

North York Community Council

From: Alyssa Rhynold <Arhynold@tnpi.ca>
Sent: March 11, 2020 7:46 PM
To: North York Community Council; Jenny Choi
Subject: 19 264742 NNY OZ
Attachments: T-LN-MUN-LTR- ZBLA 19264742 OZ- Response.pdf; 1744_Crossing Guidelines FINAL1.pdf; Ontario_brochure.pdf; Living and Working Near Pipelines, DPR.pdf; Pipeline Damage Prevention - NEB 2016.pdf

Good evening:

Please find attached Trans-Norther's comments related to the above captioned application.

Regards,

Alyssa Rhynold

Property and Right-of-Way Administrator | Administrateur de droit fonciers

TRANS-NORTHERN PIPELINES INC.

OFFICE: 289-475-5392



Please note:

Reference material indicated in this e-mail are available on City's website



March 11, 2020

City of Toronto
5100 Yonge St,
North York, ON
M2N 5V7

Attention: Jenny Choi, Planner

RE: 1 and 5 Kenton Drive Application to Amend the Zoning By-law
Application No.: 19 264742 NNY 18 OZ
TNPI File Ref.: MP 66/ RW 1 Adj.

Dear Mrs. Choi:

TNPI has received notice of the above captioned application. TNPI currently operates a high pressure petroleum products transmission pipeline approximately 1.5 meters from the subject property in the adjacent Hydro One corridor.

Given the proximity of the proposed development to the pipeline, TNPI would request that should this application be approved, buildings be setback approximately 10 meters from the pipeline right of way. TNPI would expect that detailed designs showing the proposed construction in relation to the pipeline be circulated to us for review and comment by our Crossing Coordinator.

The applicant is reminded that Section 335 (1) and (2) of the Canadian Energy Regulator Act (formerly the National Energy Board Act) provide that:

- **335 (1)** *It is prohibited for any person to construct a facility across, on, along or under a pipeline or engage in an activity that causes a ground disturbance within the prescribed area unless the construction or activity is authorized or required by the orders made under subsection (3) or (4) or regulations made under subsections (5) or (6) and done in accordance with them.*

- **Prohibition — vehicles and mobile equipment**

(2) *It is prohibited for any person to operate a vehicle or mobile equipment across a pipeline unless*

- o **(a)** *that operation is authorized or required by orders made under subsection (3) or (4) or regulations made under subsections (5) or (6) and done in accordance with them; or*
- o **(b)** *the vehicle or equipment is operated within the travelled portion of a highway or public road.*

Should the applicant choose to construct a facility across, on, along or under the pipeline, conduct any ground disturbance within 30 metres on either side of the pipeline center or vehicle crossing of the pipeline, they would be required to contact Trans-Northern prior to commencement of these works. This contact can be initiated through Ontario One Call (1-800-400-2255); a representative from Trans-Northern will attend on site to mark the pipeline location, confirm safe work practices and confirm any permit requirements.

TORONTO

310-45 Vogell Road, Richmond Hill ON L4B 3P6
TEL (289) 475-5369 • FAX 905-770-8675

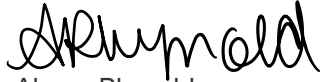
CALGARY

109-5305 McCall Way NE, Calgary AB T2E 7N7
TEL (403) 476-1646 • FAX 905-770-8675

TRANS-NORTHERN PIPELINES INC.

As always, Trans-Northern appreciates being given the opportunity to provide comments on the above captioned application. Should the applicant have any questions related to this correspondence they may contact the undersigned. For any technical requirements related to crossing of the pipeline or work within the prescribed area, the applicant may contact our Crossing Coordinator, Cliff Lee (crossingrequestseast@tnpi.ca).

Yours truly,



Alyssa Rhynold
Property and Right-of-Way Administrator
(287)-475-5392

1 Preamble

Trans Northern Pipelines Inc. ("TNPI") owns and operates pipelines that contain refined petroleum products being transmitted under high pressure. Any damage sustained by the pipeline could result in injury or death, as well as environmental contamination. We caution you that in the event of any work taking place within 100 ft (30 m) perpendicular on each side from the centre of pipeline or pipelines, our office must be notified in advance. The pipeline(s) must be located in the field before the commencement of any work and an inspector must be present during construction as required by Section 112 of the National Energy Board Act and Section 8 (a) of the Damage Prevention Guidelines – Obligations of Pipeline Companies. These regulations are contained in the National Energy Board ("NEB") publication Pipeline Damage Prevention Ground Disturbance, Construction and Vehicle Crossings and are provided in order to ensure that any activity near a pipeline is carried out in the safest possible manner.

The following publications are available for your use:

- NEB Damage Prevention Regulations – Authorizations
- NEB Damage Prevention Regulations – Obligation of Pipeline Companies
- Pipeline Damage Prevention: Ground Disturbance, Construction and Vehicle Crossing
- NEB Living and Working Near Pipelines, Landowner Guide
- NEB Guidance for Safe Crossings of NEB-Regulated Pipelines Using Agricultural Vehicles and Mobile Equipment
- TNPI Pipeline Route Maps
- TNPI Safety In Your Community Brochure

2 Legal Requirements

TNPI operates under the terms and conditions of the National Energy Board Act. Under Section 112 of the Act and the Damage Prevention Regulations – Authorizations SOR/2016-124, and Damage Prevention Regulations – Obligations of Pipeline Companies, the National Energy Board has issued Pipeline Crossing Regulations which apply to all construction activities and ground disturbances affecting TNPI's pipelines. As stipulated in these

Regulations, the authority responsible for the construction, installation of facilities and any excavation, and vehicle traffic across the pipeline or its right-of-way must obtain prior written permission from TNPI and accept the conditions set out in such permission.

Section 112 (5)(c) of the National Energy Board Act and Sections 12 and 13 of the Damage Prevention Regulations - Authorizations offers guidance for safe crossings of pipelines when using agricultural vehicles and mobile equipment. As indicated in these regulations, the landowner must obtain permission from the pipeline operator before conducting any ground disturbance activity that does not meet the set conditions (See Appendix B).

TNPI considers applicable requirements of CSA Z662 Oil & Gas Pipelines Systems in the crossing application review and approval process.

TNPI has also obtained certain rights by grant of easement, to strips of land within which its pipelines are located. The terms and conditions of these agreements also prohibit any construction or excavation within the pipeline right-of-way without the pipeline operator's consent. As such, the rights acquired by an easement recognize that the operation and maintenance of the pipeline is the primary function.

To ensure both compliance with the aforementioned regulations and safe crossings of the pipelines, TNPI issues written permission for all construction activities and ground disturbances affecting its pipelines and easements. Not all activities are approved (see Section 5).

3 TNPI's Right-of-Way No Encroachment Policy

A right-of-way (ROW) is a defined strip of land on which TNPI has the rights to construct, operate, and/or maintain a pipeline. TNPI might own the ROW land outright or have acquired an easement from a landowner for specific use of the land. An easement is an acquired privilege or right, such as a right-of-way, afforded a person or company to make limited use of another person's or company's real property.

The pipeline right-of-way includes a specific width of surface area directly above the pipeline. The right-of-way should be wide enough to permit the pipeline operator reasonable access to maintain the pipeline.

Encroachment is used to describe a land use or activity that intrudes upon the rights of TNPI as defined in the easement agreement. This usually entails an activity within the easement boundaries.

The figure below illustrates the areas in proximity to TNPI's pipelines. The area marked as "Pipeline Right-of-Way" is the pipeline company's easement area. The areas marked as

"Prescribed Area 30 metres" are off the right-of-way close enough to either host an activity which could be a threat to pipeline safety or be threatened by a pipeline failure. The two areas together constitute the consultation zone (the zone in which it is required to notify TNPI).

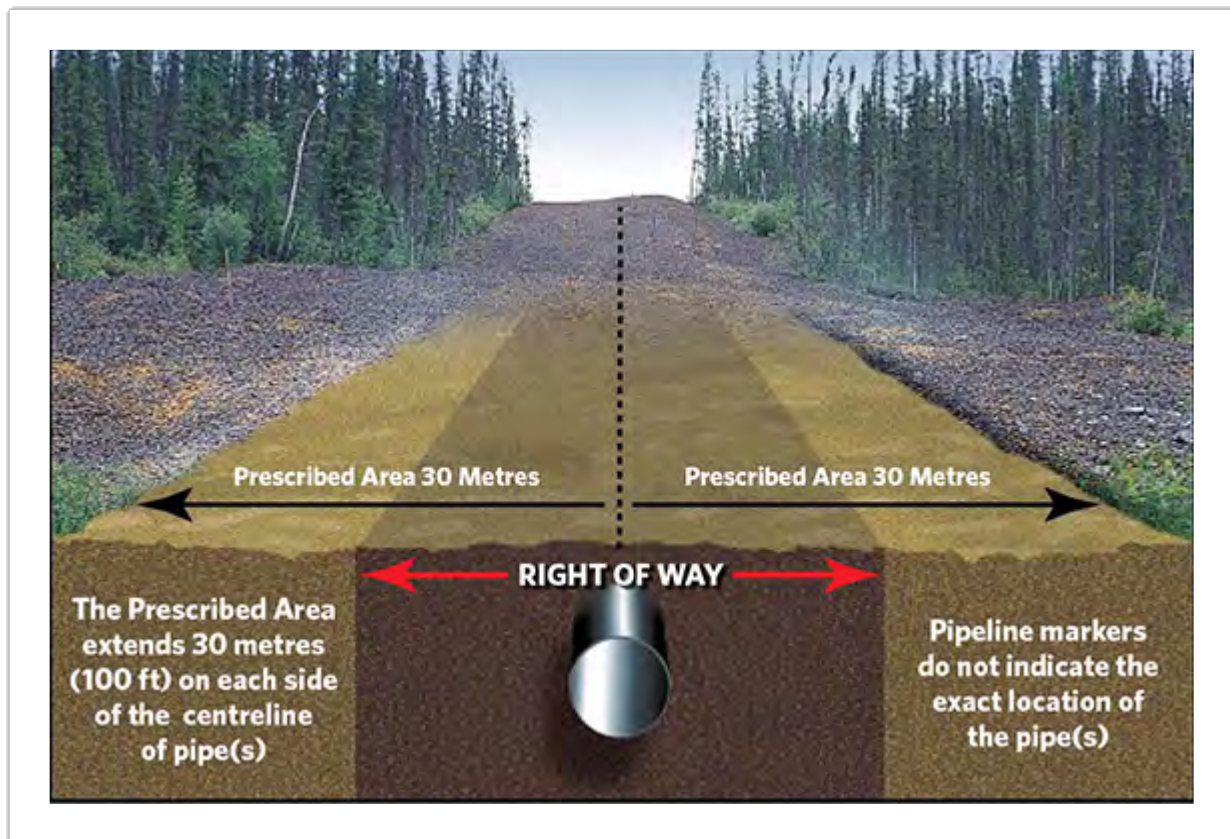


Figure 1 – Right-of-Way and Prescribed Area

A typical right-of-way agreement or easement between TNPI and a landowner may prohibit certain activities or developments outright or require permission from TNPI. There are two primary reasons for restricting certain activities and development on the Right-of-Way:

1. To monitor and manage construction, ground disturbances and vehicle crossings within the pipeline rights-of-way; and
2. To ensure the right-of-way is clear of obstructions which might interfere with pipeline construction, maintenance or emergency response and to allow for above ground integrity surveys and surveillance.

For reasons of pipeline integrity, security, public safety, and environmental protection, TNPI limits the land use in its pipeline easements and restricts any change of depth of cover over the pipeline. TNPI is mandated to control encroachments on the right-of-way.

Examples of encroachments are:

- buildings, either temporary or permanent (including any overhang);
- fences parallel to the pipeline;
- retaining walls;
- paved parking lots;
- lighting poles/standards;
- golf course greens, tee boxes, sand-traps, parallel cart paths and sprinkler heads;
- patios, concrete slabs or decks;
- playground equipment, goal posts, tennis courts, and swimming pools;
- storage of any kind;
- addition of fill or debris;
- agricultural tile drainage (except for headers at the limits of the easement);
- extensive landscaping, tall growth tree plantings, including canopy (more than 1.8 metres high).

(Please see Appendix F for a complete listing of acceptable and unacceptable activities on TNPI's easement and ROW)

- Installations which are allowed are confined to those which cross the pipeline at an angle of more than forty-five degrees (45°) and some surface works. Included are:
- utility crossings, open cut or bored;

-
- utility up-sizing by pipe bursting insertion;
 - tile drainage headers and single tile crossings;
 - open drainage ditches;
 - ditch culverts;
 - fences;
 - roads, driveways, and laneways;
 - landscaping (non-extensive).

These installations must conform to the technical requirements of Section C of the Appendix to these guidelines.

4 Management/Control of Land Use Activity in TNPI's Pipeline Right-of-Way and Easement

TNPI operates an inter-provincial pipeline system, and use of its right-of-way's must comply with the NEB Act and applicable regulations. Land uses which may be otherwise consistent with local planning, or zoning by-laws must also be in compliance with federal requirements and the applicable easement / ROW agreements.

TNPI monitors compliance through frequent air and ground patrols, and through regular communication with groups most likely to engage in or observe activities on the right-of-way. The "Ontario One Call (On1Call)" and Quebec's "Info-Excavation" underground utility locating services provide information pertaining to safe excavation and ground disturbances. TNPI's Public Awareness program provides information on easement changes, restrictions, and other related subjects. Target recipients include but are not limited to landowners, excavation/blasting contractors, developers, local governments, emergency responders, utilities, and irrigation contractors.

If attempts to resolve encroachment issues are unsuccessful, TNPI reserves the right to seek relief through the courts to eliminate an encroachment or to stop or suspend an activity that interferes with its easement rights, or endangers the safety, security, and protection of the pipeline, public, and environment.

5 How to Apply for TNPI's Permission

To obtain permission, the applicant must submit a formal request and/or complete the TNPI application form and submit to TNPI for an assessment. The request must be accompanied by three copies of a complete drawing or digital equivalent of the proposed work(s). The drawing must be prepared in accordance with the minimum standards as described in Appendix C. TNPI may request complete contractor drawings for proposals affecting an area of the pipeline. Such proposals would include but not be limited to subdivisions, grade separations and controlled access highways.

The drawings submitted must also indicate the location of the pipeline and right-of-way. This information may be obtained from TNPI by writing to:

Trans - Northern Pipelines Inc.

45 Vogell Road - Suite 310

Richmond Hill, Ontario

L4B 3P6

Attention: Co-ordinator, Crossings & Facilities

or by calling 905-770-3353, Ext. 292 Alt. 289-475-5381, Fax 905-770-8675

or by emailing crossingrequestseast@tnpi.ca for Ontario & Quebec.

A drawing, indicating the details pertaining to the pipeline location and right-of-way limits will be forwarded if one is available. If the required pipeline information is not available, then a field survey may be required. In such instances, TNPI will locate and excavate the pipeline for the applicant's surveyor. Prior to any pipeline excavation, all utilities in the area must be located or cleared. The timeline for this process may take up to approximately four (4) weeks to complete. For this reason, TNPI should be approached at the earliest possible date.

6 When to Apply for National Energy Board Authorization

The applicant may file an application with the National Energy Board (NEB) to carry out construction activities along or under a pipeline, engage in a ground disturbance activity within the prescribed area or operate a vehicle or mobile equipment across the pipeline if:

1. TNPI did not grant approval to the applicant for reasons of pipeline integrity, public safety or company policy;
2. the applicant is unable to comply with the conditions set out in the TNPI permit.

An application must be filed with the National Energy Board with a copy provided to TNPI in writing to:

Secretary of the Board
National Energy Board
517 Tenth Avenue S.W
Calgary, Alberta T2P 0X8

Approval from the NEB is also required in cases where TNPI suspends its permission for your activity and has not reinstated it.

7 Notification of Permission/Consent or Rejection

Upon receipt of a formal request for permission, TNPI will issue a decision within ten (10) business days. Facilities not in compliance with these Guidelines or TNPI Encroachment Policy will be rejected. TNPI will return incomplete submissions and drawings together with an explanation of the required alterations or additions.

TNPI's written permission shall remain in effect for a two-year period from the date of issue, and is in the form of a permit. After that period, an extension must be applied for within two (2) months if the work has not been completed, otherwise, the permit will expire.

A copy of the company's permit and the approved drawing(s) must be kept on site by the applicant, during the course of construction.

A copy of TNPI's "Contractor's Guidelines" will accompany TNPI's permit.

8 Notification of Commencement of Construction

The exact location of the pipeline(s) and easement limits must be marked in the field by a TNPI inspector before any construction commences. To schedule an inspection, call the Field Services office specified on the permit at least three business days before the start of construction and reference the permit number.

Prior to any construction near TNPI's pipeline(s), TNPI's inspector will insist that all other utility locates have been completed or cleared.

During construction, TNPI can amend or change the conditions specified within the permit to ensure that the construction or ground disturbance does not impair the safety of the pipeline.

At any given time during the construction or ground disturbance activity if it is deemed any of the technical conditions have not been met, or any work practices threaten the safety and security of the pipeline then all construction and activity will be stopped immediately and if so required TNPI will officially suspend the permission granted. The NEB will be notified of such suspension.

9 Costs

Notwithstanding existing agreements, all work consisting of realigning, raising or lowering of TNPI's pipeline, crossing applications or the addition of casing or other appurtenances thereto, shall be performed by TNPI and all costs and expenses of such work including any justifiable economic losses resulting from any shutdown of the pipeline or any other consequential loss directly attributable to such work shall be borne and paid for by the Applicant upon receipt of an invoice from TNPI, showing in reasonable detail the particulars of such costs, losses and expenses.

TNPI may also elect to recover the amount of the wages and expenses of its crossing-inspector from the Applicant upon submitting an invoice showing in reasonable detail the particulars of such wages and expenses. In addition, TNPI may require cathodic protection test stations to mitigate against corrosion. In such cases, TNPI will invoice the Applicant for such works (see reference drawing CP-1005 in Appendix E).

There are no fees associated with the assessment and processing of crossing applications.



10 Unauthorized Crossings/Construction Activity, Ground Disturbances and Encroachments

Crossings, construction activities, ground disturbances, agricultural activities and encroachments which require TNPI's prior consent and/or approval, carried out without TNPI's knowledge and approval, or crossings/activities and encroachments which are not permitted by TNPI are considered unauthorized.

All unauthorized crossings/activities and encroachments are reported to the National Energy Board pursuant to Section 11 of the Damage Prevention Regulations – Obligations of Pipeline Companies, and the National Energy Board Act, and those taking place in Ontario may also be reported to the Technical Standards and Safety Authority (TSSA) for further investigation. Technical Standards and Safety Authority may lay charges on those parties involved in unauthorized pipeline crossings/activities.

Appendix A Technical Requirements

1. UTILITIES

No mechanical excavation within 1 metre of the pipeline, including directional boring/drilling. Distances closer than 1 metre must be hand dug or alternatively by hydro-vac under the direct supervision of TNPI.

Utilities should cross the pipeline at an angle greater than forty-five degrees (45°) and as close ninety degrees (90°) as reasonably possible, in addition, utilities should be constructed approximately level across the pipeline easement.

A minimum vertical clearance of thirty centimetres (30 cm) must be maintained between utility and pipeline.

Minimum clearance thirty centimetres (30 cm) must be maintained when the pipe bursting method is used to replace an existing concrete or cast-iron utility which crosses the pipeline.

No joints or bends may be made over or under any Company facilities.

For utilities operating under pressure, pre-tested sections must be installed across the pipeline right-of-way.

In the case of buried communication cables, no joints, splices or other connections shall be made within the pipeline right-of-way.

Electrical power cables must be placed in concrete or rigid conduit for the entire width of the pipeline right-of-way.

Concrete patio slabs shall be installed above gas service and electrical power cable (conduit) overcrossings (see reference drawing SK-1791 in Appendix E).

Appurtenances such as catch basins, manholes, valves, and other fittings must be located outside the pipeline right-of-way limits.

Metallic installations must be wrapped with a non-conductive insulating material for a distance of 8 m on each side of the pipeline(s) to mitigate interference with the pipeline's cathodic protection.

Some metallic installations require connection through leads to a TNPI test post in accordance with company standards. If necessary, TNPI will install a test post at the Applicant's expense (see reference drawing CP-1005 in Appendix E).

Concrete duct structures that cross above the pipeline(s) must be reinforced to the extent that it will be self-supporting when exposed across a 3-metre span.

For an overhead power line, the current type (AC or DC) and voltage shall be specified.

The vertical distance between the lowest wire of an overhead line catenary and the ground surface within the pipeline right-of-way shall not be less than the minimum vertical clearance distance set out in the Canadian Electrical Code Part III, known as CSA Standard C22.3, "Overhead Systems and Underground Systems, as amended from time-to-time.

The poles, pylons, towers, guys, anchors and any other supports of an overhead line shall be located outside the pipeline right-of-way and not within 10 m of any Company pipeline.

2. ROADS, LANEWAYS, PATHWAYS, DRIVEWAYS, AND RAMPS

Minimum clearances:

120 cm between the base of the asphalt layer and the top of the pipeline.

75 cm between the bottom of road ditches and the top of the pipeline.

30 cm between subdrains and the top of the pipeline.

New road crossings may require the installation of a TNPI test post the cost of which is to borne by the applicant in accordance with company standards (see reference drawing CP-1005).

3. LANDSCAPING / Erosion Control

Minimum 100 cm clearance maintained between final grade and pipeline.

Location of all proposed installations associated with the landscaping (fences, walkways, services, etc.) must be indicated on drawings.

Fence posts on property boundaries or crossing the pipeline are to be kept 1.5 metres (5 feet) away from the centre line of the pipeline(s).

