#### **Environmental Performance**

We also produce hazardous waste, such as contaminated sediments and sludges, from remediation activities. In 2012, remediation activities generated approximately 1.7 million metric tons or 43 percent of our hazardous waste, which was safely disposed of in compliance with applicable regulations.

#### **Drilling** waste

Waste at drilling sites is separated into major categories — such as chemical, organic, inorganic and metal — to be disposed of or recycled appropriately. When disposing of cuttings from drilling operations, ExxonMobil analyzes a variety of local factors to determine optimal techniques that are both cost-effective and protective of the environment.

We may send cuttings to designated landfills, grind and inject them into deep wells, or treat and discharge them into the sea. Before disposing of cuttings, we collect and analyze samples to confirm that we are meeting local regulatory criteria.

### Compliance record

Our worldwide environmental expenditures in 2012 totaled about \$5.5 billion. This included about \$2 billion in capital expenditures and approximately \$3.5 billion in operating expenses. In 2012, 80 penalties, fines and settlements were paid, which accounted for less than 1 percent of total environmental expenditures, or about \$2 million.

In 2011, ExxonMobil Pipeline Company (EMPCo) experienced a breach in its Silvertip Pipeline, resulting in the release of an estimated 1,509 barrels of crude oil into Yellowstone River near Laurel, Montana. EMPCo entered into an agreed-upon Administrative Order on Consent (AOC) with the Montana Department of Environmental Quality in 2012 to resolve civil and related liabilities under state environmental laws resulting from the July 2011 spill. Under the AOC, EMPCo agreed to

pay a civil penalty totaling \$1.6 million, including \$300,000 in cash payments and \$1.3 million in Supplemental Environmental Projects that will be initiated in 2013. EMPCo reimbursed the state approximately \$760,000 for past costs incurred by the state in responding to the release. We also agreed to conduct any needed additional remediation activities associated with the release and to reimburse the state for future oversight costs.

# 4. Restoring the Environment

Efficiently remediating and restoring disturbed land is central to reducing our overall environmental impact. To that end, we use a consistent approach that leverages ExxonMobil's remediation practices around the world.

The ExxonMobil Environmental Services (EMES) functional organization remediates impacted soil and groundwater at operating facilities, inactive properties and formerly owned sites. EMES works to enhance asset and community value and also supports new business development, while creating opportunities for the beneficial subsequent use of inactive properties.

8,000 cases monitored by EMES

In 2012, EMES continued to monitor more than 8,000 cases in its portfolio. Our remediation and reclamation activities included the disposition of nearly 2,400 hectares of land for beneficial use. Since EMES' inception in late 2007, we have spent more than \$3.8 billion in project activities and returned some 860 properties to beneficial use. EMES pursues its environmental stewardship mission with nearly 300 employees working with approximately 40 environmental consulting firms.



Workers at our Kearl development in Canada, in 2012, Kearl became the first oil sands mining development to

For example, as part of remediation activities for a former Virginia-Carolina Chemical Company fertilizer plant, ExxonMobil developed a habitat reclamation plan to return property back to grassland and forest. The plant operated from 1897 to 1932 in Blacksburg, South Carolina. Remediation work included reinstating a stream and wetland traversing through the site using native species, and improving water quality by installing a vegetated stream. ExxonMobil is donating the 13-acre site to the Town of Blacksburg for conservation use. The town is working with a local land trust, Upstate Forever, to develop the property for the local community to access for recreational use. We anticipate this transfer of property will occur in 2013.

In Baltimore, Maryland, a developer has begun construction of a shopping mall, offices and a town center on land that was once part of our Baltimore refinery and products terminal. Operations ceased at the site in 1998, and at the portion of the property that will be developed, we have completed remediation activities, including product recovery, soil treatment and pipe removal. EMES is currently working with the developer

to finalize additional construction plans, while upgrading a major city storm drain and working with the city and state on a planned light-rail extension. The first stores are planned to open in November 2013.

# Technology

A combination of proven and new technologies is required to investigate, model and remediate impacted soil or groundwater. One of the ways EMES promotes technological advancement and stays abreast of cutting-edge developments is through financial support and active participation in the University Consortium for Field-Focused Groundwater Contamination Research, an affiliation of eight North American research institutes that collaborate with an additional 14 organizations around the world. At our Bayonne, New Jersey, facility, we recently partnered with a researcher to test several innovative technologies to understand and quantify some of the fundamental natural processes associated with hydrocarbon migration and biological decay. and new methods to enhance the speed of the remediation process.

