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Safety Advisory SA-002-2025 Safety and Damage Prevention Practices related to Large Scale Projects Near Pipelines

- Pipeline DPR Workshop
#7
- December 16, 2025

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Date ↑↓	Number ↑↓	Name ↑↓	Related information ↑↓
2025-10-06	SA 2025-02	Safety Advisory SA 2025-02 – Safety and Damage Prevention Practices related to Large Scale Projects Near Pipelines	
2025-06-19	SA 2025-01	Safety Advisory SA 2025-01 – Evaluation of Dents in Pipe	
2024-12-03	SA 2024-01	Safety Advisory SA 2024-01 – Pipeline Fitting Materials Quality Assurance	
2022-05-19	SA 2022-02	Safety Advisory SA 2022-02 – Control of Hazardous Energy	
2022-04-13	SA 2022-01	Safety Advisory SA 2022-01 – Depth of Cover in Agricultural Areas	
2020-02-12	SA 2020-01	Girth Weld Area Strain-Induced Failures: Pipeline Design, Construction, and Operation Considerations	

Safety Advisories

- Outline concerns identified
- Technical information
- Clarification of regulatory expectations



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We release advisories to let industry know important information about concerns we have identified. Advisories are developed from following up on incidents and events and examining emerging issues.

We expect companies to take steps to address the concerns noted in advisories to protect people and the environment.



Damage Prevention Safety Advisories

Provide advice to:

- Regulated companies
- Contractors
- Project owners
- Landowners

- Essentially *any person* conducting activities in the safety zone (PA) 30 metres either side of the pipe



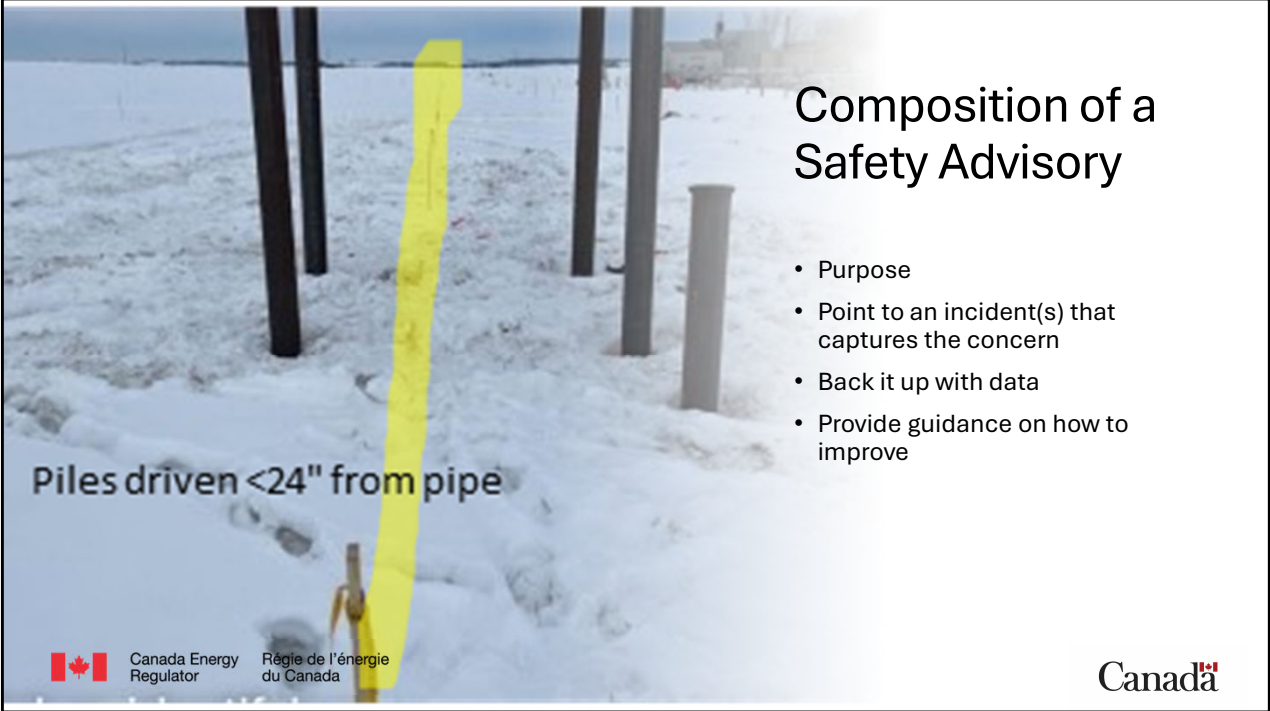
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Most of our advisories are directed at the regulated companies, but DP Safety advisories often provide advice for third parties as well as the company. DP is a shared responsibility, but remember that the pipeline company still has the lion's share of that responsibility.


