A Summary of Findings Fillmore, California

Overview

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency. It works with other agencies, states, and local governments to assess health risks in communities where people might be exposed to (come in contact with) dangerous chemicals. This is a report of our latest findings related to the Pacific Coast Pipeline Superfund site.

The Bottom Line

The levels of airborne dust in Fillmore can sometimes pose a health risk to persons with certain pre-existing health conditions (see Box 1).

Residents have probably not had contact with enough lead and PAHs from site soil in the recent past (2011–2013) to cause health effects

Implementing the proposed redevelopment plan will protect the public from harmful contact with lead and PAHs in the soil.

- Yellow dot = Not likely to harm the health of most community members. Day-to-day conditions can sometimes pose a health risk to sensitive community members.
- Green dot = Not expected to harm people's health.

History

The Pacific Coast Pipeline site is a U.S. Environmental Protection Agency (EPA) Superfund site owned by part of Chevron Corporation. The site is next to the city of Fillmore, California. It was an oil refinery until 1950 and then a pumping station. It closed in 2000. EPA and other organizations have been cleaning up the site since the 1980s. In 1986, the California Department of Health Services oversaw removal of 38,000 tons of waste and contaminated soil from the site. Some lead and polycyclic aromatic hydrocarbons (PAHs) remained in the soil on-site. Since 2011, EPA has watched over Chevron's work to dig out more contaminated soil from many on-site areas. The soil was put in two places on-site and covered with a protective cap.

ATSDR and the Pacific Coast Pipeline Site

In 2012, EPA asked ATSDR to investigate if dust from the site might be harming nearby residents. EPA also wanted to know if people might be harmed by soil exposure after site redevelopment. ATSDR reviewed available environmental data and information, then reported its findings about exposures and possible health effects.



Photo of the Pacific Coast Pipeline Superfund site, looking west, September 2012.



Community Concerns

ATSDR has been communicating with community groups and individuals since 2013. We visited the site and met with members of the Fillmore community in January and February 2013 to hear their concerns. People were worried that the health of nearby residents and school children could be affected by

- 1. Dust generated during cleanup activities
- 2. Contact with site contaminants
- 3. Reuse of the property

People also wondered if past exposure has caused cancer in the community.

Health Consultation

What did ATSDR do?

ATSDR looked at information from many sources:

- Dust monitoring data from 2011–2013
- Wind speed and direction data from 2011–2013
- Site soil data from 1980-2011
- Soil data west of Pole Creek from 2007
- EPA's Record of Decision document from 2011
- Chevron's 2013 conceptual site redevelopment plan
- Ventura County and California blood-lead surveillance data for 2011
- Census 2000 data for pre-1950 housing units and children younger than 6 years living in poverty

ATSDR analyzed the information as part of a health consultation. It presented that information for comment at a public meeting in Fillmore in June 2015. The document also was available online for public comment June 1, 2015–August 30, 2015, and at two locations in Fillmore. This fact sheet includes comments and suggestions received during the comment period.

What did ATSDR find?

During our investigations, ATSDR asked community members about their exposure concerns. The concerns are listed below, followed by what we learned about them during the investigation.

1. Concern about dust in the air

Dust levels in the air sometimes exceeded the state exposure standard for dust.

- When airborne dust was above the state standard, residents with pre-existing health conditions might have felt short-term health effects. Long-term health effects from these exposures are unlikely. (See Box 1).
- ATSDR cannot tell for certain how much the cleanup activities in the recent past (2011–2013) contributed to airborne dust in the nearby community.
- Chevron used real-time monitoring and dust control methods to limit the amount of dust created by earthmoving activities at the site. However, we could not clearly tell the source of dust blowing into the community based on the monitoring data.



Fillmore City Hall 2012 by Cbl62 - 0wn work. Licensed under CC 8Y-SA 3.0 via Wikimedia commons - https://commons.wikimedia.org/ wiki/File:Fillmore_City_Hall_2012.PG

Box 1. Airborne dust and your health

Fillmore has warm, dry summers. On windy days, dust is carried across the landscape. When there is a lot of windblown dust, residents with pre-existing health conditions, such as asthma, chronic obstructive pulmonary disease (COPD), or emphysema may experience respiratory irritation. People with Cardiopulmonary illnesses may be at higher risk for heart attacks and stroke if they breathe high levels of windblown dust.

Box 2. What is lead?

- Lead is a metal used in batteries, bullets and shot, and solder. Lead was used in gasoline until the phase-out starting in the early 1970s. It is also used in industrial processes and was part of house paint until 1978.
- Lead is poisonous. It can cause learning and behavior problems.
 Some of the effects of lead poisoning might never go away.
- Community members were unlikely to be exposed to lead in site soil and dust in the recent past (2011–2013) in amounts that could cause health effects.

