Letter Health Consultation

PACIFIC COAST PIPELINE SITE

FILLMORE, CALIFORNIA

MARCH 29, 2013

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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LETTER HEALTH CONSULTATION

PACIFIC COAST PIPELINE SITE

FILLMORE, CALIFORNIA

Prepared By:

U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations
Western Branch

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Agency for Toxic Substances
and Disease Registry
Atlanta GA 30333

March 26, 2013

Ms. Holly Hadlock
Remedial Project Manager
US EPA, Region 9
75 Hawthorne Road
Mail Code SFD-8-2
San Francisco, California 94105

Dear Ms. Hadlock:

The Agency for Toxic Substances and Disease Registry (ATSDR) is in the process of reviewing environmental information for the *Pacific Coast Pipeline* site in Fillmore, California. We are working on a health consultation evaluating the potential for exposure of nearby residents and elementary school students to fugitive dust from the site. ATSDR is concerned that lead has been detected in site soils at high concentrations and an elementary schoolyard is immediately adjacent to the site boundary.

ATSDR has noted that dust suppression efforts, monitoring and sampling are underway. We are encouraged that lead has not been found above detection limits in airborne dust monitoring samples collected at the site perimeter bordering the school and residences. However, our review of Chevron's results show that the lead analytical detection limit (approximately 0.35 $\mu g/m^3$) are above National Ambient Air Quality Standards (NAAQS) (0.15 $\mu g/m^3$),[1] though Chevron's methods are sensitive enough to detect levels exceeding the generic California Air Resource Board (CARB) AAQS (1.5 $\mu g/m^3$)[2] lead standard. The PM_{10} detection limit (approximately 1 $\mu g/m^3$) satisfies all AAQS, but no $PM_{2.5}$ data was identified to review.

To ensure community members are not exposed to pollutants at levels of health concern, ATSDR recommends altering the air monitoring, sampling and/or analysis methods employed at the site so that dust levels exceeding the NAAQS criteria for lead and $PM_{2.5}$ in Table 1 will be detectable. The NAAQS and CARB AAQS are generally considered protective of public health.

Table 1. Current Air Quality Standards

Pollutant	Standard ($\mu g/m^3$)	Description of Standard
Lead	0.15	3 month rolling average (NAAQS)†
PM_{10}	50	24 hour (CARB AAQS)
$PM_{2.5}$	35	24 hour (NAAQS)

† The CARB AAQS currently retain the prior NAAQS (http://www.epa.gov/air/criteria.html) for lead of 1.5 $\mu g/m^3$ while stating "The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants."
The Centers for Disease Control and Prevention (CDC) Advisory Committee on Childhood Lead Poisoning Prevention's (ACCLPP) report states that "the absence of an identified {Blood Lead Level} BLL without deleterious effects combined with the evidence that these effects, in the absence of other interventions, appear to be irreversible, underscores the critical importance of primary prevention" (http://www.cdc.gov/nceh/ lead/ACCLPP/Final_Document_030712.pdf). ATSDR supports the ACCLPP conclusions and encourages the use of the more protective NAAQS value for lead monitoring at the PCPL site.

[1] http://www.epa.gov/air/criteria.html
[2] http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

Additionally, ATSDR notes that elevated lead dust emissions could occur when activities take place at the more contaminated portions of the site. For example, the highest lead exposure point concentration onsite is estimated to be 4,300 mg/kg.[3] According to the calculation below, if PM_{10} greater than 35 $\mu g/m^3$ is generated from the area of concern with lead at 4,300 mg/kg, the lead levels might exceed the NAAQS for lead (0.15 $\mu g/m^3$). In this way, real-time PM_{10} monitoring can be used to prevent elevated lead dust emissions from occurring. ATSDR is available to work with the PCPL remedial team to develop a contingency plan to prevent emissions of lead and PM off-site, if requested.

$$PM_{10} = \frac{0.15\ \mu g/m^3}{4{,}300{,}000\ \mu g/kg} * \frac{1E+9\ \mu g}{kg} = \frac{35\ \mu g}{m^3}$$

ATSDR also supports the use of a truck washing station at the site exit to prevent tire tracking of soils offsite.

One method of preventing emissions is to provide a channel of communication, such as a hotline, to the community to report visible emissions migrating offsite. Communications could indicate the need to check the real-time dust monitoring stations and, if necessary, modification of earth moving activities and dust suppression.

We are continuing work on the full health consultation but are providing this recommendation separately to ensure modifications can be made as soon as feasible. We appreciate the opportunity to provide feedback on the site. If you have any questions, please contact Dr. Tonia Burk, environmental health scientist at (770-488-0764) or TBurk@cdc.gov or Ben Gerhardstein, regional representative at (415-947-4316) or BGerhardstein@cdc.gov.

Sincerely,

Tina Forrester, PhD, M.S.
Acting Director
Division of Community Health Investigations
Agency for Toxic Substances and Disease Registry

[3] Remedial Investigation/Focused Feasibility Study (RI/FS), Pacific Coast Pipeline (PCPL) Superfund Site, Fillmore, CA, Appendix F, Jan 14, 2011.

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