

CAMDEN WATERFRONT SOUTH AIR TOXICS PILOT PROJECT

Frequently Asked Questions

Which sources will be included in the pilot project?

The pilot project will focus on industrial and manufacturing sources of air pollution, plus particulate emissions from diesel trucks. It will not include emissions from residential and commercial heating and from residential use of commercial products. Most of the included sources are located within the boundaries of the Waterfront South neighborhood, but some large facilities or sources of special concern which are located near this census tract will also be included. Over 50 facilities have been identified for possible inclusion in the pilot.

Which pollutants will be included?

The sources included in this pilot project emit a wide variety of pollutants. In this project we will focus on emissions of air toxics and particulate matter. Some of the air toxics identified so far are ammonia, cadmium, chromium and lead.

What are we doing with the USEPA money?

The USEPA awarded the NJDEP a grant for \$100,000 to support the activities necessary to carry out the pilot project. The draft budget includes the following elements.

1. Grant to Camden County Health Department (via CEHA) to assist in collecting emissions information and to conduct additional compliance inspections \$20,000
2. Monitoring and analysis of air concentrations for some air toxics and particulate matter (*tentative*) \$40,000
3. Funds to support arrangements for local meetings, travel and miscellaneous expenses \$5,000
4. Other Project Support (*yet to be determined*) \$35,000

What is the timeframe for the pilot project?

The Original Project Schedule is shown below with current status indicated.

August 2002	Form DEP Workgroup (<i>done</i>)
September 2002	Data Collection begins (<i>initiated</i>)
January 2003	Initial Community Group Meetings (<i>Jan. 28, 2003</i>)
April 2003	Data Analysis/Risk Assessment (<i>done</i>)
June 2003	Present Risk Results to Community Group (<i>September 30, 2003</i>)
September 2003	Brainstorming Risk Reduction Strategies (<i>began October 2003</i>)
November 2003	Draft Project Report (<i>underway</i>)
January 2004	Finalize Project Report (<i>estimated for April 2004</i>)

What is risk assessment?

Risk assessment is the process used to estimate the increased risk of health problems in people who are exposed to different amounts of toxic substances. A risk assessment for a specific toxic substance combines: a) information from studies on the health effects of various animal and human exposures to the pollutant; and b) estimates of the level of people's exposures to the pollutant. While the estimates provided by these risk assessments are far from perfect, they do help scientists evaluate the risks associated with emissions of toxic substances. Using risk estimates and other factors, managers and other responsible parties can determine what actions to take to reduce people's exposures to toxic substances and, thereby, reduce the risk of experiencing health problems.

How does the dispersion model work?

Dispersion modeling is a mathematical calculation that predicts how far, how fast, and in what direction certain gases and/or particulate matter will move into the air from any given location. The model predictions are then expressed in terms of concentration. Models such as the ISC (Industrial Source Complex) model (which will be used in the pilot project) can take into account the likely meteorological conditions in the area, using five years of hour by hour weather data (wind speed, wind direction, etc.).

Where does the emissions information come from?

Emissions information can come a variety of sources. We will begin by using information in NJDEP Permit files (either electronic or hard copy) and the USEPA Toxic Release Inventory. This will be supplemented with information collected during site visits and by using emission factors developed by USEPA for the type of sources found in the Waterfront South neighborhood.

How can the emissions be reduced?

A wide-variety of risk reduction strategies may be available, depending on the pollutants/sources that are identified. We plan to consider strategies that are within the regulatory authority of NJDEP and those where other partners will be needed. Some possibilities are:

1. Diesel retrofit programs
2. Anti-idling programs
3. Add-on controls at industrial sources
4. Pollution prevention methods at industrial and commercial sources
5. Stationary diesel engine controls

What about transport of emissions from Philadelphia?

Assessment of the impact of Philadelphia Sources on Camden Waterfront South can be partially estimated from the results of the Philadelphia Air Toxics Study which was recently begun. The Philadelphia study is a dispersion modeling analysis being carried out by the Philadelphia office of USEPA. Their focus is on 7 toxic air pollutants. NJDEP has requested that the model include predictions of these 7 pollutants at 6 points in the Camden Waterfront South neighborhood to help estimate the impact of Philadelphia sources on our study area.

What is the role of the Community Advisory Committee?

The pilot project will rely on the Community Advisory Committee to provide unique insight into local issues. The Pilot Project will specifically depend on the Community Advisory Committee to: 1) identify air pollution sources of concern in the community that have not yet been discovered by NJDEP; and 2) brainstorm a list of reduction strategies that could result in reduced exposures to the pollutants flagged as causing the highest exposures. In addition, the Committee may provide assistance in developing air monitoring plans and other aspects of the project and can serve as liaison to the community at large when additional input is required.

What is included in the air monitoring component of the project?

There are currently 2 types of air monitoring included in the Waterfront South Pilot Project: Fine Particulate Sampling and the Bucket Brigade.

Fine Particulate (PM_{2.5})

A monitor that measures Fine Particulate Matter (particles with a diameter less than 2.5 micrometers, also known as PM_{2.5}) has been placed on the roof of the Camden County Utilities Authority building near the corner of Ferry and Jackson Streets. This monitor uses a continuous sampling and analysis which allows the observations to be viewed in real-time. The results are now available on the NJDEP website and can be found in the following way.

To get to the PM_{2.5} data on the web:

1. Type in www.state.nj.us/dep/airmon/
2. Scroll down to the map of New Jersey and click on Camden County (Region 8).
3. Scroll down that page to "Southern Delaware Valley Sites" and click on CCMUA. This will take you to a page of "Current Air Quality Readings"

Bucket Brigade

The Bucket Brigade is a sampling technique that uses a simple 5 gallon plastic bucket to collect an air sample into a plastic bag (made of tedlar) over a short (4-minute) period during odor episodes. These samples will be analyzed for sulfur-containing (odorous substances) and volatile organic compounds (non-odorous, but potentially more hazardous). The Bucket Brigade will begin on January 16, 2004 with a set of baseline

samples. About 11 samples are planned over the next 3-4 months to be taken during odor episodes.

Where can I get more information on Air Toxics?

The Internet is one source of information about air toxics. For example:

Toxic Air Pollutants - www.epa.gov/air/toxicair/index.html

Air Toxics in New Jersey - www.state.nj.us/dep/airmon/airtoxics

NJ Public Interest Research Group Report -
www.njpirg.org/nj.asp?id2=4485&id3=nj&

USEPA Toxic Release Inventory - www.epa.gov/tri

NJDHSS Hazardous Substances Fact Sheets -
www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm

Where can I get other health-related information?

Here are some website addresses for more information on topics such as risk assessment. Other resources will be identified as the pilot project progresses.

Risk Assessment for Toxic Air Pollutants: A Citizen's Guide - available at
www.epa.gov/oar/oaqps/air_risc/3_90_024.html

Air Pollution and Health Risk - available at
www.epa.gov/oar/oaqps/air_risc/3_90_022.html

Evaluating Exposures to Toxic Air Pollutants: A Citizen's Guide - available at
www.epa.gov/oar/oaqps/air_risc/3_90_023.html

Waterfront South Location

NJDEP 1/09/04

- Census tract # 6018
- Boundaries
 - North: Atlantic Avenue
 - South: Newton Creek
 - East: I-676
 - West: Delaware River

