







2003
Environment
Health
and
Safety
Report



ENVIRONMENT, HEALTH AND SAFETY PERFORMANCE HIGHLIGHTS

- For the second consecutive year, in 2002 Enbridge was selected as a member of the Dow Jones Sustainability Index. The index recognizes companies from around the world that "lead their industry in terms of sustainability."
- In 2002, we conducted 37 internal reviews of pipeline operations, gate stations and gas processing and treating plants. This doubled our activity in 2001, reflecting the increasing scope of our operations.
- Total greenhouse gas emissions from our Canadian group of companies were 1.1 million tonnes of CO₂ in 2001, comparable to 2000 but 13% below 1990 levels.
- Employee lost-time injury frequency in 2002 was up 3% over 2001, but overall has improved 40% since 1998. Employee total recordable injury frequency improved 14% and 17% over 2001 and 1998 levels.

SCOPE OF REPORT

The 2003 Environment, Health and Safety Report primarily covers the activities of Enbridge's three major business units: Energy Transportation North, Energy Transportation South and Energy Distribution.

We maintain statistical environment, health and safety (EH&S) data for these business units. We also provide some information on joint venture activities of Enbridge International.

This report covers the calendar year ending December 31, 2002. In some cases, we have reported on significant items in early 2003. We cover only activities for which Enbridge had operational responsibility.

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MESSAGE FROM THE PRESIDENT & CHIEF EXECUTIVE OFFICER



Safe and environmentally responsible operations are embedded in Enbridge's core values, and we work hard to live up to our stated commitment to "value the safety of our employees and the public, a clean and healthy environment and strong, vibrant communities."

That commitment is reflected throughout this, our third annual environment, health and safety report. In 2002, we continued to work harder and smarter to minimize accidents and minimize our environmental footprint.

In 2002, we made progress on a number of fronts.

- Our lost-time injury frequency rate, although marginally higher (3%) than in 2001, has improved 40% since 1998.
- We doubled the number of internal reviews and audits of pipeline operations, gate stations, and gas processing and treating plants compared with 2001.
- We expanded training for employees and held more than 60 emergency response exercises in Canada and the United States.
- And we increased the number of full-time EH&S professionals on staff to 39.

We took an active role in the climate change debate leading up to Canada's ratification of the Kyoto Protocol late last year, and we continued to work to reduce greenhouse gas emissions from our Canadian operations.

We also continued to be a leader in pipeline integrity, strengthening formal pipeline integrity programs in all three key North American business units. During the year Energy Transportation North inspected nearly 4000 kilometres (2,480 miles) of pipeline using state-of-the-art in-line inspection tools.

We work hard to ensure continued safe and reliable operation of our pipelines, but we also know that humans and machines are not infallible. Problems do occur, and when that happens Enbridge acts quickly and communicates effectively to let all affected parties know what is happening. For example, in January of this year we had an oil spill at our Superior, Wisconsin, Terminal, and some of the oil got onto the ice on the nearby Nemadji River. We responded immediately, cleaning up the spill and alerting all appropriate parties.

One unexpected result was an article in the Superior Daily Telegram complimenting us for our communications. In an article entitled "A little luck and honesty minimized impact of oil spill," the author stated that, "Another encouraging sign was the way Enbridge dealt with the situation ... While it would have been easy to keep the event a secret in the midst of repairs and cleanup, Enbridge can be applauded for alerting not only the public, but also all the appropriate emergency and environmental agencies in an honest and timely manner."

Those words were much appreciated, because we are committed to open and honest communication. It is an integral part of our overall commitment to social responsibility, and is in keeping with our vision of becoming the leading energy delivery company in North America. We believe, too, that being a leader in EH&S is a key part of being a leader in operational excellence and financial performance. We will continue to strive to improve our EH&S performance, and we will continue to let our key stakeholder audiences know how we are doing.

Patrick D. Daniel

President & Chief Executive Officer July 7, 2003

CORPORATE PROFILE

Enbridge is a leading energy delivery company focused on crude oil and liquids pipelines, natural gas pipelines and natural gas distribution. Our energy delivery systems transport products that provide fuel for transportation, heat for homes and resources to manufacture different consumer products. We are active internationally, but most of our assets are in Canada and the United States. We operate the world's longest crude oil and liquids pipeline, and Canada's largest natural gas distribution company. Our head office is in Calgary, Alberta.



Financial performance	2002	2001
Earnings applicable to common shareholders (millions of Canadian dollars)	576.5	458.5
Earnings per common share (Canadian dollars per share)	3.60	2.91
Return on average common shareholders' equity	19.9%	18.6%
Debt to debt plus shareholders' equity at year end	64.4%	72.9%
Assets (billions of Canadian dollars)	13.0	13.1

We conduct our business through the following business units:

- Energy Transportation North operates our crude oil pipelines in Canada and the U.S. (the U.S. parts are the Lakehead and North Dakota systems). This group is also responsible for Enbridge's interests in the Alliance and Vector natural gas pipelines and for our midstream natural gas business in Western Canada.
- Energy Transportation South is responsible for our energy transportation businesses in the U.S. Enbridge holds a 13% interest in Houston-based Enbridge Energy Partners, L.P., which owns liquids and natural gas transportation and midstream systems. These include transmission and gathering pipelines and processing and treating businesses in the Midwest, Midcontinent and Gulf Coast areas.
- Energy Distribution owns and operates Enbridge
 Gas Distribution, which serves more than 1.6 million
 customers in parts of Ontario, Quebec and Upper
 New York State. We also are involved in the natural
 gas distribution business in Quebec through our
 interest in Noverco Inc., and are developing a natural
 gas distribution network in New Brunswick through
 Enbridge Gas New Brunswick.
- Enbridge International develops and coordinates Enbridge's international activities. We have a 24.7% interest in and operate the OCENSA pipeline in Colombia and have a 25% interest in Compañia Logistica de Hidrocarburos CLH, S.A., Spain's largest refined products transportation and storage business. We also provide consulting and technology transfer services internationally.

2002 highlights

- delivered 2.1 million barrels of crude oil and liquids each day
- distributed 410 billion cubic feet of natural gas during the year
- employed 4,000 people, mainly in Canada and the U.S.

Visit **www.enbridge.com** for more information on our businesses or to view the 2002 Enbridge Inc. Annual Report.



Enbridge's activities are diverse, but share a common commitment to promoting high standards of health, safety and environmental protection.

We have developed systematic processes for managing EH&S issues. These processes are driven by our policies, monitored by our Board of Directors and senior management, and supported by operational procedures and employee training programs.

POLICIES

Our corporate EH&S policy, adopted in 2000, directs our employees' decisions and actions to meet regulatory compliance and achieve EH&S excellence. Our EH&S goals are to have no incidents and cause no harm to the environment.

Some areas targeted by our policy are:

- continuous improvement in EH&S performance
- pollution prevention and resource conservation
- I health and safety management
- open consultation with our stakeholders

The policy applies to all Enbridge's facilities and operations, and is communicated to our employees through our intranet site and training programs. This and other company policies are referenced in Enbridge's Statement on Business Conduct, which all employees read and agree to adhere to as a condition of employment.

GOVERNANCE

Enbridge's activities are diverse but share a common commitment to promoting high standards of health, safety and environmental protection. This extends from our Board of Directors to all employees. As part of their corporate governance responsibilities, the Board oversees EH&S activities at a strategic level to verify they are consistent with our business objectives. The Board receives quarterly update reports on significant EH&S issues.

The Board's EH&S Committee sets EH&S directions and commitments, and reviews EH&S performance in key areas. To review performance, they receive comprehensive annual reports from the three main business units: Energy Transportation North, Energy Transportation South and Energy Distribution. This six-member committee met five times during the year to discuss a range of issues, including spills, climate change, and regulatory and legislative developments. All members are independent of management.

ORGANIZATION

Senior management EH&S committees in the three main business units are responsible for setting and communicating EH&S policy across Enbridge.

Each business unit is supported by a dedicated EH&S department providing professional services to achieve our goal of EH&S operational excellence. These

efforts include management of EH&S programs and technical assistance and guidance on EH&S regulations, policies and issues. The departments also conduct incident investigations and EH&S reviews of facilities, and provide assessments of new business development opportunities.

In 2002, we employed 39 full-time EH&S professionals.

Changes in 2002

Last year, we strengthened our company's capacity to fulfill our EH&S responsibilities.

We expanded full-time EH&S professionals in Energy Transportation South from one to six, by retaining staff from recently acquired companies. Of these, three work in the Northeast and East Texas systems

to support gas processing and treating operations.

We also formed the Sustainable Energy Department, based in Toronto, to identify and develop new corporate and marketing benefits from environmental programs in Enbridge Gas Distribution. This three-person group is focusing on opportunities to generate new revenue sources, enhance corporate leadership and manage environmental risks such as climate change.

Employee forums

We believe that many of the best ideas for improving EH&S performance come from our employees. That is why we have established local and regional EH&S committees and working groups, where employees and management meet regularly to discuss local issues and opportunities.

Our local and regional EH&S committees in Energy Transportation North provide forums for sharing best practices and looking at new ways to integrate EH&S activities into our daily operations. Last year, for example, the Edmonton office EH&S committee coordinated health and wellness awareness campaigns and promoted our employee safety recognition program.

Similarly, 10 EH&S joint committees operate throughout Enbridge Gas Distribution. In 2002, committee members took an active role in reviewing EH&S issues and providing recommendations to management. This included target setting for the company's safety challenge for operations employees.

Employee working groups have also been established in Energy Transportation South's field operations to conduct safety inspections and provide input to new EH&S programs.

MANAGEMENT SYSTEMS

We use management systems to focus our company's EH&S objectives, improve worker safety, reduce adverse impacts on health and the environment, and

measure our progress. All business units apply management systems adapted to their activities and business environments.

Energy Transportation North uses separate management systems for the environment and for health and safety. Energy Transportation South and Energy Distribution apply integrated EH&S management systems.

During the year, we strengthened and updated our management

systems to complement changing organizational and business needs.

Energy Transportation North developed an enhanced environmental review process, with defined timelines, protocols and record-keeping practices. These improvements will promote a more consistent approach to conducting reviews of the liquids pipeline systems in Canada and the U.S.

Energy Distribution also improved its management system by developing more detailed procedures to track and measure the progress of EH&S programs. And Energy Transportation South incorporated new business acquisitions into its management system.

Climate Change Commitmen

Training

Training is an important component of our company's management systems programs.

Employees who engage in work activities that may impact health and safety, or which may impact the environment, receive EH&S training.

In 2002, we provided more than 40,500 hours of EH&S training — or about 11 hours of training per field and office employee. This included classroom and hands-on training on various topics: ergonomics, driver safety, EH&S leadership, emergency preparedness, regulatory updates and management of contaminated soils.

