR on Dredges, Boosters and Towing Tugs

The report states that, "The SCR option assumes that all dredges, booster and towing tugs are outfitted with SCR units."

### Comment

02 - 28

The Department is concerned that Selective Catalytic Reduction (SCR) technology may not be a viable mitigation strategy to use on the dredges, booster and towing tugs based on the experience with the New York/New Jersey Harbor Deepening project. The New York/New Jersey Harbor Deepening project installed SCR technology on the Alice Austen ferry (as a demonstration project) with the intention of installing it on the remaining Staten Island ferries if it proved to be successful. However, due to technical issues i.e. cost, engine temperature, electrical load, weight, with the installation on the Alice Austen, the plan to install SCR technology on all the remaining ferries was abandoned. Given the technical difficulties with the SCR technology on the New York/New Jersey Harbor Deepening project, is the USACE planning to install the SCR technology on a dredge, booster, or towing tug as a demonstration project prior to installing it on all the dredges, boosters and tugs?

The report does not does indicate whether the dredges, boosters, or towing tugs would reach the required operating temperature necessary for the SCR technology to be effective. Please provide information regarding the engine temperature for the dredges. boosters and tugs.

The report states that, "The application of SCR on large dredges is limited to only a 10,000 hp cutter suction dredge on the west coast that has operated a urea injection system since the late 1990's with reportedly excellent results."

#### Comment

The report indicates that the dredge has operated a urea injection system since 1990 with 02-29 excellent results but no references or documentation to support this statement were included in the report. Please provide the documentation to support the statement that

the dredge has been operating since 1990 with excellent results. In addition, the report does not provide documentation to support the contention that installation of SCR technology would be a viable strategy. Please provide documentation to support this use of SCR on boosters and towing tugs.

# 6.4 Strategy 3 - Repower Dredges, Boosters and Towing Tugs

The report states that, "However, the turnover rate for dredge engines is low, and in some cases they may be replaced with rebuilt older style engines rather than new low emitting engines. Therefore, it cannot be assumed that later phases of the project will be dredged with much lower emitting engines as a result of the normal course of engine replacement."

#### Comment

Please clarify how this sentence is consistent with the strategy to repower dredges with cleaner engines as a mitigation strategy.

#### 7.2 McFarland

The report indicates that, "The McFarland is the USACE dredge for regional operations and maintenance dredging."

#### Comment

The Department has concerns that if plans are for the McFarland to be used to mitigate the emissions from this project, that the McFarland will not be available to do so. The Corps website (<a href="http://www.nap.usace.army.mil/sb/mcfar.htm#vital">http://www.nap.usace.army.mil/sb/mcfar.htm#vital</a>) states that the McFarland has a twofold mission, 1) Emergency and national defense dredging – as required and on short notice- anywhere in the world. 2) Planned dredging in the Delaware River and Bay. Given the McFarland's missions, please provide contingency plans if the McFarland becomes unavailable for mitigation purposes for this Project.

In addition, the Department has concerns regarding the installation of SCR technology on the McFarland. Please see comment under section <u>6.3 Installing SCR on Dredges</u>, <u>Boosters and Towing Tugs.</u>

### 7.7 Cape May-Lewes Ferries Strategy 5a – SCR Installation (no repower)

The report indicates that, "The fifth installation on a ferry is a fair comparison in terms of ship size and no accompanying repower, but that vessel (a Staten Island NY ferry named "Alice Austen") was the first ever SCR installation on a ferry." The report also indicates, "However, the details of an SCR installation and the willingness of the ferry operator to participate would need to be worked out in a detailed design and negotiation."

The report also indicates, "It is expected that a minimum of 18 months would be required to work out the terms of an agreement, design, build and install the SCR systems."

#### Comment

Please see comment for <u>6.3 Strategy 2 – Install SCR on Dredges, Boosters and Towing</u> 02–32 Tugs

In addition, the Department is concerned that the length of time (a minimum of 18 months) to implement this strategy may be too conservative. The time required for the installation of the SCR technology may be contingent upon the dry dock schedule for the ferries. Was the dry dock schedule taken into consideration when determining the amount of time need for installation of the SCR technology?

#### 7.9 Strategy 5c – Repower and SCR Installation on Cape May-Lewes Ferries

#### Comment

Please see the comment for <u>6.3 Strategy 2 – Install SCR on Dredges</u>, <u>Boosters and Towing Tugs</u>

02-33

# 7.10 Strategy 6 - Repower Local Harbor Tugs

The report states that, "Ocean-going tugs were not included in this analysis, in favor of tugs that spend the majority of their time in the project area." In addition, Table 22: Local Harbor Tugs – NOx Emissions, indicates the annual operating hours for each tug from the three local tug companies.

#### Comment

Please define "majority" in the above sentence. Table 22 indicates the annual operating 02-34 hours for the tugs. Are the tugs in the nonattainment area for the entire annual operating hours listed in Table 22? What percentage of the time will the tugs be required to operate in the nonattainment area?

# 7.15 Strategy 9 - Purchase Emission Credits (ERC's)

The report states that," A precedent is the New York Channel Deepening Project which used a conditional statement of conformity along with a menu of mitigation measures including emission offsets for early phases of the work." The report states, "The Port Authority of New York and New Jersey (PANYNJ) purchased 95.68 tons of NOx shutdown credits in early 2003 for \$113,065 as part of the then existing open market emissions trading program (OMET) in New Jersey. The PANYNJ also owned 200 tons

of NOx reduction credits from a facility on Staten Island." The report also states, "As a result of a Memorandum of Understanding between Pennsylvania and New York, it is also possible to use credits generated in New York as offsets in the Philadelphia area."

#### Comment

02-35

A Conditional Statement of Conformity was used on the New York/New Jersey Harbor Deepening Project after an agreement was reached between the states and the USEPA in order to facilitate the signing of the Record of Decision and the Project Cooperation Agreement, which released funding for the project. Subsequently, a Final Statement of Conformity was issued for the project. If the Air Team had been convened, this could have been discussed and if appropriate agreed to by all parties. In addition, ERCs were used as a bridge to real reductions in order to facilitate blasting in an area that would have had an impact on neighborhoods.

The ERCs that were generated in New York and are part of the MOU between Pennsylvania and New York cannot be used to satisfy conformity. Section 93.158 (Criteria for determining conformity of general Federal Actions) of the Federal General Conformity regulation (40CFR93) requires that "for ozone or nitrogen dioxide, the total of direct and indirect emissions from the action are fully offset within the same nonattainment area or maintenance area ...so that there is no net increase in emissions of that pollutant."

#### 8. Conclusions

The report states, "The most cost effective strategies involve the installation of SCR units on the dredges and ferries." In addition, the report states, "M &N understands the use of emission reduction credits as a conformity strategy has been discussed with the EPA and the relevant state agencies."

#### Comment

02 - 36

The Department does not believe that using project peak emissions is the best method to determine cost effectiveness for a mitigation measure. A more effective approach would be to use the total tons of pollutant reduced. In the Preliminary Emission Reduction Strategy Report (July 2003) for this project, it states that "the best metric to evaluate comparative technologies is to calculate and compare the cost per ton of pollutant avoided. This is an effective means of not only comparing on-site mitigation reduction technologies, but also comparing off-site emission reduction opportunities and emission credits to each other to ascertain the most cost effective solution to addressing emission impacts."

#### 9.0 General Conformity Strategy

The report states, "Given the project schedule, the purchase of the emission reduction credits is the only feasible strategy for the first of the seven expected construction

contracts." In addition, report states, "As the project schedule and the development of the mitigation projects evolve, the application of the various mitigation measures can be selected and managed to offset the project emissions on an annual basis."

#### Comment

02-37

The Department recommends that the comment period remain open for an unspecified period of time to allow the air team to convene to further discuss the project's conformity determination with New Jersey and the other states' State Implementation Plans. The approach to mitigation mentioned above, does not satisfy the requirements of the Federal General Conformity regulation. (40CFR93) Section 93.160 (Mitigation of air quality impacts) of the Federal General Conformity regulation (40CFR93) states that "any measures that are intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including an implantation schedule containing explicit timeline for implementation."

# Appendix B Berth Deepening Emission Spreadsheet

### Comment

The spreadsheet does not include emission estimates for equipment used at the disposal site. The emissions from the equipment at the disposal site must be addressed in the report.





# STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT SECTION

156 S. STATE STREET DOVER, DELAWARE 19901 TELEPHONE: (302) 739 - 9402

Fax No.: (302) 739 - 3106

September 14, 2009

Mr. Minas M. Arabatzis, Chief Planning Division Department of the Army Philadelphia District, Corps of Engineers Wanamaker Building, 100 Penn Square East Philadelphia, PA 19107-3390

Dear Mr. Arabatzis: M. Kee

Thank you for the Army Corps meeting with my staff and myself on Friday. I believe a sincere attempt was made to answer our questions and address the issues concerning the draft general conformity analysis for the "Main Channel Deepening Project." However, there are several important deficiencies that were not resolved. We understand that the Corps has decided not to grant Delaware's request for the extension of the deadline to submit comments and are disappointed by that decision. The comments below summarize certain unresolved issues and we reserve the right to submit additional comments as we receive the additional information that you promised to supply us at our September 11, 2009 meeting.

Based on our review of the August 7, 2009, General Conformity Analysis and Mitigation Report and our discussions on September 11, 2009, the Delaware Department of Natural Resources and Environmental Control finds your report incomplete and inadequate and accordingly does not concur with the conformity analysis and the Draft Statement of Conformity, for the Main Channel Deepening Project. The report is specifically deficient in the following areas:

- 1. The analysis does not satisfy the broad scope of the indirect emissions required for consideration under general conformity rule. The stated purpose of the report "to estimate the air emissions generated by the equipment that will be used to construct the project" falls short of meeting the purpose of general conformity rules. The calculations should at a minimum include the future emissions associated with the more economically active ports including increased ship traffic, increased employment and associated energy use and traffic.
- 2. The report fails to acknowledge nitrogen oxide (NOx) emissions as a fine particulate matter (PM<sub>2.5</sub>) precursor. The project related NOx emissions exceed the 100 tons per year conformity threshold for PM<sub>2.5</sub>, and therefore this project triggers general conformity for

Mr. Minas M. Arabatzis September 14, 2009 Page Two

PM<sub>2.5</sub>. Any decreases used to offset the increase in NOx emissions must also conform to the geographic boundaries of the PM<sub>2.5</sub> non-attainment area.

3. The report does not give any details as to the implementation of the emission reduction strategies with the necessary enforceable commitments (e.g. which emission reduction strategies and the timeframe) to offset the project's emissions as required by Delaware's Regulation 1135.

03-03

03 - 04

Regulation 1135 Section 3.12 states, Any measures that are intended to reduce air quality impacts for this purpose must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measures and tracking of such emission reductions) and enforcement of such measures must be described, including an implementation schedule containing explicit timeliness for implementation. This has clearly not been done and is a fatal flaw.

Prior to a determination of applicability, the Federal agency making the determination must obtain written commitments from the appropriate persons or agencies to implement any measures which are identified as conditions for making such determinations. Such written commitment shall describe 03-05 such mitigation measures and the nature of the commitment, in a manner consistent with the previous sentence. After this implementation plan revision is approved by EPA, enforceability through the applicable implementation plan of any measures necessary for a determination of applicability will apply to all persons who agree to reduce direct and indirect emissions associated with a Federal action for a conformity applicability determination. The Corps' conformity report is more like a menu of options without any clearly defined project or commitment.

Please contact me or my staff member, Phil Wheeler at 302/739-9402, if you need further clarification of our position.

Sincerely,

Ali Mirzakhalili, P.E.

