GALAXY/SPECTRON SUPERFUND SITE

Site Update

Elkton, Cecil County, Maryland

U.S. Environmental Protection Agency, Region III Fact Sheet June 2003

We Want Your Opinion!

The public is invited to comment on EPA's proposed plan during a 30-day public comment period that opened on June 20, 2003 and closes on July 20, 2003.

The EPA will also hold a public meeting to further explain the proposal at

Providence Middle School
3035 Singerly Road
Elkton, MD 21921

Thursday, June 26th at 7 p.m.

EPA Announces Proposed Cleanup Plan, Invites Public Input

This fact sheet is a summary of the U.S. Environmental Protection Agency's (EPA's) proposed cleanup plan for the Galaxy/Spectron (Spectron) Superfund Site in Elkton, Maryland. EPA's proposed plan is based on the results of the Agency's investigation of the Site and on a careful comparison of several cleanup technologies that could be applied to the unique conditions found at this Site. EPA believes that the proposed plan outlined in this fact sheet represents the best combination of the technologies and benefits that were evaluated by the Agency. The full proposal is available for public review at the locations listed on page 2 of this fact sheet.

Summary of Proposed Plan

EPA's proposed plan addresses Operable Unit 1 (OU1). OU1 includes:

- contamination in the soil beneath the Spectron plant area,
- shallow ground water (ground water above the bedrock) at the plant area, and
- ground water captured in the ground water containment system.

The proposed plan utilizes the existing ground water containment, collection, and treatment system but adds:

- a protective cover over the contaminated soil and
- enhanced subsurface treatment of soil contaminants.

Under this plan, the old industrial buildings and structures on-site will be demolished. Then, the Site will be re-graded and covered with a water-resistant cap. The cap itself will be covered with soil which will then be seeded. The liner and soil cover will be installed to provide a protective barrier between the contaminated shallow soils and future users of the site. Additionally, contaminated soils beneath the cap will be treated in-place. An electron donor material (*see box on page 3*) will be introduced into the contaminated soils. It will enhance the ability of the soil's natural bacteria

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to degrade or consume the contaminants in the soil and shallow ground water. Legal restrictions, called "institutional controls", will also be placed on the property deed to prevent people from conducting activities, such as construction or well-drilling, that could disturb the protective cap and soil treatment process. This combination of measures will make the property available for beneficial re-use even while long-term soil treatment and ground water containment is taking place.

The Current Groundwater Collection and Treatment System

Under the direction of the EPA, the parties responsible for the Site contamination have already constructed a groundwater containment, collection and treatment system that prevents contaminated groundwater from entering the stream. Under this proposal, the system will continue to operate.

The system is essentially a french drain built beneath the creek-bed which traps contaminated groundwater, pumps it to an on-site wastewater treatment plant where it is treated and then discharged back into the creek. An air stripper, completed in 2000, removes any residual vapors that the treated water might give off.

While the system has been successful so far at restoring water quality to Little Elk Creek, it was only designed to treat water in the shallow aquifer.

Contamination Remains in the Bedrock Aquifer

The current proposal does not address deep bedrock contamination. Further study is needed to determine the best long-term solution for addressing contamination in this aquifer. The study is currently underway and should be completed within the year. EPA will put forth an additional cleanup proposal on the deep bedrock aquifer by next summer, and the public will have the opportunity to comment at that time.

Some local residents use the deep bedrock aquifer to supply their household wells. In most cases Site-related contamination flows in the direction of the creek, rather than toward private wells, because the Site is located in a valley.

Under EPA direction, the parties responsible for the contamination monitor several private wells on a routine basis. To date, the tested well water meets all national drinking water standards.

FOR MORE INFORMATION

The full cleanup proposal is available for review at the following locations:

Cecil County Library
301 Newark Avenue
Elkton, Maryland

EPA Region III
Administrative Record
1650 Arch Street
Philadelphia, PA 19103

or on the Internet at
www.epa.gov/arweb.

Send your comments on the proposal via email or mail, postmarked no later than June 20, 2003 to:

Robert Sanchez (3HS23)
Remedial Project Manager
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
sanchez.robert@epa.gov

If you have other questions related to the public meeting, comment period, the proposed plan or the Site in general, please contact:

Carrie Deitzel (3HS43)
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Philadelphia, PA 19103
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(215) 814-5525
or
1-800-553-2509

SITE BACKGROUND

The Galaxy/Spectron site occupies approximately five acres in a rural area five miles west of Elkton, Maryland. The site was added to EPA's National Priorities List of most hazardous waste sites, or the Superfund list, in 1994. The site was originally occupied by a paper mill which burned down.

Galaxy Chemicals began a solvent recovery operation in 1961, treating wastes from the electronics, pharmaceutical, paint and chemical industries. The company went bankrupt in 1975, and then re-opened with a new name under the same ownership - Solvent Distillers, Inc. The company changed its name again in 1978 to Spectron, Inc., and then went bankrupt again in 1988.

Sloppy operations, including spills and leaks, plus the unlined lagoons caused the soil to become contaminated. These contaminants washed into Little Elk Creek as runoff and from the groundwater. Despite repeated citations by environmental inspectors, site operations continued for years with minimal compliance.

What is an Electron Donor?

An electron donor is a compound that, when introduced to an environment and metabolized by naturally occurring organisms, causes a shift of electrons from one compound to another. During a microorganism's cellular respiration, the acceptor or recipient compounds, in this case trichloroethene and perchloroethene, each accept an electron. This electron shift transforms or degrades the compounds, making them less harmful.

