Addendum to Enbridge's 2013 Corporate Social Responsibility Report (with a focus on 2013 data)

Human Health and Safety Performance Data Sheet
This performance data sheet relates to the following Global Reporting Initiative (GRI G3.1) Social Performance Indicators:

- LA6 – Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs
- LA7 – Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region
- LA8 – Education, training, counseling, prevention and risk-control programs in place to assist workforce members, their families or community members regarding serious diseases
- LA9 – Health and safety topics covered in formal agreements with trade unions
- PR1 – Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures

Context
As we strive to achieve industry leadership in pipeline and system facility integrity, process safety and environmental responsibility, we also strive to be a leader in human health and safety.

Through the structural changes we have made to our company and through the many initiatives we have in place under our Operational Risk Management (ORM) plan, we have improved our performance in the areas of employee and contractor occupational safety, and public safety. We have not yet achieved our goal of 100 per cent safe operations but we have established policies, systems and procedures that ensure we are continuously making progress toward it.

Operational Risk Management—Six Performance Areas

In 2013, we continued rolling out more than 200 initiatives under our Operational Risk Management Plan to improve our safety culture and practices. Under the Plan, we are committed to achieving industry leadership in six key areas.
2013 Key Performance Areas

#1. Achieve 100 per cent safe operations: zero injuries and zero incidents

We did not achieve a perfect safety record in 2013.

Tragically, on August 31, a multi-vehicle accident at our Flanagan South Project in Kansas took the life of a contractor and seriously injured another. Immediately following the incident, we initiated a public awareness program using road signage and radio advertisements to warn the public of the increased vehicle traffic due to construction activities. We updated our hazard assessments and reviewed our journey management practices pertaining to defensive driving training, reduced speed limits, use of hazard lights, stopping at uncontrolled intersections, avoiding high-traffic areas, avoiding left-hand turns and minimizing vehicle traffic through carpooling. We also formed a corporate-level task force to identify opportunities to reduce the number of motor vehicle incidents across the company.

In addition to the incident mentioned above, our health and safety performance included the following metrics:

- 82 recordable employee injuries (compared to 87 in 2012)
- 1.14 recordable injuries per 200,000* employee hours worked (compared to 1.27 in 2012, representing an improvement to our six-year average of 1.45)
- 0.17 lost-days injuries per 200,000* employee hours worked (compared to 0.32 in 2012, and representing an improvement to our six year average of 0.27)

*The formula for calculating injury rate (whether it be recordable injuries or lost-days injuries) is: number of injuries X 200,000 / employee hours worked, where the 200,000 hours in the formula represents the equivalent of 100 employees working 40 hours per week, 50 weeks per year.

All incidents, whether regulatory recordable or not, are reported to local supervisors, as well as to our Health and Safety Department for tracking, trending and communications regarding potential lessons learned.
As we strive to achieve industry leadership in pipeline and system facility integrity, process safety and environmental responsibility, we also strive to be a leader in human health and safety. Through the structural changes we have made to our company and through the many initiatives we have in place under our Operational Risk Management Plan, we have improved our performance in the areas of employee and contractor occupational safety and public safety. We have not yet achieved our goal of 100 per cent safe operations, but we have established policies, systems and procedures that ensure we continuously make progress toward it.

Note: The statistics quoted above are consolidated data for the following operating business units: Liquids Pipelines (LP); Gas Pipelines (the Enbridge operated portion of the Vector natural gas pipeline); Enbridge Gas Distribution (EGD); Gas Transportation (GT); and Major Projects (MP). They are based on the 8,132 employees working for those entities as of December 31, 2013, and exclude corporate (head office) employees. Click [here](#) to view a spreadsheet showing Enbridge’s complete health and safety statistics, both consolidated and by business unit.
#2. Establish a world-class safety culture

We recognize that a strong safety culture is critical to our ability to achieve our target of 100 per cent safe operations. To that end, we have deliberately built safety and operational reliability into our accountability structure. In 2013, we:

- Created Enbridge’s Operations and Integrity Committee (OIC), which our President & CEO chairs, and which is accountable for safety, operations and integrity across our organization. Please see the Operational Risk Management section of our 2013 CSR Report for more information.

