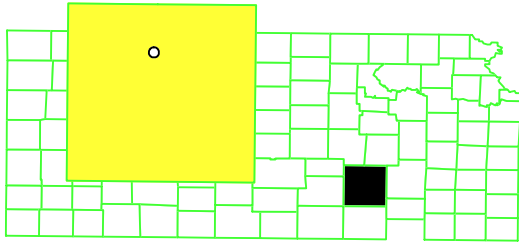


**PESTER REFINERY
COMPANY**
KANSAS
EPA ID# KSD000829846

EPA Region 7
City: El Dorado
County: Butler County
Other Names:

02/20/2009



SITE DESCRIPTION

The Pester Refinery Company site is located on a 10-acre tract to the north and west of the city of El Dorado, Butler County, Kansas. The refinery operations began in 1917. Refinery wastes were stored in the burn pond and these wastes were periodically ignited through the mid-1970s. The burn pond are adjacent to the West Branch of the Walnut River. In 1987 the Kansas Department of Health and the Environment (KDHE) found seepage from the impoundment entering the river and conducted sampling. During rainfall events, pond water has occasionally overflowed and discharged to the river and the adjacent floodplain. An estimated 160 people obtain drinking water from private wells located within three miles of the site.

Site Responsibility:

This site is being addressed through federal, state, and potentially responsible party (PRP) actions.

NPL LISTING HISTORY

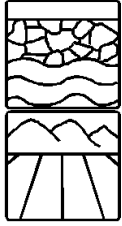
Proposed Date: 06/24/88

Final Date: 03/31/89

Deleted Date:

THREATS AND CONTAMINANTS

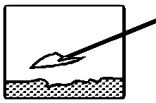
Ground water contaminants include benzene, toluene, ethylene and xylene (BTEX) compounds. The burn pond sludge, was found to be contaminated with



BTEX compounds and polycyclic aromatic hydrocarbons (PAHs). The soil beneath the pond sludge is also contaminated at lower concentrations. Accidental ingestion of soil or sludge could pose a health risk. Since the site lies within the 100-year floodplain, flooding of the site area is a concern.

CLEANUP APPROACH

Response Action Status



Initial Actions: Source Control: In 1990, the potentially responsible party began conducting a Remedial Investigation (RI) to determine the nature and extent of the contamination at the site and a Feasibility Study (FS) to consider alternatives for remediation. In 1992, the ROD was written for the first operable unit (OU1) selecting a remedy to address the source of contamination, including off-site removal of sludge from the burn ponds and in-situ bioremediation and soil flushing of underlying soil beneath the sludge. In 1992, the responsible party began construction of an interceptor trench on the north and east sides of the burn ponds. The first phase of the remedial action continued through March 1996, and included dredging and processing sludge, petroleum recovery, and shipment of solids offsite. In 1996, the installation of aerators in the ponds initiated the second phase of the remedial action, the bioremediation of soils and soil flushing.

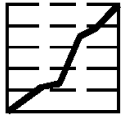


Site Studies: Ground water: In 1993, the potentially responsible party began conducting an RI into the nature and extent of the contamination of the ground water. Ground water monitoring wells were installed by the responsible party, and ground water sampling indicated contamination in the alluvial aquifer only. The lower bedrock aquifer, the Florence Aquifer, which is a drinking water aquifer, was not contaminated. In 1998, a ROD was written for the second operable unit (OU2) selecting quarterly ground water monitoring, surface water monitoring and sediment monitoring. The alluvial aquifer did not provide sufficient yield to be utilized for drinking water and the lower bedrock drinking water aquifer was not contaminated.

Site Facts:

In 1986, the KDHE issued an Administrative Order to the owner, Pester Refinery Company, to conduct an RI/FS. Pester demonstrated an inability to pay for the clean up and filed for bankruptcy. In 1990, a previous owner, Fina, along with Pester, signed a Consent Order with the KDHE in which the companies agreed to conduct the RI/FS. In 1992, a ROD was written selecting a remedy of off-site removal of sludge from the burn pond and in-situ bioremediation and soil flushing. In September 1993 an Order was signed by the KDHE and Fina in which the company agreed to conduct the remedial design and remedial action for the site. In December 1993, an Order was signed by the KDHE and Fina in which the company agreed to perform the RI/FS for the ground water operable unit (OU2). The remedial action began in 1994. In 1998, a ROD was written for OU2, the ground water operable unit, requiring quarterly groundwater monitoring, surface water monitoring and sediment monitoring. In March 2000, an Order was signed by the KDHE and Fina for the monitoring for the ground water operable unit (OU2) and the remedial design (RD) and remedial action (RA) for OU1. In 1999, the first five-year review was completed. The source of the contamination had been removed and the bioremediation long term response remedy was ongoing. In March 2000, an Explanation of Significant Differences (ESD) described a reinterpretation of the soil cleanup goals for polynuclear aromatic hydrocarbons (PAHs) to reflect current policy of toxic equivalency factors (TEFs) for individual toxicities. The efficiency of the bioremediation and soil flushing remedy declined and remedial action goals were not expected to be achieved in a reasonable time. The PRP conducted a phase 1 treatability study and pilot study and a phase 2 treatability study to investigate admixtures for a solidification remedy and performance parameters. The second five-year review was conducted in 2004. A ROD Amendment in June 2005 included dewatering the pond and incorporated the solidification remedy for the residual contaminated soils. A Consent Order was signed between KDHE and TOTAL Petrochemicals on January 3, 2006 for the solidification remedy RD/RA. The solidification remedial action was completed in 2006 and a site inspection was conducted on December 6, 2006 including TOTAL, KDHE and EPA. Ground water monitoring and surface water monitoring have continued during 2007 and 2008. Seepage of phase-separated hydrocarbons has intermittently occurred along the access road at the base of the berm of the former storm and north burn ponds during 2007 and 2008. The PRP installed five observation wells in September 2008 to monitor fluid levels between the solidified soils and the interceptor trench.

ENVIRONMENTAL PROGRESS



By addressing the source of site contamination, the EPA has determined that the Pester Refinery Company site does not pose an immediate threat to human health and the environment while the remaining site cleanup activities are being conducted. The first five-year review report was completed in 1999 and the source of contamination had been removed and the bioremediation long term response remedy was ongoing. If a remedial action is selected that results in any hazardous substances, pollutants, or contaminants remaining at the site, the remedial action must be reviewed no less often than each five years after the initiation of the remedial action to assure that human health and the environment are being protected by the remedial action being implemented. Contaminants continued to be removed and success was achieved by the bioremediation remedy. However, the efficiency of the remedy declined as indicated in the 2001 bioremediation report. ATOFINA Petrochemicals, Inc. submitted a focused Feasibility Study during 2003 which included a preferred remedy to stabilize the remaining contaminants in place. A phase 1 treatability study, a pilot study and a phase 2 treatability study were conducted during 2004 to determine admixtures for a solidification remedy and performance parameters. The second five-year review was completed in 2004. A ROD Amendment was written in June 2005 which included containment by in-situ solidification of residual contaminated soils followed by placement of a final soil cover. A Consent Order between KDHE and TOTAL Petrochemicals was signed for the solidification remedy RD/RA in January, 2006. The remedial action was completed in 2006 and a site inspection was conducted on December 6, 2006 by TOTAL, KDHE and EPA. Ground water and surface water monitoring have continued during 2007 and 2008 in accordance with the Long-Term Monitoring Plan. The third five-year review will be conducted in 2009.

COMMUNITY INVOLVEMENT

EPA and KDHE convened a public meeting on September 2, 1998, at the Bradford Memorial Library in El Dorado, Kansas, to accept comments on two proposed decisions for the cleanup of the Pester Refinery Company/Pester Burn Pond Superfund Site.

EPA distributed a fact sheet in March 2004 to announce that the second five-year review of the site was beginning.

EPA distributed a fact sheet in January 2005 to announce that the second five-year review of the site was complete. EPA placed an ad in The El Dorado Times on February 1, 2005, to inform the public that the second five-year review had been completed.

A public meeting was held on March 8, 2005 for the purpose of presenting the Proposed Plan for the ROD Amendment for the stabilization/solidification remedy. A factsheet was prepared and a display ad was placed in the El Dorado Times by KDHE.

A fact sheet and public notice were prepared in December 2008 to announce the beginning of the

third five-year review.

SITE REPOSITORY



Bradford Memorial Library
611 South Washington
El Dorado, Kansas

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-7166

REGIONAL CONTACTS

SITE MANAGER:

E-MAIL ADDRESS:

PHONE NUMBER:

Catherine Barrett

barrett.catherine@epa.gov.

(913) 551-7704

COMMUNITY INVOLVEMENT

COORDINATOR:

PHONE NUMBER:

E-MAIL ADDRESS:

Dianna Whitaker

(913) 551-7598

whitaker.dianna@epa.gov

STATE CONTACT:

PHONE NUMBER:

Margaret Weiser

(785) 296-5555

MISCELLANEOUS INFORMATION

STATE:

KS

0753

CONGRESSIONAL DISTRICT:

04

EPA ORGANIZATION:

SFD-SUPR/MOKS

MODIFICATIONS

Created by:

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Asberry/SUPRFUND/R7/US
EPA/US

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