

SHINE Evaluates Public Health Impact of JH Baxter Plant Emissions



April 2007



Creosoted poles, similar to those processed at the JH Baxter Plant.

Purpose

The Superfund Health INvestigation and Education Program (SHINE) has released a report that addresses the question of whether emissions from J.H. Baxter plant in Eugene could cause health effects for residents who live nearby. This fact sheet describes SHINE's findings and provides information on how the public can access and comment on the report.

Background & Methods

JH Baxter is a wood treatment facility located in Northwest Eugene. In SHINE's 2004 report on J.H. Baxter, SHINE concluded that more data were needed to determine whether plant emissions posed a health risk to nearby residents. In 2005 and 2006, LRAPA (Lane Regional Air Protection Agency) collected air data. SHINE used a standard health assessment process to evaluate the data, comparing the chemical levels with health guidelines to determine whether exposures present a public health concern.

What are SHINE's findings?

- The risk of developing long-term health problems as a result of exposure to plant emissions is low for nearby residents.
- The odor that residents experience may cause stress and discomfort, leading to physical symptoms such as watery eyes and burning nose.

Recommendations for Next Steps

In order to reduce the stress and discomfort that residents experience as a result of the odor, SHINE recommends that JH Baxter & Co. take steps to further reduce odor from emissions.

What do we know about chemicals used at the plant?

JH Baxter uses three substances to treat wood: creosote, pentachlorophenol (PCP), and ammoniated copper zinc arsenate (ACZA). LRAPA monitored for hazardous air pollutants likely to be found in these substances.

What do we know about emissions?

-They are a complex mixture of chemicals. The chemicals detected most frequently and at the highest levels are called polycyclic aromatic hydrocarbons (PAHs).
-Of these chemicals, naphthalene was found at highest levels. SHINE, however, does not expect that exposure to these levels would result in health problems for residents.

What we don't know

- Information on the effects of exposure to chemical mixtures is very limited.
-We do not know whether the mixture of chemicals may have different health effects on a person than each individual chemical.

How can JH Baxter emissions affect my health?

Inhalation of air emission vapors is the main way in which residents who live near a facility like JH Baxter are exposed to emissions. Breathing vapors release from wood preservative emissions can cause irritation to the respiratory tract and eyes. As many residents have indicated, the odor from these emissions can cause stress and discomfort, resulting in physical symptoms, such as burning nose and watery eyes.

How likely are JH Baxter emissions to cause cancer?

Based on current limited data, SHINE has concluded that it is unlikely for long-term exposure to the JH Baxter emissions to cause cancer in nearby residents.

Both the EPA and the International Agency for Research on Cancer (IARC) has determined that coal tar creosote is a probable carcinogen to humans based on animal and occupational studies. There are some studies that have shown a link between people who work in creosoting facilities and lung and nasal cancers. These studies have found that exposure to levels of naphthalene, a major component of creosote, up to 10,000 $\mu\text{g}/\text{m}^3$ -660,000 $\mu\text{g}/\text{m}^3$ had NO negative long-term health effects. Given that the levels detected in the area surrounding JH Baxter are well below these levels, SHINE has concluded that emissions from JH Baxter do not pose a health risk for cancer.

Please see the full report for a complete discussion of how SHINE evaluated the health risk of JH Baxter emissions.

For more information regarding SHINE's report, please contact:

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SHINE invites you to read the report and send us your comments. You can find SHINE's report at:

- SHINE's website: www.healthoregon.org/superfund
- Eugene Public Library
100 W. 10th
Eugene, OR 97401

Information on how to submit contents is included in the report. We will be accepting comments until 5/27/07.