



**ATSDR**  
AGENCY FOR TOXIC SUBSTANCES  
AND DISEASE REGISTRY

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. It was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as the Superfund legislation). ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances.

## *Environmental Health*

# ATSDR's Public Health Activities in Alexandria

## Overview

### Background

The Alexandria Department of Health asked the Agency for Toxic Substances and Disease Registry (ATSDR) to review available environmental air data and determine possible health impacts to people in the community near the Mirant Potomac River Generating Station.

### About ATSDR

ATSDR is an independent public health agency located in Atlanta, GA. Our mission is to provide communities with information they can use to protect their health. ATSDR often assists state and local health departments with environmental public health issues.

ATSDR is an advisory agency. ATSDR personnel conduct public health activities to provide authorities such as the U.S. Environmental Protection Agency (EPA) and health departments with information needed to guide their decision-making.

### ATSDR Services

ATSDR's first priority is to ensure that the Alexandria community has the information it needs regarding air quality in the area.

Through our work, we will

- Estimate how much a certain pollutant is in the air you breathe
- Provide information about ways to decrease your contact with or exposure to a pollutant
- If a problem is found, make appropriate public health recommendations

ATSDR does not have the authority to

- Provide medical care, diagnosis of health problems or treatment
- Move a person from their home if a problem is found
- Make a facility or organization implement our recommendations

## Public Health Activities

---

### Activities to Date

ATSDR reviewed available air modeling and emissions data, and provided our preliminary findings in January 2007. We used data provided by the U.S. Environmental Protection Agency (EPA), the City of Alexandria, the Virginia Department of Environmental Quality and the Mirant Plant.

---

### Preliminary Findings

Based on an initial review, ATSDR could not determine whether air pollutants near the Mirant Plant could harm people's health. For a complete evaluation, ATSDR needs additional air monitoring data that reflect concentrations of pollutants in areas where people live and work.

For more details about ATSDR's preliminary findings in January 2007 go to [http://alexandriava.gov/pdfs/letter\\_AHD.pdf](http://alexandriava.gov/pdfs/letter_AHD.pdf) or <http://www.atsdr.cdc.gov/sites/mirant/index.html>

---

### Next step: Additional Air Monitoring

Existing air monitoring data may not fully reflect the amount of pollutants people are exposed to in areas where they live and work. To give the community the information it needs, ATSDR took the following action:

ATSDR set up short-term air monitoring stations in areas people live and work. The air monitors were set up in the Alexandria community near the Mirant Plant. The monitoring took place for six weeks in June-July 2007. Our community-based air monitoring effort can help us better assess if public health could be affected.

---

### Benefits of Air Monitoring

Community-based air monitoring may generate data that can answer important public health questions. For example:

- Are the pollutants present at levels that might cause health effects in sensitive people?
  - If so, do these levels occur several times a day or only once per week?
  - Does it happen during the day or in the middle of the night?
  - Does it occur in residential areas or other areas?
- 

### Air Monitoring Details

#### **Pollutants Monitored**

ATSDR monitored for pollutants that are most likely to be emitted from the Mirant Plant and that are most likely to pose health concerns to the community. These are

- Sulfur dioxide (SO<sub>2</sub>)
- Select metals
- Components of particles in the air:
  - o Suspended particles in the air (PM<sub>10</sub> and PM<sub>2.5</sub>)
  - o Total Suspended Particles (TSP)

#### **Monitoring Locations**

ATSDR placed air monitors within a one-mile radius of the Mirant facility in areas where people live and work. These monitors mainly collected air samples in people's breathing zones. This will help ATSDR personnel assess the quality of the air people breathe during their daily activities.

---

## Air Monitoring Details (cont.)

### Monitoring Time Frame

Monitoring activities began in June 2007 and continued for 6 weeks. The summer time frame was selected because people spend more time outside. This allowed ATSDR to measure air levels when the Mirant plant is expected to operate at or near full generating capacity.

### Weather Information

ATSDR also collected meteorological data to help assess air quality.

---

## Scientific Limitations

It is important to note that all scientific investigations have limitations.

ATSDR's air monitoring program does have three main limitations:

1. Although many pollutants are released in the air, only a few key pollutants were monitored. ATSDR monitored for pollutants that are most likely to be emitted from the Mirant Plant and that are most likely to pose health concerns to the community.
  2. The monitoring will provide a snapshot of exposure during a short time period (6 weeks). It may not fully represent exposures to the community. However, the time frame was selected because it is expected to be during a peak exposure time - the summer.
  3. Air monitoring results are highly dependent on weather conditions.
- 

## Timeline for Results

Results will be available in 2008. ATSDR will share results at a public forum in Alexandria. A copy of the report will be available online.

The review process is long because ATSDR wants to provide a complete and thorough evaluation. In our review, we will evaluate the following information:

- Data from our short-term, community based air monitoring effort
  - Data from long-term air monitoring collected by other parties. A complete summary report of this long-term monitoring may be available in early 2008.
- 

## If You Have Concerns

### Stay Informed

We plan to address the public health impact of air quality in the area after evaluating data from our community based air monitoring effort and reviewing additional environmental data provided by other parties.

In the meantime, we will provide updates about our activities and general information about air quality and health.

- See the ATSDR fact sheet "Air Quality and Health in Alexandria" or go to <http://www.atsdr.cdc.gov/sites/mirant/index.html> to access this fact sheet.
  - To find out about air quality in Alexandria in real time go to <http://alexandriava.gov/link/redirect.pxe?www.deq.virginia.gov/airquality/>
-

## Reporting Health Concerns

---

We are interested in whether you feel your health is affected by exposure to air emissions from Mirant. If you'd like to share your concerns, you can go to <http://www.alexhealth.org/miranthealthconcerns.html>

We can use your information only to inform our public health work in a general way. The information you provide cannot be used to determine the cause of your health problem or to implicate any one environmental source.

If you are sick, you should seek medical care from your health care provider.

---

## For More Information

- Online:  
<http://www.atsdr.cdc.gov/sites/mirant/index.html>  
or  
<http://www.atsdr.cdc.gov>
  - Contact Lora Werner, ATSDR regional representative:  
Email: [lkw9@cdc.gov](mailto:lkw9@cdc.gov)  
Phone: 215-814-3141
-