540N05004

EPA
United States
Environmental Protection Agency

The U.S. EPA's Oil Program Report

October 2005

Contents

Oil Program Becomes Part of the EPA Office of Emergency Management ... 1

EPA Prepares for Publication of the SPCC Guidance for Regional Inspectors ... 1

Spring 2006 EPA Freshwater Spills Symposium ... 2

Recap: 2005 International Oil Spill Conference ... 2

Oil Matched to Dalco Passage Oil Spill, Update ... 2

Hurricane Katrina Pollution Response Efforts ... 3

Motiva, Premcor to Settle for $23.7 Million ... 4

Boott Hydropower Facility Oil Release, Massachusetts ... 4

Release from Unknown Source, Bangor, Maine ... 5

EPA and Sunoco Settle Clean Water Act Penalty Claim, Pennsylvania ... 6

Clean Water Act Administrative Complaint Settled, West Virginia ... 6

Owensboro Grain Crude Tank Spill, Kentucky ... 6

High-pressure Pipeline Break, Kansas ... 7

Fremont Paving Oil Spill, Colorado ... 7

Oil Program Becomes Part of the EPA Office of Emergency Management

A new EPA Office of Emergency Management (OEM) consolidates the Office of Solid Waste and Emergency Response's emergency prevention, preparedness, and response duties by joining together the Oil Program Center, Emergency Response & Removal Center, and the Chemical Emergency Preparedness and Prevention Office. To ensure that the United States is better prepared for environmental emergencies, OEM works with other EPA partners, federal agencies, state and local response agencies, and industry to prevent accidents as well as maintain superior response capabilities. Oil spill prevention issues are now addressed in the Regulatory and Policy Development Division, while preparedness and response matters are in two separate divisions of OEM, the National Planning and Preparedness and Program Operations and Coordination, respectively. For more information please go to http://www.epa.gov/oem/.

EPA Prepares for Publication of the SPCC Guidance for Regional Inspectors

EPA is preparing to release its *Spill Prevention, Control, and Countermeasure (SPCC) Rule Guidance for Regional Inspectors*. The guidance document is intended to assist regional inspectors in reviewing a facility's implementation of the SPCC rule at 40 CFR part 112. With its publication, EPA seeks to establish a consistent understanding among regional EPA inspectors on how particular provisions of the rule may be applied. The guidance document will also be available on the EPA Oil Program Web site to both owners and operators of facilities that may be subject to the SPCC rule and the general public as a guide on how EPA intends the SPCC rule to be implemented.

EPA developed this guidance document for regional inspectors to help clarify the role of the inspector in the review and evaluation of the performance-based SPCC requirements, including environmental equivalence, impracticability determinations, and integrity testing. The document is organized into seven chapters and includes several appendices for the inspector's reference.

Chapter 1: Introduction discusses the purpose and scope of 40 CFR part 112, the regulatory history of the SPCC rule, and the July 2002 amendments.

Chapter 2: Applicability of the SPCC Rule clarifies the facilities, activities, and equipment that are regulated under the SPCC rule by providing an in-depth discussion of the applicability criteria and relevant scenarios.

Chapter 3: Environmental Equivalence discusses the use of the environmental equivalence provision, lists the substantive requirements eligible for the provision, clarifies certain policy areas, provides examples, and describes the role of the EPA inspector in reviewing and evaluating deviations based on environmental equivalence.

Chapter 4: Secondary Containment and Impracticability Determinations describes the various secondary containment requirements and demonstrates how these requirements apply to specific equipment and activities at an SPCC-regulated facility. This chapter also discusses the impracticability determination provision of the rule, the additional requirements that accompany an impracticability determination, and the documentation needed to support such a determination. The role of the EPA inspector in reviewing and evaluating secondary containment requirements and impracticability determinations is also discussed.

Chapter 5: Oil/Water Separators addresses the applicability of the SPCC rule to various scenarios involving oil/ water separators and other equipment.

Chapter 6: Facility Diagrams provides guidelines on the necessary level of detail for a facility diagram included in an SPCC Plan. This chapter also includes example facility diagrams for different types of facilities.