Administrator

cc:

Diana Esher, EPA, Region III David Small, Deputy Secretary, DNREC Marjorie Crofts, Acting Director, DAWM Sarah Cooksey Robert Baldwin



# Pennsylvania Department of Environmental Protection

## Rachel Carson State Office Building P.O. Box 2863 Harrisburg, PA 17105-2063 September 22, 2009

#### Office of Waste, Air and Radiation Management

717-772-2724

Minas M. Arabatzis, Chief Planning Division United States Corps of Engineers Philadelphia District Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390

Re: Comments on the August 2009 Final General Conformity Analysis and Mitigation

Report for the Delaware River Main Channel Deepening Project

Dear Mr. Arabatzis:

The Pennsylvania Department of Environmental Protection (Department) would like to thank the United States Army Corps of Engineers (USACE) for providing an opportunity to comment on the Delaware River Main Channel Deepening Project's General Conformity Analysis and Mitigation Report (Report). We realize that this project has important implications for both the economic vitality of the Philadelphia Area as well as our ability to attain and maintain the national ambient air quality standards (NAAQS). We appreciate the USACE's cooperation with the Department in the planning process to address the requirements of the Department's General Conformity regulation codified in 25 Pa. Code Ch. 127, Subchapter J (relating to general conformity). The Department's General Conformity regulation adopts and incorporates by reference, in its entirety, the general conformity rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 93, Subpart B (relating to determining conformity of general Federal actions to state or Federal implementation plans).

The Department generally concurs with the comments and recommendations submitted to USACE on September 15, 2009, by Dianna Esher, Acting Director of the EPA's Air Protection Division. In addition to the specific comments and recommendations offered by EPA, the Department believes that clarifying information on a number of the following points would be helpful to fully understand the potential impacts and mitigation plans associated with the project:

• The Philadelphia area is currently designated as a "moderate" nonattainment area for the 1997 eight-hour ozone standard; we would expect the area to be designated as a nonattainment area for the 2008 and subsequent ozone standards as well. Therefore, it is important for public health and economic stability that the USACE identify clear advance

commitments to mitigation measures that will be put into place to offset to zero the specifically identified project emissions during each project year.

- We request that the USACE clarify in the report that the project described is the entire
  dredging project including berthing areas and that there will be no need for further
  dredging activity associated with the project. This would assure to the Department and
  the public that all potential impacts have been identified and have been appropriately
  considered for mitigation purposes.
- We request that the assessment include the effects of the dredging on shipping traffic and add to each affected year's emissions any emissions increases from increased navigation time for commercial marine vessels using the main channel during the deepening project.

04 - 02

We request that the report clarify whether carbon monoxide (CO) emission increases will occur in Philadelphia County (and Camden County, NJ) and, if they do increase, how they will be mitigated, since only these areas in the metropolitan area are CO limited maintenance areas and thus subject to general conformity.

Thank you for considering our comments, requests for clarity and recommendations. We look forward to your final report that satisfies the general conformity requirements so that the project can move forward as quickly as possible. If you have any questions, please contact me via e-mail at <a href="mailto:kereisinge@state.pa.us">kereisinge@state.pa.us</a> or by telephone at 717-772-2724, or Joyce Epps, Director of the Bureau of Air Quality, by e-mail at <a href="mailto:kereisinge@state.pa.us">kereisinge@state.pa.us</a> or by telephone at 717-787-9702.

Sincerely

Kenneth R. Reisinger Acting Deputy Secretary



September 13, 2009

Environmental Resources Branch
Philadelphia District, US Army Corps of Engineers
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107

& via email to: Public Affairs Office at <a href="mailto:Edward.c.voigt@usace.army.mil">Edward.c.voigt@usace.army.mil</a>

Re: Clean Air Act Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project, August 14, 2009

Dear Mr. Voigt,

Please accept these comments in response to the Army Corps of Engineers' ("the Corps") "Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project" ("MCD" or "the Project"), and Revised "General Conformity Analysis & Mitigation Report," (collectively "Compliance Documents") purportedly in satisfaction of Clean Air Act ("CAA" or "the Act") Section 176(c) requirements.

Based upon the information provided, the Corps does not appear to be in compliance with Section 176(c) of the CAA and its implementing regulations, and cannot legally proceed with the MCD based upon this Draft or any subsequent Final Conditional Statement of Conformity.

#### The Compliance Documents Represent an Improper Process

The procedural violations represented in the Corps' Compliance Documents are significant. The Act's implementing regulations are clear that, "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan" and that, "A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this subpart, before action is taken."

05 - 01

Delaware Riverkeeper Network

300 Pond Street, Second Floor Bristol, PA 19007 tel: (215) 369-1188 fax: (215) 369-1181 drkn@delawareriverkeeper.org www.delawareriverkeeper.org 40 C.F.R. § 93.150(a),(b). Nowhere do the applicable CAA regulations provide for a "conditional proposal" to serve as a Clean Air Act Conformity Determination, as is apparently being proposed by the Corps. Nor do applicable regulations provide for the use of an "ongoing conformity determination" to fulfill the requirements of the law. The Army Corps' assertion—that it will secure emission reduction credits for the first year of project implementation and then provide supplemental conformity determinations for all future years of the project—does not comply with the letter, spirit or requirements of the Act.

The applicable regulations are clear that in projects like the MCD, where emission levels of criteria pollutants exceed the *de minimis* threshold, actions taken to mitigate those emissions, "must be identified before the determination of conformity is made," in order to achieve a finding of conformity, and the mitigation measures selected must be enforceable. 40 C.F.R. § 93.158. Providing a veritable take-out menu of possible options to be worked out on an *ad hoc* basis in the future, as the Army Corps proposes in their draft analysis, violates the Clean Air Act.

05-02

Yet another procedural violation is striking in its bold disregard of the law: The Corps ignores CAA regulations stating, "the conformity status of a Federal action automatically lapses 5 years from the date a final conformity determination is reported under [40 C.F.R.] § 93.155, unless the Federal action has been completed or a continuous program has been commenced to implement that Federal action within a reasonable time." 40 C.F.R. § 93.157. Repackaging information identified in the 2004 General Conformity Analysis and Mitigation report does not fulfill this requirement of the law. The Corps' attempt to merely "update" conformity documents outside of this 5-year window is a clear violation of law and should be prohibited.

05-03

#### Missing, Insufficient Data and Analysis in the Compliance Documents

The Compliance Documents reflect an absence of significant data and analyses. 40 CFR § 93.159(d)(1) requires that the analyses undertaken in the conformity determination must be based on total direct and indirect emissions from the action and must reflect emission scenarios that would include emissions projected in the project maintenance plan. In contrast:

✓The Conformity determination only includes the construction phase of the deepening project and associated private channel deepening, it fails to discuss or plan for, to any degree, increased emissions that will result from maintaining an increased depth of 5 feet.

05-04

√The most recently discussed Army Corps spoil disposal plan includes the use of existing confined disposal facilities to a much greater degree than originally proposed which will necessarily require the berms at those sites to be raised, significantly. According to an April 11, 2008 Army Corps document, in order to accommodate all spoil disposal in existing Army Corps CDFs the dikes on most of the federally owned facilities would need to be raised higher than was originally anticipated or planned for, anywhere from 10 to 44 feet higher than originally anticipated. The air quality impacts of this additional construction directly associated with the project is foreseeable and should be included in the conformity analysis and planning.

05-05

✓There has been much public discussion by the Army Corps and others, including a commitment by the Army Corps to work with a multi-state team resulting from the agreement reached between the governors of New Jersey and Pennsylvania, to transport and use deepening spoils in other locations for other purposes. These have included, by way of one example, the transporting and dumping spoils in the mines of Pennsylvania. The air conformity analysis should include the air quality ramifications of these apparently serious and foreseeable options for deepening spoils disposal.

Under the Act, 40 C.F.R. § 93.160 specifically mandates that measures intended to mitigate air quality impacts of the project "must be identified and the process for implementation and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation." The take-out menu of options the Army 05 - 07Corps has put forth for possible use in the future to mitigate identified air quality impacts does not fulfill the requirement for an implementation schedule, explicit timelines, and a process for enforcement of those measures.

Section 93.159 requires the use of the most up to date information and that analyses required by the regulations be "based on the latest and most accurate emission estimation techniques available". It is questionable whether this draft conformity determination, which is founded upon merely an "update to the 2004 General Conformity Analysis and Mitigation report," can be deemed to fulfill these legal requirements. While in some instances the Army Corps discusses the use of updated information in others it specifically references the use of old information despite the availability of new.

05 - 08

✓ For example, under section 7.2 in the draft document the Army Corps states "These emission factors are reasonably consistent with the new emission factors used for the locomotive style engines assumed in the channel dredging estimates, therefore they were left unchanged." If there are new factors and they are known, available and/or calculable then that most up to date information should be used.

05 - 09

✓ By way of additional example, construction costs continue to be based upon figures provided as part of the 2004 report - this information is highly dated and can no longer be deemed up to date or accurate.

05 - 10

In addition, we highlight other instances where the Army Corps is clearly using inaccurate or barely substantiated information in its analysis.

✓ In the Executive Summary the draft document talks about using "M&N's understanding of typical engine types in the existing industry fleet." This does not seem to meet the threshold of accuracy or specificity mandated by the law - the level of M&N's knowledge is unknown, undocumented and unsubstantiated so this could be a very low threshold of knowledge, information and accuracy and has no place in a document of this importance.

05 - 11

✓ Elsewhere in the draft document there are references to information obtained via email with no indication of independent verification; again, this low threshold of substantiation for information should not be deemed acceptable.

05 - 12

√The use of Panamax sized ships in calculating how many days would be required to achieve needed offsets in the "cold ironing analysis" is inappropriate in light of the known reality that "this is bigger than the typical size vessel currently calling frequently at Packer Ave Marine Terminal." Using a ship of this size would over inflate the benefits of this approach to addressing NOx emissions.

05 - 13

### **Role of Involved Agencies**

In addition to the straightforward defects of the Corps' Compliance Documents, the various array of possible options presented - which lack the specificity required by regulation - fail to provide state and federal agencies with the level of detail or information they need to provide informed and accurate input. As a result, while the Army Corps has provided 30 days of comment upon this draft document to agencies at the federal and state level, they have not

done so with the level of detail and specificity needed to fulfill the spirit or intent of the comment period included in the law.

Under 40 C.F.R. § 93.160, "Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations." The Army Corps has specifically stated that it does not have specific agreements or commitments from appropriate persons for the implementation of the various described mitigation measures – most of the options are specifically subject to future discussions and negotiations. As a result, the Army Corps cannot, based upon this draft document, issue a final conformity determination.

05-15

### Impact of Procedural Approach on Public Involvement

Section 93.154 requires, "any Federal department, agency, or instrumentality of the Federal government taking an action subject to this subpart must make its own conformity determination consistent with the requirements of this subpart. In making its conformity determination, a Federal agency must consider comments from any interested parties." The fragmented approach the Corps proposes for their conformity and mitigation plan represents a significant barrier to meaningful public input. The pigeon-holing of CAA compliance by each phase of construction significantly increases the burden on the public to monitor and respond to various and multiple public notices, and greatly reduces the likelihood of informed public comment on this issue.

05-16

#### Construction Schedules Do Not Trump Environmental Review

The Updated General Conformity Analysis and Mitigation Report states that, "The lead time necessary to implement many of the mitigation strategies is longer than the time available before the start of construction. For the first contract, it is anticipated that emission credits will be used as it is the only strategy that can meet the project schedule." (Section 8.) This statement highlights the flawed logic that dogs the MCD generally, and specifically the compliance plans. The construction schedule must be tailored to accommodate regulatory approvals, not vice versa. Such a bold statement represents an affront to the purpose and goals of the CAA conformity process.