REVIEWS AND AUDITS

We use reviews and audits to assess each business operation's compliance against government regulations and our internal policies and management systems.

Internal reviews

Last year, teams of EH&S professionals conducted 37 internal reviews of pipeline operations, gate stations and gas processing and treating plants. This doubled our activity over 2001, reflecting the increasing scope

of our operations, with recently acquired gas processing and sulphur extraction plants in Energy Transportation South. No significant compliance issues were identified in the reviews.

We consider each review a key opportunity to continually improve our performance and share findings among staff. To carry out the review, the review team visits the site, conducts interviews and examines documentation. After the review is done, the findings are presented to local management. Management then develops an action plan to correct deficiencies.

A review team, for example, conducted an environmental review of a 1370-kilometre (850-mile) section of the Lakehead System. Although the study showed no major issues and confirmed high environmental awareness among staff, it identified opportunities to improve the handling of wastes. A corrective action plan was implemented.

Process safety management

Process safety management (PSM), a formal review process required by U.S. regulators, is used to assess plant facilities and to promote worker and public safety.

EH&S AWARDS AND RECOGNITION

Our strong performance trend was highlighted by EH&S awards presented to our businesses in 2002:

ENERGY DISTRIBUTION

Safety Award for Distribution Companies Canadian Gas Association

ENERGY TRANSPORTATION NORTH

Minnesota Governor's Meritorious Achievement Award in Occupational Safety

(for better than average performance in incident rates) Minnesota Safety Council

Environmental Management Award

(for excellence in corporate environmental management)

Canadian Energy Pipeline Association

Spill Prevention Award

(for effective detection of unplanned releases of product from an operating pipeline) Canadian Energy Pipeline Association

Safety Achievement Award

(for lowest recordable injury frequency rate for large pipeline systems) Canadian Energy Pipeline Association

INUVIK GAS

Employer Recognition Award

(for occupational health and safety activities) Workers' Compensation Board of the Northwest Territories and Nunavut

OCENSA

Emerald Cross Award

(for EH&S performance and compliance) Colombian Safety Council Our PSM activities for 2002 focused on compliance reviews at 12 gas processing and sulphur extraction plants and integrating new acquisitions into our Energy Transportation South operations. Many process improvements were discovered and implemented through the year-long process.

External audits and inspections

Environmental and safety audits and inspections of our operations also are carried out by local regulatory agencies.

In Canada, the National Energy Board (NEB) conducted an emergency preparedness audit of our NW System, which transports crude oil from Norman Wells, Northwest Territories, to Zama, Alberta. Inspecting equipment and comparing our operating practices against our policies, NEB auditors found no significant issues and commended the company on our efforts to involve communities and local response agencies in emergency deployment exercises.

The NEB also conducted a similar audit of the Niagara Gas Transmission System, which is owned and operated by Enbridge Gas Distribution. The audit identified opportunities to improve regulatory

reporting, training for employees and external emergency responders, and assessment of potential hazards at facilities. Actions are under way to correct these deficiencies.

In the U.S., state and federal regulators conducted 27 EH&S compliance audits of Energy Transportation South facilities. We received a fine of US\$5,600 for an air-permitting violation, which related to operations prior to acquisition by Enbridge. This facility is currently in compliance.

REGULATORY COMPLIANCE

Enbridge's operations are subject to extensive local, provincial, state and federal EH&S regulations and laws. We manage compliance with these requirements through system controls and regular reviews and inspections.

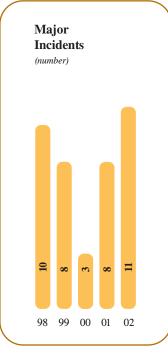
Our goal is compliance with government regulations and corporate procedures. Although we generally meet these requirements, occasionally equipment failures or human errors occur that result in non-compliance. In each case, we correct the deficiencies and reinforce proper work practices among staff.

Last year, we received seven regulatory notifications for EH&S issues:

- Energy Transportation North had one notification for contaminated soil from a historic leak site along the Lakehead System near Elgin, Illinois. We submitted a remedial action plan and are continuing work to address concerns. No citations or penalties have been received.
- Energy Transportation South had three notifications for non-compliance in the East Texas System and the Anadarko System in Oklahoma. Two of the notifications related to operations before acquisition by Enbridge.
- Enbridge Gas Distribution received three orders from the Ontario Ministry of Labour. Two orders were for failing to follow safe ladder practices during a pipeline excavation, and one was for

failing to inform contractors about safe operating practices near our system. Actions have been taken to address these issues, including the development of training materials to make employees aware of the dangers of improper use of ladders.

We incurred regulatory fines totaling US\$16,900, compared with US\$46,000 in 2001.



Major incidents are EH&S incidents that result in a critical employee or contractor injury or fatality, significant regulatory enforcement action, a liquid spill of more than 100 barrels, or significant adverse impact to the environment.

ENVIRONMENTAL PERFORMANCE



Strong environmental performance is a key indicator of successful businesses. In 2002, our efforts — everything from addressing greenhouse gas emissions to increasing energy efficiency and protecting wildlife habitat — continued to earn Enbridge a reputation for environmental leadership.

GREENHOUSE GASES

Climate change continued to be a key environmental issue for Enbridge's Canadian operations.

In late 2002, the Canadian government ratified the Kyoto Protocol on global climate change. Under this international agreement, Canada has agreed to reduce annual greenhouse gas emissions to 6% below 1990 levels over the period 2008 to 2012. Enbridge is assessing government plans for implementing the protocol.

Until details of the plans become clearer, we will not be able to quantify their impact on our operations. From a supply perspective, however, we are encouraged by recent responses of oil and natural gas producers, including their commitment to sustained oil sands development.

Enbridge supports the aim of reducing greenhouse gas emissions and believes that all sectors of society, including individual energy consumers, need to be involved. We continue to work with governments and other interested parties to find constructive solutions through policy development and public discussions.

We also are taking action to address the growth of greenhouse gas emissions from our wholly owned Canadian facilities. Our climate change action plan includes:

I fugitive emission management

Fugitive methane emissions are released to the atmosphere from our natural gas pipelines and facilities. In our Enbridge Gas Distribution system, the use of polyethylene is a major factor in reducing these direct emissions. Since the start of this program, 773 kilometres (480 miles) of polyethylene pipe have replaced cast iron mains in Ontario. In 2001, this reduced fugitive methane emissions by 4.0 million cubic metres (140 million cubic feet), or 56 400 tonnes of CO₂ equivalent.

■ internal efficiencies

We are pursuing opportunities to increase efficiencies in our Energy Transportation North liquids pipeline system, our largest source of indirect greenhouse gas emissions. System expansions, including the use of larger diameter pipe and energy efficient equipment, saved an estimated 953 gigawatt-hours of electricity in 2001, reducing the equivalent of 470 000 tonnes of CO₂.

■ demand-side management

Enbridge Gas Distribution provides demand-side management programs that encourage and enable customers to use natural gas more efficiently. From 1995 to 2001, the programs resulted in total "avoided" emissions of 1.6 million tonnes of CO_2 .

Inbridge, with Suncor, officially launched the SunBridge Wind Power Project in 2002, adding more than 11 megawatts of renewable energy to Saskatchewan's power grid. The wind farm will displace fossil fuel generating sources of electricity, resulting in "avoided" annual emissions of

more than 30 000 tonnes of CO₂.

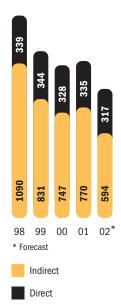


Enbridge Gas Distribution operates Solarwall technology at our Toronto garage facilities. By using solar energy to provide space heating, this technology has saved about 100 tonnes of CO₂ equivalent since its installation in 1999.

In 2001, total direct and indirect greenhouse gas emissions from our Canadian operations were 1.1 million tonnes of CO_2 , nearly unchanged from 2000 levels. This was 13% below 1990 levels, even though we delivered 20% more throughput on our energy transportation and distribution systems.

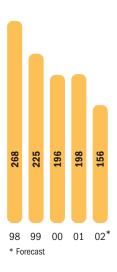
Total Greenhouse Gas Emissions Canadian Operations

(thousand tonnes of CO₂ equivalent)



Total Net Greenhouse Gas Emission Intensity Canadian Operations

(tonnes of CO₂ equivalent/ petajoules of energy delivered)



Replacement of Cast Iron Pipe Enbridge Gas Distribution

(kilometres/year)



Based on projections for our Voluntary Challenge and Registry (VCR) Update, total greenhouse gas emissions in 2002 from our Canadian group of companies are estimated to be 29% below 1990 levels. Our total net greenhouse gas emission intensity (${\rm CO_2}$ emitted for each unit of throughput) in 2002 is estimated to be 43% lower than 1990 levels.

Source: 2002 VCR Update Data

Over the last five years, Enbridge Gas Distribution has replaced 354 kilometres (219 miles) of cast iron pipe with corrosion-free polyethylene pipe, saving the equivalent of 286 400 tonnes of CO₂.

Emerging and renewable energy solutions

Our strategy is to invest in emerging and renewable energy technologies that complement our core businesses and provide environmental benefits.

With Suncor Energy, we officially launched the SunBridge Wind Power Project, generating emissions-free energy from 17 wind turbines at Gull Lake, Saskatchewan.

We also purchased shares in WindShare, a project developed by the Toronto Renewable Energy Cooperative to promote community-based wind energy initiatives. In early 2003, WindShare, in partnership with Toronto Hydro, commissioned its first wind turbine on Toronto's waterfront.

Besides wind power, we are focusing on emerging energy technologies that use natural gas, particularly fuel cells and micro turbines.

We support fuel cell development through our investment in Calgary-based Global Thermoelectric.

The natural gas-fuelled, solid oxide units are designed to use less fuel to produce more useful energy, ultimately reducing greenhouse gas emissions.

We are also exploring the use of natural gas-powered micro-turbine units that generate electricity and recover useful heat. In 2002, we sponsored a

government-led project to test a 60-kilowatt micro-turbine unit in a federal government building in Toronto. In 2003, we will pursue other microturbine project opportunities that can be applied to commercial buildings.



Residents of all ages from Gull Lake, Saskatchewan, were on hand to celebrate the official opening in June 2002 of the SunBridge Wind Power Project.

LOCAL AIR QUALITY

We are committed to reducing emissions from our operations that affect local air quality: sulphur dioxide (SO₂), nitrogen oxides (NO_x) and volatile organic compounds (VOCs).

SO₂ and NO_x

Enbridge Gas Distribution operations in Ontario emit SO_2 and NO_x from fuel use in our vehicle fleet. In 2002, these operations released 1.3 tonnes of SO_2 and 18.8 tonnes of NO_x .

SUNBRIDGE CREATES GREEN POWER

The power of the wind is being put to good use at the SunBridge Wind Power Project, Saskatchewan's first large-scale wind power facility. Since February 2002, SunBridge has generated renewable energy from 17 turbines at Gull Lake, Saskatchewan.