Chapter 7: Inspections, Evaluation, and Testing provides an overview of the SPCC inspection, evaluation, and testing requirements, as well as how environmental equivalence may apply for these requirements. The role of the EPA inspector in determining a facility's compliance with the inspection, evaluation, and testing rule requirements and a summary of industry standards, code requirements, and recommended practices that apply to different types of equipment are also discussed.

The guidance includes several appendices that provide supplementary information for inspectors. There is a sample contingency plan and two sample SPCC Plans, one for a production facility and another for a bulk storage facility. Additional appendices include a summary of the 2002 amendments to the SPCC rule, SPCC inspection checklists, and additional policy documents that are cited throughout the guidance.

The guidance document is currently undergoing the last stages of the review process and will be made available to the public within the next several weeks. Please see the EPA Oil Program Web site at http://www.epa.gov/oilspill. The guidance is a living document and EPA will revise it in the future as needed.

Questions regarding the SPCC rule and the SPCC guidance document should be directed to the Superfund, TRI, EPCRA, RMP, and Oil Information Center, which is a publicly accessible service that provides up-to-date information on several EPA programs. It does not provide regulatory interpretations, but maintains up-to-date information on the availability of publications and other resources. The Information Center is open Monday through Friday from 9:00 a.m. to 5:00 p.m. Eastern Time (except federal holidays). Contact the Information Center toll-free at (800) 424-9346 or (703) 412-9810 in the Washington, D.C., area. More information on the Information Center is available at http://www.epa.gov/ superfund/resources/infocenter/index.htm.

Plan to Attend! Spring 2006 EPA Freshwater Spills Symposium, Portland, Oregon

The Freshwater Spills Symposium Design Team, consisting of OEM staff and representatives from the EPA regions, states, and industry, is gearing up for the Sixth Annual Freshwater Spills Symposium (FSS) in Portland, Oregon. The 2006 Freshwater Spills Symposium will be held in late April or early May. A Call for Papers and a brochure are available on the website. Abstracts are due November 15, 2005.

For up-to-date FSS 2006 information and **free registration**, please visit **www.freshwaterspills.net/fss2006** or see **www.epa.gov/oilspill.** For more information on FSS 2006, please contact Leigh DeHaven, OEM, at oilinfo@epa.gov or (202) 564-1974.

Recap: 2005 International Oil Spill Conference May 14-19, 2005, Miami Beach, Florida

Many thanks go out to the EPA regional and headquarters staff and contractors who contributed to the success of the International Oil Spill Conference (IOSC), which took place in Miami Beach, Florida, on May 14-19, 2005. The theme for the conference was "Prevention, Preparedness, Response and Restoration-Raising Global Standards." More than 1,300 participants, representing 66 countries, attended the conference.

Conducted since 1969, the IOSC is the preeminent gathering of oil spill response experts from around the world and provides a unique opportunity to catch up on major developments in the field and interact with knowledgeable experts on oil spill issues. The 2005 conference included informative sessions on dispersant effectiveness, natural resource damage assessment, chemical countermeasures, preparedness and planning, education and training, security and legal considerations, and a variety of other interesting and timely topics.

EPA provided platform session chairs, paper authors, poster presenters, a poster session chairperson, and IOSC panelists for the Hot Topic, Athos I Spill on the Delaware River, and National Response Team sessions. IOSC booth exhibitors included the Environmental Response Team (ERT), Region 4, Region 6, and EPA Headquarters. EPA also provided instructors on the Spill Prevention, Control, and Countermeasure (SPCC) rule.

Oil Matched to Dalco Passage Oil Spill, Follow-up to the January 2005 *Update*

Source: USCG District 13 Press Release, December 23, 2004.

2005

In October 2004, more than 1,000 gallons of oil spilled into Puget Sound from a

previously unknown source. The spill occurred in Dalco Passage, a channel between Tacoma and Vason, Washington. Investigators with the Washington State Department of Ecology took "oil fingerprints" from ships in the area at the time of the spill to match the types of oil spilled to oil found on the ships.

In December 2004, oil sample tests conducted by both state and federal laboratories indicated that a Polar Texas oil tanker, owned by ConocoPhillips, was the source of the oil that soiled beaches around Dalco Passage. The cleanup drew nearly $2 million from federal and state oil spill contingency funds. In a December 23 press release, Rear Admiral Jeffrey Garrett of the U.S. Coast Guard (USCG) indicated that there was "more work to do before determining what enforcement action, if any, to take." The USCG and the Washington State Department of Ecology lead a continuing investigation of the spill.