The point here is not to point fingers or lay blame, it is to see where improvements can be made. We have to step away from that defense mode – we all know that everyone here has a vested interest in preventing damage; it's what we do, and we all work very hard. But we are learning organizations and we have all of this excellent data that is telling us a story. We have a responsibility to make things better.




Composition of a Safety Advisory

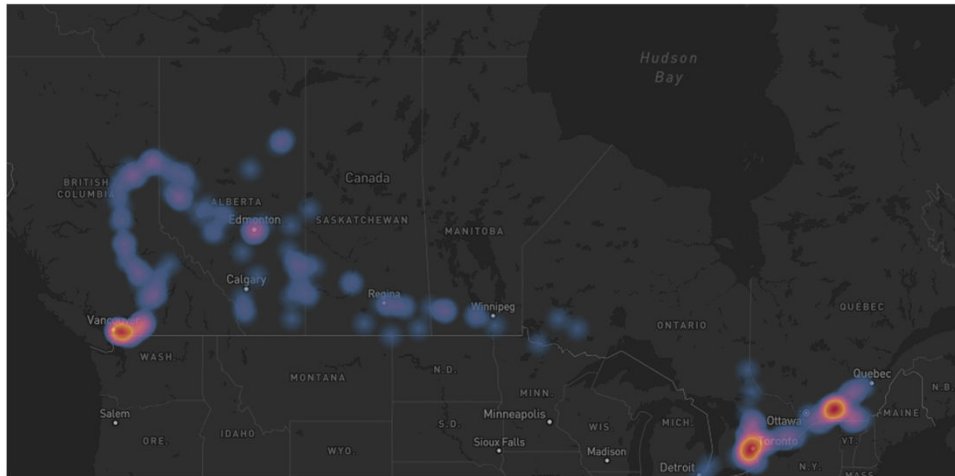
- Purpose
- Point to an incident(s) that captures the concern
- Back it up with data
- Provide guidance on how to improve


Piles driven <24" from pipe

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SA-002-2025: Safety and Damage Prevention Practices related to Large Scale Projects Near Pipelines



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The CER conducted a focused review of multiple near-miss events reported during large scale, complex authorized third-party projects near CER-regulated pipelines. This analysis revealed recurring factors and potential process gaps that contributed to these events. This Safety Advisory aims to share key findings and promote improved safety and damage prevention practices where large scale projects are occurring in the vicinity of pipelines. It outlines expectations and provides guidance to enhance communication and ensures that ground disturbance activities near CER-regulated pipelines are carried out safely.

Safety and Damage Prevention Practices related to Large Scale Projects Near Pipelines

This Safety Advisory is directed to:

- Project Managers for large or complex municipal, industrial, and commercial development projects near CER-regulated pipelines, (“Project Owners”);
- People performing the work, including contractors, subcontractors, and Project Owner’s employees (“Workers”); and
- CER-regulated pipeline companies (“Pipeline Companies”).



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As part of its ongoing compliance and oversight efforts, the CER reviews nearly 400 reports of alleged unauthorized activities each year. These reports, submitted by regulated pipeline companies, document potential violations of the Canadian Energy Regulator Pipeline Damage Prevention Regulations – Authorizations (DPR-A). Under the DPR-A, companies must report any unauthorized activity that could pose a risk to pipelines, even if no actual damage occurred. These events are classified as “near-hits” because they did not result in harm to people, regulated infrastructure, or the environment.



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Damage Prevention SA 2025-02

- Large scale projects
- Long time span – weeks to years
- Experienced project owners and contractors



This advisory focuses on near-hit events that occurred during regulated company-approved, large-scale industrial, municipal, or residential development projects. These projects typically span several weeks or months and involve experienced project owners and contractors. Given the volume of such projects near pipelines across Canada, analyzing these events presents valuable opportunities to strengthen safety practices.

