



File NEBA-RRG-DPR 01
9 February 2009

To: All Interested Stakeholders

National Energy Board
Proposed *Damage Prevention Regulations and Draft Guidance Notes, February 2009*
Comment Period

The National Energy Board (the Board or the NEB) is working on Proposed *Damage Prevention Regulations* (Proposed DPR) that will replace the *National Energy Board Pipeline Crossing Regulations, Part I* and the *National Energy Board Pipeline Crossing Regulations, Part II*.

The Proposed DPR will apply to NEB regulated pipeline companies and to any person planning or undertaking an activity with the potential to damage pipelines regulated by the Board. The purpose of the Proposed DPR is to:

- ensure the safety and security of the public and NEB regulated pipelines;
- ensure the protection of property and the environment;
- define the safety zone;
- specify the types of activities that may be restricted on rights of way and safety zones;
- identify which activities require company approvals; and
- define NEB regulated pipeline companies' roles and obligations.

The Board has made several changes to the 2004 draft of the Proposed DPR since it was originally circulated for review. Therefore, the Board has decided to provide another opportunity for interested stakeholders to comment on the *Proposed Damage Prevention Regulations and Draft Guidance Notes, February 2009*. This document is included for your review and comment.

In addition, the Board launched its Land Matter Consultation Initiative (LMCI) in October 2007, and consultations across Canada were initiated. The summary of issues raised and proposed actions are included in a Draft LMCI Report released on 16 December 2008 (Draft Report). As part of the Draft Report, the Board indicated its intention to incorporate the requirement for companies to have a program in place to manage the movement of vehicles and mobile equipment in the Proposed DPR. This information can be found in the draft LMCI Report, Action 1.2 in Appendix 1 on the NEB Website at www.neb-one.gc.ca by selecting the blue Land Matters Consultation Initiatives icon on the right-hand side of the home page. The Board invited comments on the LMCI Report by 20 February 2009. The Board would like to draw your attention to section 4 of the Proposed DPR which relates to this aspect of the 16 December 2008 draft LMCI Report.

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During the development of the Proposed DPR, a number of industry and landowner groups expressed interest in meeting with Board once the documents were publicly available for comments. Accordingly, the Board plans to follow up with Canadian Alliance of Pipeline Landowners' Association (CAPLA), Canadian Association of Petroleum Producers (CAPP), Canadian Energy Pipeline Association (CEPA), and Union des producteurs agricoles (UPA) shortly to discuss the possibility of such meetings.

Providing Written Comments on the Proposed DPR and Draft Guidance Notes

Written comments on the proposed DPR and Draft Guidance Notes can be provided before **Friday, 20 March 2009** to:

Claudine Dutil-Berry,
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National Energy Board
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Facsimile 403-292-5503 or 1-877-288-8803

Please include the subject title "*Proposed Damage Prevention Regulations and Draft Guidance Notes, February 2009*" in your correspondence. Written submissions will be posted on the Board's website.

To learn more about the proposed DPR, please see the attached Frequently Asked Questions. This letter and the attached documents can be found online at www.neb-one.gc.ca by clicking on "Acts and Regulations", selecting "Regulations Under Review" and scrolling down to "Damage Prevention Regulations (Pipeline Crossing Regulations)".

For more information please contact the Project Managers Chantal Briand at 403-292-4192 or Scott Gedak at 403-299-3674, or toll free at 1-800-899-1265.

The Board appreciates the continued involvement of interested stakeholders in this project. For updates regarding the proposed DPR, please visit the Board's website at www.neb-one.gc.ca.

Yours truly,



for
Claudine Dutil-Berry
Secretary of the Board

Attachments

National Energy
Board



Office national
de l'énergie

Proposed Damage Prevention Regulations

Draft Guidance Notes

February 2009

Canada

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References

National Energy Board Act (Act)
Proposed Damage Prevention Regulations (DPR)
Onshore Pipeline Regulations, 1999 (OPR)
Onshore Pipeline Regulations, 1999, Guidance Notes
American Public Works Association Uniform Colour Code
Canadian Association of Pipeline and Utility Locating Contractors
CSA Z662 Oil and Gas Pipeline Systems (CSA Z662-07)
National Energy Board's Filing Manual
Ontario Regional Common Ground Alliance Best Practices (ORCGA)

Foreword

The National Energy Board (the NEB or the Board) regulates natural gas, oil and commodity pipelines that cross a provincial or international border. The NEB is committed to ensuring the continued safe and reliable operation of Canada's pipeline infrastructure that fall under its jurisdiction.

The NEB's Proposed *Damage Prevention Regulations* (DPR) apply to any pipeline company and to any person planning or undertaking an activity that has the potential to damage pipelines regulated by the NEB.

Guidance Notes provide the text of the DPR followed by the Board's enacted authority (refer to Appendix 1 – Legislative Authority) and guidance pertinent to the section(s) of the DPR cited. Guidance Notes do not contain mandatory requirements unless they repeat or paraphrase the requirements of the DPR. Guidance is intended to provide additional information that will assist readers in understanding their regulatory obligations and the NEB's expectations.

To assist in comprehension and understanding, the document includes numerous explanatory text boxes under the heading "Did You Know". These boxes are used to convey important information that may assist readers in making sound decisions regarding compliance and safety.

Purpose

The DPR and Guidance Notes are based upon the following statement of purpose and three supporting principles.

Statement of Purpose

The Board regulates activities on or adjacent to pipelines under its jurisdiction in the interests of the safety of persons, the protection of property and the environment¹.

Supporting Principles

1. The Board respects the rights of companies in the management of affairs within their rights of way.
2. The Board respects the rights of owners or users of properties which contain or are adjacent to pipelines.
3. The Board assures compliance to the DPR through inspection and audit.

Compliance

The DPR reflect the Board's continued advancement in the development and implementation of goal oriented regulations. As such, a key component of the DPR is the ability to assess compliance through audits of pipeline company records, practices, and procedures. The onus is on individual companies to implement and demonstrate compliance with the DPR, which is assessed through NEB field inspections and auditing management systems.

1 The Board's goals are:

- NEB-regulated facilities and activities are safe and secure, and are perceived to be so;
- NEB-regulated facilities are built and operated in a manner that protects the environment;
- Canadians benefit from efficient energy infrastructure and markets;
- The rights and interests of those affected by NEB-regulated facilities and activities are respected; and
- The NEB delivers quality outcomes through innovation and leadership.

Definitions

The following definitions are included in the *National Energy Board Act* (Act) to which there are references in the DPR:

Company	Includes, <ul style="list-style-type: none">(a) a person having authority under a Special Act to construct or operate a pipeline, and(b) a body corporate, incorporated or continued under the <i>Canada Business Corporations Act</i> and not discontinued under that Act. (<i>compagnie</i>)
Pipeline	Means a line that is used or to be used for the transmission of oil, gas or any other commodity and that connects a province with any other province or provinces or extends beyond the limits of a province or the offshore area as defined in section 123, and includes all branches, extensions, tanks, reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegraph or radio and real and personal property, or immovable and movable, and works connected to them, but does not include a sewer or water pipeline that is used or proposed to be used solely for municipal purposes. (<i>pipeline</i>)
Utility	Means a navigable water, a highway, an irrigation ditch, a publicly owned or operated drainage system, sewer or dike, an underground telegraph or telephone line or a line for the transmission of hydrocarbons, electricity or any other substance. (<i>installation de service public</i>)

The following terms appear throughout the DPR and/or Guidance Notes and are understood to mean:

Backfill	The act of filling the void created by excavating or the material used to fill the void (as defined in the Ontario Regional Common Ground Alliance Best Practices Version 4.0 – March 2008). (<i>remblayage</i>)
CSA Plus 663	“CSA Plus 663” means CSA Plus 663 entitled Land Use planning for pipelines: A guideline for local authorities, developers, and pipeline operators. (<i>CSA Plus 663</i>)
CSA Z662-07	"CSA Z662-07" means CSA Standard Z662 entitled Oil and Gas Pipeline Systems, as amended from time to time. (<i>CSA Z662-07</i>)

