CENEX SUPPLY AND MARKETING FACILITY – QUINCY FEASIBILITY STUDY



In 1998 Cenex Supply and Marketing, Inc. (Cenex) and the Washington Department of Ecology agreed on interim actions to be taken at the Cenex/Quincy Site, located in the City of Quincy, Grant County, Washington (Site). Cenex and Ecology also agreed on the need for additional studies to more precisely define ground water contamination and on the need to pilot test technologies to address ground water cleanup. The various interim actions and Feasibility Study were conducted in accordance with State cleanup requirements authorized under the Model Toxics Control Act (MTCA) Chapter 173-340 WAC.

Cenex has prepared a Feasibility Study that describes the results of those interim actions taken in 1998 and 1999 and further evaluates technologies which can be used to complete cleanup of the property. Ecology invites the public to review these data and comment on the Feasibility Study.

Public comment will be accepted May 1, 2000 through May 30, 2000.

A Public Meeting on the Feasibility Study will be held May 4th, 2000 at the Quincy Community Center, 115 "F" SW, from 7-9 p.m.

SITE BACKGROUND

Cenex and Ecology entered into an Agreed Order in 1998 to clean up contamination near a former rinsate pond and fumigant storage facility in Quincy (Figure 1). Previous studies show subsurface soil at the former storage facility contained fumigant residues, chiefly 1,2-Dichloropropane. Additionally, a narrow plume of contamination in ground water containing similar chemicals extends southeast from the Site.

INTERIM ACTION

In cooperation with Ecology, Cenex installed a soil vapor extraction system to remove fumigant residues as vapors from the soil. To date, over 132 pounds of Volatile Organic Chemicals (VOCs), mostly 1,2-Dichloropropane, have been recovered.

Field scale testing of air sparging technology was performed to address the extent of chemicals in ground water. Though the response was not as positive as we would like, results are encouraging. In some wells closest to the former facility, wells indicate an accelerated decrease in concentrations of VOCs.

FACT SHEET MAY 2000

REPOSITORIES:

Department of Ecology Eastern Regional Office 4601 N. Monroe Spokane, WA 99205-1295

Quincy City Hall 104 B Street Southwest Quincy, Washington 98848

Grant County Health District 35 First and C Street Ephrata, Washington 98823

Technical questions/ submission of written comments contact:

Mr. Guy J. Gregory Department of Ecology Toxics Cleanup Program 4601 N. Monroe Spokane, WA 99205-1295 (509) 456-6387 or 1-800-826-7716 e-mail: ggre461@ecy.wa.gov

To be listed on the Cenex mailing list contact:

Ms. Carol Bergin 1-800-826-7716 or (509) 456-6360. e-mail: cabe461@ecy.wa.gov

PUBLIC COMMENT PERIOD FOR THE FEASIBILITY STUDY:

May 1, 2000 through May 30, 2000.

PUBLIC MEETING:

Thursday, May 4th 7-9 p.m. Quincy Community Center 115 "F" SW -- Quincy, WA New wells installed and data gathered more closely defined the extent of chemicals in ground water and soil. The data also provided information necessary to evaluate the performance of the interim actions.

REMEDIAL ACTION OBJECTIVES

Based upon data to date, Cenex and Ecology believe further actions are necessary to protect human health and the environment. These actions would eliminate direct contact by humans to contaminated soil; eliminate direct contact and ingestion by humans of chemical-bearing ground water; and protect ground water quality by eliminating transfer of chemicals from soil to ground water.

PROPOSED ACTIONS

To accomplish these objectives, Cenex evaluated the various actions against a "no-action" alternative. All actions evaluated included restrictions on access to the former fumigant facility itself, restrictions on ground water use in the plume area, and monitoring of ground water to evaluate and document the performance of remedial actions in meeting the objectives.

SOIL ACTIONS

Monitored natural attenuation was evaluated for soil. As chemicals degrade in soil, naturally occurring microbes would consume them and monitoring would evaluate the rate. The remedy relies on institutional controls such as deed restrictions and fencing to eliminate contact with Site soils. This action is

projected to take more than 50 years to achieve cleanup.

Asphalt capping was evaluated for soils. Asphalt serves as a barrier between soils and direct human contact. Natural attenuation would occur underneath the cap. This alternative would also take about 50 years to reach cleanup.

Excavation of soils was considered. Soils would be removed from the Site and disposed of according to applicable regulation. The Site would be backfilled with clean soil. This alternative would complete cleanup in less than one year.

Vapor extraction of soils above the caliche, a continuation of the interim measures currently underway, was examined. Soil cleanup levels should be reached in three years.

GROUND WATER ACTIONS

Micro-sparging is a modification of the current sparging system to allow more effective distribution of oxygen in the aquifer. It should enhance the effectiveness of the current system. Micro-sparging is expected to restore ground water quality in about 10 years.

The current sparge system alone, while not instantly effective in the short term, has the potential to be effective in the long term. Ground water cleanup levels should be reached using this technique alone in about 10 years.

Containment of on-site ground water via pumping, treatment and water disposal can capture ground water chemically impacted by Site soils. Water acquisition and disposal is difficult and expensive. Ground water quality restoration should take 25 years.

Another aquifer pumping alternative would draw down the water table in the Site vicinity with pumps and remove chemicals from formerly saturated soils using vapor extraction. This should result in chemical removal in five to ten years.

ALTERNATIVES ANALYSIS

The Feasibility Study compares these various alternatives using the criteria in the Model Toxics Control Act. Cenex's preferred alternative combines several approaches. Asphalt capping and soil vapor extraction are proposed for soil. Asphalt capping should enhance the effectiveness of the existing soil vapor extraction system. In ground water the existing air sparge system, modified by adding micro-sparge equipment, is proposed to increase the effectiveness of in-situ treatment of ground water. Access restrictions to the Site, exposure restrictions to ground water, and ground water monitoring are included

WHAT HAPPENS NEXT?

Public comment on the Feasibility Study will be considered, and these documents will be modified if necessary. Ecology will then incorporate public comments into preparation of a Draft Cleanup Action Plan (DCAP). The DCAP outlines Ecology's decision on final cleanup of the Site. Following public notice and opportunity to comment Ecology

will finalize the DCAP and develop an agreement with Cenex to perform the work. Once final, the work will be performed.

ECOLOGY WANTS YOUR COMMENTS!

The public comment period represents an opportunity to have your ideas and comments heard by Ecology. You may review and comment on the Feasibility Study May 1, 2000 through May 30, 2000.

- Copies of the Feasibility Study are available for public review at the repositories listed in the shaded box on page one of this fact sheet.
- ◆ To review more detailed Site documents than those in the information repositories, contact Johnnie Harris of Ecology at (509) 456-2751 to schedule an appointment.
- Files may be reviewed at
 Ecology's Spokane office
 Monday through Thursday,
 8-5 p.m. by appointment only.
- Please submit written comments by May 30, 2000 to Mr. Guy Gregory, Site Manager, at the Ecology address listed in the shaded box on page one.