Note: TNPI requires that all landscaping and fences across the pipeline right-of- way enable an unobstructed view along the length of the right-of-way. (for example, plywood and wood board fences, and extensive vegetation are not permitted).

Fences at the immediate crossing of the pipeline(s) are to be an open style format such as a chain link style, with a maximum height of 1.8 metres (6 feet) over a distance of 1.5 metres (5 feet) away from the centre of the pipeline(s).

Planting details to be provided with landscaping drawings. The pipeline right-of-way is to be kept clear of trees and berms. Shrubbery is permitted subject to the following restrictions:

Ground cover vegetation of less than 0.5m or 18" is allowed directly over the pipeline.

A maximum height of 1 metre (3 feet) within 3 metres (10 feet) of the pipeline(s).

A maximum height of 1.8 metres (6 feet), including canopy, on right-of-way areas not within 3 metres (10 feet) of the pipeline(s).

4. AGRICULTURAL DRAIN TILES, OPEN DRAINS, DITCHES, SWALES

Minimum 5 cm clearance required between small diameter (<4") plastic drain tiles and pipeline.

Drain tiles crossing the right-of-way are to be kept to a minimum by installing headers along the right-of-way boundaries.

A secondary header may be installed within the right-of-way if absolutely necessary, but not closer than 5 m to the pipeline.

Minimum 75 cm clearance required between the bottom of the open channel and the top of the pipeline.

Minimum 30 cm clearance required between culvert (CSP) and the top of the pipeline.

Also, see Subsurface (Tile) Drainage Crossing Guide (if applicable).

5. RAILWAYS & LIGHT RAIL TRANSIT SYSTEMS (LRT)

Required Minimum Clearances:

Design and construction to be compliant with the current version of CSA Z662;

200 cm between the base of tracks and uncased pipelines;

120 cm between the base of tracks and cased pipelines;

75 cm between the bottom of ditches and pipeline.

Conditions under which uncased crossings may be installed are addressed under Section 4.12.3.2 of the Canadian Standards Association CSA-Z662-07 Oil & Gas Pipeline Systems, and the National Transportation Agency General Order No. E-10, Regulations Respecting Pipe Crossings Under Railways.

GENERAL DESIGN REQUIREMENTS

Drawings submitted with the application must show the location of all surface and buried installations associated with the crossing (curbs, guard rails, fencing, sub-drains, sewers, cables, etc.).

Pipeline right-of-way must be kept clear of structures such as:

- buildings, bridges, structures;
- retaining walls, foundations, bollards, piers, pillars, caissons;
- patios, concrete slabs, decks;
- large commercial grade playground equipment;
- underground and above ground swimming pools;
- sheds, garages, barns, gazebos
- parallel fences, pedestrian/road barriers;
- paved parking lots, car lots, large equipment /vehicle storage yards;
- catch basins, infiltration galleries, stormwater management retention structures;
- valve chamber, manholes/ or maintenance access holes;
- reinforced concrete box culverts;
- utility fittings (i.e., fire hydrants);
- all utility and lighting poles, including traffic standards;
- transformers/switchgear, and vaults;
- extensive landscaping, berms, tall growth trees, canopy more than 1.8 metres high.

The design must allow for controlled access to the unaffected portions of the pipeline right-of-way.

Clean (free of contamination) fill must be used over the pipeline and right-of-way. Fill must be free of rocks and boulders.

Noise attenuation barriers crossing the pipeline must include a removable section to allow access to the pipeline right-of-way.

For fences crossing the pipeline(s), posts are to be kept 1.5 metres away from the center line of the pipeline(s). Where possible, floating fence construction should be considered.

MINIMUM DRAWING REQUIREMENTS FOR THIRD PARTY CROSSINGS

An approved crossing drawing is a condition of TNPI's permission. Additional information may be required in some cases. For this reason, TNPI should be contacted at an early date. Minimum drawing information requirements are:

1. A warning on the drawing stating: "Danger, High-Pressure Pipeline".
2. Drawing number and revision number, if applicable.
3. Drawing date and revision date, if applicable.
4. Dimensions in metric or imperial units.
5. A plan view showing:
 - a) North arrow.
 - b) Land description (Property Identification Number, Lot, Concession, R-Plan, Municipality, Township, etc.).
 - c) Pipeline(s) location and diameter.
 - d) Pipeline right-of-way boundaries and dimensions.
 - e) Location of crossing and dimension between crossing and nearest property line intersecting the pipeline.
 - f) Dimensions of surface installations.
 - g) The angle between crossing and pipeline (normally 45° to 90°).

A profile view showing:

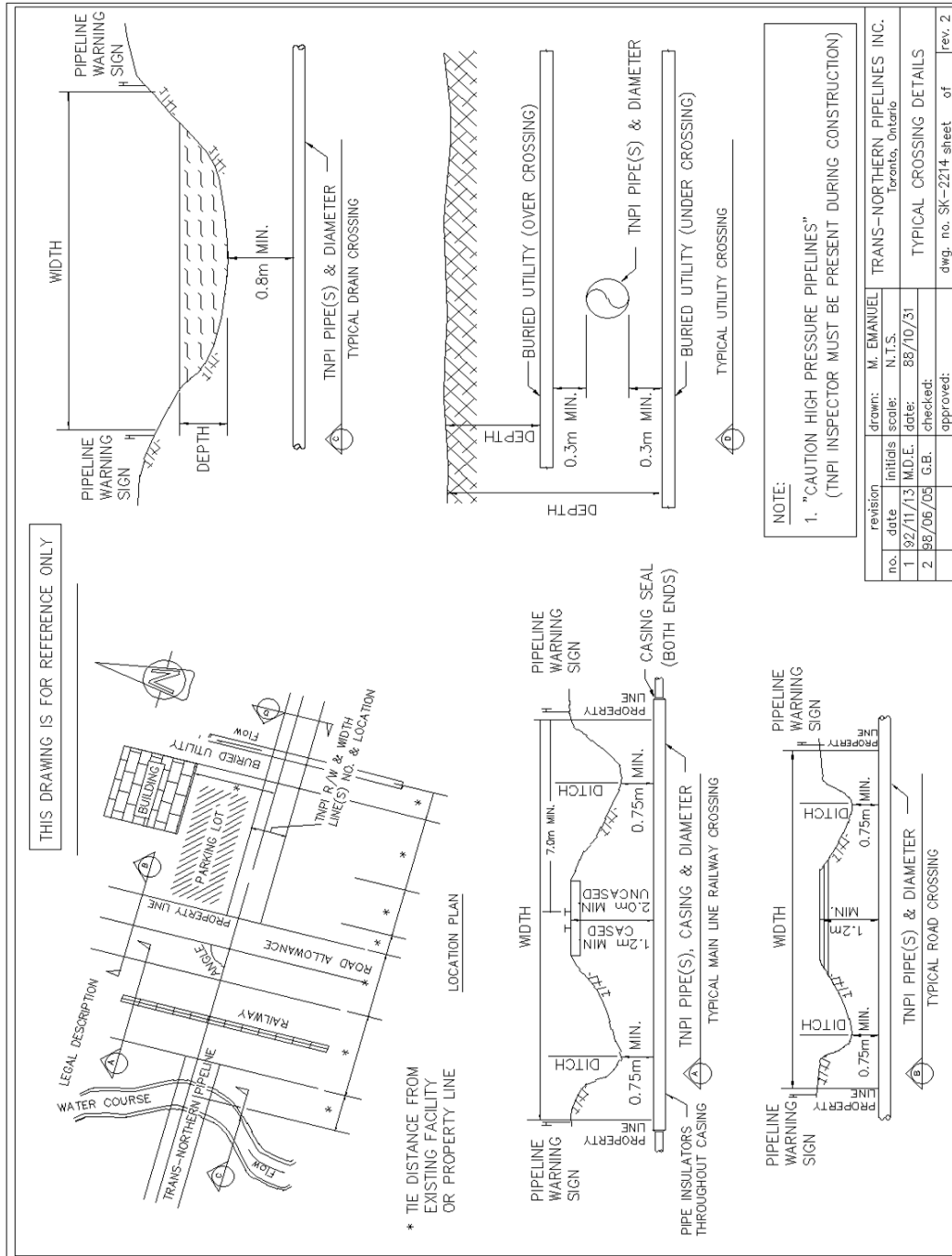
- a) For surface installations (e.g. roads, driveways, railways, ditches, landscaping, etc.): A view along the pipeline(s).
 - b) For buried installations: A view along the installation.
 - c) Pipeline depth before and after construction.
 - d) The depth of buried installations.
 - e) Distance between installation(s) and pipeline(s).
 - f) Pipeline right-of-way boundaries and dimensions.
7. Description of Installation:



-
- a) For surface installations: Surface and subgrade materials, maximum anticipated wheel loading.
 - b) For buried installations: Type of material, all dimensions.
 - c) Details of any protective devices required by TNPI (e.g. casings, reinforced slabs, special wrappings, etc.).

Note: For reference, a typical drawing of these minimum requirements is attached.

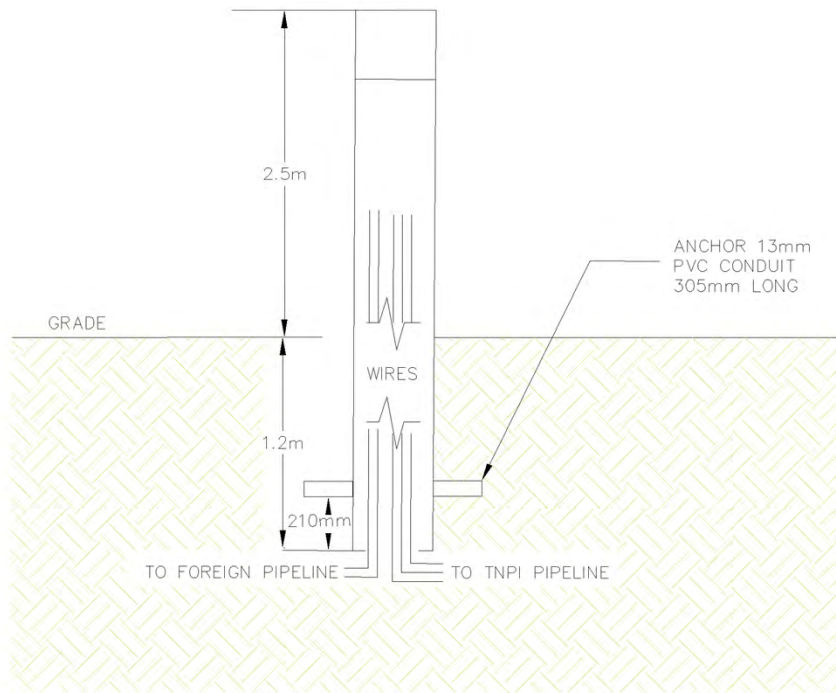
Appendix B Sample Drawing



Sample Drawing



PROFILE AT FOREIGN PIPELINE CROSSING



TEST POST INSTALLTION DETAIL

REVISIONS			DRAWN BY: C.L.	TRANS-NORTHERN PIPELINES CO. Toronto, Ontario
NO.	DATE	INITIALS	SCALE: N.T.S.	
3			DATE: 2018-01-03	DETAILS OF STANDARD TEST POST INSTALLATION
2			CHECKED:	
1			APPROVED	
				dwg. no. CP-1005 sheet 2 of 2 rev. 0

Appendix C Acceptable and Unacceptable Uses and Activities over the TNPI Pipeline ROW

Use / Activity	Acceptable	Remarks / Requirements
Agriculture	Yes Consent may be required.	Facilities such as underground (drain tiles), and overhead irrigation systems as well as the installation of permanent structures must be reviewed and approved. Activities related to the growing of crops or the raising of animals need no consent; provided the activity does not involve installation of permanent structures or adheres to all of the following four conditions: 1. The ground disturbance activity does not disturb more than 30 centimetres (12 inches) of soil cover. (TNPI should be consulted before deep cultivation or subsoiling > 45 cm). 2. When in operating mode, the agricultural vehicle or mobile equipment is not removing or adding soil cover. 3. Soil conditions are such that they ensure minimal rutting when the agricultural vehicle or mobile equipment are driven over the pipeline. 4. Loaded axle weight and tire pressures are within the manufacturer's approved limits and operating guidelines.
Airports - Private	Yes, consent required	Permission to use the right-of-way for a flight strip may be granted, provided it is for the private use of the property owner and does not involve any increase or decrease in the cover over the pipeline



Use / Activity	Acceptable	Remarks / Requirements
		or the installation of any permanent structures, including paving, on the right of way, and potential wheel loadings are considered.
Airports – Public	No	
All-Terrain Vehicle Use (ATV and Snowmobile, less than 1000kg)	No	Casual use of the right of way for recreational ATV and snowmobile driving does not require permission from TNPI. However, care should be taken to avoid formal or informal designation of the right of way as an ATV or a snowmobile trail. Physical barricades and visual screening of the right of way at access points should be utilized as necessary to discourage such use.
Automobile Wrecking Yards Automotive Storage Facilities	No	
Boats	No	See Marinas
Boat Storage	No	See Storage
Blasting or Pile Driving	No	All blasting within the 30m prescribed area requires approval. No blasting is permitted within 5m of the pipeline. Also see Contractor's Guidelines, "Appendix C" for Vibration Control Procedures.



Use / Activity	Acceptable	Remarks / Requirements
Buildings	No	No type of permanent or temporary structure permitted. See Structures
Bus Shelters	No	See Buildings or Structures
Canals	Yes, consent required	Canals or ditches may be built across the pipeline easement/ROW provided that the required cover over the pipeline is met or adequate precautions are taken to protect the pipeline.
Cathodic Protection Devices	Yes	Cathodic protection facilities may be installed provided they are coordinated with other utilities and all interference problems are eliminated.
Campsites	No	
Canopies, Kiosks, Gazebos	No	See Buildings or Structures
Carports	No	
Catch Basins & Infiltration Galleries, Retention Chambers	No	
Concrete Slabs / Pads	Yes, consent required	Except where they may be installed to provide for pipeline protection or as part of a leak detection system.
Conduits/Fiber Optics	Yes, consent required	See Utilities Crossings.
Construction Vehicles and Heavy Equipment	Yes, consent required	TNPI's approval and supervision are required. Hand dig trenches within 1m of the pipeline. Give seventy-two (72) hours prior notice before performing work.



Use / Activity	Acceptable	Remarks / Requirements
		Contact On1Call in Ontario (www.on1call.com) or Info-Excavation in Quebec (www.info-ex.com) for utility locating. The crossing of the pipeline with heavy construction equipment requires loading assessment to be completed by TNPI for approval and sufficient cover over the pipeline. A ramp or steel plate(s) may be required if the cover is insufficient.
Cross Streets	Yes, consent required	See Roads.
Culverts, excluding Concrete Box Culverts which require an engineering assessment	Yes, consent required	Provided that the necessary clearance is provided between the pipeline and the culvert above the pipeline.: .75 m for open ditch; .5 m for culvert
Curbs and Gutters	Yes, consent required	See Roads
Cuts and Fills	Yes, consent required	Some cutting and filling may be permitted over pipeline provided: 1) Cover is not reduced below 1m. 2) Cover is not increased to the point where pipe exceeds acceptable stress levels.
Dams	No	
Ditches & Swales	Yes, consent required	See Canals
Docks	No	See Marinas
Driveways	Yes, consent required	A driveway may be built across pipeline ROW, provided:



Use / Activity	Acceptable	Remarks / Requirements
		1) It is for use of property owner only and does not provide access for another parcel of property. 2) Clearances are maintained as in Cuts and Fills. 3) Written permission is obtained. 4) Driveway width does not exceed 6m.
Drain Tiles	Yes, consent required	Provided minimum of 5cm separation maintained between drain tile and pipeline. Drain tiles paralleling pipeline on pipeline ROW are to be installed outside or no closer than 5 metres.
Ducts	Yes, consent required	See Pipelines
Dumps & Landfill Sites	No	
Electric Lines	Yes, consent required	See Power Lines
Equipment	Yes, consent required	See Construction Vehicles and Equipment
Erosion Control	Yes, consent required	Structures or materials to prevent soil erosion due to wind or water may be located on the pipeline easement/ ROW provided that: 1) They do not interfere with the installation, operation or maintenance of the pipeline. 2) The design has been approved. 3) The facilities have taken into account the effect on the environment. (Proof of



Use / Activity	Acceptable	Remarks / Requirements
		an environmental assessment must be submitted to TNPI with application).
Exploration – Archaeological Geological and Hydrogeological,	Yes, consent required	Borehole applications require a detailed plan indicating locations and offsets from the pipeline.
Fences	Yes, consent required	Provided adequate access to and around facilities is maintained. Fence across the pipeline must be no more than 1.8m tall and open style type for a distance of 1.5m away from the centre of pipeline. A gate may be required. Fence posts must also be at least 1.5m away from the pipeline. Posts for fences paralleling pipeline on pipeline ROW must be maintained at a minimum distance of 1.5m from the pipeline. Fences which are to be closer than 1.5m to the pipelines are to be floating type. Written permission required. Also, see Appendix C.
Fiber Optic Cable	Yes, consent required	See Utilities.
Flammable Material, Also Fire Pits, Outdoor Chimney's	No	
Flood Control	Yes, consent required	See Erosion Control, Canals, Dams.
Flooding	No	If there is a possibility of periodic flooding, the buoyancy of pipeline as well as access must be considered.



Use / Activity	Acceptable	Remarks / Requirements
Golf Courses	Yes, consent required	Greens, tee boxes, sand-traps, parallel cart paths, and sprinkler heads must be situated outside the pipeline ROW. Also, see landscaping.
Grazing	Yes, consent required	See Agriculture.
Greenbelts	Yes, consent required	See Landscaping.
Ground Clearance	Yes, consent required	See Cuts and Fills
Ground Cover	Yes, consent required	See Cuts and Fills
Guy Wires & Anchors	No	Anchors and Guy Wires are not permitted. For permitted uses see Overhead Wires
Highways	Yes, consent required	Consent may be granted for highway construction provided TNPI is reimbursed for the cost of protecting, upgrading or relocating pipeline so that it complies with all applicable regulations and requirements. The cost will be allocated according to applicable easements, crossing agreements or regulatory orders.
Hiking Trails, Multi-Use Pedestrian Trails/Pathways	Yes	Provided reasonable access to facilities is maintained. See also Landscaping and Cuts and Fills.
Horticulture	Yes	See Agriculture.



Use / Activity	Acceptable	Remarks / Requirements
Incinerators	No	
Irrigation Lines	Yes, consent required	See Pipelines.
Junk Yards	No	
Lakes	No	Also See Ponds and Dams.
Landscaping	Yes, consent required	Provided reasonable access to facilities is maintained, and all trees and deep-rooted shrubs which may grow taller than 1 m in height are kept at least 3m from the pipeline. See Appendix C: Landscaping Item #3
Launching Ramps	No	See Marinas.
Lawns	Yes	See Cuts and Fills and Sprinkler Systems.
Leach Fields	No	Leach field would be subject to damage by the passage of heavy equipment. Piping leading to leach field may cross the pipeline ROW (see Pipelines). Entire leach field must be outside of ROW. Before granting a permit for piping, the owner must show proof that installation will meet all local water quality requirements with approval from the



Trans-Northern

Crossing Guidelines

Doc. No.: 1744

Revision No.: 3

Revision Date: February 5, 2019

Use / Activity	Acceptable	Remarks / Requirements
		Ministry of Environment or Health Board and local municipal zoning.
Loading Ramps	No	
Mains	Yes Consent required	See Pipelines.
Marinas	No	
Masonry Work	No	
Mining All	No	See Quarries Requires N.E.B. Approval.
Mini Golf Courses	No	
Mobile Homes	No	
Mobile Home Parks	No	No mobile home park facilities may be installed on pipeline ROW. Roads and utility crossings are subject to specific approval.
Multi-Purpose Pathway	Yes, consent required	A multi-purpose pathway may be built across pipeline ROW provided: 1) Written permission is obtained 2) All costs including maintenance are to be borne by applicant/owner. TNPI shall not accept liability for damages caused by pipeline maintenance works. 3) The depth of Cover to be maintained 4) The trail should meander to avoid long parallel runs atop the pipeline route.
Non-Flammable Materials	No	See Storage.