05 - 17

#### **Outstanding Issues**

In addition to the Army Corps' failure to fulfill the necessary requirements of the law, there remain a number of significant outstanding questions that need to be addressed as well as providing state and federal regulatory agencies the level of detail they need to properly review and comment:

✓ The draft document specifically states that the Army Corps has changed its scope of work on this project to use "higher horsepower dredging" significantly increasing the associated level of air pollution. We question why the Army Corps would deliberately increase its air emissions knowing that it was already impacting air quality in the region with its proposed project. (See pg 2: "...the volume of work to be performed by a cutter suction dredge using two booster pumps increased by nearly 60%. This increased the emissions per volume of dredging because boosters are a significant source of emissions.") We question the accuracy of the assertion that "NOx emissions for the off-site strategies are simple because they are the same every year." We ask for discussion and justification of this assumption.

✓ The explanation for the use of reduction in project peak annual emissions to calculate cost effectiveness in annual NOx reductions was highly confusing. In order to assess the validity of this approach we ask for better clarification than was provided.

These outstanding issues must be addressed prior to moving forward with the project.

The Army Corps' Compliance Documents do not fulfill the requirements of the Clean Air Act or its implementing regulations. The contents of the Clean Air Act Draft Conditional Statement of Conformity, Delaware River Main Channel Deepening Project dated August 14, 2009 cannot replace a new Clean Air Act General Conformity Determination and Mitigation Plan for the Delaware River Main Channel Deepening Project.

Submitted,

Maya K. van Rossum the Delaware Riverkeeper

#### **MEMORANDUM**

DATE:

**September 14, 2009** 

TO:

Minas M. Arabatzis, US Army Corps of Engineers

FROM:

David Heller, Senior Transportation Planner, South Jersey Transportation

**Planning Organization (SJTPO)** 

CC:

Jamie DeRose, NJ DOT; John Gorgol, NJ DEP

RE:

Concurrence with Clean Air Act Draft Conditional Statement of Conformity,

Delaware River Main Channel Deepening Project August 14, 2009

Thank you for giving us the opportunity to review the Clean Air Act Draft Conditional Statement of Conformity—Delaware River Main Channel Deepening Project-August 14, 2009. We concur with its findings subject to the following conditions:

- (1) As the project progresses and the contracts let, the SJTPO is apprised of the <u>actual</u> NOx emissions mitigation strategies (as described in the accompanying "General Conformity Analysis and Mitigation Report") implemented during each phase of the project and the ensuing NOx emissions reductions thereby achieved. Although the report provides charts which estimate the NOx emissions reductions attainable for each mitigation strategy, they could differ from the actual reductions, especially when these strategies are actually implemented. This apprisal can be in the form of electronic mail, via a website, or in the form of regular mail.
- (2) As an interested party, SJTPO receives and has the opportunity to comment on any supplemental conformity determination and is apprised of any changes to this conditional proposal for the duration of this project.

If you have any further comments and/or questions, please do not hesitate to contact me at: (856)-794-1941, or via email at: <a href="mailto:dheller@sitpo.org">dheller@sitpo.org</a>.

06-01



One Newark Center, 17th floor, Newark, NJ 07102 (973) 639-8400; fax (973) 639-1953; www.njtpa.org

Susan M. Zellman, Chairman Mary K. Murphy, Executive Director

September 10, 2009

Mr. M. Arabatris
Chief, Planning Division
Department of the Army
Philadelphia District, Corps of Engineers
Wanamaker Building, 100 Penn Square East
Philadelphia, Pennsylvania 19107-3390

Dear Mr. Arabatris:

The NJTPA is in receipt of your August 14, 2009 Draft Conditional Statement of Conformity regarding the Delaware River Main Channel Deepening Project. NJTPA staff has reviewed the information provided and determined that this project does not affect any of the thirteen counties in the NJTPA region. Furthermore it addresses the General Conformity Rule, not the Transportation Conformity Rule.

07-01

I would appreciate, however, you keeping us informed as the project advances should any changes occur that may affect our region in the future.

Sincerely,

Mary K. Murphy Executive Director

MMurph

**NJTPA** 

850 Library Avenue, Suite 100 Newark, Delaware 19711 302-737-6205; Fax 302-737-9584 From Cecil County: 888-808-7088 e-mail: wilmapco@wilmapco.org web site: www.wilmapco.org

August 31, 2009

WILMAPCO Council:

Stephen Kingsberry, Chair Delaware Transit Corporation Executive Director

Joseph L. Fisona, Vice-chair Mayor of Eikton

James M. Baker Mayor of Wilmington

Cleon L. Cauley
Deputy Legal Councel
Delaware Office of the Governor

Christopher A. Coons New Castle County County Executive

Vance A. Funk III Mayor of ivewark

Donald A. Halligan Maryland Dept. of Transportation Director, Office of Planning and Capital Programming

Jim Mullin Cecil County Commissioner

Carolann Wicks Delaware Dept. of Transportation Secretary

WILMAPCO Executive Director Tigist Zegeye Mr. Minas M. Arabatzis
Department of the Army
Wanamaker Building, 100 Penn Square East

Philadelphia, Pennsylvania 19107-3390

Dear Mr. Arabatzis:

Thank you for providing us with the opportunity to review the Delaware River Main Channel Deepening Project's General Conformity Analysis and Mitigation Report.

After consultation with the Environmental Protection Agency's Region III office, we have determined that WILMAPCO is not required to concur with or take 08-01 action on this document. We therefore respectfully decline to offer official concurrence.

Given the obvious environmental consequences of the project, however, we do strongly encourage the implementation of mitigation strategies, such as those outlined in the document.

Sincerely,

Tigist Zegeye
Executive Director

CA. Lyza

VILMAPCO



December 18, 2009

Environmental Resources Branch Philadelphia District, US Army Corps of Engineers Wanamaker Building 100 Penn Square East Philadelphia, PA 19107

& via email to: Public Affairs Office at Edward.c.voigt@usace.army.mil

Re: Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report, November 2009 and Draft Statement of Conformity, Delaware River Main Channel Deepening Project, November 2009

Dear Mr. Voigt,

Please accept these comments in response to the Army Corps of Engineers' ("the Corps" or "Army Corps") Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report, November 2009 and the Draft Statement of Conformity, November 2009. These comments are being submitted on behalf of the Delaware Riverkeeper Network, the New Jersey Environmental Federation, Clean Water Action and the National Wildlife Federation.

Based upon the information provided, the Corps does not appear to be in compliance with Section 176(c) of the CAA and its implementing regulations, and cannot legally proceed with the Delaware River Main Channel Deepening Project ("45 foot Deepening project") based upon this Draft or any associated Final Statement of Conformity.

09-01

The procedural violations represented in the Corps' Compliance Documents are significant. The Act's implementing regulations are clear that, "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan" and that, "A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this subpart, before action is taken."

Delaware Riverkeeper Network 300 Pond Street, Second Floor

Bristol, PA 19007

tel: (215) 369-1188 fax: (215) 369-1181

drkn@delawareriverkeeper.org www.delawareriverkeeper.org

# Merely repackaging the 2004 Conformity Determination fails to fulfill the mandates for a project Conformity Determination.

CAA regulations 40 C.F.R. § 93.157 state, "the conformity status of a Federal action automatically lapses 5 years from the date a final conformity determination is reported under [40 C.F.R.] § 93.155, unless the Federal action has been completed or a continuous program has been commenced to implement that Federal action within a reasonable time." Repackaging information identified in the 2004 General Conformity Analysis and Mitigation report does not fulfill this requirement of the law. The August 2009 Draft Conformity Analysis explicitly stated that it was merely an update of the 2004 Conformity Analysis and that it relied in large part on the information used to prepare the 2004 Determination. The December 2009 documents, while not explicitly stating so, is also a mere updating and repackaging of the 2004 documentation, relying in large part upon the same key information and analyses. If a mere repackaging with minor updating was all the law required then the expiration of the conformity status would be almost meaningless and therefore it is clear that this is not what the law requires. The law clearly provides for expiration, coupled with other requirements such as using up to date information, in order to ensure that Conformity Determinations are based on current information, current proposals, current technologies, current alternatives, current state and federal policies and concerns etc. The Corps' attempt to merely repackage and minimally "update" conformity documents after their expiration for purposes of conformity is a clear violation of law.

# The Army Corps fails to identify and articulate project mitigation measures that are enforceable.

The applicable regulations are clear that in projects like the 45 foot Deepening project, where emission levels of criteria pollutants exceed the *de minimis* threshold, actions taken to mitigate those emissions, "must be identified before the determination of conformity is made," in order to achieve a finding of conformity, and the mitigation measures selected must be enforceable. 40 C.F.R. § 93.158.

Emissions offsets, for purposes of 40 C.F.R. § 93.158, are "emissions reductions which are quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the timeframe specified by the program." 40 C.F.R. § 93.152.

Mitigation requirements "necessary for a finding of conformity must be identified *before* the determination of conformity is made." 40 C.F.R. § 93.158 (Emphasis added).

The Army Corps' approach of relying entirely on Emission Reduction Credits ("ERCs") fails to fulfill these requirements including that of enforceability, prior identification of the actions to be taken, and the level of specificity and assurance mandated by the regulations.

A statement that ERC's will be purchased does not provide the level of detail required by the regulations — it is a mere statement of an intent to purchase credits available but fails to provide any details on how reductions will be achieved, by whom, to what degree, in what quantities, with what level of SIP consistency, and how those reductions may or may not reflect upon SIP provisions. There is simply not the level of detail required to ensure emission reductions are "quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both State and Federal levels, and permanent within the timeframe specified by the program." 40

09-03

C.F.R. § 93.152. Furthermore, the stated intent to purchase ERC's fails to identify the mitigation measures to be used to fulfill the emissions reductions obligation and to demonstrate conformity "before the determination of conformity is made." 40 C.F.R. § 93.158 (emphasis added). It is merely a statement of intent to secure mitigation strategies via the purchase of credits at some point in the future with no level of information or assurance regarding what, when, how and specifically where.

While the Army Corps acknowledges in its CAA conformity documents that ERC credits must be from "permanent, enforceable, quantifiable and surplus" emissions reductions, and that emission reductions rise to the level of permanent if they are contained in a federally enforceable operating permit or a revision to the SIP, it fails to provide any information to document and demonstrate that the ERC's it will be pursuing fulfill these requirements. It is unclear that the emissions will be "fully offset within the same nonattainment or maintenance area *through a revision to the applicable SIP or a similarly enforceable measure* that effects emission reductions so that there is no net increase in emissions of that pollutant," as required by regulations. 40 C.F.R. § 93.158. (emphasis added.) It merely asserts that ERC's are generically available and that it will purchase them in a timely fashion.

The Army Corps posits that "Based on discussion with a local broker, several thousand credits are expected to be readily available in the Philadelphia area ...." Assertions that there are expected to be enough credits based on a single, self-interested source, does not rise to the level of information and documentation necessary to assure that there will in fact be the credits available for purchase when and how the Army Corps plans for compliance. And there is no enforceability to the ERC approach — without knowing the details of the mitigation measure one cannot ensure there is a measure or opportunity for enforceability by State or Federal authorities.

In addition, the Army Corps fails in its attempts to demonstrate the enforceable nature of this mitigation measure by asserting and documenting that the local sponsor, the Philadelphia Regional Port Authority ("PRPA"), has entered into an agreement with a broker for the purchase of such credits. The brokerage agreement is not clear in its articulation of the obligation for purchase of NOx emissions and at the necessary level nor does it provide any details on what actions will result in the creation of these credits being available for sale and/or purchase. In addition, this agreement includes a termination clause that allows the PRPA to terminate for any reason with a mere 7 days notice, and entitles either the broker or the PRPA to terminate for failure to perform the obligations of the agreement. As a result, this approach to mitigating for NOx emissions fails to provide the level of enforceability mandated for compliance with the Clear Air Act as there are clear and easy guidelines for and how either the broker or the PRPA (who would be responsible to purchase the ERC credits) could terminate this effort at any time.