Easement Agreement	An agreement under which a company acquires the right to use the land for the pipeline. It is a written contract that sets out the rights of the company and rights of the landowner for the use of the right-of-way. (<i>accord de servitude</i>)
Excavation	Any operation within 30 metres of the pipeline using power-operated equipment or explosives used in the movement of earth, rock or other material below existing grade. (<i>excavation</i>)
Facility	Includes a pipeline and means: <ul style="list-style-type: none"> (a) any structure that is constructed or placed on the right-of-way of a pipeline; and (b) any highway, public or private road, railway, irrigation ditch, drain, drainage system, sewer, dike, berm, communications cables or line for the transmission of hydrocarbons, power or any other substance that is or is to be carried across, along, upon or under any pipeline. (<i>installation</i>)
Ground disturbance	Any work, operation or activity on or under the existing surface resulting in a disturbance or displacement of the soil or ground cover. (<i>remuement du sol</i>)
Locate (verb)	The process of a pipeline owner/operator or their agent providing information to an excavator which enables them to determine the location of an underground facility. (<i>localiser</i>)
Locate (noun)	The provision of location information by an underground facility owner (or their agent) in the form of ground surface markings and/or facility location documentation such as drawings, mapping, numeric descriptions or other written documentation (as defined in the Ontario Regional Common Ground Alliance Best Practices Version 4.0 – March 2008). (<i>localisation</i>)
Locate report	A record of a locate. (<i>rapport de localisation</i>)
Locate request	A communication between a person proposing to excavate or disturb the ground at a particular location and a one-call centre, the pipeline company or their agent in which a request for locating underground facilities is processed. (<i>demande de localisation</i>)

Locate ticket	A locate ticket is a one-call centre and/or pipeline company’s record of a locate request that is transmitted to potentially affected members of the one-call centre, advising them of a proposed activity and requesting that they identify and, where appropriate, mark the location of their buried facilities at the site of the proposed activity.
Locator	A person who has been qualified by the pipeline company to perform a locate. (<i>localisateur</i>)
Marking	Activities involved in visibly identifying the location of buried facilities through means of temporary flags, spray paint or other appropriate means. (<i>jalonnement</i>)
ORCGA	Ontario Regional Common Ground Alliance Best Practices is a non-profit organization dedicated to shared responsibility in damage prevention and in the promotion of damage prevention Best Practices. (<i>ORCGA</i>)
Person	Any individual or legal entity, public or private. The term “any person” as stated in the DPR includes, but is not limited to: a landowner, resident, tenant, excavator, contractor, business, association and pipeline companies and their agents. (<i>personne</i>)
Pipeline Company	A company or its designate, responsible for the operation of the pipeline. (<i>compagnie pipelinière</i>)
Right-of-Way	The strip of land acquired for which a pipeline company has obtained the rights for the construction and operation of the pipeline. Figure 1 (under section 1, page 2) provides a graphical depiction of a right-of-way. (<i>emprise</i>)

Interpretation

Proposed Regulatory Text²

Section 1 — Definitions

The following definitions apply in these Regulations.

“Act” means the National Energy Board Act.

“one-call centre” means an organization that, within a defined geographical area, coordinates requests for locates and notifies its potentially affected members of any proposed ground disturbances or excavations for the purposes of protecting their facilities from damage and ensuring public safety.

“pipe” means a line that is used or is to be used for the transmission of oil, gas or any other commodity and that connects a province with any other province or provinces or extends beyond the limits of a province or an offshore area as defined in section 123 of the Act.

“safety zone” means the area extending 30 m perpendicularly from the centre line of a pipe on either side of the pipe.

“working day” means any day that is not a Saturday, a Sunday or any other holiday.

Enacting Authority

Enacted under subsections 48(2) and 112(5) of the Act.

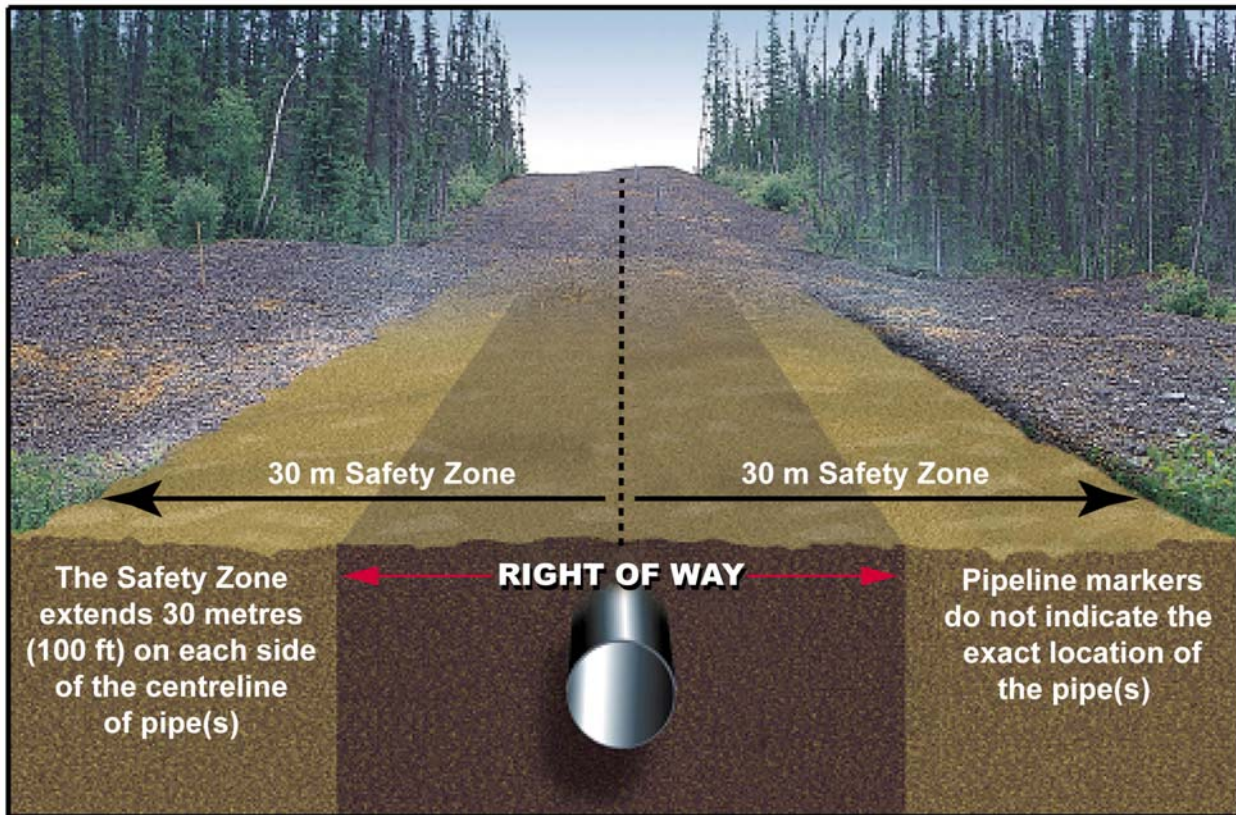
Guidance Notes

Safety Zone

The safety zone extends thirty (30) metres in both directions from the centreline of a pipe. Figure 1 provides a graphical depiction of the safety zone.

² This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Figure 1 – Safety Zone



Underground facilities provide essential services and products to their customers and pose a unique hazard to the excavator or ground disturber. Regardless of the hazards, all underground facilities should be treated with great care and protection.

The intent of the safety zone is to ensure:

- the protection of pipelines from damage resulting from external interference associated with excavations conducted using power-operated equipment or explosives; and
- the safety of all persons living or working near the pipeline.

Persons undertaking construction activities within the right-of-way are required to contact the pipeline company, prior to beginning their work.

Persons undertaking excavation activities within the safety zone or ground disturbance activities within three metres of the centre line of the pipe are required to contact the one-call centre, where one exists, prior to beginning their work. Where there is no one-call centre, the pipeline company should be contacted directly.

Persons planning changes to existing land use or new land use developments near or surrounding existing pipelines should refer to the Canadian Standards Association Guideline entitled *CSA Plus 663 Land Use Planning for Pipelines: A Guideline for Local Authorities, Developers and Pipeline Operators*.

Application

Proposed Regulatory Text³

Section 2 — Application

These Regulations apply to any person that is planning or undertaking an activity that has the potential to damage a pipeline and to any pipeline company.

Enacting Authority

Enacted under subsections 48(2) and 112(5) of the Act.

Guidance Notes

Application

The DPR apply to any person planning or undertaking activities that may potentially damage a pipeline. The term “any person” includes, but is not limited to: a landowner, resident, tenant, excavator, contractor, business, and association. These Regulations also apply to all NEB-regulated pipeline companies and their agents.

Activities Having the Potential to Damage a Pipeline

Damage to pipelines most commonly occurs through direct contact with the pipe during excavation activities and/or when an activity changes the pipe’s ambient stress levels.

