

Tank Hill Facility

A State Superfund Site Update



Montana Department of
ENVIRONMENTAL QUALITY
Hazardous Waste Site Cleanup Bureau

January 2010

The Montana Department of Environmental Quality (DEQ) will hold a public meeting in January about the Tank Hill State Superfund Facility. The meeting will be held at the Cut Bank Civic Center, 800 E. Railroad Street, in Cut Bank on January 25, 2010, from 7:00 to 9:00 p.m. DEQ will share information about the upcoming indoor air (also called vapor intrusion) investigation planned for selected areas in Cut Bank this winter. DEQ will also discuss other activities associated with the assessment of soil and groundwater contamination at the Tank Hill Facility and will answer your questions. If you would like to know more about this meeting or require accommodation, please contact Allen Schiff, Tank Hill Project Officer, at 406-841-5067 or by email at aschiff@mt.gov.

Public Meeting
January 25, 2010, 7:00 pm
Cut Bank Civic Center
800 East Railroad Street, Cut Bank

Indoor Air Investigation

DEQ is requiring the liable persons, or the parties responsible for cleanup, (hereinafter the "Group") to submit a work plan to conduct an indoor air investigation in Cut Bank in an area above known groundwater contamination. DEQ is overseeing this work. Group participating members include Ashland, Inc., Chevron, Cenex Harvest States, Inc. (CHS, Inc.) and ConocoPhillips. Other non-participating members include various Montana Refining

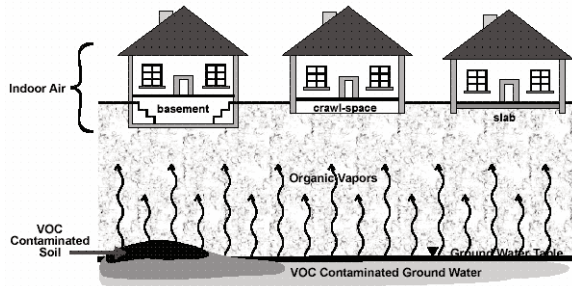
Company businesses and Flying J companies. In 2008, the Group found petroleum related volatile organic compounds (VOCs), including benzene, in soil vapor samples collected from underneath local streets and along sewer line trenches. DEQ is requiring the Group to sample in and below selected buildings in areas where petroleum seeps have occurred historically, where contaminated groundwater is nearest to the ground surface, and where petroleum product has been present in the groundwater.

The air samples are scheduled to be taken by March of 2010 when indoor and outdoor air temperatures may cause soil vapors to move inside buildings more readily and when windows and doors are typically kept closed. The Group will collect indoor air samples and samples from below buildings, such as subslab or crawlspace samples, from selected structures in Cut Bank. If you reside within the initial study area, the Group may request permission to access your property to conduct this work. **Note: There will be no charge to cooperating homeowners for any of the sampling activities to be conducted now or in the future.**



Air Sampling Canister

What is vapor intrusion? Vapor intrusion is the movement of volatile chemicals from an underground or subsurface source, such as groundwater, through the soil and into the indoor air of overlying buildings (see below).



Vapor Intrusion Illustration

What is the purpose of the indoor air investigation? Over time historical releases of petroleum have moved downward and made contact with groundwater and soil. Certain dissolved VOCs are now present in the groundwater underlying the town of Cut Bank at concentrations greater than Montana groundwater standards. Petroleum product is also present in the groundwater. The upcoming indoor air investigation will determine whether contaminants related to Tank Hill are moving from groundwater and/or soil to indoor air, and if so, whether the contaminants are accumulating in structures at levels that may pose an unacceptable human health risk.

Where will samples be collected? During this investigation, certain structures overlying contaminated groundwater and near the previous petroleum seep areas will be sampled. The Group will contact property owners to obtain access to conduct the sampling. Air samples will be collected from inside and below buildings, as well as outdoor air, to determine if benzene or other contaminants are present underneath, inside or outside the buildings.

How will samples be collected and analyzed? Metal canisters, like the one shown on page 1, will be placed in each sampling location for 24 hours to collect a representative indoor air sample.

In addition, subslab or crawlspace samples will be collected from underneath the buildings. Subslab samples will require drilling a small hole, no more than one inch in diameter, in the concrete slab of a building in order to collect a vapor sample from immediately beneath the building. A specialized probe will be placed in the hole, a metal air sampling canister connected to the probe, and the subslab (soil) vapor sample will be collected in approximately 1 hour. The hole will be sealed after the sample has been collected and the canisters will be sealed and shipped to a laboratory for analysis.