# The Army Corps fails to identify and offset total direct and indirect project emissions.

40 CFR § 93.159(d)(1) requires that the analyses undertaken in the conformity determination must be based on total direct and indirect emissions from the action and must reflect emission scenarios that would include emissions projected in the project maintenance plan. In order to comply with the Clean Air Act with regards to NOx emissions the Army Corps asserts that it will achieve conformity by fully offsetting the total direct and indirect emissions by reducing NOx emissions in the same non-attainment or maintenance area. The Army Corps fails to fulfill the § 93.159 regulatory

09-05

09-06

requirement and its chosen strategy for establishing conformity in that it fails to identify and therefore offset "total direct and indirect" emissions and it fails to fulfill the CAA requirements for successful mitigation.

09-08

The Conformity Analysis and Determination fail to include all foreseeable direct and indirect emissions. It has become increasingly clear that the Southport Port project is a foreseeable and indirect outcome of the proposed deepening project. Southport includes dredging, filling, and construction. It is also being built in order to induce increased port traffic. As it is a foreseeable outcome of the 45 foot Deepening project, and in fact its undertaking is dependent upon the 45 foot Deepening project actually happening, and there are likely to be NOx emissions associated with its construction and associated traffic, the air impacts of the Southport Project must be considered in the CAA Conformity Analysis and Determination.

There exists for Southport a 2005 Feasibility Assessment (Draft Final Report, Feasibility Assessment for Placement of Dredged Materials at the Philadelphia Naval Business Center and Southport) which documents that Southport is intended to be built upon deepening spoils and there are ample and frequent statements on the public record by representatives from the Philadelphia Regional Port Authority that the successful construction and operation of Southport is dependent upon successful construction and implementation of the proposed 45 foot Deepening project. In a letter to the Army Corps dated April 16, 2009, the National Marine Fisheries Service stated its belief to the Army Corps that Southport was a foreseeable outcome of the Deepening project and therefore its environmental harms needed to be assessed as part of the aquatic impacts of the project; this is no less true for the air impacts of the project. Furthermore, in an email from Barry Gale to Roy Denmark and others dated Jan. 5, 2009, the Army Corps acknowledged the foreseeability of Southport as an outgrowth of the 45 foot Deepening project.

Failure to include the known, anticipated and foreseeable air emissions of the Southport project is a failure to fulfill the requirements of including direct and indirect emissions from the 45 foot Deepening project.

Additionally, the most recently discussed Army Corps spoil disposal plan includes the use of existing confined disposal facilities to a much greater degree than originally proposed which will necessarily require the berms at those sites to be raised, significantly. According to an April 11, 2008 Army Corps document, in order to accommodate all spoil disposal in existing Army Corps CDFs the dikes on most of the federally owned facilities would need to be raised higher than was originally anticipated or planned for, anywhere from 10 to 44 feet higher than originally anticipated. The air quality impacts of this additional construction directly associated with the project is foreseeable and should be included in the conformity analysis and planning.

09-09

In addition, the emissions associated with transporting deepening spoils to alternative

locations in Pennsylvania is a foreseeable indirect air impact of the 45 foot Deepening project that must be included, considered, and addressed as part of the project Air Conformity documents. The agreement reached by the Governors of Pennsylvania and New Jersey in 2007 in which it is explicitly agreed that all spoils will go to Pennsylvania locations, coupled with communications including the September 19, 2008 from the Army Corps to NJDEP Commissioner Lisa Jackson and the May 15, 2009 letter from Governor Rendell to Governor Corzine, document that deepening spoils are intended for delivery to Pennsylvania -- whether that delivery be immediate or after a period of de-

watering is currently under debate but that debate does not negate the acknowledgement by all parties that eventually the spoils will be transported to Pennsylvania locations including mines, creating the pollution emissions to the air associated with that transport. (These documents are readily available in the Army Corps of Engineers files associated with the 45 foot Deepening project.)

Furthermore, the Conformity determination only includes the construction phase of the deepening project and associated private channel deepening, it fails to discuss or plan for, to any degree, increased emissions that will result from maintaining an increased depth of 5 feet.

09-11

09-12

# The Army Corps fails to articulate an enforceable mitigation strategy and implementation plan that complies with CAA regulations.

40 C.F.R. § 93.160 specifically mandates that measures intended to mitigate air quality impacts of the project "must be identified and the process for implementation and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation." The use of Emission Reduction Credits does not fulfill this mandate of the law. Apparently based on a single source the Army Corps asserts that there will be ERCs available for purchase, but it fails to provide any documentation or additional detail beyond this single assurance. In addition, it merely states that ERCs will be purchased in a timely fashion but provides no explicit schedule or timelines for implementation of the purchase. Further, its presentation of a brokerage agreement, including a wide ranging termination provision, with no other information regarding implementation if this agreement were to be terminated, fails to meet the burden of identifying a process for enforcing the ERC approach should that become necessary. Even further, the plan to use ERCs fails to provide any detail on what actions will be taken, by whom, to what degree, in what time frame, in what location in order to reduce air emissions resulting in the reductions necessary to support the creation of credits – without this detail there is not the information necessary to identify the mitigation efforts to be undertaken, nor the process for their implementation, nor the level of their enforceability.

Furthermore, the primary reason that the Army Corps provides for relying upon an ERC approach to mitigation - rather than identifying and implementing a direct strategy for taking action using admittedly "technically feasible" options to directly mitigate the air impacts of the 45 foot Deepening project - is one of convenience. To carry forth these other direct mitigation strategies requires 12 to 24 months to fully develop for implementation. The documents issued in August and now in November reveal a number of feasible options for achieving NOx reductions, and the Corps provides no valid justification for eschewing them, other than the need for additional time. (e.g. see pg 4 of the General Conformity Analysis and Mitigation Report: "Each of the mitigations strategies studied was determined to be technically feasible.") The belief that using alternative available strategies (whereby the Army Corps would be directly mitigating its air pollution harms through direct action in a reasonable level of time) would conflict with the pre-determined schedule for the 45 foot Deepening project articulated by the Army Corps is not a sound reason for failing to fully comply with the requirements of the Clean Air Act. Had the Army Corps undertaken its CAA Conformity Analysis and documentation in a timely fashion and begun steps to create a clear and enforceable implementation plan, no timing concern would exist. It is the Army Corps' own lackadaisical approach to implementing and complying with the requirements of the Clean Air Act that has prevented it from providing the required "process for implementation and enforcement of such measures ... including an implementation schedule containing explicit timelines for implementation". The construction schedule of the 45 foot deepening project must be tailored to accommodate regulatory approvals, not vice versa.

# The Army Corps failed to provide clear and accurate information regarding the success and costs of the various mitigation options considered.

To the extent there was discussion of costs of each alternative, cost is not the driving factor in selecting options. In addition, the Delaware Riverkeeper Network questions the cost calculations, as well as the NOx reductions, asserted for the various options studied. When considering the affect on NOx reductions and when considering costs of various mitigation options the Army Corps focused on the reduction in project peak annual emissions. While this method of focus sounds good, upon closer evaluation it appears to skew the picture on both effectiveness and cost.

In the example provided, electrification, the Army Corps uses an annual reduction figure of 152 tons for its analyses — but using such a figure fails to account for those years when electrification resulted in higher, as well as lower, emission reductions. Consideration of Figure 5-1 and Table 5-1 indicates that the Army Corps approach in fact minimizes the effectiveness of electrification for NOx reductions, and magnifies its associated cost. Had the actual annual figures for NOx reductions due to electrification been used in its analyses, it appears as though the level of average annual reduction would be almost twice as high (i.e. 257 tons vs 152 tons), and the associated cost almost  $\frac{1}{2}$  as low (\$109,712 vs \$200,657). The Delaware Riverkeeper Network believes that in order to provide an accurate picture of mitigation effectiveness, the actual emission reduction figures for the 6 year project life should be used in all calculations including NOx reductions and costs. In addition, actual figures during the maintenance period must also be evaluated.

The Army Corps asserts (on pg 26) that "Dividing the cost of a mitigation strategy by the NOx reductions it achieves for a single year yields a cost-effectiveness value that can be used to compare all of the emission reductions strategies under consideration." This is a more clear articulation of one of the key Army Corps calculations used in assessing the options discussed. It also allows one to more clearly recognize that the Army Corps was not calculating or providing good information for cost comparisons. Selecting a single year out of the 6 years of the project for determining the cost effectiveness of the various mitigation options selected does not provide an accurate picture for comparison. The outcome of the calculation for each mitigation option depends upon the year the Army Corps picks for its calculation. As with electrification, the success in reducing NOx emissions may vary tremendously between years – i.e. in one year electrification reduced NOx emissions by 363 tons, in another year the reduction was a mere 152 tons, which of these two years was selected for the single year calculation directly dictates the perception of success and cost for that particular mitigation strategy. In addition, the Army Corps could have selected different years for different mitigation options as a further strategy for skewing the perception in the particular direction it hoped to achieve. It is fundamental that the Army Corps should have used actual NOx reductions and costs across the 6 year project life and the associated maintenance for each mitigation strategy selected if it is to present a clear and accurate picture for decisionmaking and comparison purposes.

Further, there appears to be no good explanation (as was the case with the August documents issued for public comment) why the Army Corps must use the more polluting booster pump method for accomplishing the deepening project.

09-15

While the Army Corps uses the New York and New Jersey Harbor Deepening Project as its example of how/why ERC purchase is an appropriate strategy, in that case, as noted by the Army Corps, the ERC's were used as offsets for early phases of the work. Here the Army Corps is seeking to use them as offsets for the entire project. For all the reasons stated in this comment, that is not an appropriate or legally defensible strategy.

# The Army Corps fails to use the most up to date information and the latest and most accurate analyses for assessing emissions or mitigation options.

40 C.F.R. § 93.159 requires the use of the most up to date information and that analyses required by the regulations be "based on the latest and most accurate emission estimation techniques available". The November 2009 General Conformity Analysis and Mitigation Report and the associated Conformity Determination continue to rely in large part upon the analysis and findings of the 2004 documentation. That information is now well dated and therefore violates the up-to-date information and analyses requirements of the CAA regulations.

In addition, the Army Corps' most recent documentation explicitly states that the mitigation strategy focused on emission reduction technologies was primarily based on the same October 2000 Moffatt & Nichol study used previously. This study/analysis was only updated through the review of a January 2003 document which the Army Corps asserts demonstrated that there had been no significant changes to the emission reduction technologies considered in the October 2000 report. Both of these key documents used to identify and assess the available options for mitigation of the 45 foot Deepening project are well dated — respectively 9 years and 7 years dated. That the Army Corps would use such sorely out of date documentation to determine what mitigation options might be available and their effectiveness flies in the face of the up to date information and analysis requirements found in § 93.159 of the regulations.

Furthermore, by way of example, when considering mitigation strategy 4, action on the McFarland, an Army Corps hopper dredge used for maintenance dredging on the Delaware River, the Army Corps used daily running hours from 1999 to 2003, the same data used in the 2004 CAA conformity documentation. But, when assessing the most recent dredge spoil volumes and costs associated with deepening, all current Army Corps documents are relying upon more recent and up to date information regarding the volume of spoils that lie in the channel and need to be removed. It stands to reason that if there is new information regarding the volume of spoils associated with deepening, there should also be new information regarding volume of spoils for maintenance and therefore anticipated running times associated with maintenance dredging. This new and up to date information is what should have been used in considering the McFarland strategy.