Did You Know?

The stress under which a pipeline operates is determined by numerous factors including the pipe’s operating pressure, the strength and the wall thickness of the pipe, the soil type and density, the depth of cover, moisture content of the soil and surface loads on the pipe. Changes to any of these factors may result in damage to the pipe.

3 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

There are many activities that have the potential to damage a pipeline. The following list includes some common activities and events which may interfere with the continued safe operation of a pipeline:

- excavating
- digging
- trenching
- plowing
- drilling
- tunnelling
- auguring
- backfilling
- blasting
- topsoil stripping
- land levelling
- peat removal
- driving rods, pins, anchors
- pounding posts
- quarrying
- clearing and grading
- movement of vehicles or equipment over a pipeline
- placing excess cover or increasing surface loads over a pipeline
- tampering with pipeline markers which could lead to confusion about pipeline proximity
- chemical spills or leaks which could damage the pipe coating
- soil subsidence
- fencing
- deep tillage or sub-soiling
- earth movement
- landscaping



Did You Know?

Call Before You Dig!

You should always call the one-call centre (where one exists). Where there is no one-call centre, call individual companies directly to have buried facilities located.

Safety

Proposed Regulatory Text⁴

Section 3 — Members of one-call centre

If a pipeline company has a pipeline within a geographical area where a one-call centre exists, the pipeline company shall be a member of that centre.

Enacting Authority

Enacted under subsection 48(2) of the Act.

Guidance Notes

One-Call Centres

Under the DPR, pipeline companies are required to be a member of a one-call centre where one exists.

As stated in the *Ontario Regional Common Ground Alliance Best Practices, Version 4.0 (ORCGA)*, one-call centres promote the need to “Call Before You Dig” to:

- enhance awareness of responsibilities to safeguard workers and the public;
- protect the integrity of the buried infrastructure;
- foster a cooperative approach between the owners of buried facilities and the digging community toward the prevention of damage to buried facilities; and
- promote the service it provides.

Typical one-call centre activities include:

- participation at safety meetings;
- seminars and trade shows;
- contractor awareness programs;
- distribution of education material describing how one-call systems works;
- maintaining a database of active members of the digging community;
- promotional items;
- media advertising;
- mediating and rationalizing the expectations of both the facility owners/operators and the digging community; and

⁴ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

- participating in local damage prevention or facility location and coordination committees.

For further information on one-call centres, pipeline companies may refer to the *ORCGA*. Copies may be obtained by calling toll free 1-866-446-4493 or through their website at www.orcga.com. A list of one-call centres is found under Table 1 in section 17, page 29.

Proposed Regulatory Text⁵

Section 4 — Damage prevention program

For the purposes of anticipating and preventing damage to its pipeline, every pipeline company shall develop, implement and maintain a damage prevention program that includes provisions for

- (a) *ongoing public awareness of the existence of the pipeline and the responsibilities of the public and the company in relation to that pipeline;*
- (b) *ongoing monitoring of the use of the land on which the pipeline is located and the land adjacent to the right-of-way of the pipeline;*
- (c) *ongoing monitoring of any change in the ownership of the land on which the pipeline is located; and*
- (d) *management of the movement of vehicles and mobile equipment across the pipeline.*

Enacting Authority

Enacted under subsection 48(2) of the Act.

Guidance Notes

Damage prevention programs are intended to reduce the frequency of preventable damage. Although the content of damage prevention programs may vary according to the operations of individual companies, a company's damage prevention program must include elements pertaining to public awareness, monitoring of land use and ownership, and the management of vehicles and mobile equipment across the pipeline.

Damage prevention programs and initiatives are closely tied to requirements found within the NEB's *Onshore Pipeline Regulations, 1999* (OPR). Specifically, sections 32 through 35 of the OPR pertain to emergency preparedness and response, continuing education and liaison, and section 39 pertains to monitoring and surveillance. These requirements should also form part of a company's damage prevention program.

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Public Awareness

The public awareness component is vital to the continued safe operation of pipelines. An effective component should raise the awareness of the affected public and key stakeholders of the presence of pipelines in their communities. It should help the public understand how pipelines function and should also describe the public's responsibilities to help prevent damage to pipelines.

The awareness component should include the following information:

- one-call centre information;
- description of the safety zone;
- descriptions of activities within the safety zone which require notification to the pipeline company;
- general requirements of easement agreements pertaining to the continued safe operation of the pipeline;
- information on what activities have the potential to damage the pipeline;
- excavation requirements;
- regulatory requirements;
- illustrations and descriptions of pipeline markers;
- signage;
- guidance on the types of activities and events that should be reported to the pipeline company;
- guidelines and service standards for processing crossing requests;
- information regarding emergency response and emergency contacts; and
- the location and general physical attributes (size, material, content, pressure, etc.) of the pipeline.

Different audiences should be considered when developing and implementing the awareness component and may include:

- the public living or working near a pipeline including:
 - ♦ landowners and tenants,
 - ♦ residents, businesses or associations on or adjacent to the pipeline rights of way, and
 - ♦ homeowner organizations and neighbourhood associations;
- owners and operators of facilities;
- institutions such as schools, churches, recreation centres, hospitals, prisons or other institutions along the pipeline route;
- organizations with an interest in damage prevention;
- government agencies and emergency response representatives including;

- ♦ provincial departments or agencies with responsibilities respecting energy, safety, transportation, environment or health,
- ♦ municipal governments and planning authorities,
- ♦ emergency responders (police, fire, ambulance),
- ♦ hazardous material response teams; and
- ♦ disaster recovery or emergency measures authorities;
- excavators and contractors, including:
 - ♦ private contractors, and
 - ♦ seismic or geophysical contractors;
- industry associations;
- municipal, provincial and federal public works departments;
- persons and corporations involved in land developments such as subdivisions; and
- engineering firms engaged in fields where their work has the potential to interfere with the continued safe operation of pipelines.

The frequency of consultation should be sufficient to ensure that the audience is aware of the presence of the pipeline and the content of the damage prevention programs. The selection of the audience and the frequency of consultation may be based on:

- risks associated with pipeline damage;
- population density;
- history of prior incidents;
- other factors that may be of public interest;
- property ownership changes;
- planning and development; and
- changing land use.

The frequency of contact with audiences should not exceed thirty-six (36) months unless a longer period can be demonstrated to be appropriate.

The awareness component should include provisions for quick communication of essential information to audiences when changes to the pipeline or its operation result in changes to the content of the awareness component.

The content of the awareness component should be conveyed effectively to each target audience on an ongoing basis. Distribution methods could include:

- door-to-door contact;
- brochures;
- mailings (with response cards), and community and neighbourhood newsletters;

- promotional items;
- presentations at venues such as local meetings or town halls;
- internet;
- media advertisements;
- multimedia such as videos, CDs, and DVDs; and
- trade shows or exhibits.

The effectiveness of damage prevention programs should be periodically evaluated as part of the audit program set out within section 12, page 22 of these Guidance Notes.

Signage

Awareness of pipeline facilities relies heavily on the use of highly visible markings. Pipeline marker signs indicate that a pipeline is located nearby and provide important information on ownership and emergency response. Signs on facilities and vehicles also increase the public awareness of pipelines.

Mandatory signage requirements for pipelines are provided within clause 10 of the standard *Canadian Standards Association Z662-07 Oil and Gas Pipeline Systems (CSA Z662-07)*.

A combination of above ground and below ground markers should be considered for the identification of underground facilities. Consideration should be given to the installation of below grade markers such as high visibility marker tape at locations where it can reasonably be expected that the pipe will be exposed at some future date (e.g. within road allowances, utility rights of way, at crossings, etc.).

Did You Know?

Signs do not mark the exact location of the pipe!

It is against the law to tamper with a pipeline sign. Signs often act as the only surface indication. Tampering with a pipeline sign reduces the likelihood that persons working in that area will be aware that a pipeline is nearby.

Pipelines do not necessarily extend in a straight line between the posted signs.

Above ground markers should:

- be highly visible where the proximity to development or other activities having a high potential to result in damage to the pipeline are occurring;
- comply with the requirements of CSA Z662-07;
- be placed within sight of each other where practical;
- provide the one-call centre phone number where applicable; and
- be in the language or languages appropriate for the region.

Ongoing Monitoring of Land Use and Ownership

Pipeline companies should monitor land use and ownership on an ongoing basis through:

- establishing and maintaining line lists;
- maintaining updated information on the ownership of the land; and
- establishing a process to monitor land use changes.