- Created the Enterprise Safety and Operational Reliability team, a small corporate group that reports to our President & CEO, and that has centralized accountability for policy direction and strategic oversight across all of our business units (although the business units maintain direct accountability for safety and operational reliability).

- Established the Safety and Reliability Committee of Enbridge’s Board of Directors. Please see the Governance and Compliance section of our 2013 CSR Report for more information.

In addition to the structural changes, in 2013 we took numerous other steps to engrain safety into our culture.

Our leadership team took every opportunity to talk about our safety goals. Throughout 2013, they visited field sites throughout our operations to listen to employees and contractors, and to share Enbridge’s vision. The interactions encouraged a free flow of information and clearly demonstrated our “tone at the top.” They also provided OIC members with learnings to share at their meetings, advancing our overall safety culture.

We look to the continual efforts of our project teams to anticipate, adapt, respond and manage the changing conditions they face in their work. By understanding how and when things go right, and by acknowledging the contributions of engaged, committed project teams and support groups in ensuring that they go right, we change the game around what is possible with regard to safe performance.

We challenge our employees and contractors to continually innovate, adapt and define a new future for their teams. They do this by harnessing their skills, knowledge and experience to improve our systems and practices. We ensure that everyone is involved.

We worked with DuPont to conduct a company-wide safety-culture perception survey, using a recognized world-class approach that enabled us to compare Enbridge to other companies in the oil and gas industry, as well as to companies in best-in-class industries. We achieved a 90 per cent participation rate in the survey, suggesting that we are on the path to achieving an interdependent safety culture.

Every single employee at Enbridge now has a safety objective within his or her annual job objectives, and is rated on how well the objective is met.

We implemented a common incident management system (IMS) across our company. The IMS enables us to analyze trends and to share lessons learned across departments and business units, helping us become a “learning organization.”

Our Major Projects business unit (MP) has included safety objectives in the Master Service Agreements it signs with its suppliers. Please see the Supply Chain and Procurement Practices section of our 2013 CSR Report for more information.

Every quarter, we analyze our safety incidents from several angles, including injured body parts, nature of the injury and root cause. Our analysis leads us to take specific actions to drive incidents down and repeatable safety performance up.
We require our contractors to conduct hazard assessments before they start their work. Our inspectors review the assessments every day to ensure that they’ve been implemented.

We published our first Operational Reliability Review in December 2013, and distributed over 35,000 copies to internal and external stakeholders. Our President & CEO sent copies to his counterparts, as well as to stakeholders.

Because our employees and contractors learn about safety practices from many different companies, one of our priorities is to influence our industry to develop a consistent approach to safety. As such, we reached out to other companies in our industry to identify, compare and lead best practices. We plan on sharing our learnings from our own incidents throughout the industry, and establishing common core training expectations for all positions on a pipeline construction job.

We met with the National Aeronautics and Space Administration (NASA) to begin the process of benchmarking Enbridge against organizations that are global leaders in safety.

We developed and implemented a Corporate Crisis Management Plan (CMP)—including enterprise-wide incident screening and notification protocols—that ensure that our corporate activities are tied to the Emergency Response and Crisis Management Plans that each of our business units now have.

Each of our business units has evaluated the training that its employees need to safely complete their jobs and has created position-specific descriptions. Using this information, we have created training matrices that enable us to ensure that each employee has the necessary training and knowledge.

Management Approach and Background

Policy
Our approach to health and safety is governed by our Environment, Health and Safety Policy.

Health & Safety Principles
Our target is to establish a world-class safety culture—one that achieves zero incidents and in which our safety priority is engrained throughout our employee and contractor workforce. To that end, in April 2013, we introduced our Health & Safety Principles to guide our safety actions, policies, procedures and culture. All employees are responsible for knowing these principles and using them as a basis for their day-to-day actions.