Examples of
near-miss
events analyzed
for this advisory

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Contractor installation of multiple steel piles on both sides of a CER-regulated pipeline, with the closest pile driven just 56 centimetres from the operating gas line during an industrial site expansion project

Contractor grading directly above a pipeline, coming within 15 centimetres of its surface during site preparation for a commercial development

Contractor grading over a pipeline and installation of a fence within the strip of land measured 30 metres on each side from the centerline of a pipe (prescribed area) as part of a residential development project.



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Common Contributing Factors

Inadequate communication among parties involved.

Failure to obtain approval from the pipeline company for changes or deviations from the original scope of work.

Work conducted near the pipeline without a pipeline company representative present, in violation of the safety measures outlined in the written consent.

Excavation outside the authorized work area described in the locate ticket or without written consent from the pipeline company.



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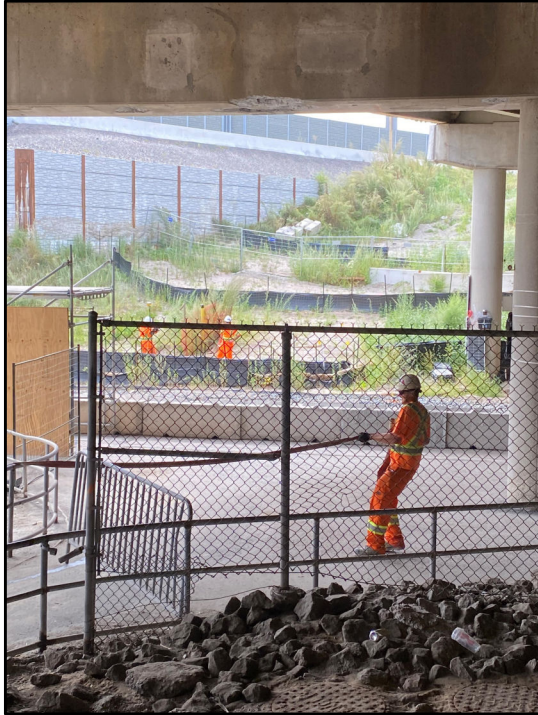
Common Contributing Factors - continued

- Digging under non-compliant conditions, including:
 - after the locate ticket had expired;
 - before receiving a locate response; and
 - misinterpreting or disregarding markings, flags, or stakes.
- Lack of awareness of site-specific safety protocols including pipeline markers and flags.
- Insufficient review or understanding of the requirements detailed in the written consent and locate ticket.
- Unauthorized operation or parking of heavy equipment over the pipeline.
- Inadequate on-site supervision and guidance for workers.



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Responsibilities for Safe Work Near CER Regulated Pipelines

Outlined in the Damage Prevention Regulations

- DPR-Authorizations
- DPR-Obligations of Pipeline companies

Damage Prevention is a Shared Responsibility

Proactively address potential hazards

Any party conducting ground disturbance, construction, or operating vehicles or mobile equipment near a CER-regulated pipeline, including Project Owners and their Workers, must adhere to the requirements outlined in the DPR-A. The DPR-A outlines essential steps for anyone working in proximity to these pipelines to work safely and remain compliant with regulatory requirements.

Although they are typically professionally managed and executed, large-scale municipal, commercial, and industrial projects can be challenging to manage because they often extend over multiple days or months and involve numerous contractors and sub-contractors. As such, effective coordination and communication are critical to minimizing the risk of incidents. Communication is a shared responsibility, and all parties must actively contribute to maintaining safety throughout the project lifecycle.

By identifying common risks and issues in advance, pipeline companies, and those planning and conducting activities near pipelines can proactively address potential hazards. The CER has developed this guidance to support Pipeline Companies, Project Owners, and Workers in mitigating these risks and promoting safe practices.

Project Owners

Responsible for:

- Ensuring work planned near a pipeline complies with regs
 - Includes safety conditions imposed by the pipeline company
- Define who is responsible for obtaining the necessary locates and permissions
 - establish a process for managing, tracking, and communicating these requirements to the Workers
- Project Owners have a duty to inform their employees, contractors, and subcontractors of the specific rules and safety requirements applicable to the work



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To ensure compliance, mitigate safety risks, and avoid delays, Project Owners and Workers should clearly define who is responsible for obtaining the necessary locates and permissions and establish a process for managing, tracking, and communicating these requirements to the Workers. This helps ensure that no critical steps are overlooked. Under section 4 of the DPR–A, Project Owners have a duty to inform their employees, contractors, and subcontractors of the specific rules and safety requirements applicable to the work. The following section provides guidance on how to fulfill this duty effectively. Pipeline Companies may also impose additional conditions, safety measures, or information that must be followed. This information is essential for fostering a shared understanding of the precautions required when working near pipelines.