USCG sampling in Potash, LA

Hurricane Katrina Pollution Response Efforts

Source: USCG, U.S. Department of Homeland Security Press Release, September 9, 2005, updated October 15th.

The Coast Guard Sector New Orleans Federal On-Scene Coordinator established a forward operating base in Baton Rouge, Louisiana, to coordinate pollution response efforts in the wake of Hurricane Katrina. USCG, EPA, and the State of Louisiana are working together with local industries to recover spilled oil and mitigate further environmental damage resulting from the hurricane. The following companies are working with officials to remediate releases from their properties and points of operation:

- Murphy Oil Corporation, located near Chalmette, Louisiana, estimated a discharge of 25,000 barrels (bbls) of oil as a result of the hurricane. While the vast majority of the product was contained within the existing secondary containment unit, an unknown quantity of oil escaped this containment and entered surrounding neighborhoods. EPA and USCG are overseeing ongoing oil recovery operations. As of October 15, 2005, 18,000 bbls of oil have been recovered using twelve vacuum trucks and ten drum skimmers. Plans have been made to use two high-volume pumps that will operate 24 hours per day.

- Shell Pipeline Company LP confirmed that damage from Hurricane Katrina resulted in two crude oil spills from company-owned assets in Pilottown and Nairn, southern Louisiana. The Pilottown incident, in which approximately 25,400 bbls of crude oil from an above-ground storage tank leaked into a tank dike, appears to have been caused by wind damage. To date, more than 20,400 bbls have been recovered. Recovery efforts include deployment of approximately 2,800 feet of absorbent boom and 2,000 feet of eight-inch hard boom. No further pollution is expected as the oil/water mixture within the secondary containment unit has been pumped to a level below the break in the storage tank.

  In Nairn, approximately 3,300 bbls of crude oil leaked from a 20-inch pipeline that was damaged as a result of a breach in a hurricane protection levee. The pipeline has been secured and pollution response equipment and responders are on scene and cleaning up the remaining free product. Approximately 300 bbls have been recovered.

- Bass Enterprises reported a discharge of approximately 90,000 bbls of oil from two

storage tanks into the secondary containment system surrounding the tanks. Approximately 7,500 bbls have been recovered. Preliminary tests indicate that the majority of the oil is contained within the secondary containment levee, and approximately 7,500 bbls remain in the tanks. The oil in the containment system is being transferred to a barge. In addition, booms have been successfully deployed to contain a visible sheen on the river.

- Chevron Empire Facility reported a discharge of 34,000 bbls of oil into secondary containment. The majority of the oil is contained at the facility. Pollution response equipment and responders are on scene and oil is being pumped out of secondary containment. Less than 2,000 bbls have been recovered.

- Chevron Pipeline Company reported a discharge of 200 bbls of oil into West Bay, near Venice, Louisiana. Approximately 100 bbls of oil have already evaporated and approximately 100 bbls of oil/water mixture have been recovered.

- Venice Energy Services Company reported a discharge of unknown quantity into the facility's secondary containment in Tant Phine Pass near Venice, Louisiana. The Louisiana Department of Environmental Quality and USCG are overseeing the recovery. Pollution response equipment and responders are on scene.

Motiva, Premcor to Settle for $23.7 Million

Source: http://www.usdoj.gov/enrd/motiva_cdfinal.pdf

On September 20, 2005, the U.S. Department of Justice (DOJ) announced that Motiva Enterprises and Premcor Refining Group Inc. agreed to a settlement in a lawsuit arising from an explosion at a Delaware refinery that killed one worker, injured others, and spilled 100,000 gallons of spent sulfuric liquid into the Delaware River (United States v. Motiva Enterprises LLC, D. Del., No. 02-1292-SLR, 9/20/05). According to DOJ the settlement of nearly $23.7 million in damages is one of the largest involving violations of environmental laws at a single facility, and is the largest sum ever collected in Delaware for environmental violations.

The lawsuit was filed following the explosion of a 415,000-gallon sulfuric liquid tank at the Delaware City Refinery owned by Motiva at the time of the explosion, July 17, 2001. The lawsuit, brought by DOJ, EPA, and the State of Delaware, alleged violations of the federal Clean Water Act; Clean Air Act; the Comprehensive Environmental Response, Compensation, and Liability Act; and numerous state environmental statutes.