Use / Activity	Acceptable	Remarks / Requirements
Orchards & Tree Farms	Yes, consent required	Trees greater than 1m in height may not be planted within 3m of the pipeline. Trees greater than 2.5m not planted with 5m of the pipeline.
Parks	Yes, consent required	ROW may be used as part of a park area, but permanent structures may not be located on ROW. Detailed plan review required.
Parking	Yes, consent required	It is preferred private property owners did not park vehicles directly over the pipeline. Use of the ROW as a commercial or other publicly used parking lots, whether paved or unpaved, is discouraged, and cannot be allowed without TNPI's review and conditional approval. If the parking lot is paved, it is required that a 3m wide strip over the pipeline is left as green space or interlocked paving stones in order to reduce its impact on TNPI's leak detection capability. If paving over the pipeline is unavoidable, monitoring wells and/or concrete slabs are required as part of the leak detection system. All costs, including maintenance, are to be borne by the applicant/owner. TNPI shall not accept liability for damages to the parking facility caused by the exercise of its rights under the easement agreement and shall reserve the right to prohibit vehicular parking on its easement at any time.
Patios	Yes, consent required	Patios that utilize lightweight removable materials such as interlocking bricks,



Use / Activity	Acceptable	Remarks / Requirements
		stones, slabs are permitted. Poured continuous concrete pads are NOT permitted.
Pipelines	Yes, consent required	Permits will be granted for other pipelines to cross pipeline ROW, provided: 1) The crossing is kept as close to a right angle as possible. 2) Pipeline maintains at least 50cm clearance above or below TNPI's pipeline. 3) The installation makes provisions for future use of pipeline ROW. 4) Precautions are taken to protect both facilities from interference problems due to cathodic protection. 5) Parallel encroachments are not allowed. (See "Utilities Parallel")
Play Equipment	Yes, consent required	No permanent structures are to be installed on the pipeline ROW. Play equipment without embedded footings or foundations may be allowed.
Pool (in-ground or above ground)	No	See Swimming Pool.
Ponds including SWM.	No	
Porches & Gazebos	No	
Power Lines	Yes, consent required	Power lines may be installed across the pipeline ROW provided:



Use / Activity	Acceptable	Remarks / Requirements
		1) Poles or towers are not located on the ROW. 2) Wires have adequate clearance to permit working on the pipeline. 3) Parallel encroachments of above or below ground power lines are not allowed (See "Utilities Parallel"). 4) Buried power lines meet TNPI's standards (Also see Appendix C).
Private Land Owner Facility Crossing	Yes, consent required	Where a private landowner wishes to cross the pipeline with a buried facility, a permit is required; the applicable minimum clearance must be maintained across the entire easement/ ROW.
Pumps	No	
Quarries & Pits	No	For all off ROW quarrying activities in proximity to the ROW, TNPI must be notified to review and assess the potential impacts to the integrity of the pipeline and the ROW.
Railroads and Light Rail Transit (LRT)	Yes, consent required	Railroad crossings may be permitted if suitably designed in accordance with applicable codes and provided railroad agrees to pay the cost to upgrade or protect the pipeline. Clearances shall be provided as shown in Appendix D.
Recreation Areas	Yes, consent required	Pipeline ROW may be used for general recreation that does not require the use



Use / Activity	Acceptable	Remarks / Requirements
(other than camping)		of any structures or facilities. Approval required.
Recreational Trails (Snowmobile and ATV Trails)	No	See All Terrain Vehicle Use or Trails
Reservoirs	No	See ponds.
Retaining Walls	No	An engineering assessment is required. Provided adequate access to the pipeline is maintained along with proper drainage. Cut and Fill criteria must also be met. Approval required.
Roads – Parallel	Yes, consent required	Parallel roads on pipeline ROW are discouraged. Trans-Northern should be involved in the planning stages of residential or commercial developments to avoid such encroachments. If paving over the pipeline is unavoidable, installation of a leak detection system (monitoring wells and/or concrete slabs) is required at the expense of applicant/owner. TNPI won't be responsible for the cost of relocation and/or leak detections system and/or concrete slabs.
Road Crossings – Private	Yes, consent required	Consent may be granted for private roads across The pipeline ROW provided: 1) Assurance is given road will remain a private road. It must be so marked and signs must be maintained. 2) The road must not be given a paved surface.

Use / Activity	Acceptable	Remarks / Requirements
		3) Minimum of 1.2m cover over the pipeline is required 4) Cut and Fill requirements must be maintained. 5) The owner must agree to pay the cost of protecting or upgrading pipeline if the road should be paved or status is changed to a public road.
Road Crossings – Public	Yes, consent required	Consent will be granted for a public road or street across the pipeline ROW: 1) The developer pays for the cost of protecting, upgrading or relocating pipeline. 2) The company retains prior rights on roads ceded to the municipality or city 3) Minimum of 1.2m cover over the pipeline is required.
Septic Tanks & Systems	No	
Service Stations Refueling Stations LPG/NG/H	No	Must comply with local zoning setbacks from the R.O.W. limits.
Sewer Lines	Yes, consent required	See Utilities, Septic Tanks and Leach Fields.



Use / Activity	Acceptable	Remarks / Requirements
Side Walks	Yes, consent required	See Roads, Minimum Cover applies
Signs, Posts	No	Signs, except pipeline markers, shall not be permitted on pipeline ROW.
Snowmobile Trail	Yes, consent required	See All Terrain Vehicle Use or Trails
Sod Farms	Yes, consent required	Requires investigation regarding irrigation methodology. See Sprinkler System
Solar / Wind farms	Yes, consent required	See Utilities.
Spoil	Yes, consent required	See Cuts and Fills.
Sprinkler System (underground)	Yes, consent required	Crossings of pipeline shall be kept to a minimum. Sprinkler heads must be situated outside the pipeline ROW.
Stock Piles	No	
Storage	No	The pipeline right-of-way shall not be designated as a storage area.
Storm Drains	Yes, consent required	See Utilities, Culverts and Catch Basins.
Streets	Yes, consent required	See Roads.
Structures	No	Permanent structures (i.e. any facility or structure, the foundation or any other portion of which lies below the ground



Use / Activity	Acceptable	Remarks / Requirements
		surface, or is otherwise not readily moveable) reduce the visibility along the right-of-way and are not allowed (e.g. buildings, sheds, swimming pools, decks, garages, etc.)
Subdivisions	Yes, consent required	The area over the pipeline right-of-way may be subdivided, provided: 1) The land developer /subdivider shall submit approved subdivision plans for review and approval. 2) ROW should be incorporated into open space wherever possible 3) Lot lines should be co-incident with ROW limits. 4) No structures may be located on the pipeline right-of-way. 5) Streets or roads are laid out to cross pipeline at close to a (90°) right angle. Parallel encroachments are discouraged. 6)The developer must meet requirements for Road Crossings, either private or public. 7) Pipeline ROW is not used for utility corridor.
Swimming Pool / Spa's (in-ground or aboveground)	No	
Tanks (underground or aboveground)	No	
Telephone Cables	Yes, consent required	See Utilities.



Use / Activity	Acceptable	Remarks / Requirements
Tennis / Basketball Courts	No	
Trails (Snowmobiles or ATV's)	Yes, consent required	Provided they are not hard surface and adequate precautions are taken to prevent erosion. Refueling on the right-of-way is not permitted. Also see All Terrain Vehicle Use.
Trash Burners	No	
Tree Farms including Christmas Tree Farms	Yes, consent required	Must provide access to the pipeline and facilities. No planting within 3m of the pipeline. TNPI to be given notice of any planting, removal or other digging.
Trees, Shrubs	Yes, consent required	Must provide access to the pipeline and facilities. No planting within 3m of the pipeline. TNPI to be given notice of any planting, removal or other digging.
TV Cable	Yes, consent required	See Utilities.
Utilities – Parallel	No	Parallel encroachment of any utilities, either overhead or underground may be allowed in some cases for short distances. In general, parallel encroachments are to be strongly discouraged.
Utility Crossings	Yes, consent required	Consent to common use will be granted for crossings of overhead or underground utilities provided: 1) Overhead lines must provide adequate clearance for working on the



Use / Activity	Acceptable	Remarks / Requirements
		pipeline. Poles, anchors or supports may not be located on pipeline ROW. 2) All underground lines must be installed with minimum 30cm clearance between pipeline and utility and must be at same depth completely across ROW. Underground electric lines and all buried telephone lines, must be encased in a rigid conduit across the entire width of the right of way. 3) Utility crossings must be designed to meet Trans- Northern's "Technical Requirements" outlined in Appendix C.
Underground Structures	No	
Footings & Foundations	No	
Vaults & Chambers	No	
Vehicles		See Parking.
Wading Pools / Splash Pads	No	
Water Pipelines	Yes, consent required	See Pipelines or Agriculture.
Weighing Stations	No	
Wells	No	
Wrecking Yards	No	



Trans-Northern

Crossing Guidelines

Doc. No.:	1744
Revision No.:	3
Revision Date:	February 5, 2019

Appendix D Contractor Guidelines

11 Consequences of Uncontrolled Excavation

TNPI's pipelines are generally installed at a nominal depth of 1 metre (39 inches). Cover over older pipelines may have been substantially reduced by erosion, farming or landscaping. Damage by uncontrolled excavation is possible.

Mechanical damage on pipelines is serious. It may remove the protective coating resulting in concentrated corrosion and weaken the pipe wall. This could result in a leak or rupture. Pipeline ruptures may result in loss of life. In addition to pipelines, right-of-ways also contain buried electrical and communication cables which are vital to the operation of the pipeline system.

12 Safe Construction Procedures

There is more to safe excavation than simply Calling Before You Dig. Experience has shown that Calling Before You Dig is but one step in a series of steps that are necessary to safeguard buried pipelines and utilities from damage and construction workers from harm.

12.1.1 Call Before You Dig

Do not rely on markers for pipeline location purposes, contact the nearest field office indicated on the marker.

Caution: An absence of markers does not guarantee that there are no pipelines present.

In Ontario and Quebec, TNPI Pipelines subscribes to the province-wide utility location service.

In Ontario, excavators must contact On1Call: 1-800-400-2255

In Quebec, excavators must contact Info-Excavation:

Montreal Area: 514-286-9228

Quebec: 1-800-663-9228

Excavators are reminded that not all utility companies are members of the provincial one-call service. As an excavator, you are responsible to determine which utilities may be located within your work area. This takes planning and time, but hazard avoidance and damage prevention are worthwhile pursuits. Safe construction can be achieved by completing the following steps:

Call the provincial one-call service as directed above. They will inform you who they will call in your work area.

Ask the municipality which utilities or pipelines may be present in your work area.
Research the local telephone directory.
Research land title deeds.
Contact the property owner.

Before commencing any work, every job site should be carefully inspected for marker signs identifying the pipeline or buried utilities and for visual evidence that there may be buried lines that have not been marked. Manholes, catch basins, pedestals, junction boxes, water and gas meters, valve chambers, conduits affixed to wood poles, test posts, even sunken ground may indicate the presence of underground structures.

Appendix "A" - Typical Pipeline Markers show TNPI's most common form of marking.

Appendix "B" - Common Errors give examples of incidents which can result in life, property, and environment threatening situations. All can be prevented by compliance with these guidelines.

12.2 Required Wait Time (72 hours)

For federally regulated pipelines, such as TNPI Pipelines Inc., the legislation requires that pipeline companies provide a locate within 72 hours or three business days following the request to provide a locate. This does not necessarily mean that once you call the provincial one-call service for a locate that you will automatically receive all your locates within 2 or 3 business days. In reality, this is the time frame in which you should expect a response from the pipeline company indicating that a locate is necessary and will be scheduled.

If emergency locates are required, almost all pipeline companies will offer this service on short notice. This often requires re-scheduling other commitments or interrupting other work activities and is very disruptive to the pipeline operator. If a locate is required for a *genuine emergency* (i.e., service disruption with a work crew on-site), this will be done as soon as a locate personnel can be dispatched. *Poor work planning is not a valid reason to request an emergency locate.*

If you do not receive an all clear or locate within a reasonable time period, say one week after your initial call, call the pipeline company directly. They do not want to delay your work or production. In such cases, something in the system is not working correctly and voicing your complaints will get action. *However, excavators are warned not to commence work until locates have been received regardless of how long the process takes.* To commence excavation without proper locates contravenes provincial legislation and offenders are liable and will be fined.

12.3 Meeting Pipeline Representative

Pipeline companies will always want to meet excavators beforehand to ensure the nature of the work is clearly understood before a locate is provided. Following the locate, a report is provided to the excavator. This report should be neat, legible and clearly understood by both parties prior to signature. Be certain you understand the report. If anything is unclear, ask for clarification. The report is the document guiding your actions and will be referenced in the event of pipeline damage investigations arising from your activities.

Frequently, the locate report may contain special instructions provided by the locate inspector. Be certain you understand clearly what these special instructions are. They may be simple, such as erect a snow fence here≡ or a barricade there≡. They may be more elaborate and restrictive such as hand dig to expose utility≡ or A build-up grade elevation before crossing with heavy equipment. Excavators are expected to fully comply with special instructions.

12.4 Pipeline Inspector Required On Site

TNPI insists that a company representative is on site before commencing any excavation near its pipelines. Comply with these requirements. If work proceeds without the presence of a pipeline inspector, damage may occur. Consider the possibility that the pipeline may have already sustained damage. Without an inspector on site to witness first-hand the uncovering of the pipeline, you may be faced with the cost of repairs caused by others. Furthermore, if the work site is backfilled without a pipeline inspector present, you may be

faced with re-excavation when the inspector does arrive. Regulations require that the pipeline company is provided the opportunity to inspect its own pipeline prior to back-filling.

12.5 Hand Digging

Mechanical excavation of any buried pipeline is hazardous to both the pipeline and to the excavator.

TNPI requires that the location of the pipeline be confirmed by hand excavation or hydro-vac before commencing mechanical excavation. Mechanical excavation within 1 metre on either side of the pipeline is strictly prohibited. It is good practice to confirm the location of all utilities before bringing in heavy equipment. This may mean hand digging or vacuum excavation but, with careful planning and work sequence, heavy equipment usage can be optimized by wasting less time idling while pipelines or other utilities are being hand dug.

The surest and safest way to confirm the location of a buried pipeline(s) is to expose it by hand excavation. Hand excavation does not include the use of picks or spud bars, it simply means excavation by shovel or vacuum excavation.

Proceeding with mechanical excavation outside of the 1 metre buffer before the pipeline or utility has been positively identified is not a safe substitute for hand excavation. Do not expect that the soil will fall away from the pipeline if you dig beside the pipe.

12.6 Hydro-Vac

The maximum pressure to be used at any time on a spinning tip nozzle during a pipeline excavation shall be 1200 psi or as defined by site permit conditions or TNPI inspector on site. Spinning tip (wand) nozzles shall be oscillating types to prevent a concentrated water stream. This type of tip can be identified by the circular pattern of water stream evident as pressure is first applied to the wand. Single tip nozzles are not allowed. The wand of tube end is capable of making direct contact with the buried structure and must have a rubber, neoprene or equivalent tip to eliminate any occurrence of mechanical damage to the structure. The wand end shall never remain motionless during excavation. Aiming directly at the underground infrastructure must always be avoided. A distance of eight (8) inches or twenty (20) centimeters shall be maintained between the end of the pressure nozzle and the

pipe and/or subsoil. The nozzle is never to be inserted into the subsoil while excavating the pipe. A deadman trigger or valve shall be installed on the wand to be capable of stopping excavation on demand.

12.7 Dig with care

Always be wary. When excavating, there is always the possibility that pipelines, or other utilities may not have been located accurately or perhaps not at all. Errors are possible. Utility locators are often confused by the signals they obtain in urban environments. There is a lot of stuff underground and signals are diffused by the presence of tramp iron, other conductors, abandoned utilities, parallel fences, overhead electrical lines, etc.

Information on pipeline depth is frequently not provided because it is prone to error. This is not error by omission, but simply changes in the grade elevation since the pipeline was originally installed. Engineering drawings and plant records, unless they utilize geodetic elevations, are unreliable sources of pipeline depth.

When excavating, keep on the lookout for evidence of previous excavations. Virgin ground is usually harder than disturbed ground. Soft ground may indicate the presence of a trench or backfill material.

12.8 Respect instructions from Pipeline Representative

During your work, the pipeline representative may remain on site to safeguard against damage to the pipeline(s). If necessary, the inspector may issue instructions over and above those that are cited on the locate report. Be mindful that these instructions are issued with the intention of protecting the pipeline from damage and not to interfere with your work. It may be a nuisance, but it can save aggravation and damage costs if you respect their instructions. Often, a good working rapport amongst all parties will mitigate conflict for everyone's benefit.

12.9 Pre-Construction Meeting

For some projects a pre-construction meeting will be required by the pipeline company. The intent of this meeting is to inform crew members of the procedures and restrictions that must be observed while working over or near the pipeline(s). The meeting is to be attended by representatives of the contractor(s), the pipeline company and the authority responsible

for the project. TNPI must be notified at least (3) three business days in advance of the scheduled meeting.

12.10 Barricading the Work Zone

In locations where TNPI pipeline(s) is exposed in an excavation which is near vehicular pathways (i.e., highway, road, parking lot, etc.), the Contractor/Owner shall erect concrete barricades or provide such measures as to prevent vehicles from entering the work zone. The barricades may be removed after the pipeline has been protected by backfill to a minimum depth of 1 metre or existing cover, whichever is the lesser.

12.11 Fencing

Fencing (usually snow fencing) may be required by the pipeline company in order to protect operating pipelines from heavy equipment and to restrict machines to designated travel ways.

12.12 Ramps

Ramps are required wherever the pipeline is buried under limited cover. In such cases, the pipeline(s) is vulnerable to damage from the direct weight of heavy construction equipment. In addition, the weight of these machines may cause buried rocks and debris to impact and damage the pipeline(s).

Written permission is required for the installation of ramps. The pipeline inspector will specify where and how ramps are to be constructed. The inspector must be present during their construction and removal. When constructing ramps, fill is to be placed over the pipeline using standoff equipment.

The minimum cover is 1.2 m (4 feet) unless the pipeline inspector specifies less. Under certain conditions, mats or steel plates may be used in lieu of ramps. Ramps are to be maintained and corrected for any settling throughout the course of construction.

12.13 Locate All Utilities

The contractor is required to obtain locates of all other underground utilities within the work area near the pipeline(s) before the commencement of any work. The locate reports obtained from the other utility companies must be kept on site during construction.

12.14 Excavation or Ground Disturbance Within TNPI's Right of Way

Any activity causing a ground disturbance including excavation within TNPI's right-of-way may require written approval. Written approval is required within the 30-metre area, in either direction, measured from the centre of the pipeline. A copy of this permission must be kept on the site. No excavation is allowed within the right of way or within 3 m (10 feet) of the pipeline unless a pipeline inspector is present. This is a minimum distance and may be extended by the pipeline inspector if warranted by the site conditions and the type and size of machinery used. To schedule an inspection, TNPI requires at least three working days' notice.

Under the direction of the pipeline inspector, the pipeline must be located and exposed by hand digging to identify direction and depth before machine excavation is permitted within the right of way.

Machinery must not be used to excavate within One (1) metre (3.28 feet) of an unexposed pipeline. This is a minimum distance and may be extended by the pipeline inspector if warranted by the site conditions and the type and size of machinery used.

Machinery will not be permitted to reach across the pipeline while excavating. Trench shoring must maintain a minimum clearance of Thirty (30) cm from the pipeline(s) and is to be removed upon completion of the crossing.

12.15 Directional Drilling / Pipe Bursting

The pipelines must be exposed prior to any directionally drilled crossings. **Never assume the depth of pipelines.**

Pipe bursting across the pipeline is prohibited unless the pipeline(s) is exposed at the crossing.

12.16 Blasting

Blasting within 30 m of the pipeline(s) is to be strictly controlled and monitored in accordance with TNPI's Vibration Control Procedures. Blasting will be strictly prohibited within five (5) meters of the pipeline. A copy of these 'Procedures' is included in Appendix "C". A detailed

blasting procedure must be submitted for TNPI's approval and will become part of the Company's permission.

12.17 Backfill

The pipeline inspector must be on site during the backfill operation and must complete a detailed inspection of the pipeline coating and an 'as built' sketch before backfilling commences. The contractor must notify TNPI at least 24 hours prior to backfilling. Backfill above and below the pipeline(s) is to be free of rocks and contaminants. Sand or select material is to be used within 30 cm of the pipeline(s). To prevent future settlement in the vicinity of the pipeline, fill is to be compacted with a hand-operated compactor in approximately 15 cm layers. The use of vibratory compactors is restricted. Refer to 'Vibration Control Procedures'.

12.18 Site Restoration

Unless otherwise specified in the Company's permission, the Contractor is to return the right-of-way to its original condition. This includes the removal of temporary fencing or barricades, site trailers, spoil piles, trench shoring, and ramps. When removing ramps, keep heavy equipment off the pipeline(s). Care must be taken not to damage or remove pipeline warning signs or test posts.

13 Emergency Procedures

The Trans Northern system consists of various sizes of pipelines operating at pressures greater than 6.9 MPa (1000 psi). The pipelines carry gasoline, jet fuel, diesel, and heating oil. These products can cause considerable damage to the environment and may be released at high pressures. They may also cause serious injury or death to a machine operator.