SunBridge is a \$22-million 50/50 partnership between Enbridge and Suncor Energy, with Enbridge serving as the project operator. Power is distributed to the power grid, with SaskPower, the province's main electricity supplier, purchasing power from the project to supply federal government buildings in Saskatchewan and other customers.

The turbines rise to the height of a 17-storey building and turn a three-blade rotor measuring 47 metres (51 yards) in diameter. They generate over 11 megawatts of electricity, or about 43 gigawatt-hours of electricity a year, enough power for 5,000 homes.

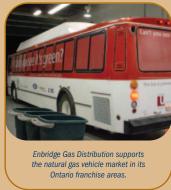
We closely monitor the project's impact on the environment. In 2002, in partnership with the Saskatchewan government and the Canadian Wildlife Service, we conducted extensive bird monitoring surveys at the site. Results of the surveys show that the turbines have little impact on migratory and nesting birds.

NATURAL GAS VEHICLES — A SOLUTION FOR URBAN POLLUTION

Natural gas vehicles (NGVs) are an efficient way to reduce urban pollution. Use of NGVs cuts SO_2 emissions by two-thirds, NO_x emissions nearly in half and CO_2 emissions to a quarter and eliminates almost all VOC emissions.

We provide incentives to Toronto's taxi industry to adopt NGV taxis. Since 1999, this has led to about 380 natural gas-dedicated vehicles, reducing CO₂ emissions by an estimated 10 200 tonnes over this three-year period.

We also work with governments and environmental groups to influence policy development that advances the use of natural gas vehicles and technologies. In 2002, Enbridge Gas Distribution and members of the Canadian Natural Gas Vehicle Alliance participated in information presentations to the Ontario Select Committee on Alternative Fuel Sources. This input, with other efforts, led to decisions by the Ontario government to further promote the purchase of environmentally friendly NGVs. In early 2003, the Ontario government doubled the provincial sales tax rebate on NGVs and introduced a new incentive for the purchase of NGV buses.



In large urban areas such as Toronto, transportation fuel use accounts for roughly 40% of the smog

problem. As part of the solution, Enbridge Gas Distribution actively promotes fuel efficiencies and greater use of natural gas as an environmentally preferred vehicle fuel.

In 2002, Enbridge Gas Distribution sponsored the Enbridge Fleet Challenge in Ontario, calling on major users of fleet vehicles in the Greater Toronto Area to lower fleet fuel consumption by reducing vehicle idling.

We also continue to encourage new community strategies to reduce smog-causing emissions.

In early 2003, Enbridge Gas Distribution will participate in 20/20 The Way to Clean Air, an energy conservation program sponsored by Pollution Probe and the City of Toronto Public Health Department. The voluntary program will show Enbridge employees how to reduce

energy costs and air emissions at home and while commuting.

In northern Canadian communities such as Inuvik, Northwest Territories, natural gas provides an environmentally attractive alternative to fuel oil, decreasing local air emissions and avoiding associated oil transportation emissions. In 2002, natural gas consumed by the Inuvik Gas Project displaced about 14 million litres of fuel oil, the equivalent of 350 fuel trucks.

Natural Gas

Fleet Vehicles

Enbridge Gas

Distribution

Consumption by

We opt to use natural gas in our Enbridge Gas Distribution vehicle fleet, wherever possible. The increase in the fleet's natural gas consumption between 2001 and 2002 reflects in part internal programs to encourage the use of natural gas.

AIR EMISSIONS REPORTING

In 2002, we developed new reporting systems in Enbridge Gas Distribution and Energy Transportation North to track SO_2 , NO_X , VOCs and other emissions. The systems will enable our company to meet new Ontario reporting regulations (called Regulation 127) and our requirements under the National Pollutant Release Inventory.

Volatile Organic Compounds

Sources of volatile organic compounds (VOCs) in our operations include emissions from vehicle use in Enbridge Gas Distribution, liquid spills and storage tanks in Energy Transportation North, and dehydration facilities and tanks in Energy Transportation South.

In 2002, Enbridge Gas Distribution emitted 7.4 tonnes of VOCs, compared with 15.2 tonnes in 2001 and 11.1 tonnes in 1998.

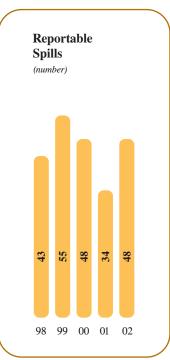
In response to new regulatory requirements, Enbridge will report VOC emissions for Canadian operations of Energy Transportation North, beginning this year. VOC

emissions are currently not tracked for Energy Transportation South facilities.

SPILLS

Our goal is to prevent all spills and leaks from our energy transportation and distribution systems. With this in mind, we carry out spill prevention and detection procedures as part of our comprehensive management of the integrity of our pipelines. Our communication programs also keep property owners and neighbors along our rights-of-way informed about our operations and enlist their help in the prevention, detection and safe response to pipeline spills.

Reportable spills are any spill reportable to a regulatory jurisdiction.



Despite our best efforts to prevent spills, incidents occur. In 2002, Enbridge recorded 48 reportable liquid spills from our pipeline systems in Canada and the U.S, totaling 2335 cubic metres (14,683 barrels) spilled. About 66% was recovered.

The company also recorded no reportable gas releases during the year.

In each case, we carried out prompt emergency response procedures to contain the spills and control environmental impacts. We also worked with landowners, regulatory agencies and other concerned parties to develop remediation and monitoring plans to ensure residual contaminants are appropriately managed.

Significant spills during the year included:

■ Kerrobert, Saskatchewan (January 18)

About 975 cubic metres (6,133 barrels) of crude oil were released from a leaking gasket on the Energy Transportation North pipeline at the Kerrobert Station. All but one barrel was contained to the industrial site, and more than 90% of the oil was recovered. About 1270 cubic metres (44,832 cubic

feet) of soil were removed and used in local road repairs.

■ Glenboro, Manitoba (May 8)

About 95 cubic metres (598 barrels) of crude oil were released onto agricultural land after a seam failure on the Energy Transportation North pipeline. About 4330 tonnes of soil were removed for disposal at a local facility.

■ Cohasset, Minnesota (July 4)

About 954 cubic metres (6,000 barrels) of crude oil were released into a wetland after a pipeline rupture on the Lakehead System near Cohasset, Minnesota. A controlled

in-situ burn was carried out to eliminate much of the oil, and nearly 16 000 tonnes of contaminated soil were removed from the peat bog area. Other parts of the site will be allowed to naturally remediate under close monitoring by Enbridge and the state environmental agency. We are cooperating with regulatory agencies to conduct a natural resources damage assessment of the incident.

SITE MONITORING AND REMEDIATION

As with any energy delivery system with many years of operating history, historic leak sites exist along our energy transportation and distribution systems.

We carry out inspections and assessments on our systems to identify and measure environmental risk from past spills, leaks and other activities. We use a risk-based process to identify and rank sites for environmental impacts, remediation and monitoring. In this way, we verify that past cleanup efforts meet today's standards and that due diligence is fulfilled.

Throughout 2002, we demonstrated this attention to site monitoring and remediation through various activities:

- We assessed 47 historic leak sites along the Lakehead System, including a right-of-way site near Elgin, Illinois. After completing test excavations at the Illinois site, we found residual crude oil in the soil and groundwater. We are working with regulators to further investigate the site and to take corrective action, if needed.
- We inspected pump stations along the Lakehead System at Cambridge, Wisconsin, La Porte, Indiana, and Iron River, Wisconsin. No significant issues were identified.
- We inspected the site of a previous spill on our Energy Transportation North System near

Herschel, Saskatchewan. No issues were found, but we are continuing to monitor the site.

- When construction activity uncovered contaminated soil from a historic leak site on our Energy Transportation North System near Hamilton, Ontario, we developed a remedial action plan and removed soil from the site. Because of further evidence of contamination, we are continuing site remediation and risk assessments of the area.
- We inspected two operating gas distribution gate stations in the Greater Toronto Area to identify
 - the risk of possible mercury contamination from past operational practices. Soil sampling was carried out, but no remediation was required.
 - We restored land at two abandoned oil wells at Tecumseh Gas Storage Operations near Sarnia, Ontario. Removing 510 tonnes of contaminated soil, we replaced topsoil and restored the land to productive agricultural use.



Enbridge conducts extensive assessments to determine the potential effects of our activities on plants, wildlife, heritage sites, water bodies and the environment.

LAND USE AND BIODIVERSITY

Our aim is to minimize our impacts to the land and sensitive environmental areas.

To choose pipeline routes and locations for new facilities, we conduct extensive assessments to determine the potential effects of our activities on plants, wildlife, heritage sites, water bodies and the environment. We also consult with local communities and public agencies to ensure their concerns are identified and addressed. Once facilities are in place, we restore the land and monitor our operations for potential impacts.

Examples of our efforts during the year included:

■ Wetlands in Indiana

We created about three hectares (eight acres) of wetlands and prairie grasslands along the Vector pipeline near Valparaiso, Indiana, to offset habitat loss during the pipeline's construction in 2000. The area will be donated to the Indiana

Merrickville, Ontario, natural gas line

We carried out an environmental assessment study and consulted with area residents during planning and construction of a 19-kilometre (12-mile) natural gas service line to Merrickville,

Department of Natural Resources.

Ontario. We routed the line along a roadway and used directional drilling to avoid impacts to streams and old growth trees.

■ Tree planting along OCENSA pipeline in Colombia
The 800-kilometre (500-mile) OCENSA crude oil

pipeline traverses grasslands, forests and mountains in Colombia. The company plants trees along the pipeline right-of-way to restore forested areas disturbed during pipeline construction from 1995 to 1997. To date, more than 1530 hectares (3,830 acres) of trees have been planted.



OCENSA plants trees along its right-of-way in Colombia as part of an ongoing commitment to restore forested areas disturbed during pipeline construction.

CONSULTATION AT LEECH LAKE

Many times during the past 50 years, parts of the pipeline right-of-way along the Lakehead System have been disturbed by construction. And as the years have passed and our techniques have improved, the expectations of landowners and others affected by construction have changed.

Last year, the system was expanded again. About 177 kilometres (110 miles) of new 36-inch pipeline were built between Clearbrook, Minnesota, and Superior, Wisconsin, as part of Phase III of the Terrace pipeline expansion project.

One of the sections in north central Minnesota involved construction within the boundaries of the Leech Lake Band of Ojibwe Reservation. Throughout the project, our project team consulted with Band leaders, identifying their concerns and discussing our plans to reduce the impact of our activities on the land and their community.