Enbridge’s Health & Safety Principles are:

- All injuries, incidents, and occupational illnesses can be prevented
- All operating exposures can be controlled
- Management is accountable for safety performance
- All employees/contractors are responsible for safety
- Assessment and improvement are a must
- We promote off-the-job health and safety for our employees 24/7

The Health & Safety Principles are fundamental expectations for all employees and contractors. They define our Path to Zero incidents, injuries and occupational illness. They define a workplace in which safety is everyone’s responsibility, leadership is accountable for safety performance, continuous improvement is required, hazards are controlled and our commitment to caring extends beyond the work day.

Whereas our enterprise-wide values of Integrity, Safety and Respect help define who we are and lay the foundation for how we approach our business, the Health & Safety Principles make our core value of Safety real. They outline our expectations and employee obligations regarding health and safety at Enbridge.
Lifesaving Rules
The Health & Safety Principles complement our six Lifesaving Rules, which we introduced in January 2012. The Lifesaving Rules are:

1. **Hazard Management**: Always ensure an analysis of potential hazards has been completed and proper authorization received prior to starting the work
2. **Driving Safety**: Only drive a vehicle or operate equipment when not under the effect of alcohol or any substances that cause impairment
3. **Confined Space Entry**: Always follow procedures for confined space entry
4. **Ground Disturbance**: Always follow procedures for locating, positively identifying and excavating buried facilities
5. **Isolation of Energized Systems**: Always follow procedures for Lockout / Tag-out
6. **Reporting of Safety-Related Incidents**: Always report significant safety related incidents

Whereas the Health & Safety Principles outline how we think about health and safety at Enbridge and define our philosophy and approach, the Lifesaving Rules are concrete and absolute. Backed up by detailed policy and procedure, the Lifesaving Rules define specific actions and behaviours that all Enbridge employees and contractors are obliged to follow.

At Enbridge, all safety incidents, whether regulatory authorities consider them to be reportable or not, must be reported to local supervisors, as well as to our Health & Safety Department for tracking, trending and communications regarding potential lessons learned.

**Health and Safety Committees**
Enbridge’s entire workforce is represented in formal joint management-worker health and safety committees. While the structure of these committees varies between business units, a common element is the participation of both employees and management representatives.

In 2011, each of the operating business units within Enbridge began a Safety Culture enhancement initiative. One component of this initiative was to establish a clear Health & Safety Committee structure that serves to promote participation and engagement at all levels and to establish clear lines of communication for decision making within the organization. These committees and the new structure were implemented in 2012. In 2013, Enbridge conducted a Safety Culture Perception Survey to measure the progress of this initiative. DuPont has been using the DuPont Safety Perception Survey since 1999 to measure the strength of the safety culture in organizations. The survey measures an organization’s safety culture across the three elements of safety management: Leadership, Structure, and Processes and Actions. The 2013 survey results indicated Enbridge experienced a 13 per cent increase in Safety Culture strength from the previous survey and the beginning of the Safety Culture enhancement initiative. Additionally, the survey results provided valuable data that will be used in planning for the continuation of our journey into 2014 and beyond.

Enbridge has significantly increased the number of Environment, Health and Safety (EH&S) personnel, with the number rising to 253 in 2013, compared with 171 in 2012. This is representative of Enbridge’s business growth and of our increased focus on EH&S excellence, operational reliability, and commitment to attaining a world-class EH&S culture.

**Absenteeism**
Enbridge’s absentee rate in 2013 was 3.86 days absent per employee. Enbridge uses the metric of ‘average days absent per employee’, because we do not track ‘scheduled hours’ in our Human Resources system. Only exception time is tracked, and as such, this is the most accurate measure of absenteeism for Enbridge.
**Risk Mitigation / Employee and Family Assistance**

Before Enbridge employees are authorized to perform any job that may have health or safety risks associated with it, they must complete mandatory training. As well, within each of our business units and at each of our sites, Enbridge has established health and safety committees, which meet regularly to discuss and proactively implement changes in response to: legislation; new company policies and practices to continuously improve safety performance; and new understandings gained from analyzing incidents.

If a serious injury occurs, Enbridge arranges for counselors to be brought in for the team.