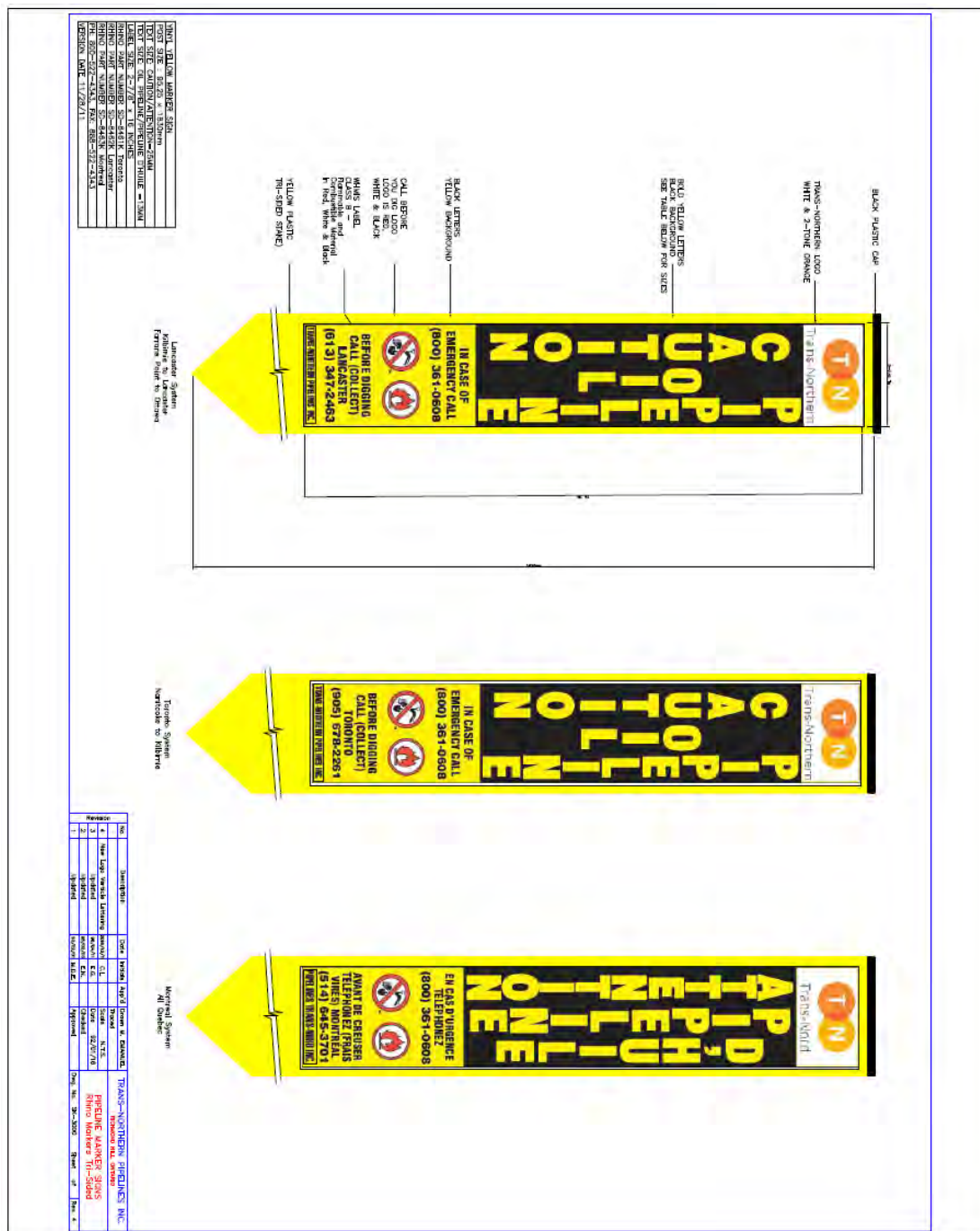
If it is evident or even suspected that a pipeline has been damaged, stop work, shut off equipment, clear the area. Notify the pipeline inspector immediately. If an inspector is not on site, call the Trans Northern Line Controller in Richmond Hill at 1-800-361-0608. This is a 24-hour number. This number is also posted on TNPI pipeline markers.

The caller should be prepared to supply the following information:

- a) Name, address, telephone number and where the caller can be located by anyone arriving to take charge of the incident.
- b) The geographic location of the incident. Specifically, lot, concession, township, municipality, address and nearest major road(s).
- c) Brief details of the incident. Type of damage and equipment involved. In the event of a puncture, indicate the amount of product and indicate if there is fire.
- d) Which police or fire department has been alerted.
- e) The time of the incident or the time the incident was first identified.

Trans- Northern Field Services personnel will supervise the containment and clean-up of any spills. The requirements addressed in these procedures are provided in a general form as a matter of information only. Special circumstances may require special considerations. It is important that Trans Northern be contacted as soon as it becomes evident that construction activity may involve its pipeline(s).

Appendix E TYPICAL PIPELINE MARKERS





Trans-Northern

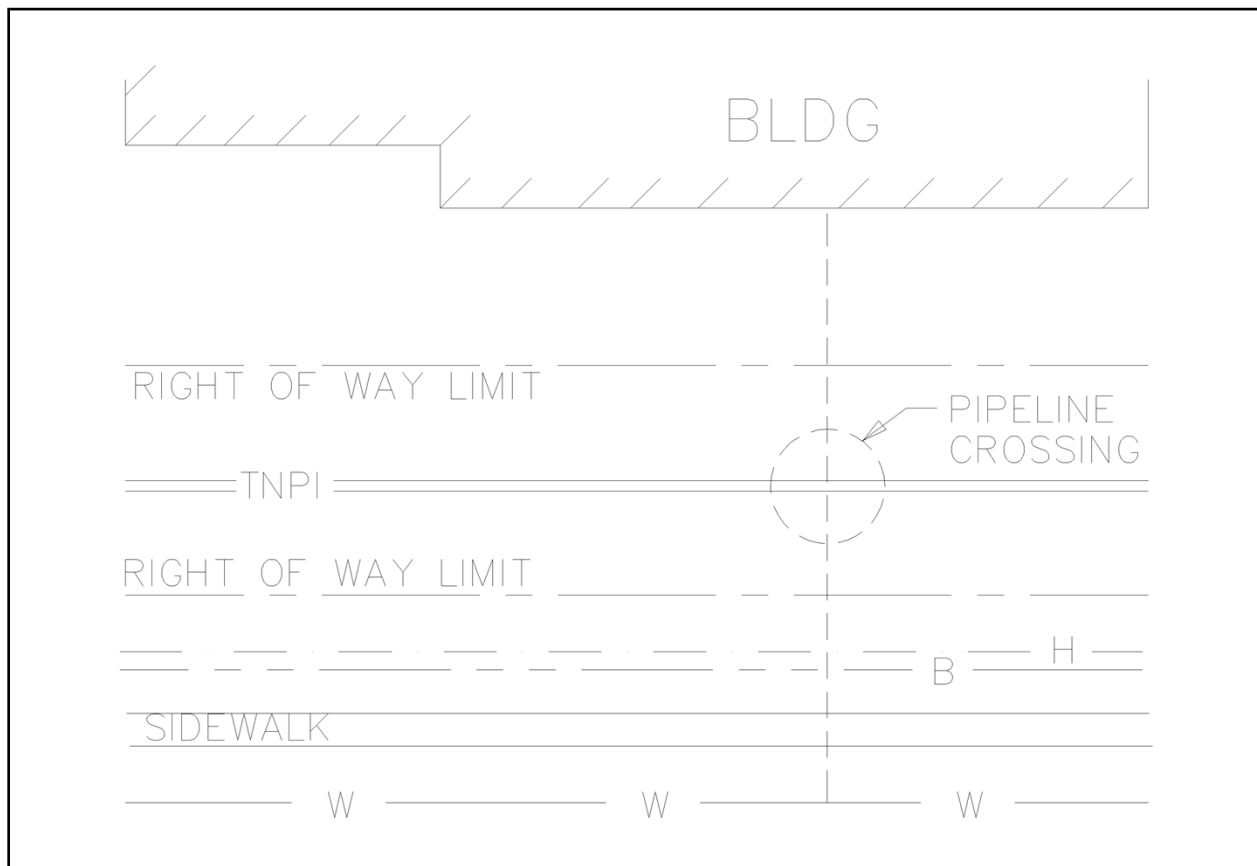
Crossing Guidelines

Doc. No.:	1744
Revision No.:	3
Revision Date:	February 5, 2019

Appendix F COMMON ERRORS

Situation 1

A contractor is installing a service from a house to the main in the street. All utilities have been contacted, located and marked. The machine operator hits the pipeline which is situated between the house and the nearest utility.

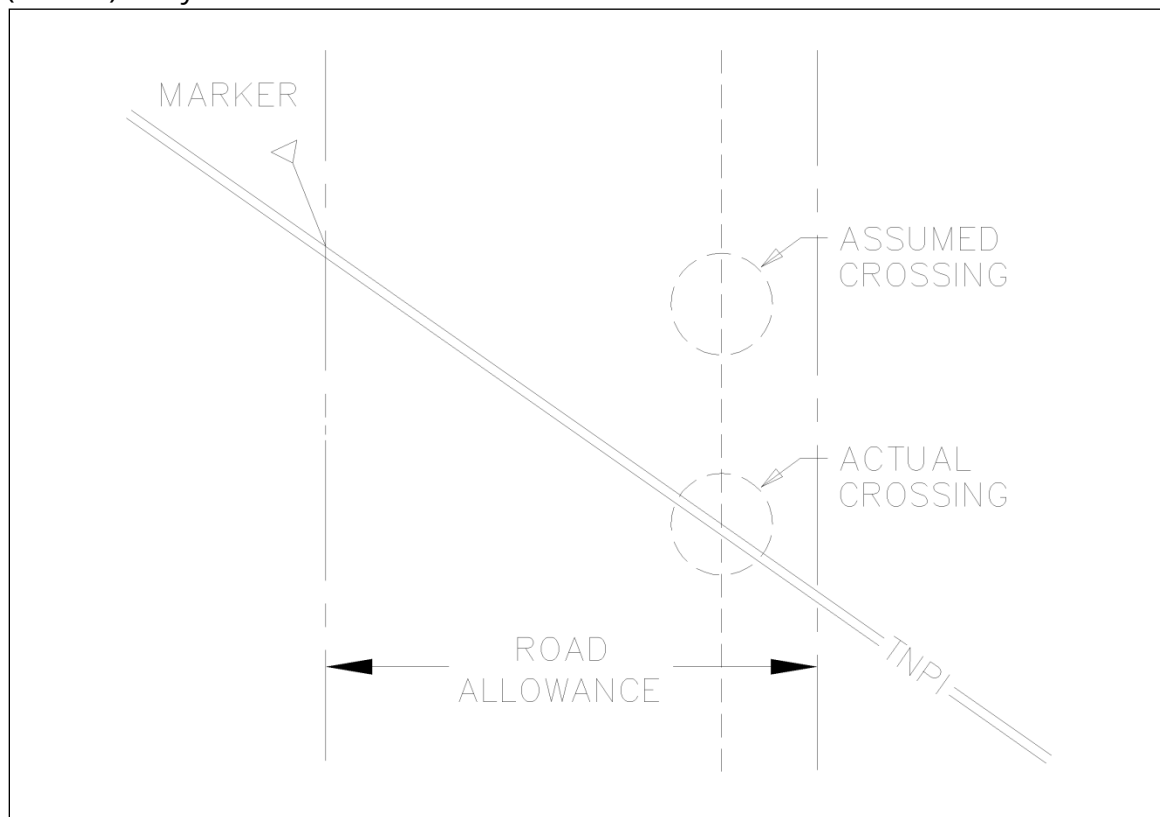


Cause: Failure to consider that pipelines exist in urban, residential areas.

Prevention: On1Call at 1-800-400-2255 or Info-Excavation (Quebec) at 1-800-663-9228 before excavation.

Situation 2

A pipeline marker is located on one side of a road allowance. The pipeline company is contacted but advises that an inspector will not be available until the next day. The contractor, who is working on the opposite side of the road assumes that the pipeline crosses the road at a right angle and decides to excavate up to a point of 1 metre (3 feet) away from the line. The pipeline does not cross the road at a right angle and is hit 3 metres (10 feet) away from the assumed location.

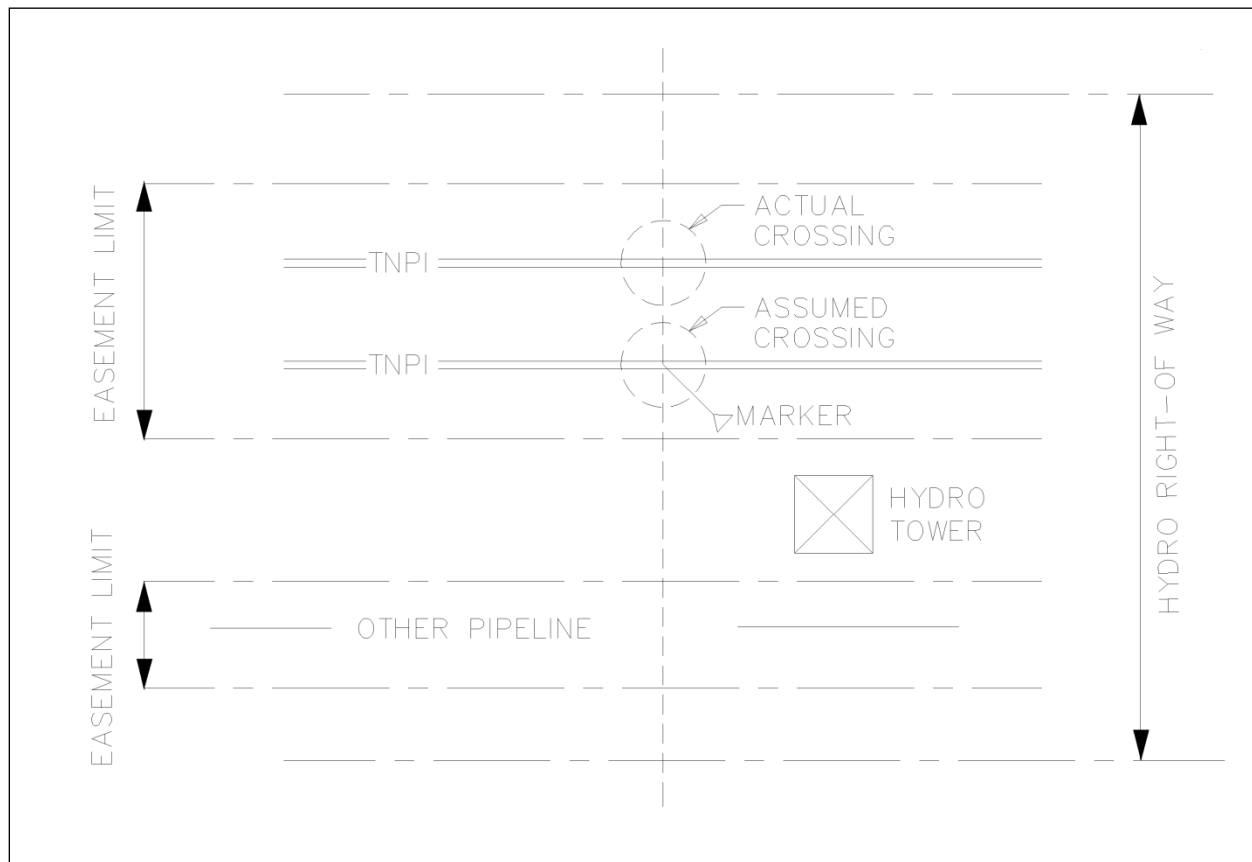


Cause: Assuming the location of the pipeline. Excavating near the pipeline before it has been located and exposed. Pipeline marker signs are often removed (i.e. snow clearing, grass cutting activities, vandalism, etc.).

Prevention: The pipeline must be adequately located and exposed so that its alignment is clear at the point of crossing before excavating in its vicinity.

Situation 3

Multiple pipelines are located in a corridor. Only one is identified with a marker. A pipeline is struck 15 metres away from the marker.

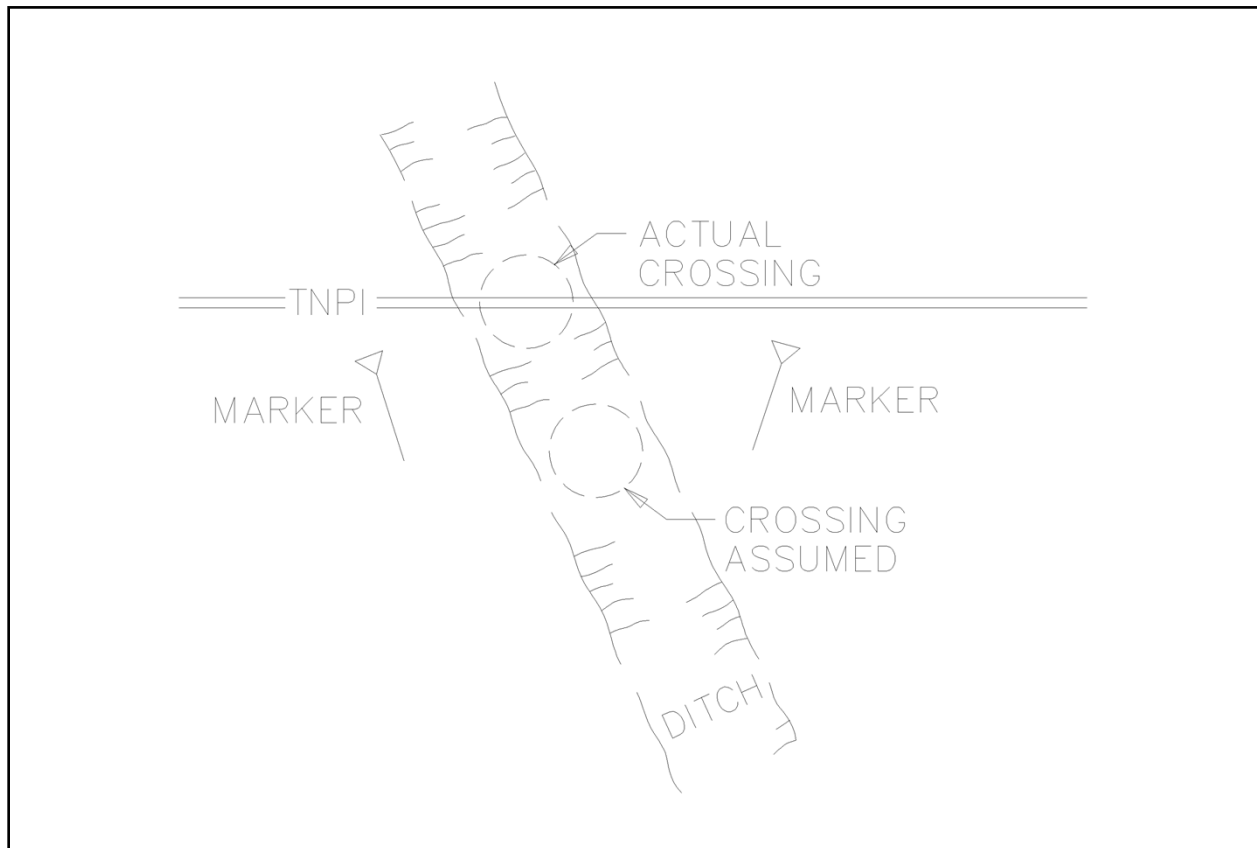


Cause: Assuming that only one pipeline exists in an area.

Prevention: Do not excavate near a pipeline marker until a company inspector has marked the location of all pipelines in the area. In addition, it should be considered that more than one pipeline company may be operating in an area.

Situation 4

A contractor assumed that the existing pipeline markers were situated exactly over the pipeline. The line was struck 5 metres away from the pipeline marker.

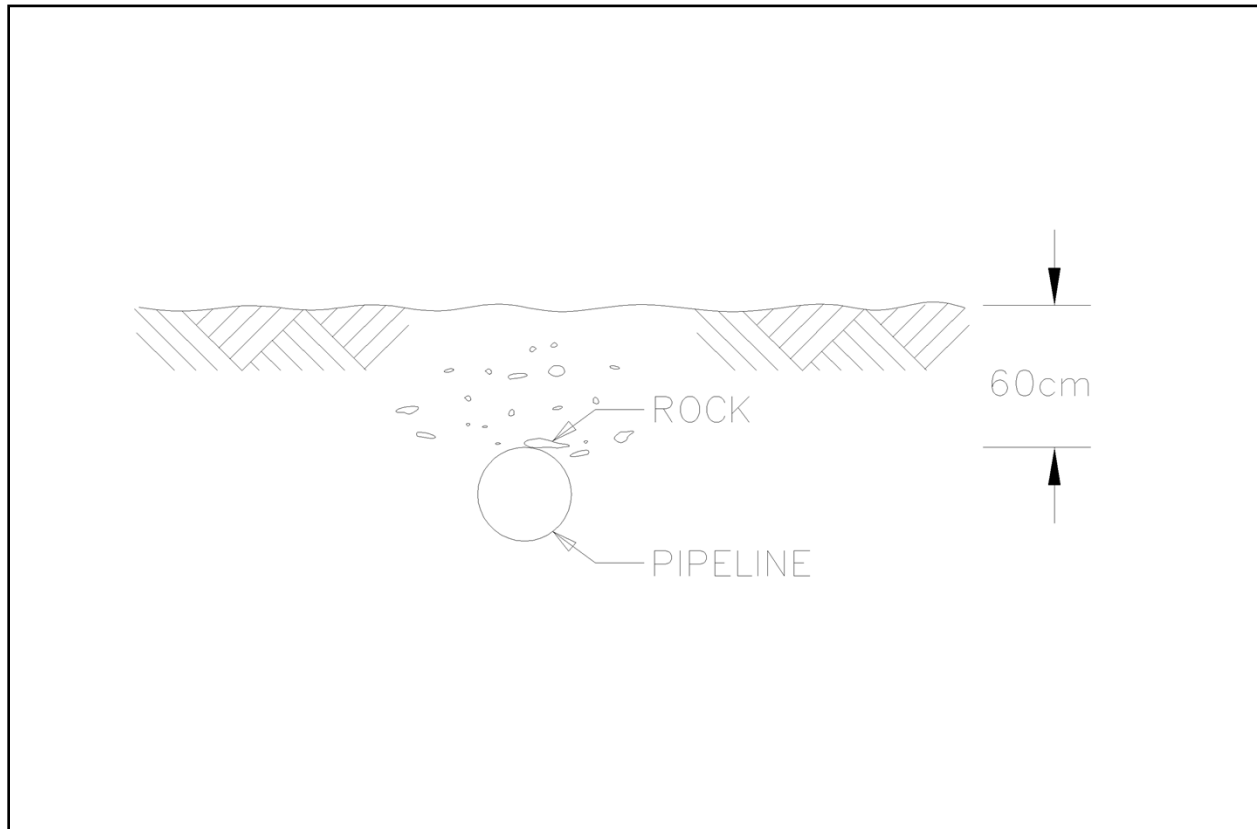


Cause: The markers had been previously removed by another contractor during uncontrolled excavation who then incorrectly reinstalled them.

Prevention: Never assume that the pipeline marker is placed directly over the pipeline.

Situation 5

A grader operator stripped the topsoil from a proposed road allowance. It was known that the pipeline was only 60 cm deep and that an inspector had been scheduled to supervise the construction of a ramp the following day. The weight of the machine caused a rock to tear away the pipeline coating and to gouge the pipeline wall.



