

# Environmental Hazards at Hamden Middle School:



## Questions and Answers For Students

### What's Going On?

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This fact sheet is an updated version of an earlier one distributed in March of 2001 to Hamden Middle School students. The purpose of this fact sheet is to make sure all students understand that the school is safe, and that the school is moving for other reasons. If you have any questions, please ask your teacher or Ms. Norwood.

The Hamden Middle School site was used as a landfill. Industrial waste and garbage was placed there in the 1930s and 1940s. During the 1950s, the town bought the land and built the Middle School on the landfill site. In 2000, the school system had soil samples taken as part of the planning for a school addition. These samples contained lead and other chemicals that were part of the landfill. More sampling was done and other chemicals were found. The Connecticut Departments of Environmental Protection (CT DEP) and Public Health (CT DPH) and the Quinnipiack Valley Health District became involved to make sure people are not exposed. Other testing has been done to make sure there are no other ways students and staff could be exposed to hazards outside and inside the school building. The building and grounds are safe for everyone to learn and work in.



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### What Hazards Were Found at the School?

- **PAHs (Polycyclic Aromatic Hydrocarbons) in the soil outside**
- **Low levels of lead in some of the soil**
- **Methane gas under the boiler room**
- **Very low levels of PAHs in the air of the auditorium**
- **Dirty air ducts, some moisture**

CT Department of Public Health



Quinnipiack Valley Health District

Keeping Connecticut Healthy

## Some Background on Exposure:

Before you can have a good understanding about the environmental hazards at the school, you need to understand exposure. Exposure means that you have come in contact with a chemical. For exposures to chemicals to happen, there has to be a source, like a landfill or a factory. Chemicals then can get into air, water and soil. **The chemical has to move from the source to a point where you can come into direct contact with it.**

### How Can You Be Exposed?

There are three ways a chemical could get into your body:

- ⇒ Breathing It in Air (Inhalation)
- ⇒ Eating or Drinking (Ingestion)
- ⇒ Touching It (Dermal Exposure)



### If You Are Exposed, Will You Get Sick?

This depends on several things about the exposure:

- ⇒ The **type** of chemical: how toxic?
- ⇒ The **amount**: how much were you exposed to?
- ⇒ The **duration**: how long were you exposed?
- ⇒ The **frequency**: how many times were you exposed?

## What Are PAHs?

PAHs (Polycyclic Aromatic Hydrocarbons) are a group of chemicals formed when things like wood, trash, oil or food are burned. The PAHs at the school probably came from burning of garbage at the site. PAHs are found everywhere—in char grilled food, cigarette smoke, bus and car fumes. At very high levels, exposure to PAHs may cause health problems such as skin problems and certain kinds of cancer. Everyone should know that the levels found on the school grounds and the auditorium were not anywhere near high enough to cause health problems.



## What Is Methane?



Methane is a flammable, colorless, tasteless and odorless gas. Decomposing (rotting) materials often produces methane. Methane is not toxic to the body. If methane is found at high levels inside a building, it is a concern because a spark or fire could cause an explosion. Methane was only found in the soil underneath the building. No methane has been found in the building. Therefore, there is no explosion risk at the school from methane.

## What Has Been Done To Protect The Students and Staff?

- A special liner and clean soil cover were placed over the school grounds, including the front lawn, side lawns and the area behind the auditorium. This will prevent anyone from contacting PAHs or other chemicals in the soil.
- The inside of the school was thoroughly cleaned. This included:
  - All air ducts vacuumed
  - Everything wiped down, washed
  - New air filters to keep the air clean
- A methane alarm has been installed in the boiler room. The monitor has an alarm that will sound way before methane levels become dangerous. The Hamden Fire Department inspects the school for the presence of methane monthly to make sure that no methane has seeped into the building over the weekend.
- Ventilation systems at the school have been improved.

## What Else Is Being Done To Protect Our Health?

1. The CT DEP will be making sure the town checks regularly on the soil cover at the school.
2. The methane monitor in the boiler room is regularly checked by school personnel and the Hamden Fire Department. The monitor takes continuing readings and has an alarm. This alarm will go off at a level well below the danger level.
3. The fire department will inspect the Middle School once a month using a gas monitor to make sure the school is safe.
4. A special “Tools for Schools” Indoor Air Committee was formed and trained for the schools—see below.

### Why Is the School Moving to a New Building?

The Town of Hamden decided to find a new site for the Middle School last year. This was decided because of the need for a bigger school. It would be very expensive to try to expand the school at its present site because of clean-up cost and other factors. Therefore there is an ongoing search for a new site. **The decision to move the school is NOT because the site and the building is unsafe.**

### What is “Tools for Schools”?

The Indoor Air Quality (IAQ) Tools for Schools Program was designed by the U.S. Environmental Protection Agency (EPA). The program helps schools fix indoor air problems in the school. A committee of administrators, teachers, maintenance staff, parents, (and maybe students!) has been working together to make sure there is good air quality in the school. **Hamden Schools won a national award from EPA for their Tools for Schools program!** You can find out more about the Tools for Schools Program in the Middle School by contacting Ms. Norwood.



**If you have further questions about the Middle School situation, please ask your teacher or Ms. Norwood. You can also call the Quinnipiack Valley Health District at (203) 248-4528.**