Movement of Vehicles and Mobile Equipment

Companies must determine whether it is safe to cross the pipeline with vehicles or mobile equipment. In making this determination, companies should determine if the loading imposed by vehicle or mobile equipment is acceptable without mitigative measures or if mitigative measures are required. If mitigative measures are required, companies should determine what those measures are.

As part of the Damage Prevention Program, companies should develop, implement and maintain guidelines for the engineering assessment of surface loading. Companies should apply the guidelines consistently and document their assessments for audit purposes. Engineering Assessments should include consideration of probable loading conditions associated with the current and future land use.

Pipeline companies should also develop, implement and maintain guidelines and service standards for processing requests for the movement of vehicle and mobile equipment consistently and efficiently, which should also provide clear expectations for the public. The guidelines could include:

- the information required from the person making the request;
- how the requests will be handled by the company;
- the form that leave (permission) will take;
- the options available in the event that leave (permission) is denied;
- permitted and restricted practices or equipment; and
- situations where a blanket leave may be appropriate such as a category or grouping of activities such as farming practices within a defined area or the movement of recreational vehicles such as snowmobiles, all terrain vehicles, and motorcycles.

Pipeline companies should monitor the effectiveness of its guidelines on an ongoing basis. Pipeline companies should maintain records of all crossing requests and responses to requests for audit purposes.

Continuing Education and Liaison

Pipeline companies are encouraged to become members of damage prevention organizations where they exist along their pipeline.

Pipeline companies should be involved in planning and land development processes within the areas in which they operate a pipeline. Where appropriate, pipeline companies should provide

submissions to planning authorities outlining their requirements and concerns as well as suggestions on land use whenever proposed land use changes could affect the continued safe operation of their pipeline.

Submissions to planning authorities from pipeline companies should:

- clearly indicate that the land contains a pipeline;
- provide direction on easement conditions and the requirements of the DPR;
- offer alternatives where the proposal impacts their pipelines;
- provide contact information for the pipeline company; and
- provide information on the physical characteristics of the pipeline (product, pressure, size, etc.).

Companies responding to development proposals should consider the incremental risks associated with the proposal, and provide any current or future requirements they may have to ensure the continued safe operation of their pipeline and the safety of persons.

Surveillance and Monitoring

Pipeline companies should establish a program for monitoring and surveillance of the right-of-way which incorporates the minimum requirements of the CSA Z662-07. This program should be designed to detect potentially damaging activities that occur on or near existing pipelines.

The frequency of surveillance and monitoring should be proportional to the risk posed in the area (e.g. urban areas, populated centres, frequent ground disturbances, etc.). For more information on surveillance and monitoring refer to the OPR Guidance Notes.

Proposed Regulatory Text⁶

Section 5 — Standards for locates

The pipeline company shall develop, implement and maintain standards for locates of pipelines including

- (a) the required qualifications and competencies for locators;*
- (b) the type and quantity of surface markings to be used;*
- (c) the procedures for establishing the depth of cover over the pipe; and*
- (d) the identification to be given to locators.*

6 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Enacting Authority

Enacted under subsection 48(2) of the Act.

Guidance Notes

Qualification and Competency Requirements

Locators must be adequately trained in order to carry out their work. Pipeline companies should develop and maintain training programs and minimum qualification and competency requirements for locators. Additional guidance on training programs for pipeline company employees can be found under section 46 of the OPR. Pipeline companies may also reference the Canadian Association of Pipeline and Utility Locating Contractors at www.capulc.ca for locator technician standards.

At a minimum, locators should:

- understand plans showing buried facilities;
- possess a basic understanding of construction standards and practices;
- be competent in the use of equipment they are likely to use;
- understand the principles of how locators work (this may include an understanding of the electromagnetic theory behind the operation of electromagnetic locating equipment);
- understand the varied relationships among all stakeholders in the damage prevention process including the owners and operators of buried facilities, the digging community, the regulatory agencies and the one-call centres;
- take ground disturbance training; and
- complete periodic testing to verify their knowledge and abilities.

Surface Markings

Companies should identify and mark continuously or at regular intervals the horizontal alignment of their buried facilities using combinations of colour coded surface marks, temporary stakes or flagging. Where possible, markings should indicate the name, initials or logo of the pipeline company that owns or operates the line.

The colours used to temporarily mark the horizontal alignment of underground facilities should be consistent with the *American Public Works Association Uniform Colour Code*:

WHITE	Proposed Excavation
PINK	Temporary Survey Markings
RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit
BLUE	Potable Water
PURPLE	Reclaimed Water, Irrigation and Slurry Lines
GREEN	Sewers and Drain Lines

Depth of Cover

Pipeline companies should develop, implement and maintain procedures when establishing the depth of cover over the pipe. The depth of cover over the pipe may be established by either probing or daylighting, depending on the proposed activity and the location of the pipe.

Identification for Locators

Pipeline companies shall ensure that locators carry identification indicating they have been trained and are qualified to locate specific types of facilities on the company's behalf.

Proposed Regulatory Text⁷

Section 6 — Records of locators

The pipeline company shall create and maintain a record of locators that are qualified to perform locates on behalf of the pipeline company.

Enacting Authority

Enacted under subsection 48(2) and paragraph 129(1)(d) of the Act.

Guidance Notes

Training records shall identify persons qualified to locate underground facilities. Documentation of all training must be maintained to ensure that locators have been properly trained.

Proposed Regulatory Text⁸

Section 7 — Ground disturbances

(1) No person shall undertake a ground disturbance, other than one required to comply with paragraph (a), within 3 m of the centre line of a buried pipe unless

- (a) a locate request has been made in accordance with subsection 8(1), the surface markings identify the location of the pipe, not more than 30 days have elapsed after the date of the locate report and the location of the pipe has been determined by exposing it, in the presence of the pipeline company's representative, in a manner that does not have the potential to damage the pipe or associated facilities; or*
- (b) the pipeline company has assessed the effect of the ground disturbance on the pipe and associated facilities and that ground disturbance does not have the potential to damage that pipe or those facilities.*

7 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

8 *Ibid*

Record

(2) The pipeline company shall create and maintain a record of all exposures referred to in paragraph (1)(a) that are made in the presence of the pipeline company's representative.

Exception

(3) Subsection (1) does not apply with respect to activities referred to in section 112 of the Act.

Enacting Authority

Enacted under subsection 48(2) and paragraph 129(1)(d) of the Act.

Guidance Notes

Ground Disturbance

Ground disturbance within three metres of a pipeline must not take place until the pipeline company has been notified and measures have been taken by the pipeline company to ensure that the potential and real impacts associated with the activity have been appropriately mitigated.

Persons undertaking or performing a ground disturbance must request a locate at each proposed site by notifying the pipeline company through the one-call centre or the pipeline company directly. The locate request must be made at least three working days before the day on which the ground disturbance is to start.

The pipeline company must locate its pipe, place surface markings to identify its location and prepare a locate report. The locate report is valid for thirty days.

Pipeline Exposure

To avoid causing damage to the pipe and associated facilities, no ground disturbance can take place within three metres of the centre line of the pipe unless the location of the pipe has been determined by exposing it in the presence of a pipeline company representative. Where practical, the pipe must be exposed at sufficient intervals using hand digging or other excavation techniques acceptable to the pipeline company to ensure that the pipe and associated facilities will not be damaged. For additional information on the methods of pipeline exposure, persons planning to undertake a ground disturbance should contact the pipeline company directly. A company representative should also be on site during the backfilling.

Where it is impractical to expose the pipe because of excessive depth, frozen ground or other reasons, alternative methods should be used to ensure that the proposed ground disturbance will not interfere with the continued safe operation of the pipeline. This may include the excavation of a slot trench (an excavation proving the proposed installation will not interfere with the pipeline) over the width of the right-of-way or other techniques which provide equivalent levels of safety. The pipeline company may waive the requirement for exposure where exposure is impractical in its opinion.

Persons undertaking or performing a ground disturbance should abide by the directions of the pipeline company and the terms of any agreements specific to the undertaking.

The pipeline company representative has the authority to stop all activities deemed contrary to the DPR or any agreement in place specific to the undertaking.

Protection of Facilities

Pipeline companies are responsible for determining the necessary requirements for the protection of their facilities during any ground disturbance within the safety zone.

The ground disturber is responsible for ensuring:

- that all buried facilities have been identified and their location marked;
- that the safety zone boundaries have been posted with clearly distinguishable warning signs; and
- the protection and preservation of the staking, marking, or other designations of the locations of underground facilities.