We worked closely with the Band and the U.S. Forest Service to reduce the clearing of old growth trees in the nearby Chippewa National Forest. Using field surveys, we modified the pipeline route and limited workspace through the forest to avoid old growth trees and rare plant species, wherever possible. In one area of the forest, several old growth trees, which could not be avoided, were cut to widen the right-of-way to accommodate new pipe. Timber was donated to the Band for use in buildings, including a ceremonial roundhouse.

During construction, we looked for other opportunities to work with the community. Garden plots along the right-of-way were cleared for Band members. We also donated eight hectares (20 acres) of culturally significant land to the Band.

WATER MANAGEMENT

We continually evaluate facilities and procedures to verify adequate controls are in place to protect local water quality. We also implement procedures to safely manage surface water runoff at major facilities and during pipeline construction.

We use water to hydrostatically test the integrity of new pipeline facilities before putting them into service. At times we also hydrostatically test existing pipeline, as part of integrity management programs. Since existing pipeline sections have transported liquid petroleum or natural gas, we properly acquire, store and treat test water before returning it to the environment.

We also carry out tests before and after pipeline construction activities to measure our impacts on nearby domestic water wells. For example, we conducted groundwater monitoring along 19 kilometres (12 miles) of new natural gas distribution pipe near Merrickville, Ontario. No impacts resulting from our construction activities were found.

WASTE MANAGEMENT

Enbridge's operations typically do not generate large amounts of hazardous wastes. Most of our waste volumes are non-hazardous and include paper, scrap metals, packaging materials, and construction and demolition waste.

Last year, Enbridge Gas Distribution improved its tracking system for non-hazardous wastes in its Toronto area operations. This area generated about 363 tonnes, a 23% decrease from 2001 levels. Contributing to this decrease were fewer office renovations and ongoing recycling programs that diverted about 73% of non-hazardous waste, such as office paper and cardboard, from landfills.

Energy Transportation North collected roughly 98 tonnes of recycled material, of which the largest component was office paper. We also recycle oily rags and wood pallets, but do not track the recycling of these materials.

Asbestos-containing insulation materials, found in older buildings in our operations, are classified as a non-hazardous waste under U.S. regulations. As part of ongoing site cleanup or renovations in Energy Transportation South, we remove these materials under strict guidelines to protect worker safety. Last year, we removed and disposed of 20,500 sq. feet from a gas treating plant and a dismantled sulphur recovery unit in northeast Texas.

In 2002, Enbridge Gas Distribution disposed of hazardous waste including paint solvents, PCB materials from electrical equipment, and odorant, which is added to natural gas in small quantities for public safety.

Enbridge Gas Distribution and Energy Transportation North registered their Ontario operations with the provincial government's Hazardous Waste Information Network. This system provides online information on the generation, movement and disposal of liquid industrial and hazardous wastes in the province.

OIL SANDS MARKETS STUDY

Through our Oil Sands Markets Study, we are looking at the development of additional pipeline capacity from Fort McMurray, Alberta. Our approach is to consider all aspects of potential development, including environmental effects.

In 2002, we began environmental and regulatory evaluations of potential oil sands pipeline corridors from the area to the B.C. West Coast and different U.S. destinations. We considered the potential impacts of different routes on the environment, including water crossings, sensitive wildlife areas and heritage and archeological resources. The results of this work will be combined with information from stakeholder consultation and other economic and technical data to identify potential pipeline corridors.

ENERGY USE

Our liquids pipeline transportation systems in Canada and the U.S. primarily use electricity, while our natural gas gathering and transmission systems mainly use natural gas as fuel. Our Enbridge Gas Distribution System in Ontario is powered by electricity and natural gas. Diesel fuel is used to drive pumps in remote locations along the Enbridge NW System.

Over the last five years, our use of energy in our liquids pipelines system has decreased because of pipeline expansions, system enhancements and conservation measures. In 2002, strategies to operate the system on the most optimum flow rates led to increased system efficiency and reduced energy consumption. This decrease has been offset partly by increased shipments of heavy crude oil on our liquids transportation system (transportation of this product increases our use of electricity per unit of throughput).

In 2002, energy use in the Energy Transportation North System in Canada and the U.S. was 2,417 gigawatt-hours.

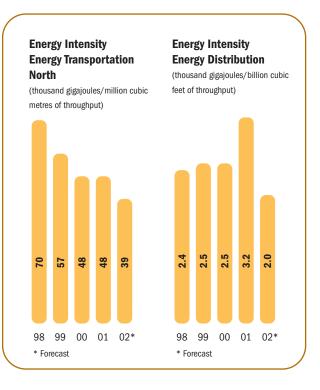
Energy reduction programs continued at Enbridge Gas Distribution with the installation of more efficient lighting at select facilities in 2002.

Extensive retrofitting of facilities, however, was not a focus during the year, due to changes in the Ontario electricity market.

DEMAND-SIDE MANAGEMENT

Enbridge Gas Distribution's demand-side management (DSM) programs help customers to save energy and improve their environmental performance:

We conduct energy audits of commercial and industrial customers' operations to identify opportunities to improve energy efficiency.



As throughput begins to increase on the Energy Transportation North System and our recent pipeline expansions reach their capacity, it is expected that Energy Transportation North's energy intensities will return to near historical levels.

Energy intensity is a measure of environmental efficiency, defined as the amount of energy used per unit of throughput on energy distribution and transportation systems.

- We partner with government, suppliers and equipment manufacturers to invest in new energy efficient technologies that benefit our ratepayers and enhance the competitiveness of our business.
- We provide financial rebates and incentives to all types of customers, from homeowners to large industrial companies, to encourage them to adopt energy-saving equipment. Over 500,000 customers participated in our DSM programs last year.

- We promote energy efficiency innovations through seminars, workshops and training programs.
 With Duke Energy, we sponsor an annual one-day symposium for the commercial building industry, showcasing best practices in energy efficient design and construction. About 200 industry representatives attended the event in 2002.
- We distribute energy-saving technology kits to Grade 5 students in schools in the Toronto and Durham, Ontario, regions. The

students use the kits to learn about energy conservation and how to install energy-saving devices in the home. In 2002, we distributed kits to more than 5,700 students in 114 schools.

Preliminary results from our 2002 DSM programs show gas savings of about 90 million cubic metres over one year, or enough to supply about 31,000 homes. Analysis of preliminary 2002 DSM results shows that roughly 2.6 million tonnes of CO_2 will be reduced over the lifetime of the measures, with NO_X and SO_2 reductions of 2148 tonnes and 21 tonnes.

VEHICLE TRANSPORTATION

Our operations have two primary road transportation impacts: vehicle travel to facilities and construction sites in our energy transportation and distribution

> businesses in Canada and the U.S., and trucking services for natural gas liquids and petrochemical products in the U.S.

In 2002, our fleet vehicles traveled 59.7 million kilometres (37 million miles) and consumed 6.4 million litres (1.4 million gallons) of gasoline. Operation of these vehicles produced an estimated 15 800 tonnes of CO₂ equivalent.



A new plant in Louisiana owned by Enbridge's Dufour Petroleum captures exhaust emissions from a nearby chemicals plant to produce foodgrade CO_2 for use in carbonated products.

SUPPORTING THE USE OF "WASTE" GAS AND EMISSIONS

We help our partners and customers to capitalize on the use of gases and emissions that otherwise would be emitted to the atmosphere.

One example is pipeline construction to collect potential energy sources, such as landfill gas. When uncollected and released to the atmosphere, this gas contributes to the greenhouse effect. But after collection and processing, it provides a useful source of energy for electricity and heat.

In 2002, Enbridge Gas Distribution completed a new pipeline from a municipal landfill site to a pulp and paper operation near Thorold, Ontario. The four-kilometre (2.5-mile) line carries on average 30 000 cubic metres (1.1 million cubic feet) of recovered landfill gas each day.

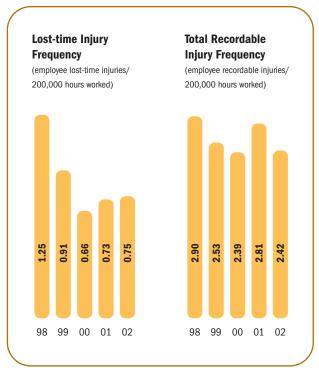
Energy Transportation South built a pipeline to connect a landfill gas plant near Kansas City, Kansas. The pipeline collects about 42 500 cubic metres (1.5 million cubic feet) of recovered gas daily for commercial customers.

Energy Transportation South also built a new plant in New Orleans, Louisiana, to capture another waste stream — CO_2 . This prototype plant collects exhaust emissions from a nearby chemicals plant to produce food-grade CO_2 for manufacturing carbonated beverages. This plant is expected to recover about 250 tonnes of CO_2 each day.

HEALTH AND SAFETY PERFORMANCE



Safety is a constant focus of everything we do at Enbridge. We believe that all incidents are preventable and all employees are accountable for creating a safe and healthy workplace.



Employee lost-time injury frequency has improved 40% over 1998 levels.

Employee total recordable injury frequency has improved 17% since 1998.

Our commitment to EH&S performance extends to all company resources, including our most valuable one — our people. Keeping our employees and contractors safe and healthy is a core value promoted throughout our organization.

SAFETY STATISTICS

Two common statistical measures of safety performance are lost-time injury frequency (LTIF) and total recordable injury frequency (TRIF). LTIF measures work-related injuries that result in employees missing regularly scheduled work shifts per 200,000 hours worked. TRIF measures job-related injuries (lost-time and medical aid incidents) per 200,000 hours worked.

Our employee LTIF rate in 2002 was 0.75, about 3% higher than 2001. Our TRIF rate was 2.42, improving 14% from the previous year.

HEALTH AND SAFETY REPORT TO EMPLOYEES — HIGHLIGHTS

(% of Energy Transportation North departments achieving 2002 health and safety objectives)

- specific EH&S objectives are established for all employees (75%)
- field supervisors receive critical task analysis training (100%)
- at least two critical task analyses are completed and documented by local and regional EH&S committees (89%)
- inconsistencies between documented procedures and practices are identified by local EH&S committees (100%)
- emergency preparedness objectives are developed by the Edmonton office and each operating region (100%)
- all required safety training is completed by field employees (63%)
- contractor safety management process is implemented for all significant contracts (83%)
- quarterly health and wellness campaigns are conducted across Energy Transportation North (100%)
- review of driving safety in the business is conducted by Safety and Environment, and options for improvement identified (100%)

FATALITIES

We deeply regret that in 2002 two contractor employees were fatally injured while working at Enbridge facilities.

On January 14, a contractor was struck by a boom during construction of the Christina Lake lateral feeder pipeline, part of the Athabasca System in northern Alberta. The incident is under investigation by Alberta Workplace Health and Safety.

On May 13, a qualified contractor electrician came into contact with an energized circuit and was fatally electrocuted at the recently acquired Enbridge Pipelines (Northeast Texas) Pittsburgh Plant. The U.S. Occupational Safety and Health Administration (OSHA) and Enbridge investigated the incident.