Cause: Failure to follow specified procedures for the installation of ramps.



Trans-Northern

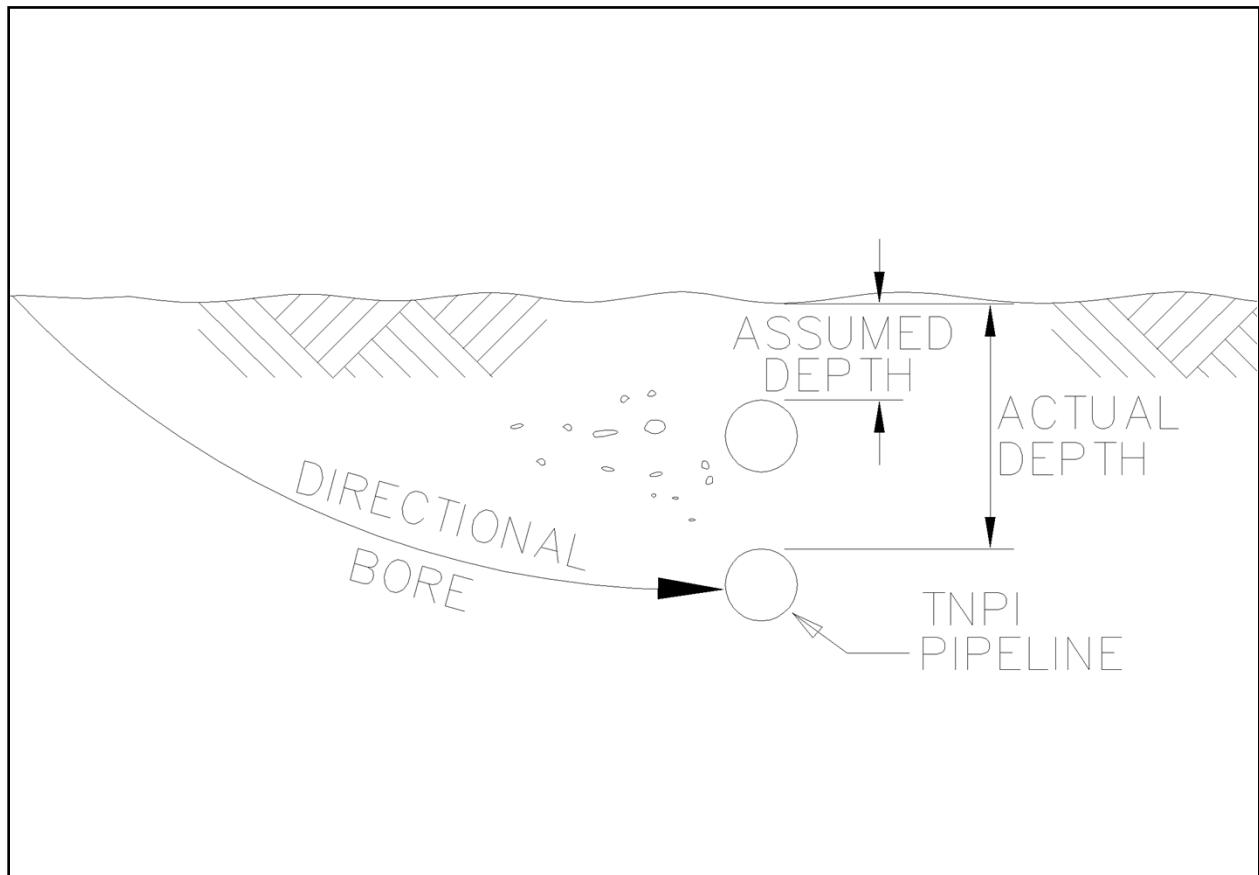
Crossing Guidelines

Doc. No.:	1744
Revision No.:	3
Revision Date:	February 5, 2019

Prevention: Use only 'stand-off' equipment when constructing ramps. Do not commence work until the inspector is on site and has approved the construction method.

Situation 6

A contractor assumed the depth of the pipeline and proceeded to install a utility line by directional boring method under the pipeline. The pipeline was hit because the actual depth of the pipeline was lower than the depth assumed by the contractor.



Cause: Pipeline depth was assumed and not confirmed by having it exposed before commencement of directional bore.



Trans-Northern

Crossing Guidelines

Doc. No.:	1744
Revision No.:	3
Revision Date:	February 5, 2019

Prevention: Never assume the location and depth of the pipeline. The pipeline must be located and exposed prior to the directional boring.

Appendix G

14 VIBRATION CONTROL PROCEDURES

The National Energy Board regulations stipulate that the excavator shall comply with the conditions imposed by the pipeline company respecting excavation, directional boring or the use of explosives. Accordingly, the company has developed the following procedures. Compliance with all the conditions is mandatory.

14.1 Procedures for Blasting, Pile Driving, Hoe Ramming or Compaction Operations

NO BLASTING, PILE DRIVING, HOE RAMMING OR COMPACTION OPERATIONS ARE PERMITTED within TNPI's 30 metre safety zone unless:

- a. AT LEAST THREE (3) WEEKS PRIOR to the initiation of blasting/pile driving operations, the contractor has submitted for TNPI's approval, a technical report (signed by a registered professional engineer/geo-scientist/ designated specialist) presenting recommended blasting/ pile driving techniques, a blasting safety plan for the proposed operations and a vibration monitoring plan. The blasting report must include all pertinent information such as recommended blasting pattern, drill hole arrays (spacing and burden), delay patterns, charge weights, distribution and arrangement of charge in hole, hole pattern, etc.
- b. Upon receipt, the blasting report shall be reviewed by TNPI's consultant together with a summary of the condition of the affected pipe(s). The summary shall address date of installation, diameter, wall thickness, grade, M.A.O.P., design pressure, coating and if applicable, the date of reconditioning and internal inspection. The location of weldments shall be confirmed, as these may be non-destructively tested and if necessary, removed prior to any blasting/pile driving operations.

Upon approval, a permit will be issued.

- c. As a condition of the permit, the contractor shall be required to monitor ALL BLASTING VIBRATIONS WITHIN 30 METRES of the pipeline(s). The monitoring, recording and interpreting of vibrations shall be by qualified personnel at all times.

- d. NO BLASTING shall take place within 5 metres of an operating pipeline.
- e. PILE DRIVING OR HOE RAMMING OPERATIONS delivering more than 10,000-foot pounds of energy on impact SHALL NOT TAKE PLACE within 6 metres of the pipeline(s) unless representative readings have been taken beforehand to determine the safe distance from the pipeline (s) for such operations.
- f. VIBRATING COMPACTORS can be permitted to operate within the pipeline safety zone at a minimum distance from the pipeline(s) calculated by multiplying the maximum static roller weight (in tons) by a safety factor of 1.5, without the requirement for vibration monitoring on the pipeline.

14.2 Monitoring

The intensity of ground vibrations generated by blasting, pile driving or compacting operations, when monitored on the existing pipeline(s) at a location nearest to the source of vibration shall not exceed a maximum horizontal peak particle velocity of 50.8 mm/sec., or a maximum vertical peak particle velocity of 101.6 mm/sec., or a maximum amplitude of vibration of 0.1524 mm, or a maximum total energy ratio of 1.0. For blasting, millisecond delays shall be used to prevent cumulative readings.

When any recording indicates either the energy ratio, peak particle velocity limits, amplitude or energy ratio have been exceeded, blasting shall be suspended. Blasting shall not be resumed until the probable cause has been determined and corrective measures are taken.

14.3 Safety

The Company's inspector shall be given a minimum of three (3) working days' notice in advance of the commencement of blasting, pile driving or compacting within 30 metres of the centre on either side of pipeline.

The contractor shall comply with the instructions of the Company's field representative regarding the procedures to be followed while working within the prescribed area.



14.4 Non-Compliance

Should the Contractor exceed the vibration criteria on two consecutive recordings, the pipeline inspector shall inform the Contractor that the blasting/pile driving shall cease. The Manager of Field Services shall be notified immediately. The Manager of Field Services or the Engineering Department shall contact the project blasting consultant to confirm the cause and remedy. Blasting/pile driving shall not resume without the approval of the Manager of Field Services or Engineering Department. Should any subsequent readings exceed the vibration limitations, the contractor shall complete the operation by other means acceptable to the company. Costs of these assessments and investigations are to be borne by the Contractor.



PIPELINE **SAFETY** IN YOUR COMMUNITY



At Trans-Northern Pipelines Inc. (TNPI), our highest priority is to operate in a safe and environmentally responsible manner. We are guided by our values: respectful, professional, trustworthy, results-focused and decisive.

ABOUT TRANS-NORTHERN PIPELINES



Our pipeline safely transports an average of **172,900 barrels** of refined fuel products daily including **gasoline, diesel, aviation and heating fuel** used by businesses and consumers.

Founded in
1949

850 km
of regulated pipeline
in **Ontario** and
Quebec

QUEBEC

Ottawa

Cornwall

Montreal

ONTARIO

Toronto

Lake Ontario

Hamilton

Nanticoke



Regulated by the
National Energy Board (NEB),
the government agency
responsible for regulating
pipelines in the interest of
all Canadians.



canadian
energy
pipeline
association
association
canadienne
de pipelines
d'énergie

We are a member of the
**Canadian Energy Pipeline
Association (CEPA)**, which means
we must demonstrate the highest
level of operational excellence,
safety and community
responsibility.

WHERE IS OUR PIPELINE?

While our pipeline may look like a straight line on this map, underground it bends and curves to accommodate changes in the landscape and terrain.

OUR PRIORITY: KEEPING YOUR COMMUNITY SAFE

According to Natural Resources Canada, pipelines are the safest method of transporting large quantities of petroleum products over long distances. Here are some of the ways we ensure the safety of our underground pipelines every day.

Monitoring the pipeline inside and out: Trained Line Controllers remotely monitor and operate the pipeline 24 hours a day, seven days a week from our control room. We look for changes that may suggest a leak or other disturbance. If we find something, we investigate immediately.

We use specialized inspection tools to look inside the pipeline. If we find something that needs further review, we conduct an integrity dig, excavating around the pipeline so that we can visually inspect it. If we find a flaw or defect, we repair it and ensure that the area is returned to pre-excavation conditions.

We also check the area around the pipeline - called the right-of-way - using aerial surveillance, vehicle patrols and by walking the pipeline route on a regular schedule.

Marker signs:

You will know our pipeline is nearby if you see one of these signs.





Training for emergency situations: While pipeline incidents are rare, we are prepared. We have an Emergency Response Plan (ERP) to guide our activities in the event of an emergency, which is approved by the NEB. You can review a copy at tnpi.ca.

We also conduct regular training to test our protocols with employees, third-party contractors, regulators, local emergency responders and others. And, we share our ERP with emergency responders and municipalities to ensure they know us and our protocols.

Working with our pipeline communities and landowners:

To get to know those who live or work near our pipeline, we participate in community events, host seminars and provide materials about pipeline safety.

We abide by the CEPA Code of Conduct for Land Representatives which means we regularly communicate with property owners and tenants about the pipeline, who to contact in case of questions and what to do if you notice anything out of the ordinary.

We always notify those living and working near our pipeline before we do any work in the area so they know what we are doing and any impact on their daily activities.

Where our pipeline crosses farm land, we work with the farmers to ensure we understand their activities and equipment and we ask them to notify us if they are making significant changes to their equipment, vehicles or if they need to excavate or conduct similar work near the pipeline. Together we can ensure the community, the environment and the pipeline are protected.

Continuous improvement: We regularly review and update our practices and processes and invest in our infrastructure. We continue to strengthen our engineering team and regularly consult with third-party subject matter experts so we can better analyze data about how fuel moves through our pipeline. We increased our integrity maintenance program and capital investment budgets and invested in modernizing our information management and reporting systems so we can better access, collect, analyze and review data about our operations.

Pumps and meters:

Along the pipeline are 17 pump stations to ensure fuel flows through the pipeline efficiently and five meter stations to continuously analyze the quality and quantity of fuel as it is transported.

GET PERMISSION BEFORE YOU WORK

Unauthorized construction and digging are leading causes of damage to pipelines. And, our pipeline is not the only underground utility as other pipelines or cables may be in the same area.

It's the law to secure approval before:

- Installing underground utility cabling/piping
- Putting up a fence, poles or posts
- Building above or in ground swimming pools
- Installing drainage or irrigation systems
- Landscaping activities
- Paving, blasting or digging

You also need permission to drive heavy machinery off a public road or to cross the right of way.



Get a FREE locate - 24 hours a day, seven days a week - which will tell you all of the utilities in the area.

Plan your work

Do you need a crossing request or permit?

Contact us at **crossingrequestseast@tnpi.ca**

We will:

- Verify the pipeline location within five business days
- Discuss permit requirements
- Within 10 business days, issue a permit or explain why a permit cannot be issued and visit the site to mark the pipeline and right of way limits so everyone knows where the pipeline is located before work begins
- Send an inspector, if needed

IF YOU SUSPECT A LEAK OR IF YOU STRIKE THE PIPELINE:



Stop all work, shut off all machinery and move to a safe location on foot

911

Call 911



Call our 24 hour emergency hotline
1-800-361-0608



Do not attempt to repair the pipe or operate any valves

See something out of the ordinary?

Call us at 1 800 361 0608.

Watch for and call if you see:

- Vandalism or suspicious behaviour near or at the pipeline or facilities
- Digging, excavating, tunneling or tree planting near the pipeline
- Any contact with or damage to the pipeline
- Damage to marker signs
- Tall grasses, fallen trees, dirt or debris piles near the pipeline or in the right of way



Tran -

Trans-Northern Pipelines Inc.



tnpi.ca



info@tnpi.ca



National Energy Board

[Home](#) > [Safety & Environment](#) > [Damage Prevention](#) > Living and Working Near Pipelines

Living and Working Near Pipelines



Pipelines are the safest method to transport products, such as natural gas, oil or other commodities, across the country. If these pipelines are damaged the results could be very serious. You have an important role to play to ensure safety. Please, click or call before you dig.

Click or Call Before You Dig

Contacting the one-call notification centre is the first step in the damage prevention process for all buried infrastructure. All NEB regulated pipelines are required to register their buried infrastructure with one-call notification centres. The national web portal at www.clickbeforeyoudig.com provides links and information for one-call notification centres across Canada.

Before undertaking a ground disturbance, you must click or call the one-call centre serving your area to contact the pipeline company and obtain written consent for the ground disturbance within the prescribed area (safety zone) 30 metres (100 feet) perpendicularly on either side of the pipe. You must also obtain written consent from the pipeline company if you want to construct a facility near the pipeline. If you are unable to reach an agreement with the pipeline company, contact the National Energy Board at 1-800-899-1265.

Did you know?

- Unauthorized construction, installation of a facility or ground disturbance over or near a pipeline is illegal.
- The pipeline company must inform you within 10-business days whether consent for your project has been granted or refused. If consent has been refused, the pipeline company must inform you of the reasons.
- The pipeline company has three business days to respond to a request to locate its pipeline.



Pipeline signs
and marker posts
do not indicate
the exact location
of a pipeline
or right of way.

ALWAYS call before you dig.

The Pipeline Right of Way

A pipeline is installed within a strip of land referred to as a right of way. The pipeline company has acquired rights to use this land for the construction, operation and maintenance of its pipelines, however, ownership of the land remains with the landowner.

Activities within the right of way are governed by the NEB Act, the *NEB Pipeline Damage Prevention Regulations – Authorizations* and *NEB Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*, and easement agreements negotiated between the landowner and the pipeline company.

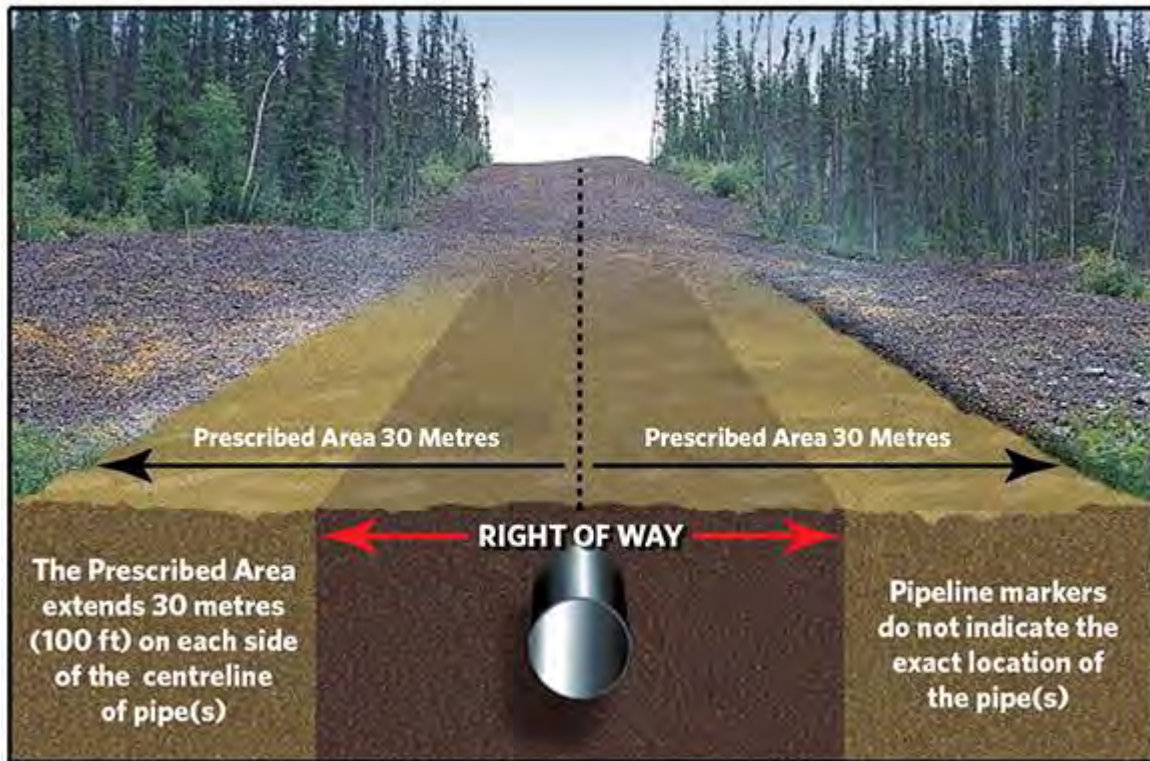
To ensure safety, you will need to contact the company to get written consent for a number of different activities on the right of way. These activities include, but are not limited to.

- operating vehicles or mobile equipment over the right of way where a roadway does not exist
- Reducing the depth of soil covering the pipeline
- Agricultural Ploughing or Tilling 45 cm and below
- Ground levelling
- Installing drainage systems

- Augering
- Fencing

The Prescribed Area

The prescribed area, also known as the safety zone extends 30 metres (100 feet) on either side of the centreline of the pipe. To ensure safety, ground disturbance activities within this zone require approval from the pipeline company. If you are unable to obtain consent, you may apply to the Board for approval of the activity.



Temporary Prohibition

There may be situations where a ground disturbance activity outside of the prescribed area may pose a potential hazard to the pipe. When a temporary prohibition area is designated, no ground disturbance activity may be performed in this area until

- the end of the third working day after the day on which the request is made; or
- at any later time that is agreed to between the pipeline company and the person making the request.

Confirm with the company representative that the company's pipeline in the area has been marked by the locator and that you understand the meaning of the various stakes and markings. A misunderstanding could cause you to damage a pipe, endangering your own life and that of others.

Safety Checklist

SAFETY CHECKLIST when planning activities near a pipeline:

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 constructing a facility, conducting activities causing a ground disturbance, or crossings in the vicinity of a pipeline.
4. **Obtain the pipeline company's written consent** for the construction of facilities across, on, along or under a pipeline, conducting activities causing a ground disturbance in the prescribed area, or crossing a pipeline with a vehicle or mobile equipment.
5. **Make a locate request** at least three working days before the day on which the construction or ground disturbance activity is started, by calling the one-call centre, or by calling the pipeline company where there is no one-call centre, to have the pipe located and marked.
6. **Be on site** when the pipeline is located, and **know the meaning of the pipeline markings**.
7. **Review NEB requirements** with all persons working on your behalf, including employees, contractors and subcontractors, to ensure they are aware of their obligations. Keep documents with safety requirements and guidance on site.
8. **Expose the pipe by hand digging or other acceptable excavation techniques accepted by the pipeline company** prior to any mechanical excavation within three metres of the pipe. **Follow the instructions of the pipeline company's authorized field representative.**
9. **Notify the pipeline company** prior to backfilling over the pipe or facilities, where the pipe or facilities have been exposed. **Follow the instructions of the pipeline company's authorized field representative.**
10. **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 pipe and must be assessed by the pipeline company.

NEB Regulated Pipelines

The main pipelines regulated by the NEB are operated by:

Alliance Pipeline Ltd.
Enbridge Pipelines Inc.
Enbridge Pipelines (NW) Inc.
Foothills Pipe Lines Ltd.
Gazoduc Trans Québec & Maritimes Inc.
Kinder Morgan Cochin ULC
Maritimes & Northeast Pipeline Management Ltd.
NOVA Gas Transmission Ltd.
Trans Mountain Pipeline Inc.
Trans-Northern Pipelines Inc.
TransCanada PipeLines Limited
Westcoast Energy Inc., carrying on business as Spectra Energy Transmission

Many smaller pipelines are also regulated by the NEB. If you have a question about the NEB's jurisdiction over a particular pipeline, please call us at 1-800-899-1265  or visit our Web site at www.neb-one.gc.ca.

Working together for pipeline safety.

The following provides information on one-call centres within Canada:

National web portal for one-call notification centres in Canada: www.clickbeforeyoudig.com
 This portal will also tell you where you have to contact the pipeline companies directly.

