



FACT SHEET

April 2010— Former CCC/USDA Grain Storage Facility in Hanover, Kansas

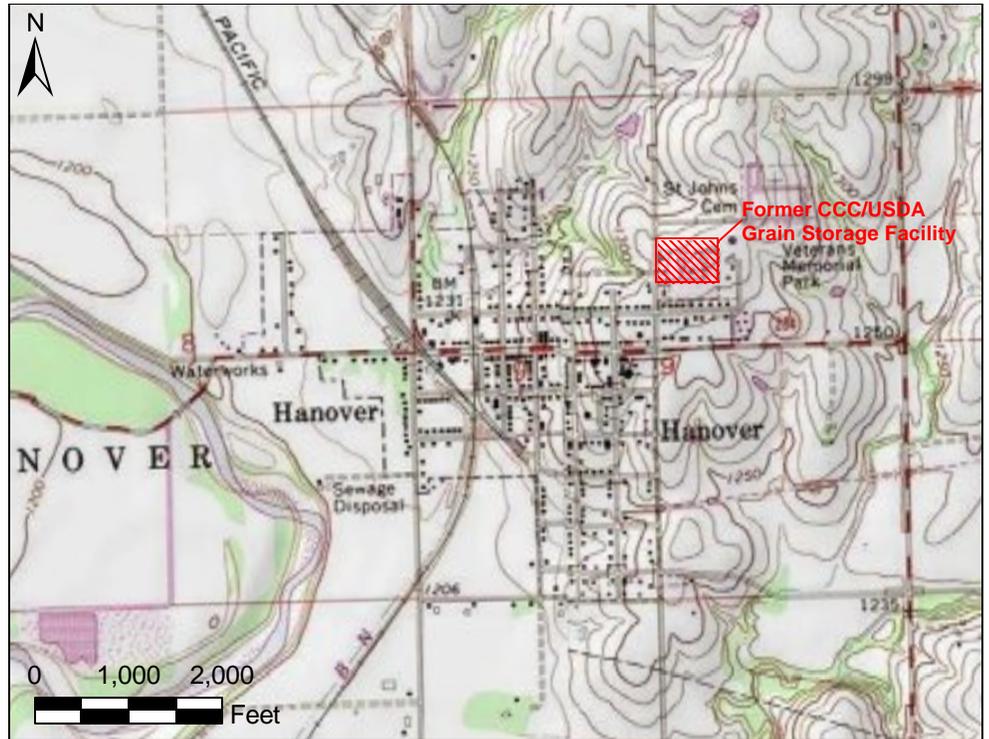
Site Investigation Update

The investigation of contamination associated with the Hanover USDA Site is nearly complete. Activities conducted as part of the investigation include the collection of soil, groundwater, plant tissue, soil gas, indoor air and ambient air samples at locations at and near the former Commodity Credit Corporation of the U.S. Department of Agriculture (CCC/USDA) grain storage facility. The goals of the investigation included identifying the sources and extent of soil and groundwater contamination, determining groundwater flow patterns, and evaluating whether indoor air is impacted by contamination attributable to historical grain storage operations. In addition, other activities to help evaluate potential remedial strategies, such as aquifer testing, have been conducted.

Testing in the site vicinity has confirmed groundwater impacts above federal drinking water standards near the former facility and extending towards the west and southwest. However, neither carbon tetrachloride nor chloroform were detected in soil above KDHE's Tier 2 Levels for the contaminants of 200 parts per billion and 960 parts per billion, respectively. Indoor air testing has identified a limited number of homes which have been impacted by grain fumigant-related contaminants. Three mitigation systems have already been installed and plans are underway for installation of two additional systems.

A copy of the investigation report, which is currently under development by Argonne National Laboratory, will be available for public review in the information repository for the Hanover USDA Site located at the Hanover Public Library once the document has been reviewed and approved by KDHE.

A Corrective Action Study, to help determine the best methods to address contamination identified during the investigation, will be submitted following KDHE approval of the investigation report.



The environmental investigation of the Hanover USDA Site is nearly complete. The property boundary of the former CCC/USDA grain storage facility is shown in red.