What did ATSDR find? (continued)

2. Concern about contact with site contaminants

- Community members were probably not exposed to lead or PAHs in site soil in the recent past (2011 – 2013) in amounts that could cause health effects.
 - The site property is currently fenced. We don't know when the fence was installed, but refinery photographs taken in 1931 and 1941 show the perimeter fencing in place. The photos are available at the Fillmore Historical Museum. Unless people trespassed, they would not have come in direct contact with contaminants on the site.
 - Small amounts of lead and PAHs could have been in airborne dust that was blown off site. However, the amount of lead and PAHs that was in airborne dust was not high enough to cause health effects.
- See Boxes 2 and 3 for information about lead and PAHs.

3. Concern that reuse of the property will put users at risk of contact with contamination

- California has restricted future use of the site to commercial, industrial, or recreational use only. The deed restrictions prohibit building residences, hospitals, day care centers, homes, or schools on the site. Also, the land may not be used to grow plants for humans to eat.
- The amount of lead and PAHs in exposed soil after cleanup is completed will not be enough to cause health effects to people during future commercial, industrial, or recreational use.

Box 3. What are PAHs?

- Polycyclic aromatic hydrocarbons (PAHs) are a group of chemicals that occur naturally in coal, crude oil, and gasoline. They are also in coal-tar pitch, creosote, asphalt, and similar products.
- Studies in animals show a link between PAHs and reproductive problems. PAHs can harm the skin and the body's ability to fight disease. Studies in people and animals show that exposure to PAHs can cause cancers of the lung, stomach, and skin.
- Community members were unlikely to be exposed to PAHs in site soil and dust in the recent past (2011–2013) in amounts that could cause health effects.

Other health concerns

Fillmore's mayor asked the California Cancer Registry (CCR) to check the number of cancer cases in and around East Fillmore for unusual patterns.

The CCR used data from 1996–2009 to look at

- 14 specific cancer types with potential links to site contaminants
- Cancers in persons younger than age 15 years
- All cancer types combined

The number of cancer cases reported for East Fillmore was similar to the number of expected cancer cases in the area.

The CCR presented its findings to community members in February 2013. Several community members had concerns about the timeframe and area included in the study. Community members also noted that people who lived in the area in the past but lived elsewhere when their cancer was diagnosed, were not included in the analysis.

These issues of timeframe, geographical area, and locating individuals are valid. They highlight the limits of what the cancer registry can tell us. Many communities with similar questions share these concerns.

How can Fillmore residents protect their health and safety?

Some things people in Fillmore can do to protect their health and safety include the following:

- Be aware of local air quality. You can check local air quality online at http://www.airnow.gov.
- Move indoors on dusty days. Residents with health conditions listed in Box 1 may want to reduce their level of activity and the amount of time they spend outdoors on dusty days.
- Report dust problems. Call the dust complaint number posted at the site during future construction activities, or call the Ventura County Air Pollution Control District's 24-hour complaint hotline (805-654-2797) to report dust blowing off site.
- Do not trespass. Obey warning signs posted by the site owner or operator.
- Contact your county lead poisoning prevention program if you have concerns about lead poisoning.

What can other organizations do?



To make sure the Fillmore community is safe, ATSDR recommends that site cleanup teams, people seeking to redevelop the site local land planning organizations, and

Fillmore Library, 502 Second Street, Fillmore, CA 93015.

redevelop the site, local land planning organizations, and Chevron follow these steps:

- Stop dust from moving off site during redevelopment activities by following the dust precautions
 in the site Dust Suppression and Air Monitoring Plan. (The plan and related documents are available
 online at http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/CAD980636781.) ATSDR does
 not expect dust coming from the site during redevelopment to contain harmful levels of lead or
 PAHs, but it will add to dust levels in the area.
- Maintain or expand existing groundcover on the site.
- Follow deed restrictions when seeking to redevelop or build.
- Ensure long-term maintenance of on-site soil consolidation areas. Monitor the protective cap and make sure it stays intact. This will help ensure that soil will not harm people who use the site in the future.

If asked, ATSDR can also

- Review work plans for future site redevelopment and recommend ways to protect public health
- Review new environmental sampling data, if available, and recommend ways to protect public health

Where can I learn more?

The full health consultation document is available on the ATSDR website at

http://www.atsdr.cdc.gov/HAC/PHA/HCPHA.asp?State=CA

You may also read it at the repository locations listed below, or by asking the ATSDR staff listed to mail you a copy.

City Clerk's Office City of Fillmore 250 Central Avenue Fillmore, CA 93015 **Fillmore Library** 502 Second Street Fillmore, CA 93015

ATSDR Region 9 staff members are available to respond to your questions. You can contact the following staff members by telephone or email:

- Ben Gerhardstein, Public Health Advisor, 415-947-4316, <u>bgerhardstein@cdc.gov</u>
- Jamie Rayman, Health Educator, 415-947-4318, jrayman@cdc.gov

You may also call, toll-free: 1-800-232-4636.