Under a consent decree filed in U.S. District Court for the District of Delaware, Motiva, an oil refining and retail company owned by Shell Oil Co. and Saudi Refining Inc., will pay a $12 million civil penalty, finance a series of environmental projects costing more than $4 million, and reimburse the federal and Delaware governments $170,000. The Premcor Refining Group Inc., which in 2004 purchased the Delaware refinery where the tank exploded, joined in the settlement and agreed to safety controls at the Delaware facility worth approximately $7.5 million.

The environmental projects planned by Motiva as part of the settlement include the purchasing and maintaining of three hybrid transit buses for the Delaware transit authority; constructing of native-species shellfish beds; funding, installing and operating a water quality monitoring station on the Delaware River; purchasing emergency equipment worth approximately $165,000 for the Delaware City Fire Co.; and constructing a meteorological facility near the refinery to assess wind and weather conditions to mitigate adverse results in the event of future accidents. Premcor also agreed to place a conservation easement on more than 285 acres of ecologically significant land near the refinery and committed $447,500 to restoration activities.

Delaware Governor Ruth Ann Minner said that the enactment of Delaware's Above Ground Storage Tank Act and improvements from the settlement would ensure that the facility would operate more safely. The chief of the Civil Division of the U.S. Attorney's Office for the District of Delaware, Rudolph Contreras, observed that valuable lessons could be learned from this accident. He noted that the company paid more than $58 million for putting off inspections of the tank that exploded, a task that might have cost just thousands of dollars. "This fact alone should be a clear message to other companies that cutting corners on safety and the environment makes no economic sense," Contreras said. A Motiva company spokesman indicated that the company is pleased "to close this difficult chapter in Motiva's history," and emphasized that the company has cooperated with state and federal officials.

Motiva settled one previous lawsuit concerning willful violations of occupational safety and health laws resulting in the death of a worker. In July 2003, Motiva plead guilty to Delaware state charges and paid $296,000 in penalties. In March 2004, the company settled criminal charges with DOJ for $10 million and agreed to pay $36.4 million to the widow and family of the worker who died.

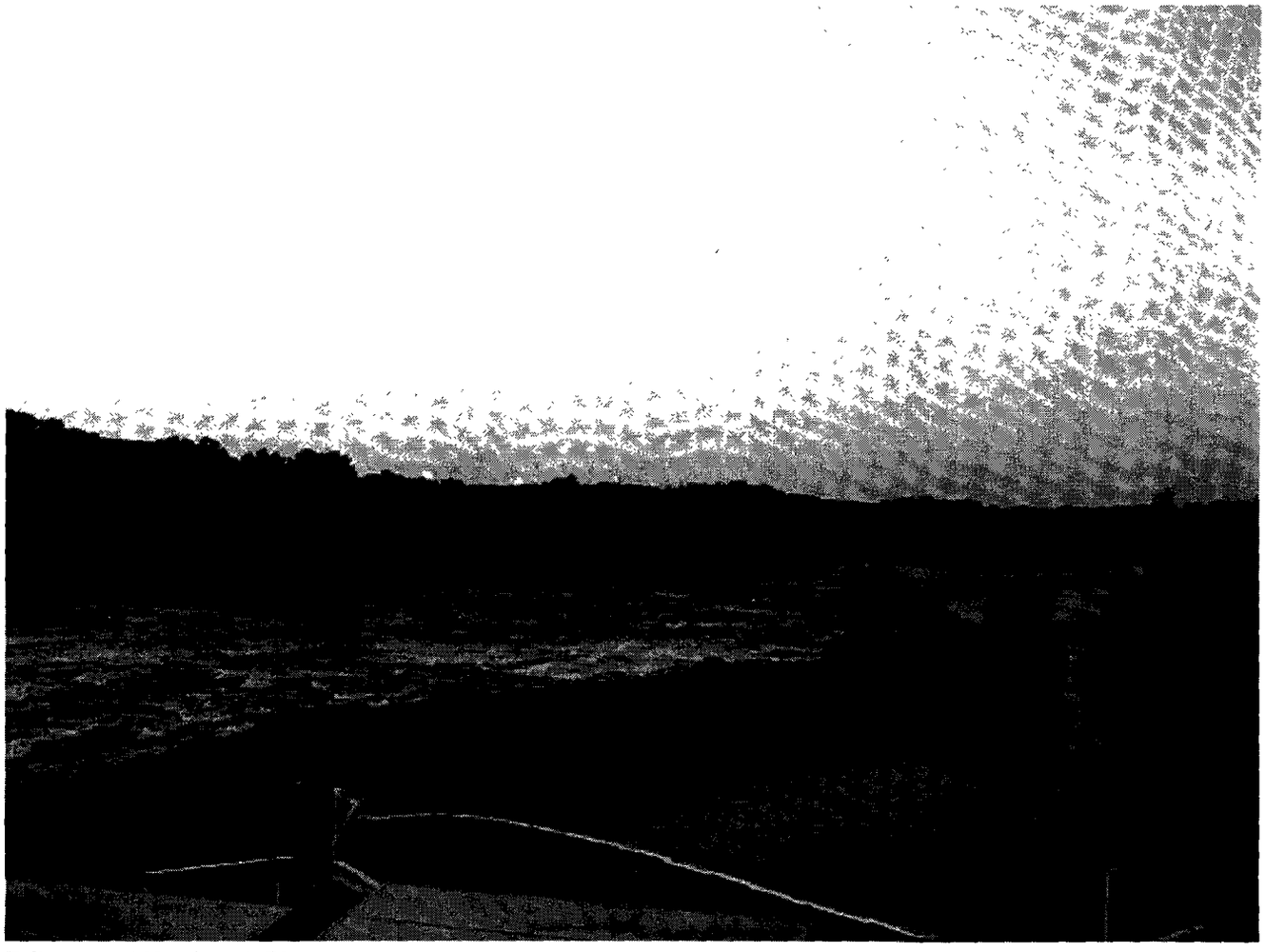
Regional Oil News: Spills and Settlements

