CT Department of Public Health

March 2010

Questions & Answers About the Chrome Engineering Site

This flyer was written to give you information about cleanup of contamination at the former Chrome Engineering site. The CT Departments of Public Health and Environmental Protection, and the City of Bridgeport are working with the U.S. Environmental Protection Agency (EPA) to provide you with information about the contamination and EPA's cleanup activities that will begin soon. For more information, please contact us at the numbers on the other side of this flyer. **There will be a community meeting on Monday, April 5, 2010 at 6 pm, at the Tisdale School to explain the upcoming site clean-up and future use of the site (see page 4).**

Background

The Chrome Engineering site is located at 405 Central Avenue in Bridgeport, Connecticut. Metal plating operations occurred at the site from 1952 until the mid 1990s. Beginning around 1997, a number of cleanup activities have been done by the City of Bridgeport and EPA, including removal of asbestos-containing materials and lead paint, building demolition, removal of waste drums and debris, and removal of some contaminated soils in the top 2 feet below ground surface. This means that the properties are much safer than they used to be. After a year of extensive removal activity, in January 2009 the City of Bridgeport discovered additional contamination in a soil pile at the Chrome Engineering site. EPA will begin an emergency removal of the 600 ton soil pile during the first week in April, 2010. This site is part of the Brownfields program and will be cleaned up and redeveloped to improve the neighborhood.

What contaminants were found in the soil pile? What are these chemicals?

Cadmium, lead and chromium were found in the soil pile. Cadmium was found at the highest levels in the soil pile.

Cadmium is a naturally-occurring metal found in soil. In industry, it is used in batteries, pigments, metal coatings, and plastics. Cadmium is found at low levels in all foods that we eat. Cadmium is also present in cigarette smoke.

Lead is a naturally-occurring metal used to make batteries, ammunition, and metal products. In the past, lead was present in many paints and ceramic products, but that use has decreased. Years ago, lead was present as an additive in gasoline. Lead is found naturally at low levels in soil almost everywhere.

Chromium is also a naturally-occurring metal. It can exist in several different forms. The most common forms are chromium(0), chromium (III), and chromium (VI). Chromium (III) is an essential nutrient in a healthy diet. In industry, chromium is used in making steel and for chrome plating, dyes and pigments, leather tanning, and wood preserving.

How could I get exposed to The contaminants?

In order to be exposed, you need to have direct contact with the contaminated soil and the contaminated soil needs to get into your body. Touching the soil, breathing soil dust, or eating the soil (putting items into your mouth that have soil on them such as fingers or food) are possible ways to get contaminated soil into your body.

Is exposure harmful?

Any chemical that enters your body can be harmful if you take in too much. Whether your health will be harmed depends on several factors:

- How much of the chemical you take into your body;
- How long you are exposed to it;
- How it enters the body (for example, through eating, drinking, breathing, or touching);
- Your age, general health, and other individual factors that determine how at risk you are to harmful health effects;
- Other exposures you have to the same or similar substances; and
- How toxic the chemical is.

What are the Possible Health Effects of These Chemicals?

The paragraphs below summarize what we know about the health effects from exposure to cadmium, lead and chromium. Based on available testing results from the soil pile, we do not believe that contaminant levels are high enough to cause the harmful health effects described below.

- Exposure to high levels of cadmium over a long time can lead to a build up of cadmium in the kidneys. Other possible long term effects are lung damage and weak bones. There is some evidence that exposure to cadmium may lead to increased risk of lung cancer.
- Lead can harm the nervous system, particularly in children. Lead can cause children to be born prematurely and have lower birth weights. Lead can also affect a child's mental and physical growth. Exposure to high levels of lead can affect the brain and kidneys of adults and children. Lead has not been shown to cause cancer in people.
- Breathing very high levels of chromium in air can irritate your nose, lungs, stomach, and intestines. Getting high levels of chromium on your skin may cause swelling, redness and may lead to skin ulcers. Chromium (VI) can cause an increased risk of lung and stomach cancer in people exposed for many years.