No citations or penalties against the company have been issued in either case. We have reviewed our contractor safety management programs to ensure appropriate measures are in place to prevent similar tragic incidents from recurring.

ACTIVITY-BASED SAFETY

Energy Transportation North's activity-based safety process plays a key role in achieving continuous health and safety improvement. The process promotes safe behaviors in a range of activities including regulatory compliance, health and wellness, assessment of workplace hazards and contractor safety. Performance improvement comes from the reinforcement of safe behaviors, with positive feedback and coaching to correct at-risk behaviors.

One of the ways we measure this process is through employee participation. Last year, we revised and expanded Energy Transportation North's safety recognition program to cover most employees. The new program encourages employees to complete three levels of safety recognition: "achieve," surpass" and "exceed." Of the 895 employees participating in the program, 19% completed "exceed" and 43% "surpass."

HEALTH AND SAFETY TRAINING AND AWARENESS

We increase our employees' understanding of health and safety issues through training and awareness programs.

Workplace safety

Enbridge Gas Distribution issued a safety challenge to nearly 1,000 operations employees after noticing an increase in safety incidents in the first half of 2002. Using information bulletins on previous incidents to highlight job-related safety risks, the challenge helped to significantly lower lost-time incidents as the year progressed (14 in the first half of the

year compared with six in the second half).

We implemented a safety inspection process in Enbridge Gas Distribution, with managers engaging staff in regular safety "walk-throughs" at work locations. We also strengthened the company's incident investigation program, dedicating EH&S staff to carry out detailed follow-up investigations of lost-time injuries.

In 2002, more than 80 managers and supervisors in Energy Transportation

North took supervisory EH&S leadership training. The course enhanced understanding of our corporate EH&S goals, and provided a forum for identifying and resolving issues through shared experience.

The U.S. Department of Transportation (DOT) requires that pipeline operators verify the qualifications of individuals performing operations or maintenance tasks. Our approach is to not only meet these requirements, but to develop our employees' capacity to achieve operational excellence, using properly designed training and evaluation systems.

Last year, the qualifications of nearly 170 Energy Transportation South employees were confirmed through the rigorous program we developed under these rules.

Ergonomics

We conduct ergonomic assessments and provide training, where required, to reduce the risk of discomfort or injury to our employees in their work environment in office and field locations.

In Enbridge Gas Distribution, for example, we conducted more than 300 office ergonomic evaluations. We also introduced an intranet-based questionnaire

and assessment tool to educate employees on how to recognize and reduce ergonomic risks at their computer workstations.



Our commitment to EH&S excellence extends beyond our own employees to contractors who work at our locations. Recent incidents have renewed our efforts to this commitment.

We regularly involve contractors in safety training at our field locations. All contractors must prove their commitment to safe work practices

by meeting our safety performance requirements and government regulations. In Energy Transportation South, for example, contractor companies are asked to complete a formal EH&S audit document. In 2003, we plan to complete on-site EH&S audits to verify this information for selected contractors.



Enbridge has many health programs that encourage employee well-being and positive lifestyles on and off the job, including:

early-return-to-work programs that help employees who are recovering from an injury, illness or surgery to return to work in a safe and timely manner.



Enbridge has numerous programs in place that encourage employee health and safety both on and off the job.

- employee voluntary assistance programs that offer confidential counseling services to employees and their families on a broad range of issues. Last year, about 8.8% of Enbridge Gas Distribution employees and family members used this service.
- If Iu immunization programs that help to safeguard employees from illness in the workplace. In 2002, more than 600 employees took advantage of this service in our different business units.
- Ilifestyle education for employees and their families on a variety of topics, including diabetes, addictions, heart health and stress management. Employees attended various health and wellness events, including health fairs and "lunch and learn" sessions.

Enbridge Gas Distribution trained managers in new attendance and performance management techniques for identifying absenteeism problems, and is working with employees to achieve solutions.

In 2002, field and office management in Energy Transportation North were surveyed and asked to comment on their health needs and concerns. A significant number identified ongoing work-life balance issues. We plan to study this issue further in 2003.

PIPELINE INTEGRITY

Enbridge's pipeline integrity activities consist of comprehensive programs to ensure the safety and reliability of our pipeline systems. We endeavor to be a leader in pipeline integrity by:

- implementing rigorous preventive maintenance programs
- pursuing and supporting technological research
- participating in industry forums to share and exchange knowledge

 contributing to development of national pipeline safety standards and industry-recommended practices

By fulfilling these obligations, we maintain high standards of operating and EH&S performance and contribute to public confidence in our systems.

During 2002, we strengthened pipeline integrity in our systems:

- Energy Transportation North adopted a formal integrity management program to cover terminals and stations on the liquids pipeline system. We also inspected nearly 4000 kilometres (2,480 miles) of the system, using technologies that detect corrosion, cracking and dents.
- Enbridge Gas Distribution formed a new department to establish a formal pipeline integrity program in our natural gas business and to meet new legislation in Ontario. The business also adopted in-line inspection to further assess pipeline integrity.
 - Energy Transportation South developed an integrity assessment and management plan in our ongoing effort to maintain pipeline safety and to address existing and pending federal and state regulations. The company uses a risk-based ranking process to integrate pipeline design, construction, operation, maintenance and performance data.

Besides our own integrity management programs, we also furthered public education efforts

that help to prevent pipeline damage by third parties. We participated in the U.S. Common Ground Alliance, a joint effort of underground utility owners and contractors to educate workers on pipeline safety and to develop industry best practices. We also supported industry efforts to add revisions to the



Enbridge is a leader in the development of pipeline integrity programs to ensure the continued safe, reliable operation of our pipelines.

new U.S. Pipeline Safety Act that strengthen pipeline damage prevention programs. And we actively worked with state governments to improve pipeline damage prevention laws and enforcement.

EMERGENCY PREPAREDNESS

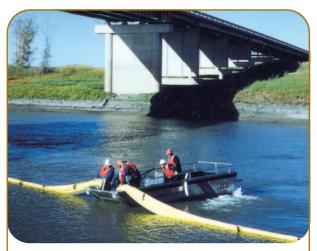
We have developed comprehensive emergency preparedness plans for each of our systems and facilities. These plans are adapted to the specific needs of the individual areas and are coordinated with the activities of local emergency response agencies.

Last year, for example, we consolidated emergency response procedures at our different pipelines, plants and gathering systems in Energy Transportation South to create an efficient, consistent and flexible plan.

Besides planning emergency procedures, we conduct training exercises to verify that our employees are constantly prepared to protect safety, property and the environment.

In 2002, we conducted 61 emergency response exercises in Canada and the U.S. These ranged from tabletop exercises, where employees discussed responses to various scenarios, to full-scale deployment exercises using equipment to practice recovery and cleanup in various terrains. We go to great lengths to include external emergency responders and members of the local community in our deployment exercises so as to stress the importance of coordinated and cooperative action during an emergency.

During the year, we took steps to enhance emergency preparedness in our various operations:



Enbridge conducted more than 60 response exercises in North America in 2002 to ensure employees know their roles and responsibilities in the event of a real emergency.

- We reviewed and revised emergency response procedures for Energy Transportation North's tank storage facilities. Although we have never experienced a fully engulfed tank fire, we recognize that a tank fire can have significant consequences, and we must be prepared. Collaborating with local fire departments, we improved tank fire emergency response procedures and planning. More than 80 employees took part in a two-day seminar on tank fire strategies and tactics. We will be conducting further training in 2003.
- We provided incident command system training to about 330 employees in Energy Transportation South and about 50 in Energy Transportation North. This system is used by regulators, company employees and local emergency responders to instill a shared understanding of the different roles and responsibilities during an emergency.
- We conducted and documented formal emergency response drills for all major facilities in Energy Transportation South.

- Enbridge Gas Distribution established a new position to oversee emergency preparedness in
 - our natural gas distribution system in Ontario. About 50 managers and supervisors in our regional offices took half-day workshops to update their knowledge of our emergency response procedures.
- OCENSA developed and implemented a training program for community and local authorities to raise awareness of the risk of oil spills from the Colombian pipeline. The company also

provided firefighting and risk awareness training to more than 400 employees and contractors.

The emergency preparedness of our staff and facilities was tested on several occasions during the year. The most serious was a pipeline leak near Cohasset, Minnesota. Our emergency preparedness system was successfully activated, with Enbridge employees fulfilling their responsibilities to contain the spill and prevent further damage.



More than 80 employees participated in training relating to tank fire fighting strategies and tactics.

RAPID RESPONSE TO U.S. PIPELINE LEAK

Early on July 4, 2002, emergency response teams from our Lakehead System rushed to investigate a suspected pipeline leak of crude oil near Cohasset, Minnesota, following a call from our pipeline control system operators. The line was immediately shut down. Once the team confirmed the leak — 954 cubic metres (6,000 barrels) in a peat bog one mile from the Mississippi River — local crews were mobilized. They set to work over the next eight hours to secure the area, notify regulators and develop their strategy to control environmental damage. Site security procedures were set up to protect the safety of workers and the public.

With input from company experts, regulatory agencies and local responders, our emergency crews conducted a controlled burn. Referred to as "in-situ burn," this is one of the best techniques available to manage crude oil leaks when traditional mechanical oil recovery methods could damage environmentally sensitive areas.

Enbridge worked closely with state and federal regulatory agencies to clean up a crude oil spill near Cohasset, Minnesota.

Before the burn, specially equipped airplanes dropped fire retardant around the release area to avoid the spread of fires to nearby woods.

Site cleanup continued for the next several weeks, and trucks hauled away soil to landfill and bioremediation facilities. Skimmers and other recovery equipment also picked up standing oil and hauled it to pipeline facilities for reuse. By the end of the summer, most of the remaining oil-soaked peat was removed. In the fall, land was contoured and restored as close as possible to its original state.

We are cooperating with regulatory agencies to conduct a natural resources damage assessment of this incident and will carry out further site remediation in 2003.

COMMUNITY RELATIONS



Enbridge invests in communities where we operate, supplying financial support and human resources. One example is the "Plugging In: Explore the Potential of Alternative Energy" program shown at left. Enbridge is a lead sponsor of this newest addition to the Science Alberta Foundation fleet of traveling science programs.

We connect with our communities in many different ways: investing in community initiatives and institutions, sharing employee time and knowledge, and conducting public dialogue with our stakeholders on issues of mutual interest.

COMMUNITY INVESTMENT

Our community investment program supports not-forprofit organizations through financial contributions and human resources. Last year, our program invested \$3 million in charitable and non-profit organizations in Canada and the U.S. A portion of this was donated to EH&S programs and initiatives.