SUMMARY OF ALTERNATIVES

During the Feasibility Study, various alternatives were identified and evaluated for effectiveness in containing contaminated groundwater and treating contaminated shallow soils. EPA's preferred alternative is "Alternative 3", which is described in greater detail in this fact sheet. Each alternative, except the "No Action" alternative contain common elements, including: the continued operation and maintenance of the existing groundwater containment, collection and treatment system; the demolition of all structures and re-grading on the Site; and the use of institutional controls to prevent unauthorized construction or drilling of wells.

Alternative 1: No Action

Alternative 2: Soil Cover with Phytoremediation

Alternative 3: Engineered Cover System with In-Situ Treatment

Alternative 4: Excavation and Off-Site Disposal with a Soil Cover

Alternative 5: Soil Vapor Extraction with Engineered Cover System

Visit Our Website for more information related to the Superfund Process

www.epa.gov/superfund

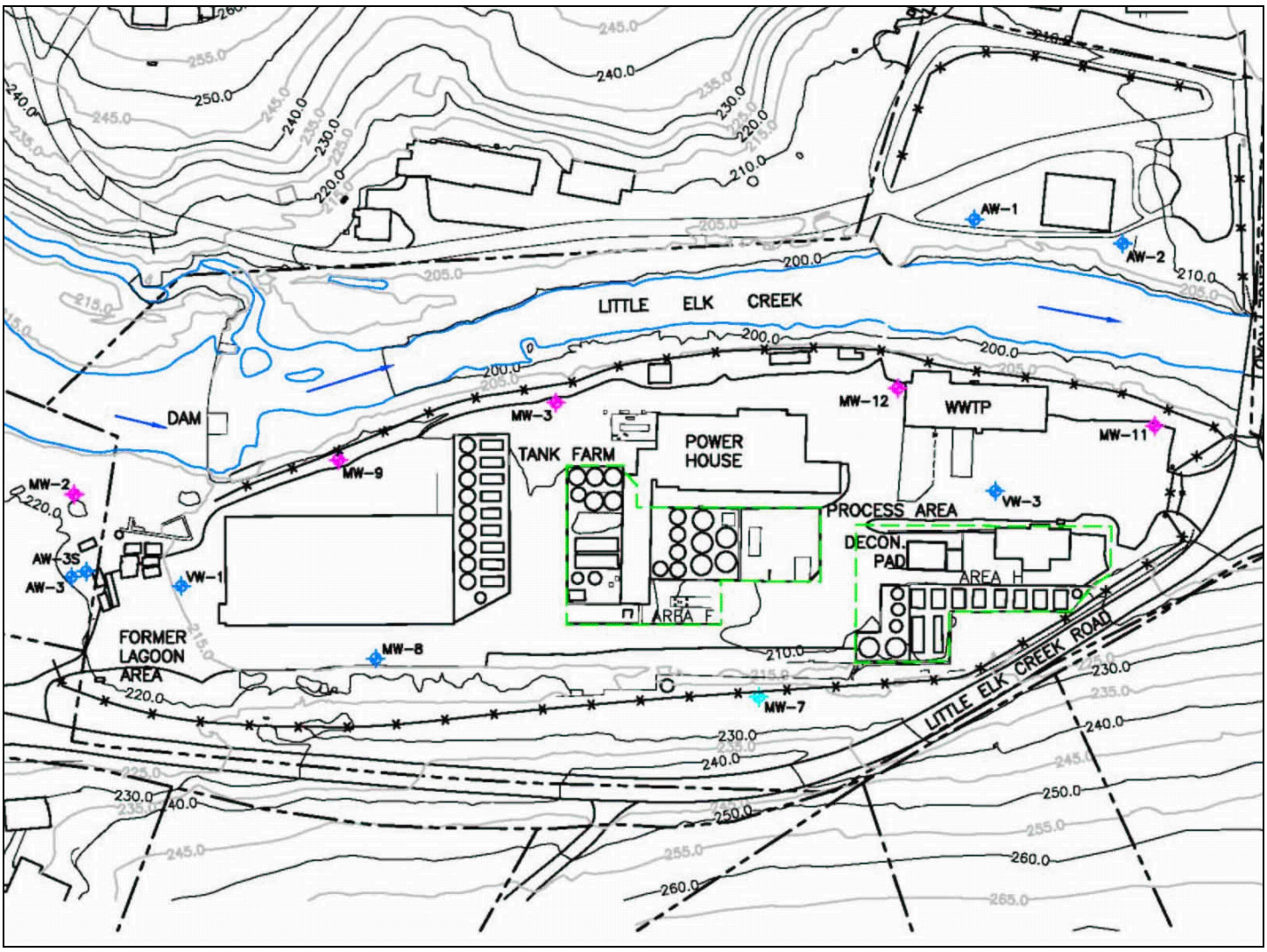
Join the Mailing List

If you would like your name added to the mailing list for information regarding the Galaxy/Spectron Superfund Site, please complete this form and mail it to:

Carrie Deitzel
Community Involvement Coordinator (3HS43)
U.S EPA Region III
1650 Arch Street
Philadelphia, PA 19103

Name: _____
Address: _____
City: _____ **State:** _____ **Zip Code:** _____
Phone: _____

SITE LAYOUT MAP



EPA Update on Site Progress

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