Murphy Oil Spill Fact Sheet
February 2006

BACKGROUND

Murphy Oil Corporation owns and operates the Murphy Oil Refinery, which is part of the Meraux oil facility located at 2500 East St. Bernard Highway in Meraux, St. Bernard Parish, Louisiana. Hurricane Katrina lifted and dislodged a partially filled 250,000-barrel aboveground storage tank (tank number 250-2) at the refinery. At the time, the tank contained 85,000 barrels of mixed crude oil, and approximately 25,110 barrels (1.05 million gallons) were released. On September 3, 2005, Murphy Oil Corporation notified the National Response Center concerning the oil spill at the refinery. The released oil affected approximately 1,800 homes in an adjacent residential community, in an area of about one square mile. Various unnamed interceptor canals and other canals such as the 20 Arpent, the 40 Arpent, the Meraux, the Corinne, and the Delarond were also affected.

RESPONSE TO SPILL

U.S. Coast Guard

The U.S. Coast Guard oversaw Murphy Oil's removal of free oil in canals, tank farm containment areas, and storm drains.

U.S. Environmental Protection Agency (EPA)

On September 3, 2005, during the initial investigation at the refinery, the EPA On-Scene Coordinator confirmed the source of the release and directed Murphy to secure the affected tank, identify the extent of the release, develop a reliable estimate of the amount released and report the status as soon as possible. EPA is monitoring Murphy Oil's sampling and cleanup at residential properties, parks, school, roads, sidewalks and other public spaces that were contaminated by the spill. Monitoring includes coordination with:

- local, state, and other federal agencies to address environmental concerns about oil cleanup activities;
- Murphy Oil on the collection of air and soil data;
- parish officials; and
- local, state, and federal health agencies as to the nature of the chemicals on the site that may pose a threat to public health.

EPA workers are monitoring the collection of samples by Murphy Oil contractors and are splitting ten percent of the samples collected by Murphy Oil. EPA is sending the split samples for independent analysis to ensure quality assurance/quality control. EPA is also identifying and characterizing the extent of contamination in the area, providing written and photographic documentation of response activities, and monitoring removal activities. To review the most recent information on EPA's activities and contact information, please visit the EPA Web site at **http://www.epaosc.net/murphyoilspill** or **www.epaosc.net**.

Agency for Toxic Substances and Disease Registry (ATSDR)

ATSDR is the lead public health agency responsible for implementing the health-related provisions of Superfund (Superfund was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and reauthorized by SARA in 1986). ATSDR assesses health hazards at specific hazardous waste sites, helps prevent or reduce exposures and the illnesses that result from the exposures, and increases knowledge and understanding of the health effects that may result from exposure to hazardous substances. ATSDR collaborates with local, state, and other federal agencies; tribal governments; local communities; and local health care providers. ATSDR's goal is to help reduce the harm that exposure to hazardous substances can cause to human health.

ATSDR is working with the Louisiana Department of Health and Hospitals (LDHH) to help address health-related issues at the Murphy Oil Spill site. ATSDR has reviewed the sample results from EPA and Murphy Oil, considered the implications of the results, and released two health consultation reports on the Murphy Oil spill. These health consultation reports reviewed environmental sampling data analyzed through November 8, 2005, advising the public of the hazards at the site. For more information about ATSDR's activities, go to **URL http://www.atsdr.cdc.gov** and then click on "Hurricane Katrina."

The sampling results indicate that the most highly contaminated areas are directly west of the Murphy Oil facility. A number of properties have visible signs of contamination on exterior and interior surfaces of the homes. However, the sediment sampling indicates that the areas of concern are those closest to the Murphy Oil facility. The data from some of the properties closest to the Murphy Oil facility show significant contamination. Elevated contaminant levels are found both indoors and outdoors on these properties. ATSDR will evaluate additional results of environmental sampling as they become available, and will provide findings to the public. ATSDR encourages active public participation in this process.

Louisiana Department of Environmental Quality (LDEQ)

The residential soil standards of the LDEQ Risk Evaluation/Corrective Action Program (RECAP) are used as action levels to ensure human health and safety. The RECAP screening standards are developed to protect residents from long-term (i.e., 30-year) exposures. As of January, 24, 2006, over 3,900 properties in the Murphy Oil spill area have been sampled and approximately 90% have been determined to be below the RECAP action levels. To learn more about the LDEQ RECAP, please call 888.763.5424 or go to**:** **http://www.deq.louisiana.gov/technology/recap/2003/index.htm**.