Besides projects mentioned elsewhere in this report, significant contributions included sponsoring:

- high school curriculum materials on climate change by FEESA, a non-profit organization promoting balanced environmental education across Alberta.
- online green learning programs by the Pembina Institute for Appropriate Development, an Albertabased environmental organization.
- environmental education camp for school children in Hay River, Northwest Territories.

- Clean Air Campaign, in partnership with Pollution Probe, to improve local air quality in the Toronto region through public education, advocacy and special events.
- student-driven conservation program, with students leading the way to measure, monitor and reduce energy use in schools in Renfrew County, near Ottawa.
- environmental and wildlife conservation education programs at the Tiffin Centre for Conservation near Barrie, Ontario.
- construction of the Hartley Nature Centre, a non-profit environmental education center in Duluth, Minnesota.
- Caesar Kleberg Wildlife Research Institute's South Texas Initiative to develop and promote native plants on private and public lands.
 - "We're Enbridge. In partnership with our communities, we deliver more than energy; we deliver on our commitment to enhance the quality of life in our communities by supporting programs in health, education, social services and the environment. Together with our employees we have the energy to make a difference."

EARTH WEEK ACTIVITIES



Enbridge Gas Distribution employees helped a Toronto-area school plant about 400 trees and shrubs on Earth Day (April 22) at the Milne Dam Conservation Park.

Battery recycling, book exchanges, composting workshops and clothing collections for charity — those were just a few of the ways employees across the company put their energy behind Earth Week in April 2002.

While employees across Enbridge took part in different activities, the theme of waste prevention and reduction was shared:

- In Fredericton, Moncton and Saint John, New Brunswick, employees collected used household batteries for recycling.
- In Estevan, Saskatchewan, employees took part in cleanups along community roadsides.
- In Calgary, employees hosted a breakfast workshop by a local environmental group providing information to staff on recycling and composting.
- In Edmonton, employees participated in a waste prevention and reduction "home fair."
- In Fort Simpson, Northwest Territories, employees visited high school students to discuss waste management.
- In Houston, employees used the proceeds from a can-recycling program to support families with sick children.

SPONSORING TORONTO'S SMOG SUMMIT

In 2000, Toronto's Medical Officer of Health released a report on the health impacts of urban smog. This report, together with increasing smog alerts in the city, sparked public concern. When city officials and the Toronto Atmospheric Fund decided to organize a Smog Summit — an annual conference of city, provincial and federal government officials to explore solutions to the problem — Enbridge Gas Distribution joined the effort as a founding sponsor.

Since then, the annual event has grown, attracting increasing numbers of individuals, businesses and governments.

In 2002, 600 people attended six citizens' forums over May and June to discuss ways to reduce smog and greenhouse gas emissions. Regional and municipal governments committed to new initiatives to reduce air pollution in the Greater Toronto Area. And Enbridge Gas Distribution used the Summit to launch the city's first-ever Fleet Challenge to lower vehicle fuel consumption by corporations.

RELATIONS WITH INDIGENOUS PEOPLES

Strong and productive relations with Aboriginal communities help Enbridge to reach strategic business objectives, and indigenous peoples to realize their aspirations.

Our Indigenous Peoples Policy lays out key principles for Aboriginal relations, including respect for heritage sites, land and knowledge, the environment and traditional ways. Adopted in 2002, the policy applies to all Enbridge operations, employees, contractors and suppliers.

Guided by our policy, we are striving to build sincere and open dialogue with indigenous peoples. Much of the work during the year to support our policy was focused on northern Alberta, where we are increasing our presence:

- Enbridge was one of 14 companies to sign a new long-term agreement with the Athabasca Tribal Council (ATC), which represents five First Nations in the Athabasca and Fort McMurray regions. The agreement aims to foster meaningful dialogue and collaboration among the ATC, government and industry.
- We met with First Nations and Metis communities to review construction plans for the MacKay River and Christina Lake feeder pipelines. Based on feedback, we identified job opportunities and revised pipeline routing to reduce impacts on trap lines, sacred sites and fishing and hunting areas.
- As part of our Oil Sands Markets Study, we established an Aboriginal Engagement Team to consult with Aboriginal communities on a potential oil sands pipeline in northern Alberta and British Columbia. This six-person team, comprised mostly of Aboriginal people, met with more than 120 communities to discuss project plans and learn about their concerns.

911 FUND ESTABLISHED

Firefighters. Police. Wardens. Sheriff's deputies. Emergency medical technicians. Hazardous materials teams. In a community emergency, they are the "first responders" — and our partners in promoting pipeline safety and environmental protection.

To recognize their contributions and to remember the heroes and victims of the September 11, 2001 tragedy, Energy Transportation South established the Enbridge Energy 911 Fund last year. The fund will provide up to \$50,000 annually in grants to first responders in U.S. communities that host our operations. These grants will be for training, special projects or new equipment.

We also met with Deh Cho communities to discuss a land use permit for a section of our NW System in the Northwest Territories. The Mackenzie Valley Land and Water Board granted the permit, commending the company on our public consultation efforts.

We recognize that better education and training initiatives are in the best interests of Aboriginal communities. Last year, we donated \$40,000 toward construction of an education centre for the Chipewyan Prairie First Nation near Fort McMurray. The building will be used to provide professional training to young people in the community.

PUBLIC CONSULTATION

We strive to foster positive and constructive relationships with our stakeholders along our rights-of-way and near our facilities, including landowners, indigenous peoples, communities, governments, and environmental and other interest groups. Before new projects are constructed, we consult and discuss our plans with affected parties. Public consultation programs, based on sincere efforts to address issues and build trust, lead to increased understanding between Enbridge and our stakeholders.

Examples of our public consultation activities during the year included:

■ We consulted with the Leech Lake Band of Ojibwe in north central Minnesota during Phase III of the Terrace pipeline expansion project. Project team members met with Band leaders before and during construction to discuss our plans and to develop mutually beneficial opportunities from our activities. Based on feedback, we agreed to donate eight hectares (20 acres) of culturally significant land to the community. We also revised the right-of-way clearing process and will sponsor a forest service firefighting training program for Band members.

ENVIRONMENTAL INITIATIVE PROGRAM

Energy Transportation North's Environmental Initiative Program (EIP) is designed to help community-based groups along our Canadian pipeline rights-of-way turn environmental commitment into action. The EIP provides grants of up to \$5,000 to qualifying projects that protect the environment and boost awareness of the benefits of being environmentally responsible.

Last year, the program donated more than \$90,000 to support 35 environmental projects.

Since EIP's launch in 1991, we have contributed nearly \$920,000 for projects ranging from interpretative trails to community recycling programs to children's outdoor education programs.



Since 1997, Enbridge has partnered with the Canadian Wildlife Service to protect the piping plover, an endangered species whose prime habitat is close to the company's pipeline in Saskatchewan.

PROTECTING THE PIPING PLOVER

The shorelines of Western Canada's prairie sloughs and lakes are prime habitat to piping plovers, small beige and white birds that are an endangered species.

When rising waters at Lake Diefenbaker threatened a piping plover nesting area last year, we underwrote the efforts of government wildlife experts to rescue eggs from the habitat area in southern Saskatchewan. Our community investment program funded air transport of rescued eggs to a U.S. hatchery and the return of chicks to the province. Fifty-two young plovers were then released at Chaplin Lake, a wetland south of Lake Diefenbaker.

This project marked the latest step in our ongoing support of Canadian Wildlife Service (CWS) efforts to promote the survival of this species. Our interest in the piping plover began in 1997, when employees chose to recognize Environment Week by supporting a CWS research and recovery program focused on plover populations at Lake Diefenbaker.

PUBLIC AWARENESS PROGRAMS

We conduct ongoing programs to raise awareness of safety issues among those who live or work near our pipelines and major facilities.

In 2002, Energy Transportation North contacted more than 12,000 stakeholders along our crude oil mainline right-of-way in Canada, including landowners, First Nations, city residents, municipalities and emergency response organizations. Through mailings and personal visits, we provided information on Enbridge's environmental programs and the location, safety and integrity of the pipeline.

Energy Transportation North and Enbridge Gas Distribution also hosted, or took part in, various community public awareness initiatives, including open houses, trade shows and safety conferences.

In the U.S., we collaborated with regulators and industry representatives to establish a recommended industry standard for developing, implementing and evaluating public awareness programs in the pipeline industry. This standard will be published in mid-2003.

We also used a mapping technology to identify stakeholders along parts of our Energy Transportation South system, improving the efficiency of our public awareness mailings.

- We carried out public and individual meetings with local residents to discuss our plans to add a 20-kilometre (12-mile) section of natural gas distribution pipe near Barrie, Ontario. We addressed public concerns by controlling traffic and modifying our construction schedule to lower disruption to the local community.
- In partnership with CCS Inc., a Calgary-based oil and gas service company, we conducted a public consultation program in Hardisty, Alberta, to support our companies' proposal to build a new crude oil underground storage facility in the area. Through an open house, information bulletins and meetings with community leaders, we established ongoing communications and sought stakeholder comments on the project.
- We met with government officials and local community representatives to identify and address stakeholder concerns for a proposed pipeline to our Griffith, Indiana, terminal.

POLICY DEVELOPMENT

Whether we are consulting with government policy-makers or reviewing our projects with regulators and local communities, we engage in public policy discussions that support the constructive resolution of EH&S issues. We strive to offer up ideas and solutions in matters of public policy for the interests of our customers, shareholders and other stakeholders.

Our activities in 2002 included:

- We provided input to government policy-makers to develop a climate change plan that engages all Canadians. Through our membership in industry associations, we took part in discussions to develop an industry response to national targets under the Kyoto Protocol. We advocated the need for a plan that encourages Canadians to be more efficient consumers and producers of energy without reducing our competitiveness.
- We provided recommendations to the Ontario Select Committee on Alternative Fuel Sources, a government committee reviewing different energy options. We hope that the committee's

recommendations, to be implemented over the next few years, will lead to new incentives to increase the use of natural gas and alternative fuels.

- We took a leading role in a multi-stakeholder process, led by the NEB, to develop industry best practices for consulting with Aboriginal peoples.
- We joined the Regional Issues Working Group of the Regional Municipality of Wood Buffalo. This multistakeholder process involves government and industry in Fort McMurray, Alberta, in collaborative problemsolving to address environmental, economic and social issues resulting from industrial growth.
- We joined with other gas companies in undertaking a technical study to determine industry reporting of pollutants to meet new regulations in Ontario and under Canada's National Pollutant Release Inventory.
- We consulted with U.S. regulators and government officials on regulations that affect pipeline integrity or environmental requirements in the 19 states where we operate.

CODE OF BUSINESS CONDUCT

Our Statement on Business Conduct outlines the expected standards of behavior and ethics for all Enbridge employees and directors. Adherence to the code is a condition of employment at the company.