Section 93.154 requires, "any Federal department, agency, or instrumentality of the Federal government taking an action subject to this subpart must make its own conformity determination consistent with the requirements of this subpart. In making its conformity determination, a Federal agency must consider comments from any interested parties." The fragmented approach the Corps proposes for their conformity and mitigation plan represents a significant barrier to meaningful public input. The Army Corps is using dated information, much of it to be found in the 2004 Conformity Determination materials and therefore not fully presented here. In addition, the Army Corps, once again, seems to be using compliance with the letter of the law to evade compliance with the spirit of the law. While the Army Corps may have publicly noticed in local papers the release of the Delaware River Main Channel Deepening Project, General Conformity Analysis and Mitigation Report, November 2009 and Draft Statement of Conformity, Delaware River Main Channel Deepening Project, November 2009 it did not undertake the action of noticing this action via its email notification system (the Delaware Riverkeeper Network has been on that notification system for several years and received no notice), nor did it undertake the courtesy of sending the notice via any means directly to the public commenters of the August, 2009 CAA conformity materials (the Delaware Riverkeeper Network submitted previous comment but received no form of direct notification from the Army Corps). It is reasonable that the public would have relied upon the Army Corps

email notification system for receiving notice of this most recent conformity determination documentation — all other Army Corps public notices are released to the public via that system. To fail to include notification of the CAA documentation here via that system seems to demonstrate a deliberate attempt to evade review and comment from a well-known and very interested segment of the public.

Pursuant to 40 CFR § 93.156, Delaware Riverkeeper Network requests that the Corps document its response to all the comments received on its draft conformity determination and make the comments and responses available within 30 days of the final conformity determination. DRN also requests pursuant to 40 CFR § 93.156 that the Corps make public its final conformity determination within 30 days of the final determination.

09-19

09-20

The Army Corps Statement of Conformity and General Conformity Analysis and Mitigation Report for the Delaware River Main Channel Deepening Project fail to comply with the Clean Air Act. Therefore, the Army Corps is prohibited by the Clean Air Act from undertaking the 45 foot Deepening project at this time.

Submitted,

Maya K. van Rossum the Delaware Riverkeeper Delaware Riverkeeper Network

Amy Goldsmith Director New Jersey Environmental Federation

Myron Arnowitt PA State Director Clean Water Action

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# State of New Jersey

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December 18, 2009

MARK N. MAURIELLO

Acting Commissioner

Mr. Minas M. Arabatzis Chief, Planning Division Department of the Army Philadelphia District Corps of Engineers Wanamaker Building, 100 Penn Square East Philadelphia, Pennsylvania 19107-3390

Dear Mr. Arabatzis:

In response to your letter dated November 19, 2009, the New Jersey Department of Environmental Protection (NJDEP) has reviewed the Draft Statement of Conformity (DSOC) and the General Conformity Analysis and Mitigation Report (November 2009) for the Delaware River Main Channel Deepening Project (Project). Based on our review, the Department still does not concur with the Draft Statement of Conformity as the Project does not conform to New Jersey's State Implementation Plan (SIP). The Project also does not satisfy the related Coastal Zone Management air quality regulation. N.J.A.C. 7:7E-8.10 (air quality issues).

10-01

The oxides of nitrogen (NOx) emissions from the Project are some of the highest among recent Federal projects in New Jersey. Since the entire State of New Jersey is in nonattainment for ozone, and Camden and Gloucester counties are in nonattainment for Fine Particulate (PM 2.5) standard, all the direct and indirect emissions from the Project must be identified and mitigated using contemporaneous emission reductions in order to meet the conformity requirements of the Federal Clean Air Act and the United States Environmental Protection Agency's (EPA's) General Conformity regulations, 40 CFR Part 93.

10-02

This letter documents the deficiencies that the NJDEP has identified at this time. These items need correction before the NJDEP can concur with the conformity determination for this Project. In addition, a technical review with additional comments of the most recent General Conformity Analysis and Mitigation Report (November 2009) is attached. It should be noted that the United States Army Corps of Engineers (USACE) has not sufficiently responded to the technical comments previously submitted on September 15, 2009. The most significant deficiencies of the DSOC are discussed in the remainder of this letter.

1. The USACE failed to substantively consult with the State of New Jersey regarding the development of its plan to ensure the action by the USACE conforms with the New Jersey SIP.

10-03

The Clean Air Act, 42 U.S.C. §7401 et seq. requires all federal agencies to ensure their actions do not prevent the states from attaining and maintaining the National Ambient Air Quality Standards (NAAQS). There have been no substantive discussions with New Jersey on the development of the USACE plan. We identified this concern in our comments on the August 14, 2009 version of the Draft Statement of Conformity. In the response to comments, the USACE determined it did not need any consultation (comment # 02-37). We strongly disagree.

After receiving the November 19. 2009 Draft Conformity Statement, the NJDEP requested and the USACE agreed to meet to discuss New Jersey's concerns with the Draft Statement of Conformity. Unfortunately, at the December 15, 2009 meeting, on the advice of counsel, the USACE listened to NJDEP's concerns, but did not actively discuss the concerns or how to resolve them. The NJDEP was hopeful that the conversation and subsequent revisions to the document would enable the State to concur with a USACE determination that the project conforms with the New Jersey State Implementation Plan. The USACE's failure to engage in substantive discussions did not adhere to its Environmental Operating Principles (<a href="http://www.usace.army.mil/environment/Pages/eop.aspx">http://www.usace.army.mil/environment/Pages/eop.aspx</a>) to actively listen to stakeholder views and find "innovative win-win solutions to the Nation's problems".

2. The USACE Draft Conformity mitigation plan fails to meet the Clean Air Act requirements by preventing the State of New Jersey from attaining the National Ambient Air Quality Standards for ozone.

10-04

The ambient air quality in New Jersey and in the multi-state nonattainment area does not meet the current health based ozone NAAQS (75 ppb). The multi-state nonattainment area is barely in compliance with the 1997 8-hour Ozone NAAQS (85 ppb), which remains applicable for certain purposes. It is expected that the USEPA will propose to revise the 2008 8-hour Ozone NAAQS (75 ppb) next week because it is not sufficiently protective of the public. In the nonattainment area, there are millions of people potentially exposed to unhealthy air quality levels and the associated adverse health effects when exposed to elevated concentrations of ozone.

The Clean Air Act requires the USACE to demonstrate that its action will not cause, contribute to, or increase the frequency or severity of any violation of any air standard, and further that it will not "delay timely attainment of any standard or any required interim emission reduction or other milestones in any area." 42 U.S.C. §7506(c)(1)(B).

For the peak year (2014), it is estimated that the Project will emit over 600 tons/year of oxides of nitrogen (NOx). NOx is a precursor for ozone. To put the emissions from the project in perspective with other New Jersey sources, the project is equivalent to a moderate sized power plant or electric generating unit or a moderate sized petroleum

refinery in New Jersey. If the Project were a stationary source, emissions of this magnitude would make it the eleventh largest source in the State, based on emissions in 2008. The emissions for the Project are major, and the unmitigated additional burden will lead to more ozone formation, continued unhealthy air quality levels, and continued nonattainment.

The USACE mitigation plan relies entirely on the use of Emission Reduction Credits (ERCs). These credits were presumably generated in the past, by stationary sources which shut down their emission sources or took some other action to permanently reduce their emissions when the ozone air quality failed to meet the 1997 8-hour NAAQS (85 ppb). These emission reductions are already reflected in the ambient ozone levels and will not help the nonattainment area meet the new 2008 8-hour Ozone NAAQS. The Clean Air Act established the use of ERCs as a mechanism to allow new or modified major stationary sources to locate in a nonattainment area. The Clean Air Act, however, requires these new or modified sources to install pollution control equipment that achieves the lowest available emission rate (LAER) possible. Thus these new emission sources would have the best controls to minimize emissions, in addition to emission offsets from other sources.

The USACE mitigation plan provides no real mitigation. Under the plan, air pollution sources will remain uncontrolled and an increase in actual emissions will occur. This increase in emissions will continue to contribute to a delay in the area attaining the health-based NAAQS, in violation of the Clean Air Act.

NJDEP acknowledges that there is a limited role for ERCs in a mitigation plan, as a contingency to ensure the project continues if there is an unforeseen delay in the implementation of the mitigation measures. The mitigation plan for the New York / New Jersey Harbor successfully used this approach, by allowing the temporary use of ERCs until such time the USACE was able to implement actual mitigation measures. For reasons discussed throughout this letter, ERCS are not adequate to make up an entire mitigation plan.

# 3. The Conformity Analysis and Mitigation Report (November 2009) is incomplete as it does not include all the emissions for the Project.

In conflict with the federal conformity rule, the analysis fails to consider the indirect emissions associated with the Project. These include the emissions associated with the movement of the dredged materials to their final location and the emissions associated with the alternation of ship and support vessel usage along the river.

The federal conformity rule requires the federal agency to include all reasonably foreseeable emissions for the project as a whole in determining applicability 40 CFR 93.158(a) (2) (Criteria for determining conformity of general Federal actions), and that the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area so that there is no net increase in emissions of that pollutant.

# Final Placement of the Dredged Materials

Governors Rendell (Pennsylvania) and Corzine (New Jersey) have agreed that the final placement of the dredged materials will be in Pennsylvania. While the details remain to be addressed, the emissions from this activity are caused by the project and reasonably foreseeable and must be included in the analysis. The USACE has direct knowledge of this agreement, as indicated in the letter from the USACE Assistant Secretary John Paul Woodley, Jr. to Governor Corzine, July 28, 2008. While we recognize that the dredged materials management plan is not complete, the Governors have agreed that the dredged material will ultimately be placed in Pennsylvania.

The USACE's current approach ignores the fact that the final placement of the dredged materials will be in Pennsylvania, in violation of the general conformity guidance segmentation provisions<sup>1</sup>. To resolve this issue, the USACE could either wait to finalize the conformity determination until the dredged materials management plan is completed, or include initial estimates in the plan and provide a regional process to update the plan and take appropriate action. The NJDEP would prefer the certainty provided by waiting until the dredged management plan is complete, but would be willing to participate in a regional process to address the issue as an alternative. If the USACE were to select this approach, the Regional Air Team process associated with the New York / New Jersey Harbor Project demonstrates that a regional process can work successfully.

# New Ship and Support Vessel Activity

The USACE claims the dredging will only improve the efficiency of the shipping activity along the river, and will not increase ship traffic or cargo. In the Response to Comment Document included with the Draft Statement of Conformity (November 2009), the USACE indicates:

The economic basis for the federal project was to increase the efficiency of the fleet currently calling area ports. There is no anticipated induced tonnage as a result of the federal project. The future volume of cargo and the fleet is determined by macroeconomic factors that are not affected in any measurable way by channel depth.

This fails to recognize the impacts of the deepening on the region and ignores the opinions of experts in the region. James McDermott, Executive Director of the Philadelphia Regional Port Authority, has stated <sup>2</sup> that "Implementation of the project will enable the newest generation of deeper draft ocean going vessels to access port facilities in Philadelphia and New Jersey." Similarly, James H. Paylor, Jr., International Vice President of the International Longshoremen's Association, states<sup>3</sup>, "the Project would allow for larger vessels to traverse the Delaware and dock at ports on the River ..." and:

"In the shipping industry, the trend is to build larger ships to accommodate more cargo. Larger ships require more "draft" or deeper water to safely 10-06

<sup>1</sup> http://www.epa.gov/air/genconform/documents/gegga 940713.pdf

<sup>&</sup>lt;sup>2</sup> Declaration of James T. McDermott, dated Nov. 4, 2009, ¶17,

<sup>&</sup>lt;sup>3</sup> Declaration of James H. Paylor, Jr., dated Nov. 20, 2009 ¶¶10, 14.

navigate. In order to maintain the current business and to promote growths in the Ports in Wilmington, Delaware, Southern New Jersey and Philadelphia, Pennsylvania, the deepening of the Delaware River is essential."

In addition, the Philadelphia Regional Port Authority believes<sup>4</sup> "The need for this Project is fueled by the changing nature of the global shipping industry. Implementation of the Project will enable the newest generation of deeper draft ocean-going vessels to access port facilities along the Delaware River in Philadelphia and New Jersey."