Could I be harmed from past exposures?

The short answer is: We don't know for sure.

Evaluating past exposures from contamination is very difficult. We know that historic operations at Chrome Engineering, the nearby Pacelli Trucking Property and the Mount Trashmore Property caused a lot of environmental contamination. It is difficult to assess whether the environmental contamination could have harmed people in the past because of the lack of information about how much exposure to contamination people could have received in the past.

Here is what we do know:

- We have a great deal of soil testing results from these 3 parcels, but none of it is from just the surface soil. The testing results we have are from deeper soils.
- We know from the deeper soil information that very high levels of many metals, as well as chemicals associated with fuel oil and ash, were found in deep soils across the properties.
- We also know that there were asbestos containing materials in and around the buildings.
- Several clean-up activities have already occurred so the area is much cleaner than it used to be.

However, we don't know:

- what chemicals were present in the soil most accessible to people—especially in the past;
- the levels of chemicals present; and
- how much contact people had with the soil.

This makes it difficult to pinpoint whether there was exposure in the past and whether it was enough to cause harm.

The groundwater is polluted. Could I be drinking contaminated water?

Everyone in the neighborhood is hooked up to the public water supply through closed pipes. The water supply is regularly checked for contaminants. It is not possible for the groundwater to seep into public water pipes because of the strong water pressure.

What Clean-up Activities will happen? How Long Will It Take?

EPA already has started to move their equipment onto the property. Clean-up work is scheduled to begin during the first week in April, 2010. The first thing EPA will do is to secure the property so no trespassers can enter. The soil pile will be loaded on trucks and taken out of town. EPA expects that it will take **2-3 weeks** to complete all the cleanup activities.

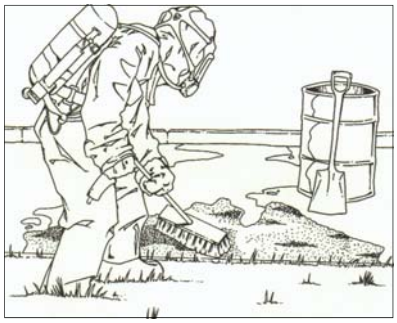
How will the community be Kept safe during cleanup?

First, EPA will make sure that the property is secure so only people who are supposed to be on the property can enter. During the cleanup work, EPA will make sure that the neighborhood is kept safe by:

- Checking the air to make sure that air quality is safe for the cleanup workers and for the nearby community.
- Wetting down the soil being removed to keep dust levels low. If contamination is detected in the air, workers will stop work if needed to correct the problem.
- Cleaning contaminated soil off the truck tires before they drive through the neighborhood.
- Providing security at the site to prevent people from going on the site.
- Keeping trucks from parking on the street.
- Truck drivers will respect the 3 minute idling law.

What things might I see during the cleanup?

Cleanup workers will be wearing protective clothing such as white suits, respirators, hard hats, gloves, and boots. This level of protection is required by law because cleanup workers may come into direct, repeated contact with contaminated materials. You also may see trucks and other vehicles at the property. You may see equipment for monitoring air quality.



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For More Information:

HEALTH QUESTIONS:

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http://www.ct.gov/dph

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William Quinn, MPH, Acting Director
203-576-7680

Dept Web Site: http://ci.bridgeport.ct.us/newdepartments/health/default.aspx

REDEVELOPMENT QUESTIONS:

Office of Planning & Development
City of Bridgeport
203-576-7221

ENVIRONMENTAL QUESTIONS:

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Site Web Site: http://www.epaosc.org/site/site_profile.aspx?site_id=5837
www.epa.gov/region1/superfund/er/index.htm

Chrome Engineering Site

Community Meeting

Jettie S. Tisdale School
250 Hollister Ave
Bridgeport, CT

Monday, April 5, 2010
6– 8 PM

Come & Find out About
the Clean-up & Future Plans