Call or click before you dig! Contact your one-call centre.
--

British Columbia www.bconecall.bc.ca BC One Call: 1-800-474-6886	Ontario www.on1call.com Ontario One Call: 1-800-400-2255
Alberta albertaonecall.com Alberta One Call Corporation: 1-800-242-3447	Québec www.info-ex.com Info-Excavation: 1-800-663-9228
Saskatchewan www.sask1stcall.com Sask First Call: 1-866-828-4888	Atlantic Canada www.info-ex.com Info-Excavation: 1-866-344-5463 1-800-663-9228
Manitoba www.clickbeforeyoudigmb.com Click Before You Dig MB: 1-800-940-3447	
Contact the pipeline company directly in the Northwest Territories.	

About the National Energy Board

The National Energy Board regulates pipelines, energy development and trade in the Canadian public interest.

The NEB regulates activities on or adjacent to rights of way under Board jurisdiction in the interests of the protection of property, the environment, and the safety of the public and of the pipeline company's employees. NEB staff regularly perform audits and inspections of pipeline companies to ensure their compliance.

Contact the NEB

Each ground disturbance or construction activity is unique, and this guide cannot deal with all cases. If you need further assistance with any ground disturbance or construction activity near a federally regulated pipeline, please call us at 1-800-899-1265 and ask for an Operations Inspector responsible for damage prevention or email dpinfo@neb-one.gc.ca

The *National Energy Board Act*; the *National Energy Board Pipeline Damage Prevention Regulations* and other NEB publications are available from:

The Publications Office

National Energy Board

517 Tenth Avenue SW

Calgary, Alberta

T2R 0A8

E-mail: publications@neb-one.gc.ca

Telephone: 403-299-3561

Telephone (toll free): 1-800-899-1265

Facsimile: 403-292-5503

Facsimile (toll free): 1-877-288-8803

TTY (teletype): 1-800-632-1663

Our publications are also available on our Website: www.neb-one.gc.ca

Date modified: 2016-08-12

National Energy
Board



Office national
de l'énergie

Pipeline Damage Prevention

Ground Disturbance, Construction and Vehicle Crossings

June 2016



Permission to Reproduce

Materials may be reproduced for personal, educational and/or non-profit activities, in part or in whole and by any means, without charge or further permission from the National Energy Board, provided that due diligence is exercised in ensuring the accuracy of the information reproduced; that the National Energy Board is identified as the source institution; and that the reproduction is not represented as an official version of the information reproduced, nor as having been made in affiliation with, or with the endorsement of the National Energy Board.

For permission to reproduce the information in this publication for commercial redistribution, please e-mail:
info@neb-one.gc.ca

Autorisation de reproduction

Le contenu de cette publication peut être reproduit à des fins personnelles, éducatives et/ou sans but lucratif, en tout ou en partie et par quelque moyen que ce soit, sans frais et sans autre permission de l'Office national de l'énergie, pourvu qu'une diligence raisonnable soit exercée afin d'assurer l'exactitude de l'information reproduite, que l'Office national de l'énergie soit mentionné comme organisme source et que la reproduction ne soit présentée ni comme une version officielle ni comme une copie ayant été faite en collaboration avec l'Office national de l'énergie ou avec son consentement.

Pour obtenir l'autorisation de reproduire l'information contenue dans cette publication à des fins commerciales, faire parvenir un courriel à : info@neb-one.gc.ca

© Her Majesty the Queen in Right of Canada 2016 as represented by the National Energy Board

ISBN:
Paper NE23-186/2016E
Cat. No. 978-0-660-05868-9

PDF NE23-186/2016E-PDF
Cat. No. 978-0-660-05867-2

This title is published separately in both official languages.

Copies are available on request from:
Library and Publication Services
National Energy Board
517 Tenth Avenue SW Calgary, Alberta T2R 0A8

Telephone:
403-292-4800
1-800-899-1265

Fax:
403-292-5503

Copies are available for pick-up at the NEB office:
Library
Second Floor

Email: publications@neb-one.gc.ca
www.neb-one.gc.ca

This publication is available upon request in multiple formats

Printed in Canada

© Sa Majesté la Reine du Chef du Canada 2016 représentée par l'Office national de l'énergie

ISBN :
Papier NE23-186/2016F
No de cat. 978-0-660-05870-2

PDF NE23-186/2016F-PDF
No de cat. 978-0-660-05869-6

Le titre est publié séparément dans les deux langues officielles.

Pour obtenir des exemplaires sur demande :
Bibliothèque et bureau des publications
Office national de l'énergie
517, Dixième Avenue S.-O. Calgary (Alberta) T2R 0A8

Téléphone :
403-292-4800
1-800-899-1265

Télécopieur :
403-292-5503

Des exemplaires sont également disponibles à la bibliothèque de l'Office
Deuxième étage

Courriel : publications@neb-one.gc.ca
www.one-neb.gc.ca

On peut obtenir cette publication sur supports multiples, sur demande.

Imprimé au Canada

WARNING NOTE

Each ground disturbance, construction activity or vehicle crossing is unique and this guide cannot deal with all cases. Its purpose is to help you determine whether you must obtain consent, where to obtain it and how to obtain it. This document should be regarded as a guide and the *National Energy Board Act*, and the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations and National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*, the Act and the Regulations shall take precedence.

This booklet also contains a consolidation of the:

National Energy Board Pipeline Damage Prevention Regulations – Authorizations, SOR/2016-124
National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies, SOR/2016-133

Users of this office consolidation are reminded that it is prepared for convenience of reference only.

www.neb-one.gc.ca

1-800-899-1265





TABLE OF CONTENTS

1. National Energy Board Regulations	1
One-Call Centres	1
The National Energy Board Regulations for Pipeline Damage Prevention	2
Who is Affected by the Regulations?	2
What is a Ground Disturbance Activity?	3
What is the Prescribed Area?	4
What is a Facility?	4
Which Pipelines are under National Energy Board Jurisdiction?	4
What Do the Regulations Provide?	5
2. Obtaining Consent	6
What Activities Require Consent from the Pipeline Company?	6
What Activities Do Not Require Consent?	6
How to Obtain Consent from the Pipeline Company	7
Is There a Time Limit?	8
When Do You Require Approval from the National Energy Board?	8
How to Apply to the National Energy Board for Authorization	8
3. Your Responsibilities	9
Your Field Responsibilities	9
Your Responsibilities After Construction	11
4. Unauthorized Activities	12
Contact us	12
5. Safety Checklist	13
Appendix 1 – National Energy Board Contact	14
Appendix 2 – One-Call Centres	15
Appendix 3 – Damage Prevention in the <i>National Energy Board Act</i>	16
Appendix 4 – Regulations and Related Guidance	19
<i>National Energy Board Pipeline Damage Prevention Regulations – Authorizations</i>	19
<i>National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies</i>	27
Appendix 5 – Mailing List Request Form	35

.....



1. NATIONAL ENERGY BOARD REGULATIONS

The National Energy Board (NEB or the Board) takes all available actions to protect Canadians and the environment. As a result of on-going regulatory efforts and continued monitoring, pipelines continue to be a safe method to transport products, such as natural gas, oil or other commodities, across the country.

Preventing damage to pipelines is a shared responsibility. Pipeline companies and anyone living or working near pipelines have an important role to ensure that activities near pipelines are conducted safely. The *National Energy Board Act* (the NEB Act) and its regulations define the responsibilities of both pipeline companies and anyone planning to conduct an activity near a pipeline. It is often human error that causes damage to pipelines that may put your safety, your community and the environment at risk. Please be aware of pipelines and always click or call before you dig!



The purpose of the NEB's regulations for pipeline damage prevention is to ensure the safety of all persons living or working near pipelines. The regulations provide a framework to allow activities near pipelines to occur if they can be conducted safely.

The NEB is committed to continual improvement of the regulatory framework for pipeline damage prevention. Should you have any questions or feedback on this guidance, please send them to DPinfo@neb-one.gc.ca.

One-Call Centres

National web portal for one-call notification centres in Canada: www.clickbeforeyoudig.com

This portal will also tell you where you have to contact the pipeline companies directly.

Call or click before you dig! Contact your one-call centre.

British Columbia

www.bconecall.bc.ca

BC One Call: 1-800-474-6886

Alberta

<http://albertaonecall.com>

Alberta One Call Corporation: 1-800-242-3447

Saskatchewan

www.sask1stcall.com

Sask First Call: 1-866-828-4888

Manitoba

<http://www.clickbeforeyoudigmb.com/>

Click Before You Dig MB: 1-800-940-3447

Ontario

www.on1call.com

Ontario One Call: 1-800-400-2255

Québec

www.info-ex.com

Info-Excavation: 1-800-663-9228

Atlantic Canada

www.info-ex.com

**Info-Excavation: 1-866-344-5463
1-800-663-9228**

Contact the pipeline company directly in the Northwest Territories.

The National Energy Board Regulations for Pipeline Damage Prevention

Experience has shown that many pipeline incidents are caused by contractors or others working near the pipeline. Unsafe construction and ground disturbance practices can damage a pipeline and the environment, sometimes resulting in injury or death to construction company workers and bystanders. In addition to the dangers to people and the environment, such damage can lead to expensive repairs as well as a loss of revenue and essential services.

The NEB is focused on the safety of pipelines under its jurisdiction. Under section 112 and section 48(2) of the NEB Act, the NEB developed the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* (DPR – Authorizations) and *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies* (DPR – Obligations of Pipeline Companies) (the Regulations). Following these regulations will reduce the likelihood of damage to pipeline company facilities and enable you to complete your project safely and legally.

“Pipeline” in section 2 of the NEB Act is defined as follows: “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.

“Pipe” in section 2 of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* means a pipe that is part of a pipeline and that is used or is to be used for the transmission of hydrocarbons or any other commodity.

Who is Affected by the Regulations?

Under section 112 of the NEB Act, the following are prohibited unless authorized through the Regulations or a Board order: ground disturbance activities within the prescribed area; facility construction across, on, along or under a pipeline; and vehicle crossings of a pipeline

The *DPR – Authorizations* applies to anyone who will be: undertaking an activity that causes a ground disturbance in the prescribed area, which extends 30 metres perpendicularly on either side from the centerline of the pipe (*DPR – Authorizations*, section 2); constructing a facility across, on, along, or under a pipeline; or crossing a pipeline (which includes the right-of-way) with a vehicle or mobile equipment. Activities to a depth less than 30 cm that do not reduce the total cover over the pipe at the time of construction and cultivation to less than 45 cm are not considered ground disturbance (NEB Act, section 2).

The *DPR – Obligations of Pipeline Companies* sets out responsibilities of pipeline companies concerning proposed ground disturbance activities, construction near pipelines and vehicle crossings. The NEB requires companies to anticipate, prevent, manage and mitigate potentially dangerous conditions associated with their pipelines.

What is a Ground Disturbance Activity?

Under section 2 of the NEB Act, ground disturbance does not include:

- cultivation to a depth of less than 45 cm below the surface of the ground
- any activity to a depth of less than 30 cm and that does not result in reduction of the depth of earth cover over the pipeline less than that approved at time of construction

Activities causing ground disturbance can include, but are not limited to, the following:

- digging
- excavation
- trenching
- ditching
- tunnelling
- boring/drilling/pushing
- augering
- topsoil stripping
- land levelling/grading
- plowing to install underground infrastructure
- tree planting
- clearing and stump removal
- subsoiling
- blasting/use of explosives
- quarrying
- grinding and milling of asphalt/concrete
- seismic exploration
- driving fence posts, bars, rods, pins, anchors, or pilings
- crossing of buried pipelines or other underground infrastructure by heavy loads off the travelled portion of a public roadway¹



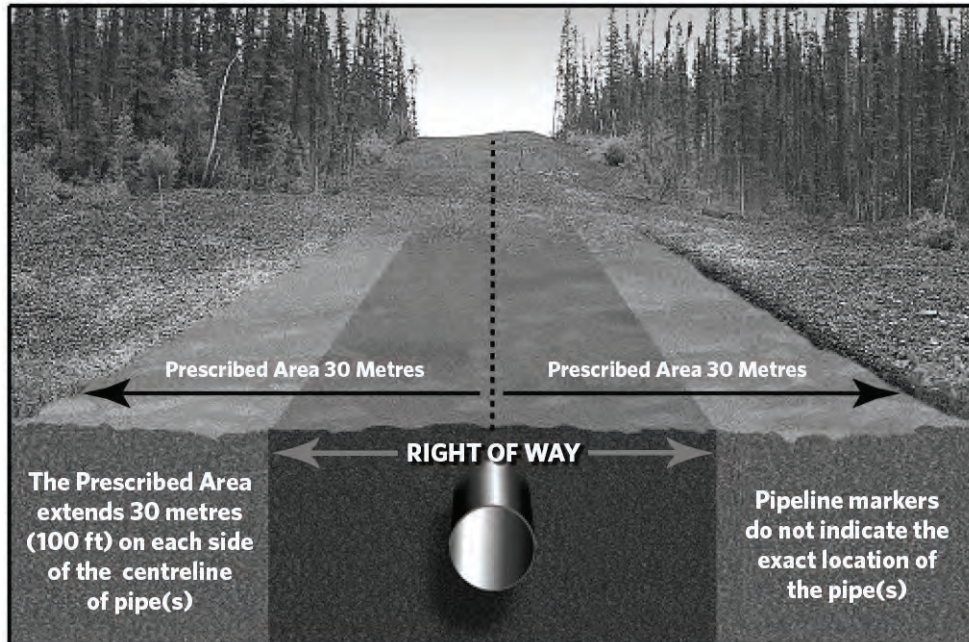
¹ Ref. CSA Z247 *Damage Prevention for the Protection of Underground Infrastructure*

What is the Prescribed Area?

The *DPR – Authorizations* provides that the prescribed area extends 30 metres perpendicularly in both directions from the centreline of a pipe. The intent of the prescribed area is to ensure:

- the protection of pipelines from damage that may result from activities causing ground disturbance; and
- the safety of all persons living or working near the pipeline.

Prescribed Area



What is a Facility?

In general, a facility includes but is not limited to:

- a structure (anything built or installed), for example: a fence, a concrete conduit structure, a swimming pool, a retaining wall, a shed;
- a highway, private road, lane, parking lot, walkway;
- a railway;
- a drainage or irrigation system, including dykes, ditches and culverts;
- a telecommunication line or power line; and
- a pipe, for example: a water main, a sewer, a gas line, an oil line.

Which Pipelines are under National Energy Board Jurisdiction?

In general, the NEB regulates natural gas, oil, and commodity pipelines that extend beyond provincial, territorial or national boundaries.

What Do the Regulations Provide?

The *DPR – Authorizations* explains the legal conditions under which ground disturbance in the prescribed area and construction of facilities near the pipeline (including the right of way) can be conducted safely. It also provides the requirements for authorization to cross a pipeline (including the right of way) with a vehicle or mobile equipment. The *DPR – Obligations of Pipeline Companies* outlines responsibilities of the pipeline company to you and the NEB.

If you cannot meet all the requirements of the Regulations, including obtaining the pipeline company's consent, you can apply to the Board for an order authorizing the ground disturbance activity.

If you have any questions about the Regulations, contact the NEB. Contact information is included in Appendix 1 of this guide.

It is illegal to proceed with: unauthorized construction of a facility across, on, along or under a right of way; unauthorized ground disturbance activity within the 30 metre (100 foot) prescribed area; or unauthorized vehicle or mobile equipment crossings.



2. OBTAINING CONSENT

What Activities Require Consent from the Pipeline Company?

Consent from the pipeline company is required for:

- Construction of a facility across, on, along, or under a pipeline (including the right of way);
- Ground disturbance activities in the prescribed area, which extends 30 metres (100 feet) from each side of the centreline of the pipe; and
- Operation of a vehicle or mobile equipment across a right of way, outside the travelled portion of a highway or public road.

What Activities Do Not Require Consent?

Overhead Lines

- While consent of the pipeline company is not required to construct an overhead line across a pipeline (assuming that ground disturbances do not occur in the prescribed area or that the construction does not involve vehicle or mobile equipment crossing), a person constructing an overhead line across the pipeline ROW must, prior to construction: obtain from the pipeline company the safety practices to be followed while working in the vicinity of its pipes; make a locate request; and wait for the pipeline company to mark their pipeline and explain the significance of those markings.
- Any person undertaking the construction of an overhead line across a pipeline must also comply with the applicable federal and provincial laws for the construction of the overhead lines. Ground to wire clearances are determined by a number of factors addressed in applicable codes and standards for the construction of overhead lines.
- Aerial warning devices must be installed and maintained by the person constructing the overhead line where it crosses the pipeline, if the pipeline is patrolled by aircraft, for the safety of pipeline company employees, the public and the pipeline.
- Poles, pylons, towers, guys, anchors or supporting structures must not be constructed or placed across, on, along or under the pipeline. If a third party proposes to place such structures on the pipeline ROW, separate authorization must be obtained in accordance with the procedures outlined in the other sections of the *DPR – Authorizations*, including section 7 and section 10.

Maintenance of an Existing Facility

- If maintenance of an existing facility in the prescribed area causes a ground disturbance, the person engaged in the maintenance must make a locate request in accordance with section 3 of *DPR – Authorizations* and obtain the necessary information from the pipeline company, including written safety practices, and an explanation of the markings made as a result of the locate request. If performing mechanical excavation within 3 metres of the pipe, the person engaged in the maintenance must follow the requirements for such excavation outlined in paragraph 10(3)(c) of *DPR – Authorizations*.
- The person engaged in the maintenance must also comply with the instructions of the pipeline company's authorized field representative regarding the procedures that are to be followed during the activity and that relate to the pipeline's safety and security.

.....

- If interference with or alteration of a pipe becomes necessary, the person engaged in the maintenance must obtain the pipeline company's written consent to interfere with or alter the pipe.
- The person engaged in the maintenance must carry out any activity that involves the interference with or alteration of a pipe under the pipeline company's supervision. As well, the person engaged in the maintenance must immediately notify the pipeline company of any contact with a pipe or its coating during the activity.
- Unless otherwise agreed on by the pipeline company and the person that is engaged in the activity, the facility owner must notify the pipeline company at least 24 hours before backfilling over a pipe.
- See "Your Field Responsibilities" in this guidance for further information.

Crossing a Pipeline with an Agricultural Vehicle or Mobile Equipment

The *DPR – Authorizations* provides that persons operating agricultural vehicles or mobile equipment across pipelines may do so in low-risk areas, under certain conditions.

The operation across the pipeline of a vehicle or mobile equipment that is used for an agricultural activity is authorized if the following conditions are met:

- the loaded axle weight and tire pressures of the vehicle or mobile equipment are within the manufacturer's approved limits and operating guidelines; and
- the point of crossing has not been the subject of a notification from the pipeline company that crossing at that location could impair the pipeline's safety or security.

This applies to vehicles or mobile equipment used for agricultural activities in the production of crops and the raising of animals and includes pasturing and cultivation activities such as tillage, plowing, disking and harrowing.

If you have any doubts, please contact the applicable pipeline company or the NEB (see Appendix 1 for NEB contact information).

How to Obtain Consent from the Pipeline Company

1. Contact the pipeline company for a copy of their technical guidelines. These guidelines set out the information you need to include in your application to the pipeline company.
2. Prepare your request for consent following the pipeline company's guidelines.
3. If you have any questions pertaining to your project, contact the pipeline company **before** you submit your request for consent. They will discuss your project with you and, if necessary, provide assistance.
4. Submit your request for consent to the pipeline company.

Within ten working days of receiving your request, the pipeline company must either give you its consent or provide reasons for denying it. **If consent is denied, you may apply to the NEB for a review of your request under the NEB Act (section 112) and the *DPR – Authorizations* (section 14).**

If you decide to change the design, location, or type of facilities to be constructed **after** the pipeline company gives its consent, the pipeline company must agree to the changes **before** you start your work.

.....

Is There a Time Limit?

In general, the pipeline company's consent will lapse if all work is not completed within two years of the date that consent was given. However, this time limit may be changed if you and the pipeline company agree.

The pipeline company may suspend the consent given if technical details and conditions are not followed or unsafe construction practices are used (*DPR - Obligations of Pipeline Companies*, section 10). The NEB may order work to stop if the Board considers it necessary for the safety and security of the pipeline.

When Do You Require Approval from the National Energy Board?

If you cannot obtain the pipeline company's consent or you cannot comply with all the requirements in the Regulations, you must obtain the NEB's approval before starting: construction of a facility across, on, along, or under pipeline (including the right of way); any ground disturbance activity in the prescribed area (30 metres from either side of the centreline of the pipe); or the operation of a vehicle or mobile equipment across the pipeline (including the right of way).

You will also have to ask the NEB for its approval if:

- You cannot meet the conditions required by the pipeline company
- The pipeline company has suspended and not reinstated its consent for your proposed activity

Mining activities within 40 metres of a pipeline right of way require consent from the NEB (see NEB Act, section 81).

How to Apply to the National Energy Board for Authorization

An application to the Board for authorization is a letter or document that should include the location and full details of the proposed activity. The Board's Filing Manual provides guidance regarding the type of information the Board would typically need for a section 112 application, including information on the purpose and location of the activity, and the rationale for seeking approval from the Board. The applicant is requested to provide as much information as possible about the efforts made to obtain the pipeline company's consent for the activity prior to making the application to the Board, including the reasons given by the pipeline company for withholding its consent.

The Filing Manual can be accessed online at www.neb-one.gc.ca. The Filing Manual is 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
517 Tenth Avenue S.W.
Calgary, AB T2R 0A8

Have Questions? Don't hesitate to contact us. Pipeline damage prevention staff are available by phone at 1-800-899-1265 or by email at DPinfo@neb-one.gc.ca.

