



Evaluation on Public Health Implications of Surface and Subsurface Soil Exposures at Estes Park

March 2013

This letter health consultation was conducted to evaluate the potential public health implications associated with future residential exposures to surface and subsurface soils at the Habitat for Humanity Brownfield's Redevelopment site (the site) located in Estes Park, Larimer County, Colorado.

Site Background

The site, located at 995 Dry Gulch Road, has been utilized as a storage/maintenance facility for a number of entities since at least 1955. Based on historical aerial photographs and interviews with individuals familiar with the site, the property and existing building were originally constructed for use by a construction/excavation company, which stored construction equipment and vehicles at the site and also conducted light maintenance of their vehicles and equipment (oil changes, lubrication, etc.). Maintenance activities could have included oil changes of trucks and heavy equipment, greasing/lubricating various mechanical equipment, refueling diesel trucks and diesel equipment, washing/rinsing heavy equipment utilizing the floor drains and French drain, and the potential use of solvents for degreasing parts.

The 0.82 acre parcel of land is currently owned by The Estes Park Community Resource Center. A vacant, one-story commercial building containing approximately 1,800 square feet of interior floor space is the only building on the property at this time. The exterior grounds consist of grass vegetated cover and exposed soil in areas. The site has been vacant for the past few years.

In 2012, Habitat for Humanity of Estes Valley submitted an application for a Targeted Brownfields Assessment to purchase the property, demolish the existing structure and redevelop the property. According to the application submitted by Habitat for Humanity, this will likely include the construction of one or more units of affordable housing. Some contaminants have been found in surface and subsurface soil on the property that are a result of the former use of the site as vehicle maintenance facility. The focus of this evaluation is to determine if any potential health effects are likely to occur in future residents following exposure to these contaminants in soil.

What did CCPEHA find in the Health Consultation?

Based on a review of the available environmental soil data and the evaluation of the public health implications associated with potential residential exposure at the future Habitat for Humanity's residential redevelopment, CCPEHA has reached one conclusion.

Residential exposure to contaminants in soil is not likely to harm the health of future residents of the Habitat for Humanity Estes Valley Brownfields site. This conclusion was reached because the estimated non-cancer and cancer risks are below levels of concern. Specifically, the estimated cumulative non-cancer hazard indices from incidental ingestion of arsenic and chromium are below 1 for children and adults. In addition, the estimated lifetime excess cancer risks resulting from residential exposure to soil are within the acceptable cancer risk range, which indicates a very low increased risk of developing cancer.

It should be noted that this conclusion is based on the current environmental data collected to date and the purported site use at the time this evaluation was conducted. If additional environmental data becomes available or an alternative land-use/exposure scenario is selected in the future, the findings of this health consultation should be reconsidered.

What's next?

- As necessary, CCPEHA will review any additional data collected from the Habitat for Humanity Estes Valley Brownfields site.
- Upon request, CCPEHA will provide input to State and Local environmental officials on sampling plans and analysis.
- Upon request, CCPEHA will provide health education on the findings of this health consultation to stakeholders and the community.

FREQUENTLY ASKED QUESTIONS:

What is a health consultation? A health consultation provides advice on a specific public health issue related to real or possible human exposure to toxic material. A Health Consultation is a way for the Colorado Department of Public Health and Environment to respond quickly to a need for health information on toxic substances and to make recommendations for actions to protect the public's health. Health Consultations may consider:

1. The levels (or "concentrations") of hazardous substances;
2. If and how people might be exposed to contamination (through "exposure pathways" such as breathing air, drinking or contacting water, contacting or eating soil, or eating food);
3. The harm the substances might cause to people (or the contaminants' "toxicity");
4. If and how working or living nearby might affect people's health; and
5. Other dangers to people, such as unsafe buildings, explosive hazards, or other physical hazards.

Where can I find this health consultation?

An electronic copy of this health consultation can be found at:

<http://www.cdphe.state.co.us/dc/envtox/ccpehasites.html>

To request a free copy of this health consultation or for more information about the health consultation, please feel free to contact Thomas Simmons, Health Assessor, at 303-692-2961. For other site-related concerns, please call Alissa Schultz, Project Manager, at 303-692-3324.