PROFESSIONAL SERVICES DESCRIPTION FOR
THE POSITION OF:

Paulsboro Marine Terminal
General Conformity Air Quality Analysis

SUBMISSION DEADLINE:
August 5, 2010 at 1:00 P.M.

FAIR AND OPEN PUBLIC SOLICITATION PROCESS
FOR PROFESSIONAL SERVICES

FOR

GLOUCESTER COUNTY IMPROVEMENT AUTHORITY
109 BUDD BOULEVARD
WOODBURY, NEW JERSEY 08096
Through this Request for Proposals, the Gloucester County Improvement Authority (GCIA), on behalf of the South Jersey Port Corporation (SJPC), seeks to engage a Specialty Consultant for the term from the date the successful contractor is issued a notice to proceed letter until completion of the work on or before December 31, 2010. This contract will be awarded through a fair and open process pursuant to N.J.S.A.. 19:44A-20.4 et seq.

The Specialty Consultant’s Standard Requirements of Technical Proposal (items A thru M) and Cost Proposal must be received and will be publicly opened and read aloud on August 5, 2010 at 1:00 P.M. at the GCIA administrative office located at 109 Budd Boulevard, Woodbury, New Jersey. Each specialty consultant is advised that compliance with the “Fair and Open Standardized Submission Requirements and Selection Criteria” is required. Incomplete proposals will be rejected from further consideration. The “Fair and Open Standardized Submission Requirements and Selection Criteria” must be obtained by contacting Danae Ciociola of the GCIA at 856-848-4002.

The following is a description of the professional services needed including a description of the tasks involved.

**Scope of Services**

The Gloucester County Improvement Authority (GCIA) is undertaking the development of the Paulsboro Marine Terminal on behalf of the South Jersey Port Corporation (SJPC). The Paulsboro Marine Terminal is located northeast of 303 Mantua Avenue, in the Borough of Paulsboro, County of Gloucester, New Jersey. From a regional perspective, the Paulsboro Marine Terminal & Access Road and Bridge project is located across the Delaware River from the Philadelphia International Airport.

As part of the project’s environmental compliance process, the NJDEP Bureau of Air Quality Planning (BAQP) has requested that the Paulsboro Marine Terminal & Access Road and Bridge project conduct a General Conformity Air Quality Analysis. The general conformity analysis shall document air quality emissions during construction of the marine terminal & access road and bridge and during terminal operations. The Clean Air Act Amendments (CAAA) General Conformity Rule (GCR) applies to non-transportation federal actions. As required by the New Jersey Department of Environmental Protection (NJDEP), this project requires a permit from the US Army Corp of Engineers (ACOE), which is a federal agency under the GCR requirements. The types of operations and construction activities included in the General Conformity analysis include:

- Facility operations;
- Roadway traffic along bridge and access road to/from future marine terminal;
- Bridge construction;
- Access road construction;
- Wetlands fill and mitigation;
- Harbor dredging; and,
- Wharf construction.

Therefore, the general conformity rule applies to the ACOE’s federal action, which is limited to permitting for these types of activities. The quantified emissions shall be compared with the federal de minimis limits for the non-attainment pollutants including NOx and VOC (the
precursors to ozone), CO, PM2.5. If exceedances of the de minimis limits are predicted, candidate air quality control measures shall be investigated and recommendations forwarded for the client to consider. No formal conformity determination through dispersion modeling analysis is required.

**TASK 1: Data Collection and Coordination**

- Within 5 work days after a Notice-To-Proceed (NTP), the Specialty Consultant will coordinate with the Project Team on the proposed scope, approach, schedule and data needs
- Contact the New Jersey Department of Environmental Protection Bureau of Air Quality Planning (BAQP) to confirm the scope, approach and schedule for the project
- Work with the GCIA, SJPC and Final Design Consultant (CH2MHILL) to obtain the required input data that identifies specific facility information, which is necessary to complete the emissions modeling analysis
- Coordinate the exchange and type of data required to obtain and complete the proposed air quality analysis

**TASK 2: Existing Conditions**

- Contact the US Environmental Protection Agency (EPA) and the NJDEP to collect monitored data on the criteria air pollutants
- Contact the NJDEP and the Delaware Valley Regional Planning Commission (DVRPC) to solicit modeling inputs for the mobile source emission factor program (MOBILE6.2)
- Although Gloucester County as part of the Philadelphia metropolitan region is currently in non-attainment for several criteria pollutants including ozone and PM2.5, verify the current regional attainment status

**TASK 3: Emissions Analysis – Construction**

- Prepare an emissions inventory of the proposed construction scenarios for each year of construction (i.e. 2010 thru 2014)
- Develop truck and motor vehicle emission factors for carbon monoxide (CO), oxides of nitrogen (NOx), Volatile organic compounds (VOC), and particulate matter (PM10 and PM2.5) using EPA’s MOBILE6.2 program
- Develop emission factors for non-road vehicles and equipment (such as excavators, tugboats, and bulldozers) using EPA’s NONROAD2008 program

- Determine cumulative pollutant emissions on an annual basis based on the proposed schedule of construction activities

- Based upon Specialty Consultants previous maritime and transportation related project experience, and supported by the RS Mean Handbook and input received from the SJPC and the Final Design Consultant (such as schedule activities, sequence and duration), identify and develop the necessary construction activity data including type of construction equipment, duration of use, engine size and fuel type

- Calculate maximum predicted emissions on an annual basis and compare with the federal de minimis level for the region.