According to the Philadelphia Regional Port Authority Chairman John H. Estey, Esq.<sup>5</sup>, "At 40 feet, the current depth of the channel is too shallow for many of the world's larger container vessels, putting the Delaware River ports at a competitive disadvantage among the U.S. East Coast Ports. A 45 foot shipping channel allows the region to compete on the same state as other East Coast Ports, attracting more cargo and securing the future viability of the Port of Philadelphia."

These statements show the Project Sponsors are expecting a change in shipping characteristics to occur. Clearly, the use of the Delaware River and its ports will change because of the USACE action. This is reasonably foreseeable, thus the change in future emissions must be addressed in the Conformity Statement pursuant to 40 CFR 93.153(b).

4. The Draft Statement of Conformity and the Conformity Analysis and Mitigation Report (November 2009) misstates how Emission Reduction Credits (ERCs) were utilized in the New York/New Jersey Harbor Deepening Project.

The response to comment document indicates that ERCs were used as mitigation for the New York / New Jersey Harbor Deepening Project. This is inaccurate. In that project, actual mitigation measures were and are being implemented to address the increase in emissions from the dredging activity. ERCs were used in the initial start up and are used as a contingency measure if any of the emission reductions from mitigation measures fall behind schedule.

ERCs were utilized before the start of the project to avoid blasting twice in Kill Van Kull area #5, and to avoid unnecessary impacts on the surrounding residents. Mitigation of the emissions from the Harbor Deepening Project involves many different measures each with their own challenges. There were times when the emission reduction measures were delayed, and to avoid stopping the project, ERCs were utilized to keep the project on schedule. The success of the Harbor Deepening Project demonstrates an appropriate and successful use of ERCs to supplement the mitigation measures; significantly, however, that plan relied primarily on the use of actual mitigation measures to achieve conformity.

<sup>&</sup>lt;sup>4</sup> Proposed Memorandum of Law of Phila. Regl Port Auth. in Opposition to Motion for Preliminary Injunction (Case 1:09-cv-00821-SLR, page 7)

<sup>&</sup>lt;sup>5</sup> PA DEP Daily Update page (Governor Rendell says Delaware River Channel Deepening Project is a Milestone for Maritime Commerce, (June 23)

As noted in point 2, the Clean Air Act envisioned the use of ERCs to facilitate economic growth by major stationary sources in nonattainment areas. Removal of over 600 tons of NOx ERCs from the region's ERC banks could have a stifling effect on locating new or modified major stationary sources in New Jersey and the other states in the multi-state region. As far as NJDEP is aware, the cost benefit analyses developed to support this project did not include the impact to the regional economy from the removal of the ERCs from the market place. If the USACE continues to base its mitigation plan on the use of ERCs, it should conduct a new cost benefit analysis that considers the impact of the loss of ERCs on the regional economy and the additional burden placed on the existing economy to meet the ozone health standard (see point #6) to compensate for the unmitigated emissions from this project.

# 6. The NJDEP requests the USACE develop a mitigation plan that relies on mitigation measures not on the use of ERCs.

In order to meet the current ozone health standard or a more protective revised standard and for the nonattainment area to attain the standard, additional emission reductions will be needed. New Jersey has established rules to reduce emissions from many different source categories, including the stationary sources in the State and emissions from sources, such as, consumer products, paints and coatings, emissions from the idling of vehicles, and engines and inspection and maintenance programs for vehicles. However, these measures alone are insufficient. To reach attainment, additional measures will be needed from many of the types of sources that will be used in this project, e.g., non-road equipment and on-road vehicles. This project provides a unique opportunity for government and the project sponsors to work together to clean the air by its actions. Failure to act to achieve actual emission reductions would ultimately place additional

7. The USACE must explain the relationship between the project scope changes over time and its recent representation that maintenance dredging has occurred to 45°. The following table illustrates the evolution of the NOx emission estimates from the previous Conformity Analyses for this project to the current date.

burdens on the existing businesses and industries to reduce their emissions, further

stressing the regional economy.

Report Version	Quantity of	Lowest Year	Highest	Project Total
	Material	NOx	Year NOx	NOx
	(cubic	Emissions	Emissions	Emissions
	yards)			
February 2004	26,088,964	102 tons	849 tons	3,290.24
August 2009	15,961,100	130 tons	905 tons	3,037.72
November 2009	15,961,100	424 tons	607 tons	3,037.7

In legal papers filed in support of this project, the USACE has represented that "some portions of Reach C have previously been dredged to forty-five feet as part of

10-10

maintenance dredging to ensure that the navigation project's previously authorized forty-foot depth would not be comprised by accumulation of sediments between maintenance dredging cycles." (See Declaration of Anthony DePasquale, dated Nov. 19, 2009; Brief in Opposition to Preliminary Injunction at 16-17).

The current Philadelphia to the Sea Maintenance Dredging Project authorizes the ACOE to maintain the federal navigation channel at -40 feet plus the allowable +1 foot overdredge. However, a review of current contract plans for the maintenance dredging of Reach C, and previous contract documents for the 2008 dredging cycle indicates that the channel is routinely dredged beyond -40 feet+1 foot overdredge. In light of the above, the NJDEP is requesting documentation as to the authority to perform "advanced maintenance dredging" beyond the authorized depth to maintain the channel. The NJDEP also requests documentation of the historic channel depths and maintenance dredging activities over the last five years. This documentation is necessary to determine whether a federal deepening project has in essence been implemented in violation of the provisions of the Clean Air Act.

# 8. The USACE should use the success of the New York / New Jersey Harbor Deepening project to develop an acceptable mitigation plan.

The USACE should emulate the success of the New York / New Jersey Harbor Deepening project. While there have been challenges associated with the mitigation plan for the Harbor Project, the commitment by all the agencies involved has allowed that project to proceed in an economically viable and environmentally beneficial manner. The experience gained from the New York/New Jersey Harbor Deepening project demonstrates successful strategies to satisfy the conformity requirements for this Project and should be emulated.

In 2004, a consultative process similar to the Harbor Deepening project was initiated for this Project, but it has since been abandoned. It is not clear why the USACE has chosen to work in a vacuum without the benefit of input from the state regulatory partners, or why it has decided to deviate from a successful model.

As the NJDEP recommended in July 2009 and stated in our September 15, 2009 comment letter, the current situation might have been avoided if an Air Quality Team had been convened and had an opportunity to address the outstanding issues this Project presents. For example, the USACE response to the comment requesting that the comment period be kept open for an extended period in order to convene the air team (comment # 02-37) states that "several emission reduction strategies were evaluated and the most appropriate mitigation measure, the purchase of emission reduction credits, was selected. ....Accordingly, additional convening of the air team is not needed." This response fails to acknowledge New Jersey and the other states as stakeholders and partners in the air conformity determination. The Department continues to recommend, as indicated in Commissioner Mauriello's September 3, 2009 letter, that the comment period remain open to allow the air team to convene to further discuss the project's conformity with New Jersey and the other states' (Pennsylvania and Delaware) State Implementation Plans.

# 9. The levels associated with Severe Ozone nonattainment areas should be used in the Project evaluation.

The southern New Jersey – Philadelphia - Wilmington nonattainment area was previously classified as a Severe ozone nonattainment area under the "old-old" 1-hour ozone NAAQS. To prevent backsliding and to meet the goal of the Clean Air Act (42 U.S.C. 7502 (e)) to achieve attainment of the Ozone NAAQS, the de minimis emissions levels established for General Conformity projects for a Severe nonattainment area at 40 CFR 93.153(b)(1) should be used. The Department acknowledges that the latest emission estimates for Volatile Organic Compounds are below the de minimis levels for a Severe Ozone NAAQS and will have no effect on the project. However, the appropriate de minimis levels should be identified for the public for their understanding. NOx emission levels would be far above 25TPY.

## Conclusion

Based on the deficiencies in the DSOC the Department does not concur with the USACE's determination that the project's mitigation plan conforms with the SIP and does not agree that the project is consistent with the related Coastal Zone Management air quality regulation, N.J.A.C. 7:7E-8.10. The current analysis does not satisfy the requirements of the Federal General Conformity regulation. The mitigation plan violates the Clean Air Act requirement. As was indicated at the December 15, 2009 meeting, we are prepared to work with the project partners to assist in the development of a mitigation plan which would conform with the New Jersey State Implementation Plan, and which would meet the requirements of the federal General Conformity regulation and the Clean Air Act.

The goal of the Clean Air Act is to provide citizens with clean air. The Act specifically requires the Federal agencies to ensure their actions do not inhibit or delay the States from achieving this goal. The USACE must revise its conformity statement and mitigation plan to conform to this requirement.

10-15

10-14

Sincerely

Chris N. Salmi
Assistant Director

Raymond Werner, USEPA Region III Diana Esher, USEPA Region III Suzanne Dietrick, NJDEP

# Technical Attachment for the Delaware River Main Channel Deepening Project General Conformity Mitigation Report November 2009

1. The report states, "In 2004, all ten of the counties affected by the project were in either severe or moderate nonattainment for ozone (precursors are VOCs and NOx). Two of the counties were in designated maintenance areas for CO. by 2009, all ten of the counties affected by the project were in moderate nonattainment for ozone and ten were in attainment for CO."

## Comment

Although in 2009, the ten counties affected by the Project were in moderate nonattainment for eight hour ozone, the de minimis levels applicable to an area in severe nonattainment for one hour ozone remain in effect for this project, pursuant to the anti-backsliding provisions of the Clean Air Act (42 U.S.C. 7502(e)).

10-16

2. The report states, "The authorized Delaware River Main Channel Deepening Project (project) provides for modifying the existing Delaware River Federal Navigation Channel from 40 feet to 45 feet mean low water (MLW) with an allowable overdepth of one foot.

## Comment

Please clarify if the emission estimates in this report are for dredging to 45 feet or to 46 feet (45 feet with a one foot overdepth). The USEPA's General Conformity Guidance: Questions and Answers<sup>1</sup> (July 13, 1994 page 6) addresses the issue of potential to emit. The document states that "the analyses should consider the greatest expected level of direct and indirect emissions." Based on this, emissions estimates to 46 feet (45 feet with a one foot over depth) must be included in the emission estimates for this Project.

10-17

3. The report states, "The project's navigation benefits from the channel deepening are based upon transportation cost savings. ... Therefore, there is no induced tonnage as a result of the deepening project.

## Comment

Statements by the Project Sponsors indicate they are expecting a change in shipping characteristics to occur. Clearly, the use of the Delaware River and its ports will change because of the USACE action. This is reasonably foreseeable, thus the change in future emissions must be addressed in the Conformity Statement per 40 CFR 93.153 (b). Please see New Ship and Support Vessel Activity for the project sponsors comments.

http://www.epa.gov/air/genconform/documents/gcgqa\_940713.pdf

4. The report states, "the dredged material disposal plan for the riverine portion of the project will only utilize the existing federal sites, which include: National Park, Oldmans, Pedricktown North, Pedricktown South, Penns Neck, Killcohook, Reedy Point South, and Artificial Island. The Fort Mifflin site in Philadelphia will also be used for disposal of rock removed in the vicinity of Marcus Hook, Pennsylvania."

#### Comment

The report should include the indirect emissions for the transportation of the dredged materials to their final destination in Pennsylvania. Governors Rendell (Pennsylvania) and Corzine (New Jersey) have agreed that the final placement of the dredged materials will be in Pennsylvania. While the details remain to be addressed, the emissions from this activity are reasonably foreseeable and must be included in the analysis.