23 : exonmobil.com 2012 Corporate Citizenship Report

## **Environmental Performance**

Another example of a technology application related to remediation is Imperial Oil Environmental Services' specialized soil treatment facility for soil salvage and land reclamation activities in Canada. This innovative, technologically advanced facility accepts hydrocarbon-impacted soil from inactive sites and uses a bioremediation system to clean and rehabilitate it. Once the soil in treatment is determined to meet applicable guidelines, it goes back to the original site for use as backfill. This system has provided 47,000 metric tons of treated soil to nine remediation projects since 2008.

#### Land conservation

Since 2002, ExxonMobil has engaged with the Land Trust Alliance (LTA), contributing more than \$500,000 toward LTA's annual conference and general education programs. EMES also participates in an LTA work group to advance corporate engagement efforts related to land conservation. Through the application of natural land management strategies and proactive stakeholder engagement, EMES continues to consider land conservation as a viable end use option, which includes transfer of ownership to

enact permanent environmental protection as a disposition option for surplus sites. This latter approach was successfully employed at two former waterfront terminals located along the Long Island Sound on Long Island, New York.

In 2012, ExxonMobil transferred ownership of our former Cold Spring Harbor Terminal along Cold Spring Harbor and Oyster Bay Estuary in Huntington, New York, to the North Shore Land Alliance. As part of this transaction, ExxonMobil also worked with the local Peconic Land Trust to steward a conservation easement to ensure the property was preserved in perpetuity as natural habitat and open space.

In a similar transaction, ExxonMobil, the Peconic Land Trust, the Town of Southold, New York, and the Village of Greenport collaborated to reclaim and preserve a former terminal property. ExxonMobil transferred the land to the Peconic Land Trust to oversee the reclamation, and donated a deed of conservation easement to Southold, with Greenport as a party to the easement.

"Many corporations today have significant land holdings.... ExxonMobil recognizes the important role companies can play in our vital work to make communities healthy and vibrant places to live, work and play. As a founding member of the Land Trust Alliance's Corporate Council, ExxonMobil's leadership has been instrumental in helping us partner with other likeminded companies interested in supporting land conservation."

Rand Wentworth,
President, Land Trust Alliance



Photo courtesy of the Land Trust Alliance, Katherine Lambert, photographer.



An aerial view of the Mobil Adelaide Refinery in South Australia. ExxonMobil mothballed the refinery in 2003 and the silte will be remediated to a standard suitable for future industrial use.

# D Up Close: Site Decommissioning and Demolition in Adelaide, Australia

ExxonMobil mothballed the Mobil Adelaide Refinery at Port Stanvac in South Australia in 2003 and began demolition in 2012. By the end of 2013, demolition of above-ground infrastructure is expected to be completed. The site will then be remediated to a standard suitable for future industrial use. Preparation for demolition work of the refinery began in early 2010, and the property was transferred to the EMES portfolio. The project team includes experienced refinery personnel to assist with the decommissioning strategy development, validation of the plant condition, identification of associated hazards and preparation for demolition.

Following the closure of the refinery, ExxonMobil engaged a South Australian Environment Protection Authority (SA EPA)-accredited Site Environmental Auditor to oversee regular environmental assessments of the refinery site and ensure there were no offsite impacts from former refinery operations, particularly on adjacent marine waters. ExxonMobil's environmental consultants are collecting and analyzing samples from nearly 150 groundwater wells around the site, and they are monitoring the health of the offshore marine environment. Much of the work to assess the environmental condition of the site and prepare remediation plans will be completed following the demolition of the refinery.

In the meantime, ExxonMobil has entered into a Voluntary Site Contamination Assessment Proposal with the SA EPA, under which we have committed to carry out certain environmental assessment and remediation activities. We are taking every precaution to limit the impacts of this project on our neighbors and keep them informed of our project activities. We give periodic briefings to the local city council. We also regularly provide updates about our activities to the adjacent community by attending community meetings, publishing briefings in the community newsletter, sending out mailings and conducting in-person visits as necessary. Although we have not operated the refinery for many years, ExxonMobil has continued its contributions to schools and other community organizations neighboring the facility.

24 exxonmobil.com 2012 Corporate Citizenship Report