Enbridge also offers the Employee and Family Assistance Program (EFAP) to employees and their families in need of help in a variety of areas. In addition to providing assistance in dealing with an illness or injury, employees and their families can access help related to:

- Alcohol and drug dependencies
- Marital and family concerns
- Outplacement and retirement issues
- Bereavement
- Depression, stress and anxiety
- Long-term or major illness
- Financial counseling or debt management

All services under the EFAP are provided by, or coordinated through, an independent consulting firm with certified professional counselors. All EFAP counselors are qualified psychologists or social workers who are required to maintain employees' confidentiality.

Under the EFAP, Enbridge covers the initial assessment and the first four hours of counseling. Extended health care plans provide ongoing coverage to certain maximums.

Enbridge’s short- and long-term disability plans also include a variety of healthcare, support and counselor assistance.

Additionally, we have several programs and initiatives in effect within our business units that focus on the health of our employees and families, such as pandemic planning and other health initiatives.

**Trade Unions**

The business units within the Enbridge group of companies that employ individuals who are represented by trade unions are Liquids Pipelines and Enbridge Gas Distribution (EGD). However, only the collective agreement that EGD has with the Communications, Energy and Paperworkers Union (CEP), local 975, includes topics related to health and safety. Article 2 of the Union Management Cooperation document states the following:

2.04—Enbridge and the Union recognize the importance of a strong commitment to the Health and Safety of our work force and agree and commit to the following:

- Compliance with a standard that, as a minimum, meets all applicable laws and regulations as of April, 1998, and reflects applicable industry standards
- That Enbridge will provide and maintain a safe and healthy work environment, safe equipment and will follow operating practices that will safeguard all employees and the public
The elimination of the source of dangers to the health, safety and physical well-being of our employees is of paramount importance.

That procedures are in place to ensure the efficient delivery of, and accessibility to, Health and Safety Training.

That Enbridge and the Union will work together to ensure all employees are aware of their rights and obligations with respect to these commitments.

That unacceptable performance of health and safety responsibilities will not be tolerated.

Development and communication of a Safety Management System.

2.05—Enbridge and the Union also recognize the importance of Joint Health and Safety Committees, comprising knowledgeable employees, to achieve these commitments and agree to ensure that the committees have the necessary support to fulfill their role.

**Customer Health and Safety**

Enbridge is a transporter of energy, primarily in the form of liquid petroleum products and natural gas. Enbridge does not produce these commodities, but transports them from source to end users.

While Enbridge does not specifically conduct life-cycle reviews of the products that we transport through our systems, we do thoroughly review our systems to ensure that the products we transport are delivered in a manner that is safe and reliable. These reviews pertain to the design, construction, operation and maintenance of the transport systems. They are conducted on all of Enbridge’s systems.

Enbridge’s Liquids Pipelines business unit (LP) implements a New Service Request and New Commodity Approval process prior to movement of new products on its pipeline system. These processes require shippers to provide product quality information and material safety data sheets when requesting to ship a product on the pipeline for the first time. These processes further set out the requirements for ongoing periodic testing of all products once approved for transport on the pipeline. Enbridge also requires shippers to provide updated material safety data sheets every three years in accordance with regulations. This information is used to assess the health and safety impacts of any new products being introduced to the pipeline system and any changes in characteristics that may impact health and safety during the product lifecycle.

In addition to these processes, LP has an industrial hygiene program that sets out requirements for regular air sampling and monitoring of its operations and maintenance activities to assess worker exposures to airborne contaminants and potential impacts to worker health and safety. This information is used to validate the effectiveness of controls utilized to protect workers, including engineering controls, administrative controls and personal protective equipment.

Enbridge is also expanding our interests in electricity transmission, as well as in renewable and alternative energy technologies such as wind, solar and geothermal energy. Enbridge takes our responsibility as an energy producer seriously. We pursue this commitment by:

- Managing all of our operations and new facilities with respect for our neighbours and their land
- Consulting with the individuals who live and work in the vicinity of these operations, as well as those who may become our neighbours as our renewable energy portfolio grows
- Maintaining our projects to the highest possible standards
- Keeping neighbours, community residents and officials informed about our activities
Health and Safety of Our Communities

Enbridge is committed to protecting the public and the environment, and we build safety into every step of our operations.