Applications may be filed with the Board by mail, courier or by facsimile by calling the toll free number at 1-877-288-8803. Applications can also be uploaded through the NEB's Applications and Filings Portal on the NEB website at Home / Applications and Filings / Submit Applications and Regulatory Documents / File under the NEB Act / OPR: NEB Act - Guide C (<http://www.neb-one.gc.ca/pplctnflng/sbmt/nbpr-eng.html>).

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.

3. YOUR RESPONSIBILITIES

Your Field Responsibilities

Please refer to the *DPR – Authorizations* for all third party responsibilities (see Appendix 4).

Once the pipeline company has given its written consent, you must follow these steps to comply with the Regulations.

1. For the construction of a facility or ground disturbance activity, contact a one-call centre

You must contact a one-call centre, or the pipeline company directly if one call services are not available in your area, to submit a locate request at least three working days before starting any work (except in the case of emergencies). The company must locate the pipe within three working days after the date of the request. This period of time may be extended if both you and the pipeline company agree.

Confirmation must be received from the pipeline company that all of the pipeline company's pipes in the vicinity of the construction or ground disturbance have been marked and the pipeline company must have clearly explained the significance of the markings to you. You must also receive written information from the pipeline company regarding the safety practices to be followed while working in the vicinity of its pipe or in the prescribed area. A misunderstanding could cause you to damage a pipe, endangering your own life and that of others.

2. Follow the instructions of the pipeline company

After written consent is obtained, and work is to start, you must comply with the safety measures in the company's consent, the regulations, and the instructions of the pipeline company's authorized field representative regarding the procedures that are to be followed while carrying out the ground disturbance activity in the prescribed area. This includes stopping the work if it may impair the pipeline's safety or security.

3. Duty to inform

If you are planning to conduct a ground disturbance or construction activity, or to operate a vehicle across a pipeline, you must inform anyone working on your behalf, including employees, contractors and subcontractors, of their obligations under the *DPR – Authorizations*.

If you are renting out your land, you will want to talk to your tenants about the *DPR – Authorizations* as they will also be expected to abide by them.

4. Provide notice for backfilling and report any damage immediately

You must provide the pipeline company with 24 hours' notice before backfilling over the pipe. **Any contact with the pipe or its coating must be reported to the pipeline company immediately as well as any other damage that may have occurred.** Even incidents which seem minor at the time – small dents and scratches on the pipe or any damage to the coating – could lead to serious problems such as corrosion which could eventually cause the pipe to rupture.

At no time are you allowed to move or alter the pipe or its fittings, or in any other way interfere with the pipe without the written consent of the pipeline company, and then only if the work is done under its direct supervision. (See *DPR – Authorizations*, paragraphs 10 (3)(e) and (f))

5. Observe the temporary prohibition area

The temporary prohibition area differs from and should not be confused with the 30 metre (100 feet) prescribed area. When a pipeline company receives a locate request for a ground disturbance activity, they may designate a temporary prohibition area in the vicinity of the pipeline which may extend beyond the 30 metre prescribed area. This may occur when there are situations where a ground disturbance activity outside of the prescribed area may pose a potential hazard to the pipe. When a temporary prohibition area is designated, no ground disturbance activity may be performed in this area until:

- the end of the third working day after the day on which the request is made; or
- at any later time that is agreed to between the pipeline company and the person making the request.

6. Follow the rules for mechanical excavation within three metres of the pipe

(See *DPR – Authorizations*, paragraph 10(3)(c))

Ground disturbance using mechanical equipment is not permitted within three metres (10 feet) of the pipe unless:

- i. if the excavation runs parallel to the pipe, the pipe has been exposed by hand at sufficient intervals to confirm the pipe's location or the pipeline company has used a method that would permit it to confirm the pipe's exact location and has informed the person of that location,
- ii. if the excavation crosses the pipe, the pipe has been exposed by hand at the point of crossing or the pipeline company has used a method that would permit it to confirm the pipe's exact location, has informed the person of that location and has confirmed that the pipe is at least 60 cm deeper than the proposed excavation, and
- iii. if ground conditions render it impractical to locate the pipe using any of the methods set out in (i) and (ii), the pipeline company directly supervises any excavation.

When boring directionally or using explosives, you must meet the pipeline company's conditions.

7. Comply with the pipeline company's conditions/instructions or the conditions of a Board approval

The pipeline company may have made its consent conditional on meeting certain requirements. You must comply with the company's conditions, as well as with the instructions of any authorized pipeline company field representative regarding procedures when working near the pipeline.

If the Board has approved the activity, you must comply with the conditions outlined in the Board's order.

Your Responsibilities After Construction

(See *DPR – Authorizations*, sections 8 and 11)

If you are the owner of the facility that is constructed across, on, along or under a pipeline, you must maintain the facility in good condition so that it will not impact the safety of the pipeline. This remains your responsibility until you can show that someone else has taken over the ownership of the facility, or until it has been removed or abandoned in a manner that does not adversely affect the pipeline's safety and security or jeopardize property and the environment and the safety and security of the public and of the pipeline company's employees.

Facility owners must contact the one-call centre or the pipeline company directly prior to any maintenance activities that could cause a ground disturbance in the prescribed area; for further information regarding requirements for maintenance activities, see section 11 of *DPR – Authorizations*.

If you decide to remove or abandon the facility, you must notify the pipeline company in writing before doing so. You must also remove or alter your facility if it is determined that it could adversely affect the safe and efficient operation of the pipeline. The NEB may require you to remove or alter your facility if it determines that it is necessary. When removing your facility, any ground disturbance required would have to be authorized. If you are abandoning your facility, the pipeline company may require that you take precautions to ensure that deterioration of the facility does not become a hazard to the safety of the pipe.

.....

4. UNAUTHORIZED ACTIVITIES

The following are examples of unauthorized activities:

- a ground disturbance within the prescribed area, the construction of a facility near the pipeline or a non-agricultural crossing for which consent was not obtained;
- a ground disturbance within the prescribed area or the construction of a facility near the pipeline for which a locate request was not obtained;
- a ground disturbance within the prescribed area or construction of a facility in a manner that does not meet the conditions outlined in the consent or does not accord with the instructions of an authorized field representative;
- a crossing in the absence of consent for the purposes of an agricultural activity in an area that has been identified by the pipeline company as a location where such crossings could impair the pipeline's safety and security.

A failure to follow the requirements in the Regulations (e.g. obtaining consent, complying with conditions of consent, performing a locate request) must be immediately reported by the pipeline company to the Board.

If the Regulations are not followed when conducting an activity that causes a ground disturbance in the prescribed area, constructing a facility near a pipeline, or crossing a pipeline, it is unauthorized, and illegal, unless otherwise authorized by the Board.

The NEB may enforce against unauthorized activities for environmental protection and the safety of all involved. Contravention of section 112 of the NEB Act or the Regulations is an offence and could be subject to prosecution. Such contraventions are also designated violations subject to a monetary penalty under the NEB's *Administrative Monetary Penalties Regulations* (AMPs). For more information on AMPs, please go to the NEB's website at www.neb-one.gc.ca.

For more information on the NEB's enforcement framework, please refer to the Board's website under Safety and the Environment at www.neb-one.gc.ca, or contact damage prevention staff using the contact information below.

Contact us

If you have any questions about this guide or the Regulations, please do not hesitate to contact the NEB by email at DPinfo@neb-one.gc.ca or by phone at 1-800-899-1265.

You can find a copy of this document on the NEB website: www.neb-one.gc.ca.

.....

5. SAFETY CHECKLIST

The safety and security of Canadians and protection of the environment is the NEB's top priority. We recognize that anyone who lives and works near pipelines plays a key role in pipeline safety. You can help create a safe and secure environment for you, your family and community and the environment by following this checklist.

Please note that this checklist is a guide. Refer to the *DPR – Authorizations* to ensure that your project follows safety and legal requirements.

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 constructing a facility, conducting activities causing a ground disturbance, or crossings in the vicinity of a pipeline.
4. **Obtain the pipeline company's written consent** for the construction of facilities across, on, along or under a pipeline, conducting activities causing a ground disturbance in the prescribed area, or crossing a pipeline with a vehicle or mobile equipment.
5. **Make a locate request** at least three working days before the day on which the construction or ground disturbance activity is started, by calling the one-call centre, or by calling the pipeline company where there is no one-call centre, to have the pipe located and marked.
6. **Be on site** when the pipeline is located, and **know the meaning of the pipeline markings.**
7. **Review NEB requirements** with all persons working on your behalf, including employees, contractors and subcontractors, to ensure they are aware of their obligations. Keep documents with safety requirements and guidance on site.
8. **Expose the pipe by hand digging or other acceptable excavation techniques accepted by the pipeline company** prior to any mechanical excavation within three metres of the pipe. **Follow the instructions of the pipeline company's authorized field representative.**
9. **Notify the pipeline company** prior to backfilling over the pipe or facilities, where the pipe or facilities have been exposed. **Follow the instructions of the pipeline company's authorized field representative.**
10. **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 pipe and must be assessed by the pipeline company.

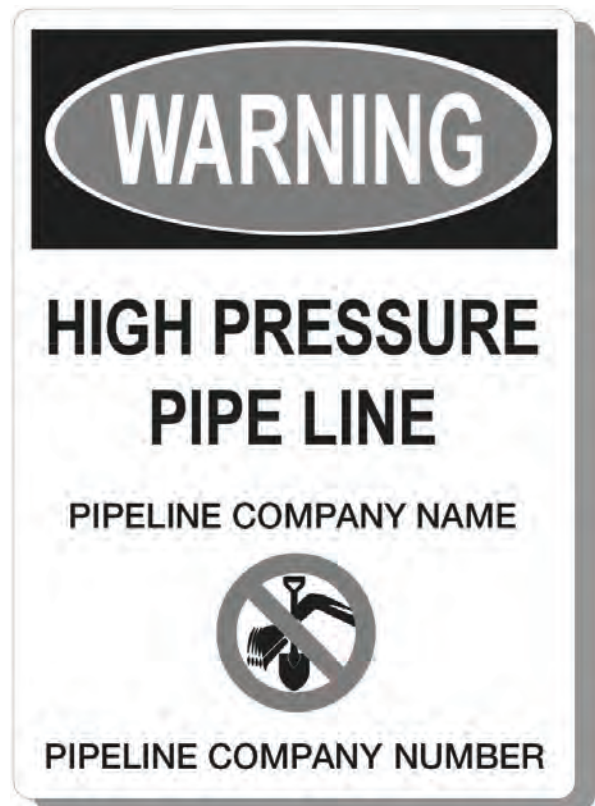
APPENDIX 1 – NATIONAL ENERGY BOARD CONTACT

For information concerning ground disturbance or construction near pipelines, and pipeline crossings:

DPinfo@neb-one.gc.ca
1-800-899-1265

Mailing Address

National Energy Board
517 Tenth Avenue SW
Calgary, Alberta T2R 0A8
Facsimile: (403) 292-5503
Facsimile (toll free): 1-877-288-8803
www.neb-one.gc.ca



APPENDIX 2 – ONE-CALL CENTRES

There may be buried utilities in the ground such as: electrical cables high pressure gas lines, television cables, water lines, oil lines, etc. It is important to know what is in the ground before you dig to protect you, the public and the environment.

If you plan a ground disturbance or construction activity, you must contact a One-Call centre. The One-Call centre will advise you of its member companies buried utilities in the area of your proposed activity. The One-Call centre will notify its member companies about your proposed activity and the pipeline company will mark the exact location of its facility(s).

National web portal for one-call notification centres in Canada: www.clickbeforeyoudig.com

This portal will also tell you where you have to contact the pipeline companies directly.

Call or click before you dig! Contact your one-call centre.

British Columbia

www.bconecall.bc.ca

BC One Call: 1-800-474-6886

Alberta

<http://albertaonecall.com>

Alberta One Call Corporation: 1-800-242-3447

Saskatchewan

www.sask1stcall.com

Sask First Call: 1-866-828-4888

Manitoba

<http://www.clickbeforeyoudigmb.com/>

Click Before You Dig MB: 1-800-940-3447

Ontario

www.on1call.com

Ontario One Call: 1-800-400-2255

Québec

www.info-ex.com

Info-Excavation: 1-800-663-9228

Atlantic Canada

www.info-ex.com

Info-Excavation: 1-866-344-5463

1-800-663-9228

Contact the pipeline company directly in the Northwest Territories.

APPENDIX 3 – DAMAGE PREVENTION IN THE NATIONAL ENERGY BOARD ACT

Construction and ground disturbance

112 (1) It is prohibited for any person to construct a facility across, on, along or under a pipeline or engage in an activity that causes a ground disturbance within the prescribed area unless the construction or activity is authorized by the orders or regulations made under subsection (5) and done in accordance with them.

Use of vehicles and mobile equipment

112 (2) It is prohibited for any person to operate a vehicle or mobile equipment across a pipeline unless

(a) that operation is authorized by the orders or regulations made under subsection (5) and done in accordance with them; or

(b) the vehicle or mobile equipment is operated within the travelled portion of a highway or public road.

Terms and conditions

(3) Repealed.

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 or security of the pipeline and may, if the Board considers that the facility may impair the safety or security of the operation of the pipeline, direct the owner to reconstruct, alter or remove the facility.

Regulations and orders

(5) The Board may make orders or regulations

(a) governing the design, construction, operation and abandonment of facilities constructed across, on, along or under pipelines;

(a.1) prescribing the area for the purposes of subsection (1);

(a.2) authorizing the construction of facilities across, on, along or under pipelines;

(a.3) authorizing ground disturbances within the prescribed area;

(b) governing the measures to be taken 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) ground disturbances within the prescribed area;

(c) authorizing the operation of vehicles or mobile equipment across a pipeline and governing the measures to be taken in relation to that operation; and

(d) specifying activities for the purposes of paragraph (a) of the definition “ground disturbance” in section 2.

Temporary prohibition on ground disturbance

(5.1) Orders or regulations made under subsection (5) may provide for the prohibition of ground disturbances in an area that is situated in the vicinity of a pipeline and that may extend beyond the prescribed area 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).

Offence

(8) Every person who contravenes subsection (1) or (2), a direction made under subsection (4) or an order or regulation made under subsection (5) is guilty of an offence and liable

(a) on summary conviction, to a fine not exceeding one hundred thousand dollars or to imprisonment for a term not exceeding one year or to both; or

(b) on conviction on indictment, to a fine not exceeding one million dollars or to imprisonment for a term not exceeding five years or to both.

Application of subsections 121(2) to (5)

(9) Subsections 121(2) to (5) apply, with any modifications that the circumstances require, to an offence under subsection (8).

.....

Definitions

"pipeline" in section 2 of the NEB Act:

"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.

"ground disturbance" in section 2 of the NEB Act:

"ground disturbance" does not include a ground disturbance caused by

- a) any activity that is specified in the orders or regulations made under section 112(5),
- b) cultivation to a depth of less than 45 cm below the surface of the ground, or
- c) any activity to a depth of less than 30 cm and that does not result in reduction of the depth of earth cover over the pipeline to a depth that is less than the cover provided when the pipeline was constructed.



APPENDIX 4 – REGULATIONS AND RELATED GUIDANCE

National Energy Board Pipeline Damage Prevention Regulations - Authorizations

Interpretation

Definitions

1 The following definitions apply in these Regulations.

Act means the *National Energy Board Act*. (*Loi*)

facility means any structure, highway, private road, railway, irrigation ditch, drain, drainage system, sewer, dike, telephone line, telegraph line, telecommunication line, line for the transmission of electricity or pipe for the transmission of hydrocarbons or any other substance. (*installation*)

offshore area means the submarine areas adjacent to the coast of Canada. (*zone extracôtière*)

overhead line means a facility that is an above-ground telephone, telegraph, telecommunication or electric power line or any combination of those lines. (*ligne aérienne*)

pipe means a pipe that is part of a pipeline and that is used or is to be used for the transmission of hydrocarbons or any other commodity. (*conduite*)

working day means any day that is not a Saturday or a Sunday or other holiday. (*jour ouvrable*)

General Provisions

Prescribed area

2 For the purposes of subsection 112(1) of the Act, the prescribed area means a strip of land measured 30 m perpendicularly on each side from the centreline of a pipe.

Locate request — person

3 (1) Subject to subsection (2), any person that intends to construct a facility across, on, along or under a pipeline or engage in an activity that would cause a ground disturbance within a prescribed area must make a locate request in the following manner at least three working days before the day on which the construction or activity is to start:

- (a) to a one-call centre if the intended construction or activity is within an area where a one-call centre exists; or
 - (b) to the pipeline company directly if the intended construction or activity is not within an area where a one-call centre exists.
-

Locate request — pipeline company

- (2) Any pipeline company that intends to construct a facility across, on, along or under its pipeline or engage in an activity that would cause a ground disturbance within a prescribed area must make a locate request to a one-call centre at least three working days before the day on which the construction or activity is to start if the intended construction or activity is within an area where a one-call centre exists.

Emergency

- (3) In the case of an unexpected situation that could endanger life or cause substantial property or environmental damage that requires immediate action, the three-day period set out in subsections (1) and (2) does not apply and the locate request must be made as soon as possible before the construction or activity starts.

One-call centre

- (4) A one-call centre is an organization that, for the purposes of protecting the underground infrastructures of its members from damage and ensuring public safety,
- (a) receives locate requests from within a defined geographical area; and
 - (b) notifies its members that may be affected by any proposed construction or any proposed activity that would cause a ground disturbance and that are the subject of a locate request of that construction or activity.

Duty to inform

- 4 Any person that intends to construct a facility across, on, along or under a pipeline, engage in an activity that would cause a ground disturbance within a prescribed area or operate a vehicle or mobile equipment across a pipeline must, before the construction, activity or operation is to start, inform all persons working on their behalf, including employees, contractors and subcontractors, of their obligations under these Regulations.

Designation of temporary prohibition area

- 5 If a pipeline company, after having received a locate request from a person that intends to engage in an activity that would cause a ground disturbance within a prescribed area, designates an area that is situated in the vicinity of a pipeline and that may extend beyond the prescribed area as a prohibition area, the ground disturbance is prohibited within the area during the period referred to in subsection 112(5.1) of the Act.

Authorization Under the Act

Pipeline company

- 6 For the purposes of subsection 112(1) and paragraph 112(2)(a) of the Act and despite sections 7 and 9 to 13 of these Regulations, the construction of a facility — in an area other than an offshore area — across, on, along or under a pipeline, an activity — in an area other than an offshore area — that would cause a ground disturbance within a prescribed area and the operation of a vehicle or mobile equipment across a pipeline is authorized if the pipeline company that intends to carry out the construction, activity or operation
- (a) is authorized to carry out the construction, activity or operation under the Act;
 - (b) makes a locate request in accordance with section 3; and

-
- (c) if another pipeline company receives the locate request, the pipeline company that made the locate request obtains from the other pipeline company the information that is referred to in paragraphs 6(1)(a) and (c) of the National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies.

Facility

Authorization – of construction

7 (1) For the purposes of subsection 112(1) of the Act, the construction of a facility — in an area other than an offshore area — across, on, along or under a pipeline, other than the construction of an overhead line referred to in section 9, is authorized if the person that intends to construct the facility

- (a) obtains the pipeline company’s written consent;
- (b) makes a locate request in accordance with section 3; and
- (c) obtains from the pipeline company the information that is referred to in paragraphs 6(1)(a) and (c) of the National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies.

Suspension

(2) If the consent is suspended by the Board, or by the pipeline company in accordance with subsection 10(1) of the National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies, the authorization is suspended and the construction must cease for the duration of the suspension of the consent.

Measures

(3) Any person that is undertaking the construction of a facility must comply with the following measures:

- (a) ensure that the construction is carried out in accordance with the technical details that are set out in the person’s request for consent and that have been accepted by the pipeline company, as well as with the conditions set out in the pipeline company’s consent;
- (b) ensure that the construction is completed within two years after the day on which the consent was obtained, unless the pipeline company and the person agree on another time period that is set out in the consent;
- (c) comply with the instructions of the pipeline company’s authorized field representative regarding the procedures that are to be followed while carrying out the construction in the vicinity of a pipe and that relate to the pipeline’s safety and security;
- (d) if interference with or alteration of a pipe becomes necessary, obtain the pipeline company’s written consent to interfere with or alter the pipe;
- (e) carry out any construction that involves the interference with or alteration of a pipe under the pipeline company’s supervision; and
- (f) immediately notify the pipeline company of any contact with a pipe or its coating during the construction.

Obligations — existing facilities

8 The owner of a facility that is constructed — in an area other than an offshore area — across, on, along or under a pipeline must

- (a) maintain the facility in a state of good repair compatible with the pipeline's safety and security;
- (b) immediately correct any deterioration in the facility on being so notified in writing by the pipeline company under subsection 9(1) of the *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*;
- (c) notify the pipeline company, in writing, of any proposed abandonment or removal of the facility; and
- (d) remove or alter the facility or part of the facility that could adversely affect the pipeline's safe and efficient operation or that could jeopardize property and the environment and the safety and security of the public and of the pipeline company's employees.

Authorization for construction of overhead line

9 (1) For the purposes of subsection 112(1) of the Act, the construction of an overhead line across a pipeline — in an area other than an offshore area — is authorized if the person that intends to construct the overhead line

- (a) makes a locate request in accordance with section 3;
- (b) confirms with the pipeline company that all of the pipeline company's pipes in the vicinity of the construction have been marked; and
- (c) obtains from the pipeline company the information that is referred to in paragraphs 6(1)(a) and (c) of the *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*.

Measures

(2) Any person that is undertaking the construction of an overhead line across a pipeline must comply with the following measures:

- (a) construct the overhead line in accordance with any applicable provincial and federal law;
- (b) if the pipeline is patrolled by aircraft and if the overhead line poses a risk to the aircraft, install and maintain aerial warning devices; and
- (c) not construct or place any kind of pole, pylon, tower, guy, anchor or supporting structure across, on, along or under the pipeline.