The transportation of the dredged materials to their final placement is an activity that generates additional indirect emissions for the Project. The Federal General Conformity regulation 40 CFR 93.153 ("Applicability") states that "...a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emission of the criteria pollutant or precursor in a nonattainment or maintenance area caused by the Federal action" exceeds the applicable de minimis threshold. Indirect emissions as defined by the Federal General Conformity regulation, 40 CFR 93.152, "occur later in time and/or may be further removed in distance ...but are still reasonably foreseeable; and the Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency." The definition for "caused by" in the Federal General Conformity regulation (40 CFR 93.153) is "as used in the terms "direct emissions", means emissions that would not other wise occur in the absence of the Federal action." If it were not for this Project, there would be no dredged materials nor would the dredged material require transportation to their final destination in Pennsylvania.

5. The report states, "Detailed emission estimates were developed on the latest USACE construction estimates."

#### Comment

What are the dates of the project construction schedule that were used to develop the emission analysis?

10-19

6. The report states, "Because the entire area is in attainment of the PM10 and CO standards, General conformity does not apply to those pollutants and there is no need to compare them to a de minimis level."

## Comment

Camden County, New Jersey and Philadelphia County, Pennsylvania are maintenance areas for carbon monoxide. (CO). Section 93.153 (b)(2) (Applicability) of the Federal General Conformity regulation must be applied to this Project. The Federal General Conformity regulation 40 CFR Part 93, applies to maintenance areas. An Applicability Analysis must be completed for CO.

10-21

7. The report states, "The de minimis levels for ozone precursors, NOx and VOCs, are 100 and 50 tons per year, respectively."

# Comment

10-22

The State of New Jersey continues to be in nonattainment for the 8-hour Ozone NAAQS. To prevent backsliding and to meet the goal of the Clean Air Act (42 U.S.C.§ 7502 (e)) to achieve attainment of the NAAQS, the de minimis emission levels established for General Conformity projects for a Severe nonattainment area at 40 CFR 93.153 (b)(1) should be used. The Department acknowledges that the latest emission estimates for Volatile Organic Compounds are below the de minimis levels for the 1-hour Ozone NAAQS and will have no effect on the project. However, the appropriate de minimus level should be identified for the public.

# 8. Mitigation Alternatives Analysis

The report states, "However, for on-site measures (#1-3 above), the NOx emissions and reductions are different from year to year. For these strategies, the annual NOx reduction used to calculate cost effectiveness was a reduction in project peak emissions".

## Comment

10-23

In our September 15, 2009 letter, we commented that using project peak emissions is not the best method to determine cost effectiveness for a mitigation measure. A more comprehensive approach would be to use the total project costs and the tons of pollutant reduced. Your response to this comment states, "The metric chosen for comparison of cost was based on reduction of peak annual emissions. This metric provided a value comparative to the market value of emission reduction credits. Total emission reduction would not be comparable to emission reduction credits." Please explain why the USACE is using a metric that is only comparative to the market value of emission reduction credits. In a previous document prepared by the USACE for this Project,

Preliminary Emission Reduction Strategy Report (July 2003), it states that "the best metric to evaluate comparative technologies is to calculate and compare the cost per ton of pollutant avoided. This is an effective means of not only comparing on-site mitigation reduction technologies, but also comparing off-site emission reduction opportunities and emission credits to each other to ascertain the most cost effective solution to addressing emission impacts." Please explain why this metric is no longer considered to be effective. The USACE (New York District) used a similar metric to determine cost effectiveness for the New York/ New Jersey Harbor Deepening project.

9. The report states, "Based on the analysis conducted and the evaluation of potential mitigation strategies, the purchasing of perpetual multi-year emission reduction credits is the preferred plan."

#### Comment

The Clean Air Act requires the USACE, to demonstrate that its action will not cause, contribute to, or increase the frequency or severity of any violation of any air standard, and further that it will not "delay timely attainment of any standard or any required interim emission reduction or other milestones in any area." 42 U.S.C. §7506(c)(1)(B).

The USACE mitigation plan relies entirely on the use of Emission Reduction Credits (ERCs). These credits were presumably generated in the past by stationary sources which shut down their emission sources or took some other action to permanently reduce their emissions (when the ozone air quality failed to meet the 1997 8-hour NAAQS (85 ppb) let alone the 2008 8-hour Ozone NAAQS (75 ppb)). The Clean Air Act established the use of ERCs as a mechanism to allow new or modified major stationary sources to locate in a nonattainment area. The Clean Air Act, however, requires these new or modified sources to install pollution control equipment that achieves the lowest available emission rate (LAER) possible. Thus these new emission sources would have the best controls to minimize emissions, in addition to emission offsets from other sources.

The USACE mitigation plan provides no real mitigation. Under the plan, air pollution sources will remain uncontrolled and an increase in actual emissions will occur. This increase in emissions will contribute to continue to delay the area from attaining the health-based NAAQS, in violation of the Clean Air Act.

#### 10. General Conformity Strategy

The report states, "As such, emission reduction credits (ERCs) will be purchased from within the non-attainment areas."

#### Comment

See comment 9 above.

10-25

11. The report states, "In 2004, all ten of the counties affected by the project were in either severe or moderate nonattainment for ozone (precursors are VOCs and NOx). Two of the counties were in designated maintenance areas for CO. by 2009, all ten of the counties affected by the project were in moderate nonattainment for ozone and ten were in attainment for CO."

#### Comment

See comment 1 above.

10-26

12. The report states, "according to the latest literature, hopper dredge engines are most similar to medium speed ocean-going vessel auxiliary engines and cutter suction and booster pump engines are generally older locomotive style engines."

#### Comment

Please cite source for the "latest literature".

10-27

#### 13. 1.1 Background

The report states, "The authorized Delaware River Main Channel Deepening Project (project) provides for modifying the existing Delaware River Federal Navigation Channel from 40 feet to 45 feet mean low water (MLW) with an allowable overdepth of one foot.

#### Comment

See comment 2 above.

10-28

14. The report states, "The project's navigation benefits from the channel deepening are based upon transportation cost savings.... Therefore, there is no induced tonnage as a result of the deepening project."

#### Comment

Please see comment number 3 above.

15. The report states, "the dredged material disposal plan for the riverine portion of the project will only utilize the existing federal sites, which include: National Park, Oldmans, Pedricktown North, Pedricktown South, Penns Neck, Killcohook, Reedy Point South, and Artificial Island. The Fort Mifflin site in Philadelphia will also be used for disposal of rock removed in the vicinity of Marcus Hook, Pennsylvania."

#### Comment

See comment 4 above.

10-30

16. The report states, "Indirect emissions include those that may occur later in time or at a distance from the Federal action. In addition, the conformity rule limits the scope of indirect emissions to those that can be quantified and are reasonable foreseeable by the Federal agency and those which the Federal agency can practicably control through its continuing program responsibility."

## Comment

10-31

The definition for indirect emissions in the Federal General Conformity regulation (40 CFR 93.152) "means those emissions of a criteria pollutant or its precursors that: 1) Are caused by the Federal action, but may occur later in time and/or may be further removed in distance from the action itself but are still reasonably foreseeable; and 2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency. The definition for "caused by" in the Federal General Conformity regulation (40 CFR 93.153) is "as used in the terms "direct emissions" and "indirect emissions" means emissions that would not other wise occur in the absence of the Federal action." Your comment above fails to include "caused by" as indicated in the definition for "indirect emissions". Please revise the above statement to state that "indirect emissions are "caused by" the Federal action..." Please include the indirect emissions from the transportation of the dredged material to their final placement in Pennsylvania in the emissions estimates for this Project.

## 17. 1.6 Local Setting

The report states, "In addition to the channel deepening, some berths at various terminals and oil refineries along the Delaware River will also be deepened by the facility owners."

#### Comment

10-32

Has the Corps recently contacted other terminals/oil refineries along the Delaware River to determine if the facility owner would want to have their berths deepened? If so, please provide information concerning the contacts that were made.

18. The report states, "This is a four state (PA-NJ-MD-DE), 18 county non-attainment area currently in moderate non-attainment for the 8-hour ozone standard. In 2004 this area was in severe non-attainment of the 8-hour ozone standard.

Comment

See comment 1 above.

10-33

19. The report states, "The ozone problem has abated somewhat in the intervening years."

#### Comment

In response to this comment in our September 15, 2009 letter. Your response to our comment states: "Comment noted; however, the Report information remains correct. Nonattainment status in this area has improved since the 2004 report." Although there have been improvement in air quality in the nonattainment area, the United States. Environmental Protection Agency (USEPA) announced on September 16, 2009, that it would reconsider the 2008 national ambient air quality standard (NAAQS) for ground-level ozone. It is expected that the USEPA will propose to revise the 8-hour ozone NAAQS next week because it is not sufficiently protective of the public. Please provide this information in your report.

10-34

## 20. 2.1 Construction Cost Estimates

The report indicates that, "It was assumed that there are no changes to the berth deepening scope from the information provided in the 2004 study."

#### Comment

Why was it assumed by the USACE that the oil refineries and port terminals would not want the scope of the berth deepenings to change? Changes to the scope of the berth deepenings could lead to potential indirect emissions that should be considered as they would not occur without the Project. 40 CFR § 93.153 (b) requires a conformity determination for the emissions (direct and indirect). 40 CFR 93.158(a)(2) requires the total of direct an indirect emissions from the action are fully offset...so there is not net increase in emissions of that pollutant.

## 21. 3. General Conformity Results

The report states, "Because the entire area is in attainment of the PM10 and CO standards, General Conformity does not apply to those pollutants and there is no need to compare them to a de minimis threshold."

## Comment

See comment 6 above.

10-36

22. The report states, "The de minimis levels for ozone precursors, NOx and VOCs, are 100 and 50 tons per year, respectively."

#### Comment

See comment 7 above.

10-37

## 23. <u>5.2 Selection of Reduction Strategies</u>

The report states, "However, for on-site strategies, the annual reduction used to calculate cost effectiveness was the reduction in project peak annual emissions."

### Comment

Please see comment 8 above.

10-38

## 24. 5.3 Unmitigated NOx Emissions

The report indicates states that, "A breakdown for each of the seven planned deepening contracts broken out by dredge type is shown in figure 5-1 below. The emissions included in the chart below are the total marine emissions for the deepening project (2,820 tons and do not include mobilization, landside emissions or berth deepenings."

# Comment

Please provide a breakdown of the unmitigated marine NOx emissions in figure 5-1 by year not by contract, as the contracts may include more than one year. The Federal General Conformity regulation (93.153 (b)(1) requires a conformity

determination for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant oor precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) or

(b)(2). (B)(1) and (B)(2) are in tons per year. Table ES-1 is in tons per year. Table 5-1 is by contract.

# 25. 6.3 Strategy 2 – Install SCR on Dredges, Boosters, and Towing Tugs

The report states,"The NOx emission factors for equipment with SCR were reduced from the unmitigated level by 92%. "

### Comment

Please cite a source for this statement.

10-40

# 26. 6.4 Strategy 3 – Repower Dredges, Boosters, and Towing Tugs

The report states," "... an entire repowering with Tier 2 engines has not been done in the industry yet. However, there is no reason to expect major difficulty implementing this alternative as the engine technology is well proven."

#### Comment

Since you indicate that an entire repower with Tier 2 engines has never been performed, please provide the basis for the statement that "...there is no reason to expect major difficulty..." or revise sentence to remove this characterization.

10-41

#### 27. 7.3 Strategy 4a – SCR Installation (no repower)

The report states, "It was assumed that the NOx reductions achieved by the SCRs would be 92%, which allows for time spent in warm-up and light load."

#### Comment

Please cite the basis and source for the above statement.

10-42

## 28. 7.15 Strategy 9- Purchase Emission Credits

The report states, "ERCs from existing stationary source trading markets could be used as a means of offset project emissions and demonstrate conformity. A precedent is the New York and New Jersey Harbor Deepening Project which used a conditional statement of

Harbor Deepening Project which used a conditional statement of conformity along with a menu of mitigation measures including emission offsets for early phases of the work."

