



## Region 7

Iowa  
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## Fact Sheet

**AUGUST 2003**

### **Engineering Evaluation and Cost Analysis Le Mars Coal Gas Superfund Site Le Mars, Iowa**

#### **SITE UPDATE**

The U. S. Environmental Protection Agency is releasing an Engineering Evaluation and Cost Analysis (EE/CA) for the Le Mars Coal Gas Superfund Site. This EE/CA identifies the proposed removal action alternatives to clean up benzene, toluene, ethylbenzene and xylene (BTEXs) and polycyclic aromatic hydrocarbons (PAHs) in the soil and ground water at the Le Mars site. These contaminants of concern (COCs) proved to be ones that were the most harmful to human health and the environment. This EE/CA is being issued to provide an opportunity for public comment on EPA's framework for evaluating the best remedy for the site.

#### **MORE ABOUT THE PROCESS**

The EE/CA is a study of cleanup options for the Le Mars Coal Gas Site and costs associated with those options. It explains the process related to each option to address the ground water and soil contamination posed by hazardous substances. This action is taken under the Comprehensive Environmental Response, Compensation and Liability Act, also known as the Superfund law.

An important part of the Superfund process provides the public an opportunity to comment or give feedback on the proposed removal action at the Le Mars Coal Gas Site.

#### **MARK YOUR CALENDARS**

##### **Public Comment Period**

**Dates:** August 6, 2003 through September 6, 2003

**Purpose:** To comment on the EE/CA for the Le Mars Coal Gas Superfund Site

##### **Information Meeting**

**Date:** Monday, August 18, 2003

**Time:** 6:00 - 9:00 p.m.

**Place:** Public Library  
46 First Street, S.W.  
Le Mars, Iowa

**Purpose:** To discuss the Proposed Removal Action Plan for the Le Mars Coal Gas Superfund Site

EPA has classified removal actions into three types, based on the circumstance surrounding the release or threat of release at a site: emergency, time critical, or non-time critical. The removal action for the Le Mars Coal Gas Site is non-time critical, since on-site action will take more than six months after the start of the

planning period. This EE/CA describes the implementability, effectiveness, and costs for soil and ground water removal actions.

During the development of the EE/CA, input from the Iowa Department of Natural Resources (IDNR) and Iowa Department of Public Health (IDPH) was taken into consideration. The IDPH performed risk assessments and determined that a risk to human health exists at the site. As the lead Agency, EPA has final approval authority for recommended removal action alternatives and is responsible for public participation activities. EPA is working in cooperation with both IDNR and IDPH in the implementation of this removal action.

### **INFORMATION ABOUT THE SITE**

The Le Mars Coal Gas Site is located at 331 1<sup>ST</sup> Street Northeast, Le Mars Plymouth County, Iowa. It is 1.6-acres and is bordered on the northwest by the Union Pacific and Canadian National railroads, on the east by 4<sup>th</sup> Avenue Northeast, and on the south by 1<sup>st</sup> Street Northeast. The area surrounding the site is currently occupied by residential and commercial properties. The site is a former manufactured gas plant (FMGP). Currently, the site is the location of the Le Mars Street Department and consists of an office and maintenance shop building, two additional storage buildings, and a shed. The property is currently owned by the city of Le Mars. Previous owners include the Le Mars Gas Company, Iowa Public Service Company and private parties.

Sources of COCs at FMGP sites, like the Le Mars Coal Gas site, typically are associated with gas holders, tar wells, and oil tanks. The likely sources of COCs at the Le Mars site include gas holders A and B, a tar well, and two oil tanks. Three underground storage tanks (USTs) installed after the Le Mars FMGP site ceased operations also could be sources of COCs.

### **THE REMOVAL ACTION**

The purpose of the removal action is to minimize further releases of on-site COCs off-site, and to stop surface soil and ground water exposure pathways that were identified for these contaminants. The objectives of the removal action include the following:

- Remove potential sources of contamination, which include gas holders A and B, the tar well, oil tanks, and the underground storage tanks, and dispose of any contamination found in the tanks.
- Eliminate exposure to contaminated ground water by relocating Municipal Wells 4 and 8 on the southern side of the city.
- Eliminate exposure to contaminated soil by preventing contact with, or destroying COC contamination in surface soil.

### **ALTERNATIVE SOLUTIONS**

Six removal action alternatives for addressing COC-contaminated soil and ground water were evaluated:

- Alternative 1 - No Action
- Alternative 2 - On-site Thermal Desorption and Enhanced Bio-remediation
- Alternative 3 - Containment
- Alternative 4 - Biosparging and Bioventing
- Alternative 5 - Heat-Enhanced Vapor Extraction and Enhanced Bioremediation
- Alternative 6 - Source Removal Above the Water Table

A detailed description of the above alternatives can be found in the EE/CA.

## **RECOMMENDED ALTERNATIVE**

The six removal action alternatives were evaluated based on effectiveness, implementability and cost. The recommended removal action is Alternative 6, which will involve the removal and proper disposal of approximately 11,000 cubic yards of contaminated soil and other materials, removal of the USTs, and backfilling these areas with clean soil. The EPA believes this is the best clean up option because:

- The City of Le Mars plans to stop using Municipal Wells 4 and 8 for drinking water purposes, which would eliminate potential exposure to contaminated ground water, and therefore, would eliminate the need to directly address ground water contamination.
- Soil contaminated above removal goals will be removed above the water table, which will reduce the surface soil risk and also future ground water contamination.
- Potential UST contamination would be removed, which would reduce mobility of COCs left in place.

## **NEXT STEPS**

The EPA's EE/CA recommends actions that will help to reduce contamination in the ground water near the site where it is moving underneath nearby residential areas. Soil and air will also be addressed. Air monitoring will occur during the removal action to assure the well being of the community.

Although EPA and IDNR are recommending a proposed action to address the contamination, a final decision will not be made until EPA reviews comments from the public. After the comment period closes, EPA will make a decision, which will be published in an Action Memorandum. The Action Memorandum will also include a summary of EPA's responses to the comments

received during the public comment period.

EPA encourages community members to review and comment on the EE/CA for the Le Mars Coal Gas Superfund Site. The EE/CA and accompanying documents can be found in the Administrative Record for the site, and are available for public review at the following information repositories:

Le Mars Public Library  
46 First Street, S.W.  
Le Mars, Iowa

EPA Region 7  
Records Center  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas

## **ADDITIONAL INFORMATION**

If you have questions or need additional information, please contact us at the number listed below.

**Comments on the EE/CA can be mailed or e-mailed to:**

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**Written comments must be postmarked by September 6, 2003.**