The person undertaking the ground disturbance should stop the ground disturbance activities and notify the one-call centre and the facility owners if the markings are removed, altered or are no longer visible.

The pipeline company must carry out such inspections as are necessary to ensure the continued safe operation of the pipeline while activities having the potential to damage the pipeline are occurring. This may include:

- witnessing and providing guidance for the exposure of the pipe;
- inspecting any supports or devices used to protect the pipe from damage;
- inspecting the condition of the pipe prior to backfilling; and
- witnessing backfill operations over the pipe until the amount of backfill is sufficient to prevent accidental contact damage to the pipe.

Backfill should not include material that could damage facilities.

Pipeline Assessment

All ground disturbance activities within three metres of the pipe must be assessed by the pipeline company. If the pipeline company believes the effect of the ground disturbance on the pipe and associated facilities will not cause damage to its pipe or facilities, a pipeline locate and locate report may not be required.

Records of Pipeline Exposures

If the pipe and facilities have been determined by exposure, the pipeline companies must document that exposure. Thorough documentation helps ensure that there is an accurate record of the work that was performed. Documentation may include:

- name of the pipeline company representative that observed the activity;

- name and address of the excavator/contractor;
- date of the commencement and termination of the ground disturbance activities;
- location (such as mileage post and kilometre post) and a description of the activity;
- method of pipeline exposure;
- inspection of the pipeline (such as condition and clearance) prior to backfilling;
- observations during backfilling;
- depths of fill, fill material;
- statement whether the excavator/contractor has met the condition in the DPR;
- any concerns the pipeline company representative may have had prior, during or after the activity and any measure to rectify the situation; and
- signature of the company representative.

Proposed Regulatory Text⁹

Section 8 — Locate request for ground disturbance

(1) The locate request shall be made to the pipeline company, at least three working days before the day on which the ground disturbance is to start,

- (a) through a one-call centre if the pipe is within an area where the one-call centre co-ordinates requests for locates; and*
- (b) through the pipeline company directly if a one-call centre does not exist in that area.*

Locates

(2) Within three working days after the day on which the locate request is received, the pipeline company shall, at no cost to the person requesting the locate,

- (a) determine if the ground disturbance has the potential to damage the pipe or associated facilities;*
- (b) locate the pipe and associated facilities and place surface markings to identify the horizontal alignment of that pipe and those facilities to within plus or minus 0.6 m; and*
- (c) make a locate report that includes*
 - (i) a sketch showing the horizontal alignment of the located pipe and associated facilities and, if possible, showing their approximate position relative to readily identifiable objects, and*

⁹ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

- (ii) *sufficient information to enable the person undertaking the ground disturbance to understand the actions and duties necessary for the prevention of damage to the pipe or associated facilities.*

Extending period

- (3) *The period prescribed in subsection (2) may be extended by mutual agreement between the person making the locate request and the pipeline company.*

Exception

- (4) *The pipeline company is not required to undertake the activities prescribed in subsection (2) if the ground disturbance does not have the potential to damage the pipe and associated facilities.*

Date of locate report

- (5) *The locator shall date the locate report.*

Enacting Authority

Enacted under subsection 48(2) and paragraph 129(1)(d) of the Act.

Guidance Notes

Locates

Persons undertaking or performing a ground disturbance must request a locate for each proposed site by notifying the pipeline company through the one-call centre or the pipeline company directly. The locate request must be made at least three working days before the day on which the ground disturbance is to start.

Within three working days after the day on which the locate request was received, the pipeline company must, at no cost to the person requesting the locate:

- determine if the ground disturbance has the potential to damage the pipe or associated facilities;
- locate the pipe and associated facilities and place surface markings to identify the horizontal alignment of that pipe and those facilities to within plus or minus 0.6 m; and
- make a locate report that includes a sketch showing the horizontal alignment of the located pipe and associated facilities, the position relative to readily identifiable objects and sufficient information to enable a person undertaking the ground disturbance to understand the actions and duties necessary for the prevention of damage to the pipe or associated facilities.

The Board encourages a pipeline company to respond to a request as soon as possible regardless of the number of days allowed in the regulation.

Markings

Stakes or markings may disappear or be displaced. Where delays occur beyond the specified period stated in the locate report or where the locate markings become unclear, a new locate must be requested by the person requesting the locate.

If the surface over the pipe or facilities is to be removed or excavated, supplemental offset markings may be used to clearly indicate the horizontal alignment of the pipe or facilities as determined through the locate.

Prior to undertaking any ground disturbance having the potential to damage a pipeline, the person proposing to perform the ground disturbance should mark out the location or boundary of all proposed activities using markings which are visible and which may be maintained until such time as the ground disturbance is complete. Activities associated with the ground disturbance may not proceed beyond the limits of the markings.

Accuracy of markings shall be within plus or minus 0.6 m measured horizontally from the centreline of the actual pipe or facility.

Time Period

Unless otherwise specified, locate reports are valid for a period of thirty (30) days after a locate has been completed or until such time as the markings no longer provide clear direction on facility location (whichever occurs sooner).

Locators

Locators must communicate the meaning of markings and the information on the locate report to the ground disturber. In addition, the ground disturber should be made aware of the requirements arising from the DPR.

No Response Received for Locates

If the pipeline company fails to respond to the person requesting the locate request for a locate, the person requesting the locate should re-call the one-call centre or the pipeline company directly.

Proposed Regulatory Text¹⁰

Section 9 — Investigation

When a pipeline company becomes aware of conditions, activities, actions or omissions that might reasonably be expected to cause damage to its pipeline or that might jeopardize the safety of the public or the company's employees in the construction, operation or abandonment of the pipeline, it shall investigate the conditions, activities, actions or omissions and maintain a record of the results of the investigation.

10 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Enacting Authority

Enacted under subsection 48(2) of the Act.

Guidance Notes

Investigation

All conditions, activities, actions or omissions which could reasonably be expected to have caused damage to the pipeline or that might jeopardize the safety of the public or the company's employees should be investigated by the pipeline company as soon as practical. The findings from investigations should be communicated verbally and in written form to all parties involved. A copy of the investigation report should be retained on file by the pipeline company for the life of the pipeline.

Investigation Report

The investigation report should contain the following information:

- the nature, location, date and time of the occurrence;
- the names, addresses and contact information for all persons involved;
- a full description of any damage to the pipeline and how it was assessed;
- the pipe contents and operating parameters at the time of the occurrence;
- copies of locate tickets;
- confirmation that the pipeline company and the one-call centre was contacted and copies of one-call records;
- a statement as to the accuracy of surface markings (if a locate was performed);
- photographs and sketches providing pertinent details;
- a description of any interruption of or reduction in service;
- a description of the actions taken by the pipeline company to protect persons, property and the environment;
- a description of the repairs made or to be made by the pipeline company;
- a description of the nature and extent of any adverse environmental effects;
- a summary of the nature and extent of any concerns expressed to the pipeline company by the public;
- a descriptive assessment of any continuing hazards as a result of the condition, activity, action or omission of the DPR;
- a list of vehicles and equipment directly involved in the condition, activity, action or omission of the DPR;
- other significant facts that are known to be relevant to the cause of the condition, activity, action or omission of the DPR;
- a list of witnesses along with their addresses and telephone numbers; and
- the corrective actions taken to prevent reoccurrence of similar events.

Proposed Regulatory Text¹¹

Section 10 — Report to Board

The pipeline company shall immediately report to the Board in writing the results of an investigation if it concludes that the conditions, activities, actions or omissions have caused damage to the pipeline or have jeopardized the safety of the public or the company's employees in the construction, operation or abandonment of the pipeline.

Enacting Authority

Enacted under subsection 48(2) of the Act.

Guidance Notes

Report to the Board

Pipeline companies shall immediately report their findings of the investigation to the Board, in writing. This documentation should be addressed to the Secretary of the Board and may be filed with the Board by facsimile at toll free 1-877-288-8803 or by courier at 444, Seventh Avenue S.W., Calgary, Alberta, T2P 0X8.

Activities or Actions that may Result in Damage to a Pipeline

Activities or actions which may have resulted in damage to the pipe include:

- unauthorized ground disturbances within three metres of the pipe;
- unauthorized movement of vehicles or mobile equipment over pipelines; and
- unauthorized mechanical contact with a pipe.

Any contact with a pipe, reportable under sections 1 and 52 of OPR, must be immediately reported by the pipeline company to the Transportation Safety Board at (819) 997-7887.