In line with our commitment to corporate social responsibility, Enbridge adopted the internationally recognized Voluntary Principles on Security and Human Rights in 2002. These principles deal with responsible corporate action in "zones of conflict" and are especially relevant to our business involvement in Colombia, where we operate the OCENSA pipeline.

We added the principles to our Statement on Business Conduct, further enhancing an already strong code of conduct. We met with congressional members to provide input during development of the U.S. Pipeline Safety Bill. In December 2002, U.S. Congress passed the bill, which increases pipeline safety requirements.

Enbridge is a strong advocate of responsible public policy that addresses the need for long-term energy reliability, safety and security in North America. Although a U.S. Energy Policy was not passed in 2002, we continued to offer our views during each stage of policy development. We raised awareness of the energy interdependence between Canada and the U.S. and stressed the need to streamline government permitting for pipelines in ways that balance market and environmental needs.

ASSOCIATION MEMBERSHIPS

Enbridge belongs to a number of industry and environmental associations. These organizations provide a forum where we can listen to the views of our stakeholders and participate in collaborative problem-solving to address EH&S issues. These organizations include:

- Alberta Chamber of Resources
- American Petroleum Institute
- Association of Oil Pipe Lines
- Canadian Coalition for Responsible Environmental Solutions
- Canadian Energy Partnership for Environmental Innovation
- Canadian Energy Pipeline Association
- Canadian Gas Association
- Canadian Wind Energy Association
- Clean Air Renewable Energy Coalition
- Interstate Natural Gas Association of America
- Pipeline Research Council International

SUMMARY OF PERFORMANCE INDICATORS ENERGY TRANSPORTATION NORTH 1

Poliveries (thousands of barrels/day) ^{2,3} 2,024 1,942 2,072 2,109 2,088		1998	1999	2000	2001	2002
Barrel miles (billions) 3.4	Operations					
Barrel miles (billions) 3.4		2,024	1,942	2,072	2,109	2,088
Length of right-of-way (miles) 5,740 6,109 6,107 6,115 0,120 Number of employees 1,205 1,209 1,178 1,164 1,129 EH&S Management 7		759	687	735	695	705
Number of employees		5,740	6,109	6,107	6,115	6,152
Major incidents 5 9 8 3 5 9 Regulatory notifications 6 3 2 0 1 1 Elh&S fines and penalties (thousands of dollars) 7 313 162 0 0 0 Elh&S professionals (full-time) 22 22 22 23 22 Environmental Performance Greenhouse gas emissions 8 7 7 7 7 7 7 7 Total direct emissions (thousand tonnes of CO2 equivalent) 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 10 10 10 10 10 Energy 11 11 10 10 10 10 10 Energy 11 11 10 10 10 10 10 Total net emission intensity 10 10 10 10 10 Total net emission intensity 10 10 Total net emission intensity 10 10 Total net emission intens		1,205	1,209	1,178	1,164	1,129
Major incidents 5 9 8 3 5 9 Regulatory notifications 6 3 2 0 1 1 Elh&S fines and penalties (thousands of dollars) 7 313 162 0 0 0 Elh&S professionals (full-time) 22 22 22 23 22 Environmental Performance Greenhouse gas emissions 8 7 7 7 7 7 7 7 Total direct emissions (thousand tonnes of CO2 equivalent) 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 1083 824 917 764 5899 Total net emission intensity 10 10 10 10 10 10 Energy 11 11 10 10 10 10 10 Energy 11 11 10 10 10 10 10 Total net emission intensity 10 10 10 10 10 Total net emission intensity 10 10 Total net emission intensity 10 10 Total net emission intens	EH&S Management					
EH&S fines and penalties (thousands of dollars) 7 313 162 0 0 0 EH&S professionals (full-time) 22 22 22 22 23 22 Environmental Performance Secondary of the control of the		9	8	3	5	9
EH&S fines and penalties (thousands of dollars) 7 313 162 0 0 0 EH&S professionals (full-time) 22 22 22 23 22 Environmental Performance Greenhouse gas emissions 8 Total direct emissions (thousand tonnes of CO2 equivalent) 47 47 23 23 239 Total indirect emissions (thousand tonnes of CO2 equivalent) 1083 824 917 764 5899 Total net emission intensity 10 229 182 204 154 1139 Energy 11 Energy use (thousand gigajoules) energy delivered) 8,200 6,600 5,800 5,900 5,000 Energy intensity (thousand gigajoules) energy delivered) 8,200 6,600 5,800 5,900 5,000 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Reportable spills 12 Number of spills 39 54 43 27 46 Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680		3		0		1
Environmental Performance Greenhouse gas emissions 8 Total direct emissions (thousand tonnes of CO2 equivalent) 47 47 23 23 23 23 23 23 Total indirect emissions (thousand tonnes of CO2 equivalent) 1083 824 917 764 5899 Total net emission intensity 10 (tonnes of CO2 equivalent) 229 182 204 154 1139 Energy 11 Energy use (thousand gigajoules of energy delivered) 8,200 6,600 5,800 5,900 5,000 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Energy intensity (basel delivered) 7,830 28,760 7,480 25,670 14,680 7,480 25,670		313	162	0	0	0
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Greenhouse gas emissions 8					
Total indirect emissions (thousand tonnes of CO_2 equivalent) 1083 824 917 764 5899 Total net emission intensity 10 (tonnes of CO_2 equivalent/petajoules of energy delivered) 229 182 204 154 1139 Energy 11 Energy use (thousand gigajoules) 8,200 6,600 5,800 5,900 5,0009 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Reportable spills 12 Number of spills CO_2 Number of spills CO_2 Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680 Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00 Waste Recycled material (tonnes) 8,13 66 96 96 105 88 989 Health and Safety Employee lost-time injury frequency (lost-time injuries/200,000 hours worked) 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity (days lost/200,000 hours worked) 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 1.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.29 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		47	47	23	23	239
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1083	824	917	764	589 ⁹
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Energy use (thousand gigajoules) 8,200 6,600 5,800 5,900 5,0009 Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 399 Reportable spills 12		229	182	204	154	1139
Energy use (thousand gigajoules) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (thousand gigajoules/million cubic metres of throughput) Energy intensity (48 Ener						
Energy intensity (thousand gigajoules/million cubic metres of throughput) 70 57 48 48 48 399 Reportable spills 12 Number of spills 39 54 43 27 46 Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680 Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00 Waste Recycled material (tonnes) 8,13 66 96 105 88 989 Health and Safety Employee lost-time injury frequency (lost-time injuries/200,000 hours worked) 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity (days lost/200,000 hours worked) 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 1.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		8,200	6,600	5,800	5,900	$5,000^9$
Number of spills 12 39 54 43 27 46 Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680 Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00 Naste Recycled material (tonnes) 8,13 66 96 105 88 989 Naste						399
Number of spills 39 54 43 27 46 Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680 Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00 Waste Recycled material (tonnes) 8,13 66 96 96 105 88 98 98 Pealth and Safety						
Spill volume (barrels) 9,830 28,760 7,480 25,670 14,680 Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00 Waste Recycled material (tonnes) 8,13 66 96 105 88 98 Health and Safety Employee lost-time injury frequency (lost-time injury severity 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity (days lost/200,000 hours worked) 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		39	54	43	27	46
Spill volume rate (barrels/million barrels of throughput) 12.84 38.80 9.40 31.60 17.00		9,830	28,760	7,480	25,670	14,680
Waste Recycled material (tonnes) 8,13 66 96 105 88 989 Health and Safety Employee lost-time injury frequency (lost-time injuries/200,000 hours worked) 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity (days lost/200,000 hours worked) 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		12.84	38.80	9.40	31.60	17.00
Health and Safety Employee lost-time injury frequency 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity 0.00 0.09 1.36 4.23 Employee total recordable injury frequency 0.00 0.09 1.36 4.23 Contractor lost-time injury frequency 0.10 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency 2.93 3.44 3.26 3.13 2.72						
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked) Employee lost-time injury severity (days lost/200,000 hours worked) Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 Absenteeism (days absent/employee) Motor vehicle incident frequency	Recycled material (tonnes) 8,13	66	96	105	88	989
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked) Employee lost-time injury severity (days lost/200,000 hours worked) Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 Absenteeism (days absent/employee) Motor vehicle incident frequency	Health and Safety					
(lost-time injuries/200,000 hours worked) 0.09 0.00 0.09 0.34 0.18 Employee lost-time injury severity 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency						
Employee lost-time injury severity (days lost/200,000 hours worked) Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 Absenteeism (days absent/employee) Motor vehicle incident frequency		0.09	0.00	0.09	0.34	0.18
(days lost/200,000 hours worked) 1.53 0.00 0.09 1.36 4.23 Employee total recordable injury frequency (recordable injuries/200,000 hours worked) 14 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency						
Employee total recordable injury frequency (recordable injury source) $(1.19 \times 1.10 \times 1.04 \times 1.19 \times 1.10 \times$		1.53	0.00	0.09	1.36	4.23
(recordable injuries/200,000 hours worked) 14 1.19 1.10 1.04 1.19 1.10 Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency						
Contractor lost-time injury frequency (lost-time injuries/200,000 hours worked) 15 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		1.19	1.10	1.04	1.19	1.10
(lost-time injuries/200,000 hours worked) 15 2.24 0.54 1.76 1.26 1.06 Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency						
Absenteeism (days absent/employee) 2.93 3.44 3.26 3.13 2.72 Motor vehicle incident frequency		2.24	0.54	1.76	1.26	1.06
Motor vehicle incident frequency						
		2.32	2.60	2.65	2.52	2.14

- Unless otherwise noted, data covers Enbridge Pipelines Inc., Enbridge Energy Partners, L.P., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc., Enbridge Pipelines (North Dakota) Inc., Enbridge Pipelines (Athabasca) Inc. and Enbridge Pipelines (Toledo) Inc.
- 1 barrel = 0.159 cubic metres or 42 U.S. gallons.
- Includes Enbridge Pipelines Inc., Enbridge Energy Partners, L.P., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc. and Enbridge Pipelines (Toledo) Inc.
- Barrel miles are the number of barrels delivered multiplied by the distance traveled in miles.
- Major incidents are EH&S events that result in a critical employee or contractor injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.
- Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.
- EH&S fines and penalties are levied against the company as a result of regulatory notifications. Fines and penalties in a particular year often relate to activities in prior years. Reported in Canadian dollars.
- Includes Enbridge Pipelines Inc., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc. and Enbridge Pipelines (Athabasca) Inc. Prior year emission numbers have been revised.
- 100 Year emission numbers nuce been reviseu.
 2002 data is projected based on data from the Enbridge 2002 VCR Update. Data not yet available.
 10 Net emissions include greenhouse gas emission reductions from offset projects.
- Includes electricity and fuel consumption in operations of Enbridge Pipelines Inc., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc. and Enbridge Pipelines (Athabasca) Inc.
- 12 Reportable spills are any spill reportable to a regulatory jurisdiction.
- 13 Includes office paper, aluminum, glass, metal and newspaper. Materials such as wax, waste oil, rags and batteries are recycled but not tracked.
- 14 Includes lost-time and medical aid injuries.
- Contractor lost-time injury frequency rates include engineering project contractors. They do not include operations contractors, because the number of hours worked is not tracked for these contractors.
- Motor vehicle incident frequency rates do not include incidents that occurred at office locations in Edmonton, Alberta, and Duluth, Minnesota, because mileage is not tracked for these locations.