Prior to the sampling, owners of residences and businesses will be asked to complete a questionnaire, and may be asked to temporarily remove materials such as paint, glue, and cleaning products



Subslab Probe

from the area being sampled. Some of these products may contain VOCs, such as benzene, that could be detected in the indoor air samples and distort results.

How will DEQ evaluate the sampling results? DEQ will use multiple lines of evidence to evaluate the results. It will include, but not be limited to, comparing subslab (or crawlspace) sample results to indoor air sample results from the same structure to determine whether contamination is present and moving from soil vapor into indoor air. In addition, indoor air sample results will be compared to screening levels that are compiled by the U.S. Environmental Protection Agency (EPA), and to outdoor air results.

If indoor air sample results exceed screening levels and the vapor intrusion pathway is determined to be complete (contamination is moving from underneath the building into indoor air), the indoor air sampling will be expanded to cover additional structures.

If the sample results are inconclusive, the structure may be resampled to double check the results. DEQ will send sample results to the residents/owners of the buildings sampled.

If a vapor intrusion pathway is found to be complete in a building (contaminants are getting into the building) and the contaminants are present in the indoor air at levels that may pose an unacceptable risk to human health, mitigation may be required. Mitigation interrupts the vapor intrusion pathway either by preventing contaminated soil vapors from entering the building or by

removing the vapors that are inside the building. These methods are a response to vapor intrusion that can be used while the source of the contamination is being cleaned up. Decisions for mitigation have not been made at this time.

For more information about vapor intrusion, see <http://deq.mt.gov/StateSuperfund/FrequentlyAskedQuestions.asp>.

Background about the Tank Hill Facility

The Tank Hill Facility is located on the eastern edge of the town of Cut Bank. It has been an active crude oil transportation and temporary storage terminal since the 1930's. Contaminants at the facility include petroleum hydrocarbons and several VOCs. In May 1988 the DEQ tank program responded to complaints of petroleum vapors in residences and the discovery of petroleum seeping from the bluff above Cut Bank Creek (additional petroleum seeps occurred in 2002). Interim actions included the installation of several positive pressure ventilation systems in homes and a 200-foot long trench and collection system to recover petroleum prior to it flowing into Cut Bank Creek. Between 1988 and 1991 approximately 8,840 gallons of petroleum were recovered until the efforts were discontinued in 1991 when petroleum was no longer observed. In 1994 the Tank Hill Facility was listed as a State Superfund (CECRA) Site. In 1995 DEQ issued ten notices to a group of potentially liable persons. These entities would eventually be considered by CECRA as the liable persons

group. Since 1997, the Group has collected numerous soil, sediment, surface water, groundwater, and soil vapor samples. Groundwater monitoring is ongoing. EPA required installation of an additional collection system to control and contain the 2002 petroleum seeps. In 2002, DEQ issued a unilateral administrative order to the Group that requires the Group to conduct certain remedial actions at the Tank Hill Facility. A remedial investigation, which is being completed in phases by the Group, has identified areas of soil and groundwater contamination and petroleum floating on the groundwater at the storage terminal and in the town of Cut Bank. As an additional interim measure to address petroleum product in the groundwater, absorbent socks, which soak up petroleum, were placed in monitoring and recovery wells where petroleum thicknesses have been less than 12 inches. An automated petroleum removal system is also being used to remove petroleum from one recovery well (R-103) where a product thickness greater than one foot has been measured.

Questions? Concerns?

Contact Allen Schiff, DEQ Project Officer:

Phone (406) 841-5067 (direct)
(800) 246-8198 (Superfund hotline)
Fax (406) 841-5050
Email aschiff@mt.gov

Or come to the public meeting:

7 p.m., Monday, January 25, 2010,
Cut Bank Civic Center, Cut Bank

For More Information

You can review documents related to the Tank Hill Facility at the locations listed opposite.

Tank Hill Mailing List

If you would like to receive future updates, contact Allen Schiff at (406) 841-5067 or aschiff@mt.gov.

Information Located At

Glacier County Library

21 1st Avenue Southeast
Cut Bank, MT 59427
Telephone (406) 873-4572

Montana Department of Environmental Quality

Remediation Division
1100 North Last Chance Gulch
Helena, MT 59601
(406) 841-5000
www.deq.mt.gov

Persons with disabilities who need an alternative accessible format of this information, or who require some other reasonable accommodation in order to participate in the public meeting should contact DEQ at least 3 days before the meeting.