Proposed Regulatory Text¹²

Section 11 — Audit program

The pipeline company shall develop, implement and maintain an audit program for the purposes of verifying compliance with these Regulations.

Enacting Authority

Enacted under subsection 48(2) of the Act.

11 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

12 *Ibid*

Guidance Notes

Audit Program

Audits are required under section 53 of the OPR for a number of programs and initiatives pertaining to the design, construction, operation and abandonment of pipelines under the jurisdiction of the NEB. Similarly, the DPR require that companies develop an audit program intended to assess compliance.

Additional guidance on the development of an audit programs can be found in the OPR Guidance Notes.

Consideration should be given to the following when developing an audit program under the DPR:

- periodic evaluation of damage prevention programs to assess the effectiveness of the message and media relations. This evaluation may include:
 - ♦ measurements of audience awareness,
 - ♦ review and recommendations for updating of program content, and
 - ♦ opinion surveys of audiences with respect to the effectiveness of the pipeline company's communications strategy or initiatives;
- verification of the completeness and adequacy of records necessary to demonstrate compliance;
- evidence of compliance and adherence to pipeline company programs, policies and procedures;
- the adequacy and completeness of records; and
- the results of investigations carried out as required under section 9 of the DPR.

An audit program may also include:

- requirements for the evaluation of the adequacy and effectiveness of the damage prevention program required by section 4 of the DPR;
- mechanisms and procedures for the refinement of pipeline company programs and procedures; and
- requirements for the creation, storage and handling of audit materials, records and reports.

Audits should be conducted so that the results may be used for benchmarking with previous audits and/or external data when available and appropriate.

Circumstances in which or conditions under which leave of the Board is not necessary

Leave Under Section 108 of the Act

Proposed Regulatory Text¹³

Section 12 — Crossing utility

Leave of the Board under section 108 of the Act is not necessary to carry a pipeline across a utility other than a navigable waterway or a railway if the terms for the pipeline's construction have been set out in a written agreement between the pipeline company and the owner of the utility.

Enacting Authority

Enacted under subsection 108(5.1) of the Act.

Guidance Notes

Utility Crossing

Where the Board is the appropriate authority under section 108 of the Act, leave (authorization) of the Board is not required if the pipeline company and the utility owner can agree on the terms associated with a proposed crossing.

When a pipeline crosses a utility such as a highway, the right-of-way commonly ceases to exist. The safety zone still applies. However, within the utility crossing area, where there is no right-of-way, the NEB's authority is over the pipeline itself. As such, pipeline companies should ensure that agreements with utility owners provide any necessary protection from facilities placed near the pipeline.

Leave of the Board

Where no agreement can be reached, the pipeline company may apply to the Board for leave (authorization) under section 108 of the Act.

13 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Leave Under Subsection 112(1) of the Act

Proposed Regulatory Text¹⁴

Section 13 — Construction across, on, along or under pipeline

Leave of the Board under subsection 112(1) of the Act is not necessary for the construction of a facility across, on, along or under a pipeline if the terms for the construction have been set out in a written agreement between the pipeline company and the person planning the construction.

Enacting Authority

Enacted under subsection 112(1) and 112(5) of the Act.

Guidance Notes

Construction Within the Right-of-Way

Persons planning to construct a facility within the right-of-way are required to contact the pipeline company directly and get a written agreement from the pipeline company.

Pipeline companies are responsible for considering and processing all requests by persons wishing to construct a facility.

Refer to section 15 of this document for further information on the “response to a request” to construct a facility within the right-of-way.

Written Agreements

Written agreements between the pipeline company and the person planning the construction should include:

- an acknowledgement that the person planning the construction accepts the conditions set out in the agreement and that the work will be carried out in accordance with the technical details set out in request for permission;
- a provision that the work should be completed within two years after the date the agreement is signed by the pipeline company or within a period otherwise agreed on by the pipeline company and the person planning to construct a facility;
- requirements for locates and exposure of the pipe;
- contact information and notification requirements for the work and in case of emergency;
- inspection requirements for the pipeline company;

¹⁴ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

- indemnification as appropriate;
- methods and procedures to be taken to protect the pipe from damage during construction of the facility;
- requirements for the notification of the pipeline company of any contact with the pipeline company's pipe or its coating;
- maintenance provisions and access requirements for the facility; and
- requirements for the abandonment of the facility.

If you are unable to reach an agreement with the pipeline company, or you cannot comply with all the terms and conditions in the DPR, you must obtain leave (authorization) from the NEB before starting any construction activities. Refer to section 14 of this document.

Leave Under Subsection 112(1) of the Act

Proposed Regulatory Text¹⁵

Section 14 — Response to request

(1) If a request for an agreement referred to in section 13 is made, the pipeline company shall enter or refuse to enter into the agreement within 10 working days after the day on which the request is received.

Date of receipt of request

(2) The date of the request is the day on which the person making the request gives information to the pipeline company that allows it to adequately evaluate the request.

Extending period

(3) The period prescribed in subsection (1) may be extended by mutual agreement between the person making the request and the pipeline company.

Refusal by pipeline company

(4) If the pipeline company refuses to enter into the agreement, it shall immediately provide the Board and the person making the request with the reasons for the refusal in writing and shall inform the person of their right to seek leave from the Board for the construction of a facility under subsection 112(1) of the Act.

Enacting Authority

Enacted under subsection 112(5) of the Act.

¹⁵ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Guidance Notes

Response to a Request

The pipeline company must approve or deny these requests within ten (10) working days of their receipt. The Board encourages a pipeline company to respond to a request as soon as possible regardless of the number of days allowed in the regulation.

If a Pipeline Company Denies a Request

Should the pipeline company deny a request, the pipeline company will immediately provide the Board and the person making the request with the reasons for its denial, in writing and will inform that person of their right to seek leave (authorization) from the NEB.

How to Apply to the National Energy Board

An application to the Board should include the location and full details of the proposed activity. The Board's Filing Manual provides guidance as to the type of information the Board would typically need in order to make a decision.

The Filing Manual can be accessed online at www.neb-one.gc.ca. Copies of the Filing Manual are also available from the Board's Library by calling 1-800-899-1265.

Applications should be addressed to:

Secretary of the Board
National Energy Board
444 Seventh Avenue S.W.
Calgary, AB T2P 0X8

Applications may be filed with the Board by mail, courier or by facsimile by calling the toll free number at 1-877-288-8803. A copy of the application must be forwarded to the pipeline company so that it can review the information and forward any comments it may have to the NEB.

Leave Under Subsection 112(1) of the Act

Proposed Regulatory Text¹⁶

Section 15 — Excavations outside safety zone

Leave of the Board under subsection 112(1) of the Act is not necessary for excavations outside of the safety zone if the excavations do not have the potential to damage the pipeline.

16 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Enacting Authority

Enacted under subsection 112(1) and 112(5) of the Act.

Guidance Notes

Persons undertaking excavation activities outside the safety zone, but within 30 metres extending from the edge of the right-of-way, do not need approval from the Board providing these activities do not have the potential to damage the pipeline.

Even if you are outside the safety zone, if you think the excavation activity may damage the pipeline, you should notify the pipeline company prior to undertaking these activities. By notifying the pipeline company, this will allow the pipeline company to assess the impact of the proposed activities, ensure that the proposed activities will not harm its pipeline and take the necessary steps to ensure the safety of the pipeline.

Examples of activities having the potential to damage a pipeline are provided under the *Guidance Notes*, in section 2, page 4.

Leave Under Subsection 112(1) of the Act

Proposed Regulatory Text¹⁷

Section 16 — Excavations within safety zone

(1) Subject to subsection (2), leave of the Board under subsection 112(1) of the Act is not necessary for excavations within the safety zone if

- (a) a locate request has been made in accordance with section 17;*
- (b) the pipeline company and the locator have complied with section 18;*
- (c) the surface markings identify the location of the pipe and associated facilities;*
- (d) not more than 30 days have elapsed after the date of the locate report; and*
- (e) in the case of excavations within 3 m of the centre line of a buried pipe, the location of the pipe has been determined by exposing it in the presence of the pipeline company's representative in a manner that does not have the potential to damage the pipe or associated facilities.*

Assessed excavations

(2) Leave of the Board under subsection 112(1) of the Act is not necessary for excavations within the safety zone that have been assessed by the pipeline company and do not have the potential to damage the pipe or associated facilities.