Comment

10-43

In the New York / New Jersey Harbor Deepening Project, actual mitigation measures were and are being implemented to address the increase in emissions from the dredging activity. ERCs were used on a limited basis, for the initial start up and used as a contingency should any of the emission reductions from mitigation measures fall behind schedule.

ERCs were utilized before the start of the project to avoid blasting twice in Kill Van Kull area #5, and to avoid unnecessary impacts on the surrounding residents. Mitigation of the emissions from the Harbor Deepening Project involves many different measures each with their own challenges. There were times when the emission reduction measures were delayed, and to avoid stopping the project ERCs were utilized to keep the project on schedule. The success of the Harbor Deepening Project demonstrates an appropriate and successful use of ERCs in a mitigation plan.

29. The report states, "The PANYNJ also owned 200 tons of NOx reduction credits from a facility on Staten Island. At the time they published their plan (December 2003) those credits were being considered for use in the General Conformity strategy for the NYNJ Harbor Deepening Project.

#### Comment

10-44

The Harbor Air Management Plan for the New York / New Jersey Project Harbor Deepening Project states, "A tiered approach was developed in coordination with the RAT to help prioritize and categorize the emission reduction strategies. Six tiers were established numbered zero through five, each representing a different mitigation strategy." Emission reduction credits is listed as a Tier IV strategy.

30. The report states, "The project sponsors and the affected states' regulators as well as the EPA have discussed the use of ERCs as a means for demonstrating General Conformity."

<sup>&</sup>lt;sup>2</sup> http://www.nan.usace.army.mil/harbor/pdf/air.pdf page 23.

<sup>&</sup>lt;sup>3</sup> http://www.nan.usace.army.mil/harbor/pdf/air.pdf page 30.

Comment

10-45

The General Conformity Analysis and Mitigation Report (August 7, 2009) stated that, "M&N understands the use of emissions credits as a conformity strategy has been discussed with the EPA and relevant state agencies." However, at a meeting held on July 15, 2009, the NJDEP Division of Air Quality staff informed the USACE that they would need to discuss the use of ERCs for this Project with the Department's Bureau of Air Quality Management. Subsequently, on October 8, 2009, a representative from the Philadelphia Regional Port Authority (PRPA) contacted us to coordinate a meeting to discuss the conformity issues but a meeting date was never arranged. However, on October 6, 2009, a meeting was held with representatives from the USACE, PRPA, and the USEPA Region 3. At this meeting the use of ERCs was discussed, as indicated by the November 5, 2009 letter which indicates that "the USACE indicated ... it would be feasible to demonstrate general conformity by means of securing emission reduction credits or offsets in lieu of mitigation measures specified in the August 7, 2009 draft plan." Unfortunately, at the December 15, 2009 meeting, on the advice of counsel the USACE listened to NJDEP's concerns, but did not actively discuss the concerns or how to resolve them. The NJDEP was hopeful that the conversation and subsequent revisions to the document would enable the State concur with an USACE determination that the project conforms with the New Jersey State Implementation Plan.

# 31. 8.1 Introduction

The report states that "Table 8-1 depicts the construction contracts and the associated NOx emissions that need to be mitigated on an annual basis."

#### Comment

10-46

Table 8-1 appears to only provide the calendar year emissions. The construction contracts do not appear to be included in this table. Please provide the construction contracts or revise the description of Table 8-1.

# 32. 8.2 Development of the Conformity Plan

The report states, "The plan must reduce or compensate for the annual NOx emissions for each calendar year of the project."

#### Comment

10-47

Please define the term "compensate" in the above sentence Section 93.158 (a)(1) of the Federal General Conformity regulation requires that "for ozone and nitrogen dioxide the total of the direct and indirect emissions from the action are fully offset...so that there is not net increase in emissions of that pollutant." Please revise the above sentence to state that "the emissions from the action must be fully offset" not just reduced or compensated.

33. The report states, "Category 1- Reduce the emissions below the de minimis level by physically altering equipment ..."

## Comment

Please revise language to indicate that the "emissions from the action must be fully offset." Section 93.158 (a)(1) of the Federal General Conformity regulation requires that "for ozone and nitrogen dioxide the total of the direct and indirect emissions from the action are fully offset...so that there is not net increase in emissions of that pollutant." Thus, once the emissions from an action exceed the de minimis level they must be offset to zero, not to the de minimis level.

10-48

34. The report states, "The SCR technology would reduce NOx emissions below the annual peak and, if the equipment is modified could be utilized for the project's construction."

#### Comment

10-49

Please revise the above sentence to indicate that the "emissions from the action must be fully offset" not just reduced below the annual peak. Section 93.158 (a)(1) of the Federal General Conformity regulation requires that "for ozone and nitrogen dioxide the total of the direct and indirect emissions from the action are fully offset…so that there is no net increase in emissions of that pollutant."

35. The report states, "This involves upfront purchasing of perpetual and multi-year emission reduction credits within the nonattainment area that encompasses the project area to offset the annual peak of 607 tons."

# Comment

See comment 9 above.

## 36. 8.3 Plan Evaluation

The report states, "1. Completeness – Does the plan compensate for all pollutants that exceed the de minimis levels? "

#### Comment

10-51

Please define the term "compensate" in the above sentence.

Section 93.158 (a)(1) of the Federal General Conformity regulation requires that "for ozone and nitrogen dioxide the total of the direct and indirect emissions from the action are fully offset...so that there is no net increase in emissions of that pollutant."

39. The report states, "Plan 2 – Purchasing Emissions Reduction Credits This plan meets the criteria of completeness, cost-effectiveness, reliability, and flexibility. Furthermore, once the emission reduction credits are purchased they can be applied for the balance of the project. Therefore, Plan 2 is the preferred plan. This plan is less costly and more efficient and demonstrates conformity."

#### Comment

Please see comment 9 above.

10-52

## 37.. <u>8.4 Conclusion</u>

The report states, "Based on the analyses conducted and the evaluation of potential plans, the upfront purchasing of perpetual multi-year reduction credits has been selected. The plan is the least costly and most efficient way to attain conformity for the project."

#### Comment

See comment 9 above.

10-53

### 38. 8.5 Implementation of the Recommended Plan

"Presently, there are roughly 2,000 tons of NOx credits available on the open market within the 10-county nonattainment area across the three states in which the project is located. ... Credits will be obtained from the three states on an equitable basis to the maximum extent practicable; the actual allocation of credits will be based on availability and cost."

# Comment

See comment 9 above.

# 39. Appendix B. Berth Deepening Emissions

The spreadsheet does not include emission estimates for the equipment used at the disposal sites. The emissions from the equipment at the disposal site must be addressed in the report. This comment was made in our September 15, 2009 letter. Your response to this comment states, "The annual construction emissions summary for the project which includes emissions estimated for equipment used at the disposal sites is provided in Table ES-1 of the Report." Table ES-1 provides calendar year emissions. The emissions from the equipment at the disposal sites can not be determined from Table ES-1. Please provide an annual breakdown of the emissions from the equipment at the disposal sites.



# STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

### DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT SECTION

156 S. STATE STREET DOVER, DELAWARE 19901

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December 18, 2009

Mr. Minas M. Arabatzis, Chief Planning Division Department of the Army Philadelphia District, Corps of Engineers Wanamaker Building, 100 Penn Square East Philadelphia, PA 19107-3390

Dear Mr. Arabatzis:

This letter is in response to the Army Corps of Engineers (ACOE) solicitation for comments on their "Clean Air Act Draft Statement of Conformity, Delaware River Main Channel Deepening Project" and "Delaware River Main Channel Deepening Project General Conformity Analysis and Mitigation Report," both dated November 2009. The ACOE has significantly revised these documents from their August 2009 drafts based on comments received and adjustments to the project schedule.

While these November 2009 documents correct several of the issues identified in the August 2009 drafts, significant problems still exist. The Delaware Department of Natural Resources and Environmental Control (the Department) does not concur with your November 2009 conformity analysis and Draft Statement of Conformity because it does not comport with the requirements of 7 DE Admin. Code 1135, "Conformity of General Federal Actions to the State Implementation Plans" in the following areas:

1. The report fails to satisfy the requirements of 7 DE Admin Code 1135, Section 10.0 and 40 CFR 93.160 "Mitigation of Air Quality Impacts." The analysis does not provide required information on the acquisition and use of Emission Offset Credits (ERCs). The ACOE indicates that conformity will be demonstrated by fully offsetting all NOx emissions, which will be accomplished by purchasing 607 perpetual/multi-year ERCs. The ACOE provides some specific information regarding the ERCs and the implementation of this plan, such as a commitment that the ERCs will be acquired from within the non-attainment area and prior to the commencement of construction.

However, no commitment that the ERCs to be purchased will be surplus and reflected in the SIPs has been made, nor has detail on the process to be followed to transfer or surrender these ERCs to the States been provided. 7 DE Admin Code 1135 requires, "the measures intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation." The information provided is not sufficient for the Department to determine whether the specific ERCs purchased are surplus to the States' ozone and fine particulate matter State Implementation Plans (SIPs).

In addition, the ACOE indicates that with respect to fine particulate matter they conservatively treated the project as if the entire area were in PM2.5 non-attainment. This is not a conservative assumption regarding ERCs. A conservative approach would be to ensure all ERCs are obtained from the portion

11-01

11-02

Mr. Minas M. Arabatzis December 18, 2009 Page | 2

of the area that is actually designated non-attainment for PM2.5, rather than obtaining ERCs from the broader ozone non-attainment area as indicated.

2. The report fails to satisfy the requirements of 7 DE Admin Code 1135, Section 8 and 40CFR 93.159. The analysis does not adequately consider indirect emissions. The ACOE analysis indicates that the economic basis for the project is to increase the efficiency of the fleet currently calling on area ports, and merely indicates that the future volume of cargo passing through the Delaware River port system is determined by macroeconomic factors that are not affected by the channel depth and, therefore, there is no induced tonnage as a result of the deepening project. This is not an adequate consideration of indirect emissions.

The ACOE should estimate the future emissions associated with the more economically active ports including increased ship traffic, increased employment and associated energy use and vehicular traffic as well as the maintenance dredging required to maintain the additional five feet of main channel depth. The ACOE must include in its analysis the impacts of those future emissions of criteria pollutants or their precursors that will result due to the project, but which may occur later in time or may be farther removed in distance from the project itself. The Department believes these results are foreseeable and their future emissions will potentially impact the State's ability to meet its attainment demonstration for ozone and PM<sub>2.5</sub> and therefore should be calculated and reported by the ACOE.

The ACOE correctly notes that the market for NOx emissions trading in the northeast is generally driven by New Source Review (NSR) regulations, and that "the obvious purpose for requiring offsetting emissions decreases is to allow an area to move towards attainment of the NAAQS while still allowing some industrial growth." Although there is no specific prohibition for using ERC's as proposed by the ACOE, the failure to provide any real mitigation measures has lost the opportunity to assist the region in attaining the ozone and fine particulate standards. As an agency of the federal government, it is difficult to understand why the ACOE has opted to choose offsets that do not move the region any further in the right direction. We encourage the ACOE to reconsider their approach to incorporate projects that were identified in the report as capable of providing cost-effective, real and permanent air quality offsets such as retrofitting the barges, etc.

Thank you for this opportunity to comment, and I look forward to receiving a revised analysis which addresses our comments prior to your finalization of your statement of conformity. Please contact me or my staff member, Phil Wheeler at 302/739-9402, if you need further clarification of our position.

Sincerely,

Ali Mirzakhalili, P.E.

Administrator

ce: Judith Katz, EPA, Region III
David Small, Deputy Secretary, DNREC
Marjorie Crofts, Acting Director, DAWM
Sarah Cooksey
Robert Baldwin

Joyce Epps, PADEP Chris Salmi, NJDEP 11-04

# **Attachment 4**

**Estimated NOx Emissions – November 2009** 