Louisiana Department of Health and Hospitals (LDHH)

To address any public health question associated with this site or to learn more about the process, please contact Collette Stewart-Briley, LDHH Environmental Health Educator, at 888.293.7020. LDHH encourages active public participation in this process.

LDHH has available several fact sheets not related to the Murphy Oil site that are of value to the public. These fact sheets, listed below, can be found at **http://www.dhh.louisiana.gov/publications.asp#Cat-13:**

- *Indoors MOLD and MILDEW After Hurricane Katrina*
- *Mold - What You Need to Know About Your Health and Your Property*
- *Personal Protective Equipment to Use When Repairing Your Home*
- *Returning to Your Home After Hurricane Katrina*
- *Keeping Food and Water Safe*

Murphy Oil

As the responsible party, Murphy Oil is conducting assessment and cleanup activities. Cleanup of public areas includes removal of oil-stained sediment and soil.

On January 30, 2006, a Federal Judge certified a class-action lawsuit against Murphy Oil over the oil spill. The Judge's ruling determined that Murphy Oil is no longer allowed to communicate with any residents within the designated spill area, unless the residents have already settled with Murphy. With the property owners' written consent, Murphy Oil had been sampling properties and removing crude oil from properties in the affected spill area. When sampling is completed on the properties, Murphy will still send the sampling results letters out, but Murphy will not be able to respond to any questions related to the sampling unless the recipients have already settled with Murphy.

The results of EPA's analysis of the split samples are on the EPA Web site at **http://www.epa.gov/katrina/testresults/murphy.**

DATA EVALUATION AND FINDINGS

Contaminants from Murphy Oil were found in sediments in the area affected by the spill at concentrations exceeding levels that would meet LDEQ's RECAP screening standards for residential soils. The contaminants for which concentrations exceed screening standards are polycyclic aromatic hydrocarbons (PAHs) and diesel-range and oil-range organic chemicals. PAHs, such as benzo(a)pyrene, are commonly found in fuel oils and crude oil. Detecting diesel-range and oil-range organic chemicals indicates that petroleum products are present in the sample. Whether exposure to those chemicals presents a health hazard is determined on the basis of an analysis of the sample.

In the case of the samples from the area of the Murphy Oil spill, concentrations of oil-related chemicals in sediment samples from most properties are below ATSDR comparison values and LDEQ's RECAP standards for petroleum products in residential soils. However, concentrations of petroleum products in sediment samples from some properties exceed levels that would meet LDEQ's standards. Therefore, these properties should be cleaned to LDEQ's standards to be protective of public health for reoccupancy.

HAZARD EVALUATION SUMMARY

Exposures to sediment that is contaminated with crude oil can cause skin problems if the sediment gets on bare or broken skin. Skin contact with crude oil for short periods may cause itchy, red, sore, or peeling skin.

Because concentrations of oil-related chemicals in sediment samples from most properties within the Murphy Oil spill area are below ATSDR comparison values and levels that would meet LDEQ RECAP standards, short-term or long-term exposures to such sediments on these properties do not pose a public health hazard. However, before these properties are reoccupied, other potential health hazards, such as indoor mold and structural damage, should be evaluated.

Concentrations of petroleum products in sediment and soil samples from some properties exceed levels that would meet LDEQ RECAP standards. Remediating such properties to meet RECAP standards would be protective of public health for reoccupancy.

RESOURCES

U.S. Environmental Protection Agency

For questions about EPA's actions related to the Murphy Oil site, call EPA at 512.426.6400 or 800.533.3508 (toll-free.). Visit the EPA Web page at **http://www.epa.gov/katrina.**

Agency for Toxic Substances and Disease Registry

For questions about ATSDR Health Advisories related to the Murphy Oil spill, call 888.422.8737 or visit the ATSDR Web page at **http://www.atsdr.cdc.gov/** or http://**www.bt.cdc.gov/disasters/hurricanes/environmental.asp**.

Louisiana Department of Environmental Quality

For questions on the LDEQ RECAP standards, call 888.763.5424 or visit the LDEQ web page at **http://www.deq.louisiana.gov/portal/**.

Louisiana Department of Health and Hospitals

For questions on the LDHH fact sheets, call Collette Stewart-Briley, MSPH, Environmental Health Educator, at 225.763.3573 or visit the LDHH Web page at **www.dhh.louisiana.gov**.

U.S. Coast Guard

http://www.uscg.mil/USCG.shtm

St. Bernard Parish

http://www.sbpg.net