**TASK 4A: Emissions Analysis – Operations (Wind Turbine Manufacturing & Assembly Facility with adjacent Bulk & Breakbulk Marine Terminal)**

- Prepare an emissions inventory of all operations associated with future manufacturing, assembly and marine terminal uses in the Initial Year of Operations (i.e. Yr 1) and the Maximum Capacity or Design Year (i.e. Yr 30)

- Develop truck and motor vehicle emission factors for carbon monoxide (CO), oxides of nitrogen (NOx), Volatile organic compounds (VOC), and particulate matter (PM10 and PM2.5) using EPA’s MOBILE6.2 software program for the Initial Year of Operations (i.e. Yr 1) and the Maximum Capacity or Design Year (i.e. Yr 30)

- Develop emission factors for non-road vehicles and equipment (such as cranes, generator and boilers) using EPA’s NONROAD2008 software program for the same analysis years as for the on-road vehicles

- Determine cumulative pollutant emissions on an annual basis based on operational inputs for each analysis year

- Based upon Specialty Consultants previous maritime related project experience, and supported by input received from the SJPC and the Final Design Consultant, identify operations data including type of equipment, duration of use, engine size and fuel type

- Calculate maximum predicted emissions on an annual basis and compare with the federal de minimis level for the region (estimated at 25 tons per year for oxides of nitrogen and volatile organic compounds)

- Verify the federal de minimis limits for the region based on the current attainment status for each of the criteria pollutants
TASK 4B: Emissions Analysis – Operations (Bulk & Breakbulk Marine Terminal)

- Prepare an emissions inventory of all operations associated with future marine terminal uses in the Initial Year of Operations (i.e. Yr 1) and the Maximum Capacity or Design Year (i.e. Yr 30)

- Develop truck and motor vehicle emission factors for carbon monoxide (CO), oxides of nitrogen (NOx), Volatile organic compounds (VOC), and particulate matter (PM10 and PM2.5) using EPA’s MOBILE6.2 software program for the Initial Year of Operations (i.e. Yr 1) and the Maximum Capacity or Design Year (i.e. Yr 30)

- Develop emission factors for non-road vehicles and equipment (such as cranes, generator and boilers) using EPA’s NONROAD2008 software program for the same analysis years as for the on-road vehicles

- Determine cumulative pollutant emissions on an annual basis based on operational inputs for each analysis year

- Based upon Specialty Consultants previous maritime related project experience, and supported by input received from the SJPC and the Final Design Consultant, identify operations data including type of equipment, duration of use, engine size and fuel type

- Calculate maximum predicted emissions on an annual basis and compare with the federal de minimis level for the region (estimated at 25 tons per year for oxides of nitrogen and volatile organic compounds)

- Verify the federal de minimis limits for the region based on the current attainment status for each of the criteria pollutants

TASK 5: General Conformity Applicability Analysis

- Based on the results compiled in Tasks 3, 4A and 4B, the Specialty Consultant shall conduct a general conformity applicability analysis to determine compliance with the provisions of the CAAA and the National Environmental Policy Act (NEPA)

- If impacts are expected, the Specialty Consultant shall describe potential mitigation measures that would be necessary to reduce the onset or severity of the construction or operational impacts

TASK 6: Air Quality Control Measures

- If impacts are predicted, the Specialty Consultant shall identify, evaluate and recommend potential air quality control measures for SJPC to consider
The types of control measures could include, for example, implementing individual equipment controls (such as installing engine retrofit technologies that minimize emissions of particulates), modified equipment operating cycles, exploring a change in equipment types, or exploring the possibility of emission offsets.

**TASK 7: Reporting**

- The results of the air quality general conformity analysis, including the existing monitored data, the modeling analyses and the results of the mitigation assessment, shall be described in a draft ‘General Conformity Air Quality Analysis Report’. The Specialty Consultant shall submit six (6) hard copy reports and an electronic (PDF) version of the draft report.

- Following GCIA, SJPC and agency review, incorporate agency comments related to the air quality draft report and prepare a revised Final General Conformity Air Quality Analysis Report that incorporates all agency and team comments, as appropriate. Six (6) hard copy and one (1) pdf version of the Final Report are required.

**TASK 8: Meetings**

- Specialty Consultant will plan on attending 5 team meetings to coordinate the necessary technical data, discuss the proposed modeling approach, present the results of the air quality analysis to the team and to present the air quality results, control measures and mitigation assessment to the NJDEP in powerpoint fashion.

**SCHEDULE**

Upon receipt of a Notice-To-Proceed, the Specialty Consultant shall commence the work within a period of 5 business days. A notice to proceed is targeted for mid August 2010 and the draft report is to be submitted within 6 weeks of the NTP. The Specialty Consultant is to include a bar chart schedule that depicts the time frame required to complete the scope of services indicated above.

**INSURANCE**

Consultant is to include a copy of proposed insurance coverage with the technical proposal documents. In addition to the Gloucester County Improvement Authority, the South Jersey Port Corporation is to be included as additional insured.

**COST PROPOSAL FORMAT**

The Authority requires that the proposer provide a lump sum price for the scope of services. The lump sum price shall include all labor and materials to complete the scope of services and shall be provided in number and written format.