¹⁷ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

Records of assessed excavations

(3) The pipeline company shall create and maintain a record of the excavations that it has assessed and that do not have the potential to damage to the pipe or associated facilities.

Enacting Authority

Enacted under subsection 112(1) and 112(5) and paragraph 129(1)(d) of the Act.

Guidance Notes

Excavation Within the Safety Zone

If an excavation activity is planned within the safety zone, a locate request must be made and the pipeline company must be provided with the opportunity to: assess the impact of the proposed activity, locate its pipeline or associated facilities, place surface markings indicating the location of the pipeline or associated facilities and take whatever steps necessary to ensure that its pipeline is protected from damage.

The excavator/contractor must request a locate at each proposed site by notifying the pipeline company through the one-call centre (refer to section 17), or the pipeline company directly.

Excavation activities must not take place outside the area covered by the locate request without first obtaining a further locate from the one-call center or the pipeline company directly.

Locates are valid for thirty calendar days. Persons planning to undertake excavation activities must not rely on expired locates. A new locate must be made to the one-call centre where they exist, or the pipeline company.

Assessed Excavations

When a pipeline company assesses the impact of a proposed excavation and determines that the excavation may pose a risk to its pipeline, the pipeline company may be required to take necessary steps to ensure the safety of its pipeline, such as:

- requiring the construction of specialized crossings or the provision of crossings for the movement of vehicles or mobile equipment over pipelines;
- use of monitoring devices such as accelerometers to measure the effects of vibration loading on the pipeline; or
- requiring or providing shoring for excavations where subsidence could damage the pipeline.

No activity having the potential to damage a pipeline shall proceed until such time as the continued safe operation of the pipeline can be assured by the pipeline company.

Common or Frequent Excavations

Subsection 16(2) of the DPR is intended to provide the pipeline company with the ability to eliminate locate requests for common and/or frequent excavations which have no potential to

result in damage to the pipeline. Such activities could include agricultural tillage or similar activities where the pipeline company is satisfied that the activities can be conducted safely.

Records of Agreement

The impact of the proposed excavation activities need to be assessed by the pipeline company to ensure that the excavation will not pose a risk of damage to the pipeline. Records of agreement may include:

- name and address of the excavator/contractor;
- date of commencement and termination of proposed activity;
- location and description of activity (including equipment, etc.);
- date of locate request;
- date the activities have been assessed and by whom;
- assessment of impact to its facilities; and
- whether special requirements have been considered or are required such as: the construction of specialized crossings for the movement of vehicles and mobile equipment, monitoring devices to measure the effects of vibration loading, and shoring.

Proposed Regulatory Text¹⁸

Section 17 — Locate request for excavations

The locate request shall be made to the pipeline company, at least three working days before the day on which the excavation is to start,

- (a) through a one-call centre if the pipe is within an area where the one-call centre co-ordinates requests for locates; and*
- (b) through the pipeline company directly if a one-call centre does not exist in that area.*

Enacting Authority

Enacted under subsection 112(5) of the Act.

Guidance Notes

Locate Requests

Locate requests must be made at least three working days prior to undertaking excavation activities within the safety zone.

18 This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

No excavation activities may take place within the safety zone until the pipeline company has completed the locate or determined that there is no need for a locate. If the pipeline company determines there is no need for a locate, this decision should be communicated back to the person planning the excavation.

One-Call Centres

Anyone undertaking an excavation or ground disturbance activity is required to contact the one-centre to arrange to have the pipeline located. Where a one-call centre does not exist, persons requiring a locate must contact the pipeline company directly.

The following table includes one-call centres within Canada:

Table 1 – One-Call Centres

Name	Area Covered	Phone Number	Website
Alberta One-Call	Alberta	1-800-242-3447	www.alberta1call.com
BC One Call	British Columbia	1-800-474-6886	www.bconecall.bc.ca
Sask First Call	Saskatchewan	1-866-828-4888	www.sask1stcall.com
Ontario One-Call System	Ontario	1-800-400-2255	www.on1call.com
Info-Excavation	Quebec	1-800-663-9228	www.info-ex.com
City of Saint John	Saint John, N.B.	1-800-567-1009	www.info-ex.com

Proposed Regulatory Text¹⁹

Section 18 — Locates

(1) Within three working days after the day on which the locate request is received, the pipeline company shall, at no cost to the person requesting the locate,

- (a) determine if the excavation has the potential to damage the pipe or associated facilities in the safety zone;*
- (b) locate the pipe and associated facilities and place surface markings to identify the horizontal alignment of that pipe and those facilities to within plus or minus 0.6 m; and*
- (c) make a locate report that includes*
 - (i) a sketch showing the horizontal alignment of the located pipe and associated facilities and, if possible, showing their approximate position relative to readily identifiable objects, and*

¹⁹ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

(ii) sufficient information to enable the person undertaking the excavation to understand the actions and duties necessary for the prevention of damage to the pipe or associated facilities.

Extending period

(2) The time period prescribed in subsection (1) may be extended by mutual agreement between the person making the locate request and the pipeline company.

Date of locate report

(3) The locator shall date the locate report.

Enacting Authority

Enacted under subsections 48(2) and 112(5) of the Act.

Guidance Notes

Locates

Stakes or markings may disappear or be displaced. Where delays occur beyond the specified period stated in the locate report or where the locate markings become unclear, a new locate must be requested by the excavator or contractor.

Markings

If the surface over the pipe or facilities is to be removed or excavated, supplemental offset markings may be used to clearly indicate the horizontal alignment of the pipe or facilities as determined through the locate.

Prior to undertaking any excavation having the potential to damage a pipeline, the person proposing to perform the excavation should mark out the location or boundary of all proposed activities using markings which are visible and which may be maintained until such time as the excavation is complete. Activities associated with the excavation may not proceed beyond the limits of the markings.

Accuracy of markings shall be within 0.6 metre measured horizontally from the centreline of the actual pipe or facility.

Time Period

Unless otherwise specified, locate reports are considered valid for a period of thirty days after a locate has been completed or until such time as the markings no longer provide clear direction on facility location (whichever occurs sooner).

Locators

Locators must communicate the meaning of markings and the information on the locate report to the excavator. In addition, the excavator should be made aware of the requirements arising from the DPR.

No Response Received for Locates

If the pipeline company fails to respond to the excavator's request for a locate, the excavator should re-call the one-call centre or the pipeline company directly. The Board encourages a pipeline company to respond to a request as soon as possible regardless of the number of days allowed in the regulation.

Leave Under Subsection 112(2) of the Act

Proposed Regulatory Text²⁰

Section 19 — Operation of vehicles or mobile equipment across pipeline

Leave under subsection 112(2) of the Act is not necessary for the operation of a vehicle or mobile equipment across a pipeline if the pipeline company has assessed the operation and if the operation does not have the potential to damage the pipeline.

Enacting Authority

Enacted under subsection 112(2) of the Act (leave/permission from the pipeline company).

Guidance Notes

The movement of vehicles and mobile equipment over a pipeline increases the stresses on the pipe and, in some cases, may result in damage to the pipeline. The actual stress changes can only be assessed through engineering calculations which take into account factors such as:

- the depth of cover and soil type;
- the operating stresses experienced by the pipe;
- the pipe materials;
- the bearing pressure imposed by the static and dynamic loads applied; and
- other factors.

Prior to moving vehicles or mobile equipment over a pipeline, the pipeline company should:

- have been contacted directly;
- be provided with the opportunity to ensure that the movement will not result in damage to the pipe; and
- give its permission to operate a vehicle or mobile equipment across its pipeline.

²⁰ This proposed text is provided solely for information purposes and in no way commits or binds the Federal Department of Justice, now or in the future.

If permission cannot be obtained by the company, the NEB remains a resource and is available to offer services such as ADR.

CSA Z662-07 contains guidance for the assessment of surface loading effects on pipe.

If necessary, the pipeline company may request that the location of the crossing be moved or reinforced in some manner to prevent damage.

LEGISLATIVE AUTHORITY

The Proposed *Damage Prevention Regulations* are based upon and will be promulgated pursuant to the following sections of the *National Energy Board Act* (the Act):

Section 48

Safety and security

48. (1) *To promote the safety and security of operation of a pipeline, the Board may order the company to repair, reconstruct or alter part of the pipeline, and may direct that, until the work is done, that part of the pipeline not be used or be used in accordance with such terms and conditions as the Board may specify.*

Regulations as to safety and security

- (2) *The Board may, with the approval of the Governor in Council, make regulations governing the design, construction, operation and abandonment of a pipeline and providing for the protection of property and the environment and the safety and security of the public and of the company's employees in the construction, operation and abandonment of a pipeline.*

Exempting orders respecting companies

- (2.1) *The Board may make orders exempting companies from any or all of the provisions of the regulations made under subsection (2).*

Terms and conditions

- (2.2) *In any order made under subsection (2.1), the Board may impose such terms and conditions as it considers proper.*

Section 108

Construction over other utility lines etc.

