
**Focused Public Health Assessment
Soil Pathway Evaluation
for Isla de Vieques, Puerto Rico
October 25, 2001**

This fact sheet contains highlights of the Focused Public Health Assessment, Soil Pathway Evaluation, issued October 25, 2001, for public comment, which evaluates the surface soils of Vieques and looks at the possible impact on public health of exposure to those soils.

Background

In 1999, a Vieques resident asked the Agency for Toxic Substances and Disease Registry (ATSDR) to find out if the U.S. Navy's training operations on the island might be exposing residents to unhealthy levels of environmental contaminants. As part of the Navy training, bombing was conducted on land owned by the Navy at one end of the island, the Live Impact Area (LIA).

Hazardous substances, however, only affect human health if people come into contact with them, either at the source of the hazardous substances or where the substances are carried to people by means of a pathway, such as air, groundwater, soil, or plants and animals.

What is ATSDR and what has it done in Vieques?

—ATSDR is a federal public health agency in Atlanta, Georgia. The agency's mission is to prevent harm to human health from exposure to hazardous substances present in the environment. To do this, the agency reports on how hazardous a site is and recommends actions that need to be taken to protect the health of community members. ATSDR works with communities, environmental groups, tribal governments, and local, state, and other federal agencies to protect the public health.

For the last 2 years, ATSDR has studied health concerns on Vieques and is releasing its findings in a series of reports called focused public health assessments (PHAs). In February 2001, ATSDR released the first PHA on the island's groundwater and drinking water.

How was this evaluation conducted?

— ATSDR evaluated the quality of the soils of Vieques in several ways:

- soil samples were sorted according to their parent material (i.e., what they are made of) and their chemical qualities were examined for similarities and differences;

- the quality of the soil on Vieques was compared with soils from Puerto Rico and the United States;

- soil at the LIA was compared to soil from the remainder of Vieques;

- LIA soils were examined for any changes in chemical amounts over time;

- the soil data were examined for any pattern or differences that might show movement of contaminants from the LIA.

— ATSDR evaluated the levels of metals and other chemicals in soils to determine if the levels are harmful to public health.

What were ATSDR's findings?

— Although it contains some properties unique to the island's natural makeup, the soil on Vieques is similar to that of the mainland of Puerto Rico and the United States. Natural soil contains a variety of chemicals, including metals.

— The metal levels of the soil in the LIA are essentially the same as the rest of the island and have not changed with time.

— ATSDR compared the amounts of metals and other chemicals detected in the soil on Vieques to screening levels that public health people use to guide reviews and focus their attention on areas of potential health concern. The screening levels have generous safety margins built into them. Seven metals exceeded screening levels and were closely examined by health officials: arsenic, cadmium, chromium, iron, lead, manganese, and vanadium. After detailed evaluations of these seven metals as well as mercury, ATSDR found that the levels of these chemicals in the soil **would not result in harm to the health of either adults or children** who might swallow or touch the soil while living on Vieques.

— In addition, all other chemicals in the soil are in amounts that are too low to be of concern to people's health.

— ATSDR also conducted an evaluation of soil on the LIA. ***People who Inhabited the LIA from April 1999 to May 2000 were not exposed to harmful levels of metals and other chemicals in soil.***

Copies of ATSDR documents are available from the ATSDR Information Center.
Call toll-free 1 (888) 42-ATSDR or e-mail ATSDRIC@cdc.gov.

See the ATSDR News Archive
<<<http://www.atsdr.cdc.gov/announce.html>>> for previous news items.

This page last updated on November 1, 2001 - Contact Name: Maria Gosa/mjg4@cdc.gov

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