Our public awareness work helps landowners, community members and first responders recognize and report incidents, and instructs them on how to stay safe if an incident occurs. In 2013, we rolled out, or continued operating, the following programs:

- **Enbridge Enterprise Emergency Response Team (E³RT):** Through E³RT, employees throughout Enbridge’s business units in Canada and the U.S. participate in regular emergency response exercises to test and improve our capacity to respond to large-scale emergency events. These exercises range from tabletop simulations, where employees discuss responses to various scenarios, to full-scale deployment drills with local emergency agencies, using equipment to practice recovery and clean-up in various terrains and on water, as applicable.

- **Enbridge Safe Community Program:** Maintaining strong relationships with emergency responders in our areas of operation throughout North America is a priority for us. One of our flagship community investment programs is our Safe Community Program, under which we provide grants to the first responders, police agencies, fire-fighters, emergency medical services and other related health providers who would respond to emergency situations in or near communities along our pipeline rights-of-way. The grants help eligible organizations acquire new safety-related equipment, obtain professional training and deliver safety education programs in their communities. Since the program’s inception in 2002 through to the end of 2013, our Safe Community Program grants to first responder organizations in Canada and the U.S. have totaled approximately $7 million.

- **Emergency Responder Education Program:** We rolled out the Enbridge and Vector Pipeline Emergency Responder Education Program in the U.S. in December 2012 to more than 8,000 emergency response agencies, and rolled it out in Canada in April 2013 to approximately 800 first response agencies. The online training program features 3-D, interactive graphics to help first responders visualize their response to pipeline incidents. Content includes the basics of natural gas and crude oil pipeline operations information, how to safely handle products transported by pipelines, pipeline emergency response tactics and pipeline emergency scenarios. The program material is based on Pipeline Emergencies, an industry-leading pipeline emergency response training program developed by the National Association of State Fire Marshals (NASFM) in the U.S. We adapted the NASFM materials to provide information specific to our pipelines. In 2013, we also rolled out an in-person outreach component of the program and developed a new training module that targets 911 dispatch centres covering the areas in which we operate and fire departments close to our pipelines and facilities.

When we experience a spill, leak or release, our highest priority is the safety and protection of people and the environment. We develop plans for remediation and reclamation with the input of affected stakeholders and environmental regulators. We strive to address all regulator and stakeholder requirements, and to restore impacted areas to a state that is acceptable to the local community. We investigate each release to determine causes, and incorporate recommendations for prevention and improvement into our Integrity Management programs.
Our Gas Distribution (GD) business unit’s largest operational threat is third-party damage to its natural gas pipeline infrastructure. Preventing these damages improves worker and public safety, as well as the integrity of GD’s distribution assets. A key prevention measure is to provide information about underground infrastructure to individuals interested in excavating—before they conduct any excavations. Enbridge Gas Distribution (EGD) strongly influenced the passing in 2012 of the Ontario Underground Infrastructure Notification System Act, into law. Under this legislation, all underground utility operators are required to participate in Ontario One-Call, a call centre that provides answers to third-parties wanting to excavate for any reason in Ontario. With the passing of the legislation, excavators can easily get the information they need with just one call. Ontario was the first of Canada’s provinces and territories to pass such legislation. EGD was also actively involved in developing and implementing effective regulations for this legislation.

In 2012, GD also implemented a High Risk Excavation Program where damage prevention inspectors proactively engage with contractors performing excavations that have traditionally resulted in multiple damages (e.g. deep excavation work such as sewer and water main work). Through these efforts and others, GD has been successful in reducing normalized damages per thousand locate requests, as well as absolute damages.

**For More Information**

Please see Enbridge’s complete health and safety statistics, both consolidated and by business unit, on [http://csr.enbridge.com/](http://csr.enbridge.com/). Please also see Enbridge’s Operational Reliability Review and the following performance data sheets on [http://csr.enbridge.com/](http://csr.enbridge.com/): Governance, Commitments and Engagements; Asset Integrity and Reliability; Spills, Leaks and Releases; Emergency Preparedness and Response; and Product Responsibility/Customer Protection.