Definitions

108. (1) *In this section and sections 110 and 111, "appropriate authority" means*
- (a) *with respect to a navigable water, the Minister of Transport, and*
 - (b) *[Repealed, 1996, c. 10, s. 244]*
 - (c) *with respect to any other utility, the Board;*

"utility" means a navigable water, a highway, an irrigation ditch, a publicly owned or operated drainage system, sewer or dike, an underground telegraph or telephone line or a line for the transmission of hydrocarbons, electricity or any other substance.

Construction of pipeline over other utilities

- (2) *The pipeline of a company may, if leave is first obtained from the appropriate authority, be carried across any utility and for that purpose may be constructed on, along or under any such utility.*

Application for leave

- (3) *On an application for leave under this section, a company shall submit to the appropriate authority such plans and profiles and other information as the appropriate authority may require.*

Terms

- (4) *The appropriate authority may, by order, grant the application in whole or in part and on such terms and conditions as the appropriate authority considers proper.*

Construction without leave

- (5) *The appropriate authority may provide that leave under this section is not necessary if the pipeline is constructed in accordance with the orders, regulations, plans and specifications made, adopted or approved by the appropriate authority for those purposes.*

Exemption

- (5.1) *The Board may make orders or regulations prescribing the circumstances in which or conditions under which leave under this section is not necessary to carry a pipeline across a utility other than a navigable water or a railway.*

Leave in emergency cases

- (6) *The appropriate authority may grant leave under this section after construction of the proposed work has commenced if the appropriate authority is satisfied that the work was urgently required and, prior to the commencement of construction, the appropriate authority was notified of the company's intention to proceed with the proposed work.*

Section 112

Construction of facilities across pipelines

112. (1) *Subject to subsection (5), no person shall, unless leave is first obtained from the Board, construct a facility across, on, along or under a pipeline or excavate using power-operated equipment or explosives within thirty metres of a pipeline.*

Use of vehicles and mobile equipment

- (2) *Subject to subsection (5), no person shall operate a vehicle or mobile equipment across a pipeline unless leave is first obtained from the company or*

the vehicle or mobile equipment is operated within the traveled portion of a highway or public road.

Terms and conditions

- (3) *The Board may, on granting an application for leave under this section, impose such terms and conditions as it considers proper.*

Directions

- (4) *The Board may direct the owner of a facility constructed across, on, along or under a pipeline in contravention of this Act or the Board's orders or regulations to do such things as the Board considers necessary for the safety of the pipeline and may, where the Board considers that the facility may impair the safe operation of the pipeline, direct the owner to reconstruct, alter or remove the facility.*

Exception

- (5) *The Board may make orders or regulations governing*
 - (a) *the design, construction, operation and abandonment of facilities constructed across, on, along or under pipelines;*
 - (b) *the measures to be taken by any person in relation to*
 - (i) *the construction of facilities across, on, along or under pipelines,*
 - (ii) *the construction of pipelines across, on, along or under facilities, other than railways, and*
 - (iii) *excavations within thirty metres of a pipeline; and*
 - (c) *the circumstances in which or conditions under which leave under this section is not necessary.*

Temporary prohibition on excavating

- (5.1) *Without limiting the generality of paragraph (5)(c), orders or regulations made under that paragraph may provide for the prohibiting of excavations in an area situated in the vicinity of a pipeline, which area may extend beyond thirty metres of the pipeline, during the period that starts when a request is made to a pipeline company to locate its pipeline and ends*
 - (a) *at the end of the third working day after the day on which the request is made; or*
 - (b) *at any later time that is agreed to between the pipeline company and the person making the request.*

Exemptions

- (6) *The Board may, by order made on any terms and conditions that the Board considers appropriate, exempt any person from the application of an order or regulation made under subsection (5).*

Inspection officers

- (7) *The provisions of sections 49 to 51.3 relating to inspection officers apply for the purpose of ensuring compliance with orders and regulations made under subsection (5).*

Section 129

Regulations respecting accounts, etc.

- 129.** (1) *The Board may, with the approval of the Governor in Council, make regulations*
- (a) *respecting the manner in which the accounts of a company shall be kept;*
 - (b) *respecting the classes of property for which depreciation charges may properly be included under operating expenses in the accounts and the accounting method or methods that may be used in computing and charging depreciation in respect of each of the classes of property;*
 - (c) *respecting a uniform system of accounts applicable to any class of company; and*
 - (d) *requiring*
 - (i) *companies that have been authorized under Part III to construct or operate a pipeline,*
 - (ii) *persons exporting oil, gas or electricity or importing oil and gas, and*
 - (iii) *persons holding a licence under Part VI or VII,*

to keep and make available to the Board for inspection by the Board or a person authorized by the Board at a place of business in Canada such records, books of account and other documents in such as may be prescribed by the regulations and submit to the Board, at such times and in such form as may be so prescribed, returns and information respecting capital, traffic, revenues, expenses and other matters so prescribed and deemed by the Board to be matters that should be considered by it in carrying out its powers and duties under this Act in relation to those companies and persons.

PROTECTION OF PIPELINE FROM MINING OPERATIONS

National Energy Board Act

Protection of pipeline from mining operations

81. *(1) No person shall work or prospect for mines or minerals lying under a pipeline or any of the works connected therewith, or within forty metres therefrom, until leave therefore has been obtained from the Board.*

Use of oil and gas

(2) Notwithstanding subsection (1), leave from the Board is not required in the case of a well taking oil or gas from lands lying under a pipeline or any of the works connected therewith if the well is not drilled within forty metres of the pipeline.

Application for leave

(3) On an application to the Board for leave to work or prospect for mines and minerals, the applicant shall submit a plan and profile of the portion of the pipeline to be affected thereby, giving all reasonable and necessary information and details respecting the proposed operations.

Terms of leave

(4) The Board may grant the application referred to in subsection (3) on such terms and conditions for the protection and safety of the public as to the Board seem expedient, and may order that such things be done as under the circumstances appear to the Board best adapted to remove or diminish the danger arising or likely to arise from the proposed operations.

Guidance Notes

Section 81 does not provide the NEB with the ability to make regulations and as such, prospecting for mines or minerals lying under a pipeline or any of the works connected therewith is not governed by the DPR.

Filing information for applications under section 81 of the Act can be found in the National Energy Board Filing Manual, Guide C, Protection of Pipelines from Crossing Activities and Mining Operations (Act section 112 and section 81).

Did You Know?

Prospecting (including seismic exploration) and mining operations within forty (40) metres of the pipeline right-of-way require the approval of the Board.

Activities associated with prospecting and mining near pipelines require the approval of the NEB when those activities take place within forty (40) metres of a pipeline (see section 81 of the Act).

SAFETY CHECKLIST

1. **Plan your activity** - Identify the precise location of your work, check records for evidence of pipeline easements or other buried facilities.
2. **Go to the site** and look for pipeline warning signs or pipeline marker posts.
3. **Contact the pipeline company** and obtain a copy of the pipeline company's guidelines for excavations or crossings.
4. **Obtain the pipeline company's written approval** for the construction of facilities across, on, along or under a pipeline.
5. **Make a locate request** at least three working days before the day on which the excavation is started, by calling the one-call centre, or by calling the pipeline company where there is no one-call centre, to have the pipeline located and marked and the safety zone staked.
6. **Be on site** when the pipeline is located, and **know the meaning of the pipeline markings**.
7. **Expose the pipe by hand digging or other acceptable excavation techniques accepted by the pipeline company** prior to any ground disturbance and excavation within three metres of the pipe and **ensure a pipeline representative is on site** prior to exposing the pipe.
8. **Notify the pipeline company** prior to backfilling over the pipe or facilities, where the pipe or facilities have been exposed and **ensure that a pipeline representative is on site** prior to backfilling.
9. **IMMEDIATELY NOTIFY THE PIPELINE COMPANY IF YOU COME INTO CONTACT WITH THE PIPE!** A small scratch or dent in the pipe's coating can impact the long term safety of the line and must be assessed by the pipeline company.
10. **ALWAYS follow the instructions** of a pipeline company representative.