Region 1

Boott Hydropower Facility Oil Release, Massachusetts

On June 24, 2005, EPA arrived at the Boott Hydropower Facility, owned and operated by Enel Corporation, to investigate a reported release to the Merrimack River. The facility is located along the Merrimack River in Lowell, Massachusetts.

The Lowell Fire Department also responded to a report of a visible sheen on the Merrimack River and determined that



Tailrace and Merrimack River

the Boott facility was the source of a hydraulic oil release. The fire department notified the National Response Center and Massachusetts Department of Environmental Protection (MADEP), and deployed curtain and sausage boom in the tailrace to contain any further release of hydraulic oil. In addition, the Lowell Fire Department notified downstream water suppliers in the communities of Tewksbury, Methuen, Lawrence, and Andover. Tewksbury Water Supply requested contingency provisions (personnel and containment booms adjacent to the water intake) to protect its water intake until the situation was fully stabilized.

That morning Boott facility personnel shut down the power generation system after observing increased vibrations. Shortly after, a low oil-level alarm sounded on the 400-gallon hydraulic oil head tank that gravity feeds lubricating oil to hydropower components. Facility personnel observed a sheen in the tailrace and closed head and tailgates of the facility. Debris in the gate area prevented the tailgate from closing completely but was removed by a diver the next morning. With the oil tank empty, a majority of the product was trapped within the draft tube (the portion of the facility between the head and tailgates through which water moves and impels the turbines).

On June 27 the draft tube was pumped and the product was recovered. Based on the volume of the empty tank head, the facility operator initially indicated that a potential maximum of 400 gallons was released to the Merrimack River. Final estimates indicate that of the 1,420 gallons of oil released into the draft tube, 1,403 gallons were recovered into a vacuum truck and 17 gallons were released into the river. The Responsible Party will continue to remediate any residual oil left in the tube and repair the system under the direction of a Licensed Site Professional with oversight from MADEP.

For more information, please see http://epaosc.net/BoottHydroPowerFacilityOilRelease, or contact Daniel Wainberg, On-Scene Coordinator (OSC), at wainberg.daniel@epa.gov.