SUMMARY OF PERFORMANCE INDICATORS ENERGY TRANSPORTATION SOUTH 1

	2001	2002
Operations		
Gas transmission volume (billion cubic feet/day) ²	4	5.2
Deliveries (barrels/day) ³	4,500	5,500
Barrel miles ⁴	180,000	407,000
Length of right-of-way (miles)	2,400	6,400
Length of pipeline (miles) ⁵	4,100	8,550
Number of employees	337	616
EH&S Management		
Major incidents ⁶	3	1
Regulatory notifications ⁷	4	3
EH&S fines and penalties (thousands of dollars) 8	46	16.9
EH&S training (hours)	700	4,600
EH&S professionals (full-time)	1	6
Environmental Performance 10		
Reportable spills ¹¹		
Number of spills ¹²	5	1
Spill volume (barrels)	517	2
Health and Safety		
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked)	2.40	0.19
Employee lost-time injury severity (days lost/200,000 hours worked)	29.19	7.86
Employee total recordable injury frequency (recordable injuries/200,000 hours worked) ¹³	5.63	1.07
Preventable motor vehicle incident frequency (incidents/million miles driven)	1.64	0.55

- Unless otherwise noted, data covers Enbridge Midcoast Energy, L.P.

- Reflects aggregate throughput capacity of Enbridge Midcoast Energy, L.P. transmission lines. 1 barrel = 0.159 cubic metres or 42 U.S. gallons. Barrel miles are the number of barrels delivered multiplied by the distance traveled in miles.
- Includes 40 miles of crude oil pipeline and 34 miles of natural gas liquids pipeline. The remainder is pipeline for natural gas transmission and gathering.

 Major incidents are EH&S events that result in a critical employee or contractor injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.
- Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.
- EH&S fines and penalties are levied against the company as a result of regulatory notifications. Fines and penalties in a particular year often relate to activities in prior
- years. Reported in U.S. dollars.

 Includes EH&S training for plant and pipeline employees. In 2002, this consisted of safety meetings, driver safety, process safety management, incident command system training and Occupational Safety and Health Administration (OSHA) compliance.
- 10 Due to different regulatory requirements and business needs, Energy Transportation South does not track some corporate performance indicators. A key priority of this business operation is full compliance with existing regulatory requirements. The company's management system provides accountability for achieving this performance.
- Reportable spills are any spill reportable to a regulatory jurisdiction.
- Includes liquid spills from gas transmission and crude oil pipelines. Includes lost-time and medical aid injuries.

SUMMARY OF PERFORMANCE INDICATORS ENERGY DISTRIBUTION 1

	1998	1999	2000	2001	2002
Operations					
Gas distribution volumes (billion cubic feet)	397	402	421	427	410
Length of pipeline (thousand kilometres) ²	24.3	25.6	27.0	28.0	29.0
Number of employees	4,122	4,000	1,681	1,780	2,008
EH&S Management					
Major incidents ³	1	0	0	0	1
Regulatory notifications ⁴	7	1	7	4	3
EH&S fines and penalties (thousands of dollars) ⁵	0	0	0	0	0
EH&S training (hours) 6	n/a	n/a	n/a	n/a	4,939
EH&S professionals (full-time) ⁷	13	14	11	12	11
Environmental Performance					
Greenhouse gas emissions ⁸					_
Total direct emissions (thousand tonnes of CO ₂ equivalent)	292	297	299	311	2939
Total indirect emissions (thousand tonnes of \overline{CO}_2 equivalent)	7	7	5	6	69
Total net emission intensity					
(tonnes of CO ₂ equivalent/petajoules of energy delivered) ¹⁰	745	739	697	682	698 ⁹
Energy					10
Energy use (thousand gigajoules) 11	947	1,016	1,059	1,334	86312
Energy intensity (thousand gigajoules/billion cubic feet of throughput)	2.4	2.5	2.5	3.2	2.0
Reportable spills ¹³					
Number of spills (gas) 14	3	0	0	1	0
Number of spills (liquid)	1	1	5	1	1
Spill volume (litres of liquid)	100	1,600	6,000	5	180
Spill volume rate (barrels/billion cubic feet of throughput)	0.25	3.9	14.2	0.01	0.45
Waste					
Waste to offsite disposal	2760	1705	070	460	565
Total non-hazardous waste (tonnes)	2760	1705	978	469	303
Total liquid Ontario Ministry of	51	41	39	46	141 ¹⁵
Environment registrable waste (thousand litres) Total solid Ontario Ministry of	31	41	39	40	14115
Environment registrable waste (kilograms)	3430	403 455	150 000	38 000	7156 ¹⁵
Recycled material (tonnes)	600	600	500	40	431
	000	000	300	40	431
Health and Safety					
Employee lost-time injury frequency	1 (1		0.05	0.62	1.01
(lost-time injuries/200,000 hours worked)	1.61	1.17	0.95	0.62	1.21
Employee lost-time injury severity	0.41	0.05	0.61	6.00	11.07
(days lost/200,000 hours worked)	9.41	9.05	8.61	6.98	11.27
Employee total recordable injury frequency	2 44	2.04	2.07	2.20	2 42
(recordable injuries/200,000 hours worked) ¹⁶	3.44	2.94	3.07	3.29	3.42
Absenteeism (days absent/employee)	6.43	7.53	5.14	4.86	4.44
Preventable motor vehicle incident frequency (incidents/million kilometres driven)	3.02	2.98	1.71	2.13	2.04
(incidents/million knometres driven)	3.02	2.98	1./1	2.13	2.04

- Includes overall distribution system of Enbridge Gas Distribution, Gazifère, St. Lawrence Gas Company and Enbridge Gas New Brunswick.
- Does not include gas services (pipe required from the main to serve residential, commercial or industrial buildings).

- Includes EH&S training for employees such as driver safety, pipeline excavation safety and WHMIS.
- Includes vehicle safety trainers and nursing staff in the company's Wellness Centre. Does not include customer emissions. Prior year emission numbers have been revised.
- 2002 data is projected based on data from the Enbridge 2002 VCR Update. Data is not yet available.
- 10 Net emissions include greenhouse gas emission reductions from offset projects.
- 2003 estimates. 11
- 11 2 Reflects decreased use of gas compressors at Tecunseh Gas Storage Operations.
 13 Reportable spills are spills reportable to a regulatory jurisdiction.
- 14 Does not include fugitive emissions, planned releases or third-party incidents. 15 Includes wastes registered under the Ontario Hazardous Waste Information Network.
- 16 Includes lost-time and medical aid injuries.

Major incidents are EH&S events that result in a critical employee or contractor injury or fatality, significant regulatory enforcement action or significant adverse impact to the environment.

⁴ Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.

EH&S fines and penalties are levied against the company as a result of regulatory notifications. Fines and penalties in a particular year often relate to activities in prior years. Reported in Canadian dollars.

GLOSSARY

Carbon dioxide equivalent — Measure used to compare the emissions of various greenhouse gases based on their global warming potential. Expressed in CO₂, a primary greenhouse gas.

Gate station — Point of entry for natural gas leaving the transmission system into the local distribution system.

Greenhouse gas emission intensity — Amount of greenhouse gas emissions per unit of energy delivered on energy transportation and distribution systems. Measures an operation's environmental efficiencies.

Internal reviews — Reviews conducted by trained EH&S professionals to evaluate the status of EH&S performance at company facilities. These range from monthly facility inspections to broad comprehensive system reviews every five years. The reviews are a means of assessing whether management and staff are performing their jobs in accordance with regulations, permits, operating approvals and corporate standards.

Hydrostatic testing — Process involving the use of water to test new or existing pipeline facilities for leaks and to prove their structural strength under safe, controlled conditions. Through this process, water is drawn from nearby water sources. The pipe or tank is filled with water and brought up to high pressure. After testing is completed, the water is treated and discharged according to regulatory requirements.

Indirect greenhouse gas emissions — Emissions released during electricity production for Enbridge's use.

In-line inspection — Use of cylinder-shaped devices, fitted with electronic sensors, that locate pipeline wall weaknesses before they can progress to the point of causing a leak.

Lost-time injury frequency (LTIF) — Measure of work-related injuries per 200,000 hours worked. Lost-time injuries result in employees missing regularly scheduled work shifts.

Major incidents — EH&S incidents that result in a critical employee or contractor injury or fatality, significant regulatory enforcement action, a liquid spill of more than 100 barrels or significant adverse impact to the environment.

Net emissions — Measure of the company's greenhouse gas impact on the global atmosphere after accounting for climate change actions.

Nitrogen oxides (NO_x) — Nitrogen-based and oxygen-based compounds produced by combustion processes. NO_x emissions contribute to acid rain and ground-level ozone (smog).

Polychlorinated biphenyls (PCBs) — Chemicals formerly used as coolants in electrical equipment.

Regulatory notification — Formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties, or may be rescinded.

Sulphur dioxide (SO_2) — Gas formed by the burning of fossil fuels, including coal, fuel oil and diesel fuel, that contain small amounts of sulphur. SO_2 emissions can result in acidification of soils and lakes.

Total recordable injury frequency (TRIF) — Measure of work-related injuries per 200,000 hours worked. Includes lost-time and medical aid injuries.

Volatile organic compounds (VOCs) — Gases and vapors in hydrocarbon fuels. VOCs react with nitrogen oxides in sunlight to produce ground-level ozone (smog).

For more information on organizations and topics discussed in this report, visit the following Web sites:

- Dow Jones Sustainability Index www.sustainability-index.com
- Enbridge EH&S policy www.enbridge.com/about/enviro.html
- Enbridge Indigenous Peoples Policy www.enbridge.com/about/comm.html
- Enbridge VCR Update www.vcr-mvr.ca
- Enbridge Voluntary Principles on Security and Human Rights www.enbridge.com/about/comm.html
- Enbridge Gas Distribution NGV Business Development www.NGVontario.com
- Energy Transportation North Environmental Initiative Program www.enbridge.com/pipelines/comm.html#2
- National Pollutant Release Inventory www.ec.gc.ca./pdb/npri
- Ontario Ministry of Environment Hazardous Waste Information Network www.hwin.ca
- Toronto Renewable Energy Co-operative WindShare Project www.windshare.ca



Enbridge invites public comment on this report.

To share your comments, please e-mail us at webmaster@enbridge.com

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