.....

Activity that Causes a Ground Disturbance

Authorization – ground disturbance activity

10 (1) For the purposes of subsection 112(1) of the Act, any activity — in an area other than an offshore area — that would cause a ground disturbance within the prescribed area, other than an activity referred to in section 11, is authorized if the person that intends to engage in the activity

- (a) obtains the pipeline company's written consent;
- (b) makes a locate request in accordance with section 3; and
- (c) obtains from the pipeline company the information that is referred to in paragraphs 6(1)(a) and (c) of the *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*.

Suspension

(2) If the consent is suspended by the Board, or by the pipeline company in accordance with subsection 10(1) of the *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*, the authorization is suspended and the activity must cease for the duration of the suspension of the consent.

Measures

(3) Any person that is engaged in an activity that causes a ground disturbance within the prescribed area must comply with the following measures:

- (a) ensure that the activity is carried out in accordance with the technical details that are set out in the person's request for consent and that have been accepted by the pipeline company, as well as with the conditions set out in the pipeline company's consent, including the conditions respecting directional drilling or the use of explosives;
- (b) ensure that the activity is completed within two years after the day on which the consent was obtained, unless the pipeline company and the person agree on another time period that is set out in the consent;
- (c) not undertake mechanical excavation that would cause a ground disturbance within the prescribed area within 3 m of a pipe, unless
 - (i) if the excavation runs parallel to the pipe, the pipe has been exposed by hand at sufficient intervals to confirm the pipe's location or the pipeline company has used a method that would permit it to confirm the pipe's exact location and has informed the person of that location,
 - (ii) if the excavation crosses the pipe, the pipe has been exposed by hand at the point of crossing or the pipeline company has used a method that would permit it to confirm the pipe's exact location, has informed the person of that location and has confirmed that the pipe is at least 60 cm deeper than the proposed excavation, and
 - (iii) if ground conditions render it impractical to locate the pipe using any of the methods set out in subparagraphs (i) and (ii), the pipeline company directly supervises any excavation;
- (d) comply with the instructions of the pipeline company's authorized field representative regarding the procedures that are to be followed during the activity and that relate to the pipeline's safety and security;

.....

-
- (e) if interference with or alteration of a pipe becomes necessary, obtain the pipeline company's written consent to interfere with or alter the pipe;
 - (f) carry out any activity that involves the interference with or alteration of a pipe under the pipeline company's supervision;
 - (g) immediately notify the pipeline company of any contact with a pipe or its coating during the activity; and
 - (h) unless otherwise agreed on by the pipeline company and the person that is engaged in the activity, notify the pipeline company at least 24 hours before backfilling over a pipe.

Authorization — activity required for maintenance of facility

11 For the purposes of subsection 112(1) of the Act, any maintenance of an existing facility — in an area other than an offshore area — that causes a ground disturbance within the prescribed area is authorized if the person engaged in the maintenance complies with paragraphs 10(1)(b) and (c) and the measures set out in paragraphs 10(3)(c) to (h).

Operation of Vehicles or Mobile Equipment Across a Pipeline

Authorization – operation across pipeline

12 Subject to section 13 and for the purposes of paragraph 112(2)(a) of the Act, the operation of a vehicle or mobile equipment across a pipeline is authorized if the person that intends to operate the vehicle or mobile equipment across the pipeline obtains the pipeline company's written consent.

Authorization — agricultural activity

13 (1) For the purposes of paragraph 112(2)(a) of the Act, the operation across the pipeline of a vehicle or mobile equipment that is used to perform an agricultural activity is authorized if the following conditions are met:

- (a) the loaded axle weight and tire pressures of the vehicle or mobile equipment are within the manufacturer's approved limits and operating guidelines; and
- (b) the point of crossing has not been the subject of a notification under section 7 of the *National Energy Board Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*.

Definition of *agricultural activity*

(2) In this section, *agricultural activity* means the production of crops and the raising of animals and includes tillage, plowing, disking, harrowing and pasturing, but does not include the construction of new buildings or impervious areas or the placement of footings, foundations, pilings or posts, including fence posts.

Application for Authorization

File application with Board

14 (1) A person that intends to construct a facility across, on, along or under a pipeline, engage in an activity that would cause a ground disturbance within the prescribed area of a pipeline or operate a vehicle or mobile equipment across a pipeline may file an application for authorization with the Board if

(a) the construction, activity or operation is not authorized under subsection 7(1), 9(1) or 10(1) or section 11 or 12; or

(b) the person is unable to comply with the applicable measures set out in subsection 7(3), 9(2) or 10(3)

Service

(2) If a person files an application under subsection (1), that person must serve a copy of the application on the pipeline company that operates the pipeline in question.

Transitional Provisions

Construction or excavation

15 (1) Any leave granted by the Board prior to June 19, 2016 to construct a facility across, on, along or under a pipeline or to excavate using power-operated equipment or explosives within 30 m of a pipeline under subsection 112(1) of the Act, as it read immediately prior to that date, expires on the date set out in the leave, but if there is no date set out in the leave it expires two years after the day on which the leave was granted.

Crossing

(2) Any leave granted by the pipeline company prior to June 19, 2016 to operate a vehicle or mobile equipment across a pipeline under subsection 112(2) of the Act, as it read prior to that date, expires on the date set out in the leave granted by the pipeline company.

Construction or installation of facility

16 The construction or installation of a facility in respect of which a person has obtained written permission under paragraph 4(b) of the *National Energy Board Pipeline Crossing Regulations, Part I* prior to June 19, 2016 is authorized under subsection 112(1) of the Act, as it reads on June 19, 2016, and the measures to be taken in relation to that construction or installation are those set out in paragraphs 4(a) to (m) of those Regulations as they read immediately before the day on which these Regulations come into force.

Excavation

17 An excavation in respect of which a person has obtained the pipeline company's written permission under paragraph 6(b) of the *National Energy Board Pipeline Crossing Regulations, Part I* prior to June 19, 2016 is an authorized ground disturbance under subsection 112(1) of the Act, as it reads on June 19, 2016, and the measures to be taken in relation to the excavation are those set out in section 6 of those Regulations as it read immediately before the day on which these Regulations come into force.

.....

Application Prior to Publication

Statutory Instruments Act

18 For the purposes of paragraph 11(2)(a) of the *Statutory Instruments Act*, these Regulations apply before they are published in the *Canada Gazette*.

Repeal

19 The *National Energy Board Pipeline Crossing Regulations, Part I* are repealed.

Coming into Force

S.C. 2015, c. 21

20 These Regulations come into force on the day on which section 34 of the *Pipeline Safety Act* comes into force, but if they are registered after that day, they come into force on the day on which they are registered.



National Energy Board Pipeline Damage Prevention Regulations - Obligations of Pipeline Companies

Interpretation

Definitions

1 The following definitions apply in these Regulations.

authorization means the authorization referred to in subsection 112(1) or paragraph 112(2)(a) of the *National Energy Board Act*. (*autorisation*)

facility means any structure, highway, private road, railway, irrigation ditch, drain, drainage system, sewer, dike, telephone line, telegraph line, telecommunication line, line for the transmission of electricity or pipe for the transmission of hydrocarbons or any other substance. (*installation*)

pipe means a pipe that is part of a pipeline and that is used or is to be used for the transmission of hydrocarbons or any other commodity. (*conduite*)

prescribed area has the meaning assigned by section 2 of the *National Energy Board Pipeline Damage Prevention Regulations - Authorizations*. (*zone réglementaire*)

working day means any day that is not a Saturday or a Sunday or other holiday. (*jour ouvrable*)

One-call Centre

Obligation to be a member

2 (1) If a pipeline company operates a pipeline within a geographical area where a one-call centre exists, the pipeline company must be a member of that centre.

One-call centre

(2) A one-call centre is an organization that, for the purposes of protecting the underground infrastructures of its members from damage and ensuring public safety,

(a) receives locate requests from within a defined geographical area; and

(b) notifies its members that may be affected by any proposed construction or any proposed activity that would cause a ground disturbance and that are the subject of a locate request of that construction or activity.

Consent

Inform person of decision

3 (1) If a pipeline company receives a request for the written consent referred to in paragraph 7(1)(a) or 10(1)(a) or section 12 of the *National Energy Board Pipeline Damage Prevention Regulations - Authorizations*, the pipeline company must, within 10 working days after receiving the request, inform the person that made the request whether the consent has been granted or refused and, in the case of a refusal, the reasons for the refusal.

.....

Contents of consent

- (2) When a person makes a request to the pipeline company for the written consent referred to in paragraph 7(1)(a) or 10(1)(a) of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* that contains the technical and other information that enable the pipeline company to determine whether the construction or activity would impair the pipeline’s safety and security, the pipeline company may grant its consent subject to any conditions necessary for the protection of property and the environment, the safety and security of the public and of the company’s employees or the pipeline’s safety and security.

Amendment or addition of conditions

- (3) At any time during the construction of a facility or the activity that causes a ground disturbance, the pipeline company may add conditions or amend the conditions referred to in subsection (2) if it determines that additions or amendments are necessary to ensure the pipeline’s safety and security.

Obligation to Provide Information

Information – application for authorization

- 4 If a person that intends to construct a facility across, on, along or under a pipeline, engage in an activity that would cause a ground disturbance within the prescribed area of a pipeline or operate a vehicle or mobile equipment across a pipeline has made a request to the pipeline company for the information that is necessary to make an application to the Board for authorization, the pipeline company must, within 10 working days after receiving the request, give the person all the information, and provide all reasonable assistance, that is necessary to prepare the application.

Comments by pipeline company

- 5 If a pipeline company receives a copy of an application for authorization that has been filed with the Board, the pipeline company must, within 10 working days after receiving the copy of the application, send to the Board its comments on the application.

Obligations Following Request to Locate

Timeline

- 6 (1) Subject to subsection (2), if a pipeline company receives a request to locate its pipes from a person that intends to construct a facility across, on, along or under a pipeline or engage in an activity that would cause a ground disturbance within the prescribed area, the pipeline company must, within three working days after the day on which the request is made, or any longer period agreed to by the pipeline company and that person,
- (a) inform the person, in writing, of safety practices to be followed while working in the vicinity of its pipes and, in case of a ground disturbance, within the prescribed area;
 - (b) mark the location of its pipes in the vicinity of the proposed facility or the prescribed area at maximum intervals of 10 m along each pipe using markings that are clearly visible and distinct from any other markings that may be in the vicinity of the proposed facility or the prescribed area; and
 - (c) provide information to the person that clearly explains the significance of the markings.

.....

Markings

- (2) The markings must be consistent with the standards for locating a pipeline that are set out in the pipeline company's damage prevention program.

Obligations Respecting Certain Locations

Agricultural activity

7 Even if the condition set out in paragraph 13(1)(a) of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* is met, when the operation of vehicles or mobile equipment across a pipeline at specific locations for the purposes of performing an agricultural activity could impair the pipeline's safety or security, the pipeline company must identify those locations and notify the following persons in writing of those locations:

- (a) landowners of the specific locations in question; and
- (b) persons that are engaged in agricultural activities, rent or lease the land or work as service providers or employees at the specific locations in question.

Inspections

Inspections and field observations

8 The pipeline company must

- (a) carry out any inspections that are necessary to ensure the pipeline's continued safety and security during an activity that causes a ground disturbance within the prescribed area;
- (b) inspect all exposed pipe prior to any backfilling over a pipe to ensure that no damage to the pipe has occurred; and
- (c) in respect of any inspection carried out under paragraphs (a) and (b), make field observations relating to
 - (i) if a pipe was exposed, the clearance between the pipe and the facility and the condition of the pipe at the time of backfilling over the pipe,
 - (ii) the compliance with the measures set out in the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations*,
 - (iii) the method used to engage in the activity that caused a ground disturbance, and
 - (iv) the occurrence of any unusual events that are related to the construction or activity and that may have had an effect on the pipeline's safety or security.

Deterioration — notify facility owner

9 (1) If the pipeline company detects any deterioration of a facility that might adversely affect a pipe, the pipeline company must notify the facility's owner in writing.

.....

Deterioration — notify Board

- (2) If the pipeline company detects any deterioration of a facility that would so impair the safety or security of the pipe as to warrant removal of the facility, the pipeline company must notify the Board in writing.

Suspension

Grounds

- 10 (1)** The pipeline company may suspend the consent that it granted to construct a facility or to engage in an activity that causes a ground disturbance within the prescribed area if
- (a) the person carrying out the construction of a facility does not comply with the technical details and the conditions referred to in paragraph 7(3)(a) of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* or the instructions referred to in paragraph 7(3)(c) of those Regulations;
 - (b) the person engaging in an activity that causes the ground disturbance does not comply with the technical details and the conditions referred to in paragraph 10(3)(a) of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* or the instructions referred to in paragraph 10(3)(d) of those Regulations; or
 - (c) work practices might impair the pipeline’s safety or security.

Notify Board

- (2) If a pipeline company suspends its consent pursuant to subsection (1), it must immediately notify the Board in writing of the suspension and give its reasons for the suspension.

Obligation to Report

Report to Board

- 11 (1)** The pipeline company must immediately report to the Board
- (a) every contravention of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations*;
 - (b) all damage to its pipe caused or identified during the construction of a facility across, on, along or under a pipeline, the operation, maintenance or removal of a facility, an activity that caused a ground disturbance within the prescribed area or the operation of vehicles or mobile equipment across the pipeline; and
 - (c) any activity related to the construction of a facility across, on, along or under a pipeline, an activity that caused a ground disturbance within the prescribed area or the operation of vehicles or mobile equipment across a pipeline that the pipeline company considers could impair the safety or security of the pipe.

.....

Contents of report

(2) The report must include the following information:

- (a) details of any contravention or of any damage, including, in the case of damage, the cause and nature of the damage;
- (b) any concerns that the pipeline company may have regarding the pipeline's safety or security as a result of the construction of the facility, the activity that caused a ground disturbance or the operation of vehicles or mobile equipment across the pipeline; and
- (c) any action the pipeline company intends to take or request.

Records

Facilities and ground disturbances

12 (1) The pipeline company must keep a record of all construction of facilities across, on, along or under a pipeline and of all activities that cause a ground disturbance within the prescribed area for the life of the pipeline.

Contents of records

- (2) The records must include, for each facility or each activity that causes a ground disturbance, as the case may be,
- (a) the name and address of the person that carries out the construction or engages in an activity that causes a ground disturbance;
 - (b) the nature and location of the facility or the activity that causes a ground disturbance;
 - (c) the dates of commencement and termination of the construction of the facility or the activity that causes a ground disturbance;
 - (d) a description of the proposed facility, submitted with the request for the consent;
 - (e) a copy of the pipeline company's written consent;
 - (f) in respect of the inspections referred to in paragraphs 8(a) and (b), all findings and observations, including
 - (i) the name of the person that conducted the inspection,
 - (ii) the date and time of the inspection, and
 - (iii) any field observations referred to in paragraph 8(c);
 - (g) a statement of whether the person that carried out the construction or the person that engaged in an activity that caused a ground disturbance has complied with the measures set out in the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations*; and
 - (h) the details of any abandonment, removal or alteration of the facility.
-

Consent — crossings

- (3) The pipeline company must keep a record that contains a copy of the written consents granted by the pipeline company for the purposes of section 12 of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* for the life of the pipeline or, if there is an expiry date set out in the consent, for a period of 12 months from the day on which the consent expires.

Locations

- (4) The pipeline company must keep a record of the locations that are identified under section 7.

Duty to make records available

- 13 Every pipeline company that is required by these Regulations to keep records must make the records, and all other materials necessary to verify the information in those records, available to officers of the Board and other persons authorized by the Board for that purpose and must give the Board and other authorized persons any assistance necessary to inspect the records.

Lists

- 14 On the request of the Board, the pipeline company must provide the Board with
- (a) a list of every written consent granted for the purposes of section 12 of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations*;
 - (b) a list of every written consent granted by the pipeline company with respect to the construction of a facility or an activity that causes a ground disturbance and the information referred to in paragraphs 12(2)(a) to (c) with respect to the consent; and
 - (c) a list of every permission granted by the pipeline company for the purposes of the *National Energy Board Pipeline Crossing Regulations, Part I* and the information referred to in paragraphs 11(2)(a) to (c) of the *National Energy Board Pipeline Crossing Regulations, Part II* with respect to the permission.

Guidelines

Request for consent

- 15 Every pipeline company must develop and maintain detailed guidelines setting out the technical and other information to be included in the requests for the written consent referred to in paragraph 7(1)(a) or 10(1)(a) of the *National Energy Board Pipeline Damage Prevention Regulations – Authorizations* and must make those guidelines public.

.....

Damage Prevention Program

Minimum content

16 The damage prevention program that a pipeline company is required to develop, implement and maintain under section 47.2 of the *National Energy Board Onshore Pipeline Regulations* must include

- (a) an ongoing public awareness program to inform the public
 - (i) of the presence of a pipeline,
 - (ii) on how to work safely near a pipeline,
 - (iii) on how to report an unexpected situation related to a pipeline that could endanger life or cause substantial property or environmental damage that requires immediate action,
 - (iv) on how to report any contact with a pipe or its coating, whether or not the pipe was damaged,
 - (v) on how to report any damage to a pipe,
 - (vi) of the services of a one-call centre if one exists within the relevant geographical area,
 - (vii) on the necessity for authorization when constructing a facility across, on, along or under a pipeline, engaging in an activity that causes a ground disturbance within the prescribed area or operating vehicles or mobile equipment across a pipeline,
 - (viii) of the information to be provided in a request for the consent to construct a facility across, on, along or under a pipeline, to engage in an activity that causes a ground disturbance within the prescribed area or to operate a vehicle or mobile equipment across a pipeline, and
 - (ix) on the requirement to make a locate request and how to make a locate request in the relevant geographical area;
 - (b) ongoing monitoring of any changes in the use of the land on which a pipeline is located and the land that is adjacent to that land;
 - (c) ongoing monitoring of any change in the landowner of the land on which a pipeline is located;
 - (d) a process to ensure a timely response to locate requests;
 - (e) standards for locating a pipeline; and
 - (f) a process for managing requests for the consent to construct a facility across, on, along or under a pipeline, to engage in an activity that causes a ground disturbance within the prescribed area or to operate a vehicle or mobile equipment across the pipeline.
-

Transitional Provisions

Section 11 – former Regulations

17 Section 11 of the *National Energy Board Pipeline Crossing Regulations, Part II*, as it read immediately before the day on which these Regulations come into force, continues to apply to any person to which that section applied.

Section 14 – former Regulations

18 Section 14 of the *National Energy Board Pipeline Crossing Regulations, Part II*, as it read immediately before the day on which these Regulations come into force, continues to apply with respect to the permissions referred to in sections 15 and 16 of *National Energy Board Pipeline Damage Prevention Regulations – Authorizations*.

Application Prior to Publication

Statutory Instruments Act

19 For the purposes of paragraph 11(2)(a) of the *Statutory Instruments Act*, these Regulations apply before they are published in the *Canada Gazette*.

Repeal

20 The *National Energy Board Pipeline Crossing Regulations, Part II* are repealed.

Coming into Force

S.C. 2015, c. 21

21 These Regulations come into force on the first day on which both sections 15 and 34 of the *Pipeline Safety Act* are in force, but if they are registered after that day, they come into force on the day on which they are registered.

Related guidance:

- Guidance Notes - NEB Regulations for Pipeline Damage Prevention
- Guidance for Safe Crossings of NEB-Regulated Pipelines Using Agricultural Vehicles and Mobile Equipment



APPENDIX 5 – MAILING LIST REQUEST FORM

If you are interested in receiving updates directly from the NEB by mail, please send a complete copy of the form below (Appendix 5) and mail or fax it to the NEB.

Request to Be Included on Mailing List for Updated Information:

National Energy Board
Regulatory Support Office
517 Tenth Avenue SW
Calgary, Alberta T2R 0A8
Facsimile: 403-292-5503

Please add me to mailing list L19 to receive updated information.

Name:

Title:

Organization:

Mailing Address:

City:

Province/Territory:

Postal Code:

Telephone:

.....



Thank you for taking the time to learn about the NEB's regulations for pipeline damage prevention. We hope this guide has answered many of your questions.

Publications may be ordered by:

- Mailing a request to NEB Library at the mailing address below
- Visiting the NEB Library located on the second floor
- Telephone: 403-299-3561 or 1-800-899-1265
- Fax: 403-292-5503 or 1-877 288-8803
- E-mail: publications@neb-one.gc.ca

For general information about the NEB and the energy sector:

- Mail: General Inquiries at the above address
- Telephone: 403-292-4800 or 1-800-899-1265
- Fax: 403-292-5503 or 1-877 288-8803
- E-mail: info@neb-one.gc.ca or for damage prevention specific information: DPinfo@neb-one.gc.ca

For settling compensation matters, please contact:

Natural Resources Canada (NRCan)

Pipeline Arbitration Secretariat

580 Booth Street, 17th Floor

Ottawa, Ontario K1A 0E4

Phone: 613-947-5664

Fax: 613-995-1913

E-mail: pas-sap@nrcan.gc.ca

Website: www.nrcan.gc.ca/energy/infrastructure/natural-gas/pipeline-arbitration-secretariat/5907

The NEB's mailing address is:

National Energy Board

517 Tenth Avenue SW

Calgary, Alberta T2R 0A8

Telephone: 403-292-4800 or

Toll Free: 1-800-899-1265

Fax: 403-292-5503

Toll Free Fax: 1-877 288-8803

TTY (teletype): 1-800-632 1663

E-mail: DPinfo@neb-one.gc.ca