Release From Unknown Source, Bangor, Maine

On April 4, 2005, the Maine Department of Environmental Protection (MEDEP) requested that EPA respond to a release of jet fuel to Birch Stream in Bangor, Maine. Birch Stream is a tributary of the Kenduskeag Stream, itself a tributary of the Penobscot River that flows to the Gulf of Maine. A MEDEP representative observed oiled wildlife at the scene.

MEDEP oversaw initial response activities performed by the City of Bangor, owner of the Bangor International Airport, and its

Collection point upstream of underflow dam

contractor. Workers set boom at the underflow dam at the culvert that leads to Birch Stream. Boom was also maintained at two culverts upstream of the underflow dam. A total of 375 gallons of oil/water mixture was recovered from the underflow dam collection area. Oiled debris, sorbent, and foliage was also recovered from stormwater drainage areas and shipped for disposal.

After surveying the area, a U.S. Fish and Wildlife Service (FWS) representative confirmed that one muskrat had died of oil exposure. FWS did not report other immediate concerns regarding impact to fish and wildlife and did not recommend further actions.

The source of the release is still unknown. The airport has current civilian and military operations, and is located on a former Air Force facility. Dye testing performed during the spill linked a retention pond on the Maine Air National Guard 101st Refueling Wing with the discharge to Birch Stream. The City of Bangor is working with the Maine Air National Guard, under EPA's response authority, to identify the type and source of jet fuel released, and perform the cleanup.

EPA and MEDEP will continue to oversee the source investigation and identification. For more information, please contact Mary Ellen Stanton, OSC, at (617) 918-1256, or Steve Mierzykowski, FWS, at (207) 827-5938 x14.

Region 3

EPA and SUNOCO Settle Clean Water Act Penalty Claim

Sunoco, Inc. and Sun Pipeline Company agreed to pay more than $3.6 million to settle a Clean Water Act lawsuit arising from a February 2000 oil spill at the John Heinz National Wildlife Refuge at Tinicum, in Pennsylvania. An estimated 192,000 gallons of crude oil was discharged into a pond and surrounding wetlands at the refuge from a cracked pipeline. The refuge contains the largest remaining freshwater tidal wetland area in Pennsylvania.

DOJ filed the settlement papers on July 27, 2005, in federal district court in Philadelphia, Pennsylvania, on behalf of EPA. Pursuant to the Consent Decree, Sunoco will pay a civil penalty of $2,742,600 to the Oil Spill Liability Trust Fund and $865,000 to resolve claims of natural resource damages by the U.S. Department of the Interior (U.S. Fish and Wildlife Service).

For more information, please contact Paula Curtin at (304) 234-0256, or Mike Welsh at (215) 814-3285.

Clean Water Act Administrative Complaint Settled

Columbia Natural Resources agreed to pay a $3,437 penalty to settle a Clean Water Act lawsuit for violations resulting from a discharge of crude oil from a storage tank in Smithfield, West Virginia. An Administrative Complaint was issued, pursuant to Section 311(b)(6)(B)(i) of the CWA, and proposed a Class I penalty in the amount of $3,437. USCG received a check in this amount.

For more information, please contact Paula Curtin at (304) 234-0256.

Region 4

Owensboro Grain Crude Tank Spill, Kentucky

On June 8, 2004, Owensboro Grain Company (OG) reported an estimated 6,000-gallon release of crude soybean oil

Tank farm and contained soil

at its tank farm in Owensboro, Kentucky (NRC Report No. 724374). All oil was contained within a grassy, diked area and no product was discharged to surface water. The Owensboro Grain Company hired a cleanup contractor to remediate the spill. Further direction on cleanup will be provided by the Kentucky Department for Environmental Protection.

EPA inspected the spill site with OG staff on June 10, 2004. The inspection confirmed that all oil product had been contained within the diked area and subsequently removed. The affected soils have been excavated, staged, and covered.

For more information please contact Art Smith, OSC, at (502) 905-7559.

Region 7

High-pressure Pipeline Break, Kansas
A high-pressure, 10-inch pipeline break occurred on the morning of May 23, 2005, in the Fairfax District of Kansas City, Kansas. Initial estimates indicated a release of 20,000 gallons of gasoline onto the ground and into storm sewers in the area. EPA OSC, Don Lininger, supported the Wyandotte County Emergency Management in the unified command. The contractor for the potentially responsible party, Magellan Pipeline, deployed booms and conducted recovery and monitoring operations in and around the spill site with EPA oversight.