Air in Hanover Schools Unaffected by Grain Fumigants

Indoor air testing conducted in the Hanover Public School and St. John's School has confirmed that contamination associated with the former CCC/USDA facility does not affect indoor air quality in the schools.

The testing, conducted by Argonne National Laboratory and Hartman Environmental Geoscience on behalf of CCC/USDA, was completed in February 2010.

Air samples from each room in the schools were analyzed by an on-site laboratory for carbon tetrachloride. In addition, for confirmation purposes and to better measure exposure over a school day, additional samples (four from each school) were collected over a period of eight hours. These samples were analyzed by an off-site laboratory for volatile organic compounds, including carbon tetrachloride and chloroform. KDHE also collected samples from each school for oversight verification purposes.

A total of 47 samples were collected from the Hanover Public School and 25 samples were collected from St. John's School. Carbon tetrachloride, the primary contaminant of concern for the Hanover USDA Site, was not detected in any of the samples. Chloroform, a breakdown product of carbon tetrachloride was detected in the public school; however, chloroform is commonly associated with the use of cleaning products containing bleach. KDHE does not attribute the detections of chloroform in the public school to vapor intrusion of grain-fumigant related contamination in Hanover. Chloroform was not detected in St. John's School.

KDHE will continue to monitor groundwater contamination in the area and may collect additional air samples from the schools in the future, if groundwater data indicate the need to do so. At this time, no additional testing is planned.



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New Tier 2 Level for Carbon Tetrachloride

In March 2010, the U. S. Environmental Protection Agency (EPA) completed a toxicological assessment of carbon tetrachloride. This review resulted in a change to KDHE's Tier 2 Level for carbon tetrachloride for indoor air from 1.6 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 4.055 $\mu\text{g}/\text{m}^3$. The applicable Tier 2 Levels for soil and groundwater remain unchanged,

as these levels are based on drinking water standards. Tier 2 Levels are routinely evaluated and updated as appropriate as new information becomes available. Although the new level is higher, KDHE believes that it is protective of human health. Additional information regarding the toxicological assessment is available from the EPA at <http://www.epa.gov/iris>.

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KDHE Seeks Community Involvement

In response to inquiries and requests made by Hanover residents, the Kansas Department of Health and Environment (KDHE) prepared a Community Involvement Plan to help facilitate two way communication between the Hanover community and KDHE and to encourage community involvement in site-related activities. Some highlights of the Community Involvement Plan include:

- Establishment of an information repository at the Hanover Public Library where the public can go to read official documents and other information about the site
- Development of a webpage dedicated to providing current information regarding the Hanover USDA Site

<http://www.kdheks.gov/remedial/scu/hanover.html>

- Issuance of fact sheets, newsletters, and/or technical summaries periodically to ensure that the community is well informed regarding the status of the Site
- Holding public meetings, forums, and/or availability sessions to update the community on site developments and obtain the community's input on site activities

KDHE is seeking community members who would like to participate in a Community Advisory Group for the Hanover USDA Site. If formed, this group will assist KDHE in evaluating and selecting remedial alternatives as part of the Corrective Action Study process. If you are interested, please contact Chris Carey, available at 785-296-0225 or ccarey@kdheks.gov.

CCC/USDA Sponsors Radon Testing in Hanover

During the winter 2010 sampling event, Argonne collected samples for analysis of radon at a number of homes and the two schools in Hanover at the request of CCC/USDA. Because radon is naturally occurring and not attributable to grain storage operations at the former CCC/USDA facility, KDHE did not oversee radon sampling activities. Radon levels in the community ranged from <0.7 picocuries per liter (pCi/L) to 27.6 pCi/L. The U.S. Environmental Protection Agency

recommends additional sampling and/or mitigation for buildings with radon levels above 4 pCi/L. A list of certified radon contractors is available by calling the Kansas Radon Hotline at 1-800-693-KDHE. Additional information regarding the risks associated with radon exposure, testing protocols and what can be done to existing and new buildings to address radon, if detected, is available from the Kansas Radon Program at www.kansasradonprogram.org or 785-532-6026.

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