EPA, in association with several mutual aid HAZMAT teams, conducted air monitoring along a rail line adjacent to the spill that was shut down. Other areas monitored include a nearby Board of Public Utilities (BPU) facility (where a power plant was shut down for safety reasons), the outfalls from the storm sewers to the Missouri River, and all areas where free product was recovered. Air monitoring data was processed using Scribe data management software and the FAST system. All air monitoring data and the locations of sewer lines were mapped with assistance from the Unified Government's GIS Coordinator.

The BPU resumed power plant operations on May 24, 2005, while the sewer lines on the BPU property were flushed throughout the afternoon. USCG personnel monitored the outfalls to ensure that all flushed material was recovered, after which EPA conducted air monitoring of the sewer lines. The Department of Transportation's Office of Pipeline Safety oversaw the removal and replacement of the broken pipeline.

For more information please contact Don Lininger at lininger.don@epa.gov, or Eric Nold at nold.eric@epa.gov, or visit http://epaosc.net/site_profile.asp?site_id=1627.

Region 8

Fremont Paving Oil Spill, Colorado
In May 2005, EPA received conflicting reports regarding the extent of a spill into Freemont Ditch, Oak Creek, and the Arkansas River in Canon City, Colorado. On May 4, a private citizen notified the

Responders at BPU power plant

Sampling at Oak Creek

National Response Center (NRC) and the local fire department of a spill, and indicated that the spill was being cleaned up by Fremont Paving and Redi-Mix, Inc., the responsible party (RP). The following morning the RP notified NRC of a spill of 100 to 200 gallons but did not state that a waterway was affected. However, other sources indicated the spill was more severe than as reported to NRC. EPA mobilized with two START contractors to the site on May 5, 2005, at which time the OSC confirmed that the spill entered navigable waters.

The RP is an asphalt mixing facility that has a 10,000-gallon capacity tank where it stores reprocessed oil for fuel to heat asphalt. The RP reported that the oil had been released from a drain plug at the bottom of the oil tank. The tank did not have secondary containment and the facility did not have an SPCC Plan. Oil samples from spill areas, retention ponds, and facility tanks were submitted for fingerprint analysis.

Investigation revealed that the oil flowed at least 13 miles down irrigation and water supply ditches and creeks, including the Fawn Hollow drainage, Chandler Creek, Oak Creek, Minnequa Canal, the City of Florence Flood Irrigation System, the Arkansas River, and Fremont Ditch, which was running full. The Arkansas River had a visible sheen and some free product was trapped in snags along its riverbank. The Pueblo and Charles reservoirs, approximately 25 miles downstream, were not affected, although downstream water users were notified.

Cleanup crews staged absorbent booms on the affected waterways to catch any residual oil. The RP's contractor, Custom Environmental, will maintain the booms. The bulk of the oil was trapped at a beaver dam on Oak Creek. Crews removed two oil-soaked beaver dams and installed an underflow dam on Oak Creek. EPA, its contractors, and the USCG Pacific Strike Team demobilized from the site but will visit periodically to monitor the progress of the residual oil cleanup. No further POLREPs (Pollution Reports) will be issued for this site and EPA will notify the USCG case officer when the site is closed. The RP still needs to cleanup the facility property where oil, discharged from the retention pond into Fremont Ditch, soaked the hillside.

Custom Environmental used several 2000-gallon capacity vacuum trucks to remove trapped oil. Since the beginning of the cleanup operations, approximately 50,000 gallons of material, including an estimated 8,000 gallons of oil, have been removed. Recovered oil, which contains debris and sediment, is being solidified in concrete at a nearby landfill.

Impacts to Bureau of Land Management land downstream of the spill were assessed and are minimal. The impact to cropland along the irrigation ditches is also believed to be minimal. Two dead beavers and several dead fish were seen on-site and an oiled muskrat was taken to an animal control facility.

For more information please contact Paul Peronard, OSC, at (303) 312-6808.

About the *Update*

The goal of the EPA Oil Program Center *Update* is to provide straight-forward information to keep EPA Regional staff, other federal agencies and departments, industries and businesses, and the regulated community current with the latest developments. The *Update* is produced quarterly, using a compilation of several sources. The views expressed here are not necessarily those of the U.S. EPA.