Project Owners – Duty to Inform Checklist

- ✓ Clarify whether the Project Owner or Worker is responsible for obtaining, managing, and communicating locates and authorizations prior to each excavation activity and verify that locates are kept current.
 - Ensure there are current locates for all ground disturbances and authorizations for vehicle crossings.
 - Ensure that markings have not been moved or damaged.
- ✓ Obtain authorization for the project from the Pipeline Company. This document outlines the legal and safety requirements for the project. Keep a copy at the work site including all measures and safety information provided.
 - Ensure that all contractors are informed of their responsibilities under the DPR-A including when to make a locate request and when to have a pipeline representative onsite.
- ✓ Ensure all parties are working from one set of project plans and construction drawings include buried pipelines.
- ✓ Ensure regular communication with the Pipeline Company to discuss changes, updates and any issues related to the project that could affect pipeline safety.
- ✓ Verify workers who are conducting ground disturbance are trained.
- ✓ Request a pipeline company representative to deliver an onsite safety briefing if required.

Workers

Hazards

- Know what the hazards are – if you don't know, ask!
- Understand the hazards – what's in the pipe?
 - Know where to get the information
- Know the regulations
- Know the measures set by the company to keep you safe
- Follow the measures



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Contractors, such as equipment operators, play a critical role in maintaining site safety and regulatory compliance during construction projects near CER-regulated pipelines. These individuals must be informed of, have access to, and understand the hazards, safety measures, and regulatory requirements associated with ground disturbance and the operation of vehicles or mobile equipment near pipelines.

It is equally important that Workers are aware of situations where a Pipeline Company representative must be present onsite, and that they always follow the representative's instructions when working near the pipeline.

Workers Checklist

- ✓ Obtain a copy of the Pipeline Company's written consent. Keep it on-site and ensure all employees and contractors know and follow any conditions or safety information throughout the project.
 - Make sure you have a pipeline representative onsite when you are supposed to and do not start work until they arrive.
 - Ensure all parties have the pipeline company's emergency contact information and know when to use it and how to report issues.
 - Supervise workers and subcontractors to maintain safety and compliance at work sites.
 - Be aware of where you can drive and park heavy machinery.
- ✓ Know who is responsible for getting company consent agreements and the locates you need. If you are responsible for getting them, plan your work accordingly. It can take 3 days to get a locate.
- ✓ Verify the locate tickets are valid and accurate at the time of work.
 - Ensure one-calls are current, active, and markings have not been moved or damaged. If locates are expired, get a new locate.
 - Review the pipeline locate (stakeout) report and written safety practices provided.
 - Collect and review all the locate responses from the owners of buried utilities in your work area.
 - Be on-site when the pipeline is located to ensure you understand the markings and receive relevant safety and emergency information. If markings are damaged or moved, call the company to replace the markings.
- ✓ Make sure you have an accurate site plan that includes pipelines.
- ✓ Review safety information regularly throughout the project, especially where the project occurs over a long period of time.

To support safe and compliant operations, the following checklist outlines key responsibilities and best practices for Workers:

Pipeline Companies

- Account for the complexity of large-scale projects
- Make sure that people have the necessary information to work safely near pipelines
- Required to be proactive to anticipate, prevent, manage and mitigate damage to their pipelines

- *These obligations are not transferable to the Project Owner.*



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Pipeline companies should account for the complexity of large-scale projects to ensure project owners have all necessary information to work safely near pipelines. Pipeline Company requirements are outlined in the Canadian Energy Regulator Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies (DPR-O). In addition, the Canadian Energy Regulator Onshore Pipeline Regulations (OPR) requires regulated pipeline companies to be proactive to anticipate, prevent, manage, and mitigate damage to their pipelines.² These obligations are not transferable to the Project Owner.

The OPR requires companies to maintain a management system that includes specific processes outlined in subsection 6.5(1). Pipeline companies should apply these existing processes to effectively manage the complexity of multi-day, multi-stakeholder projects.

Pipeline Company Obligations

The OPR mandates that companies maintain a comprehensive management system that includes processes to:

- ✓ Identify and analyze the hazards and potential hazards associated with planned work near the pipeline (paras 6.5(1)(c) and (e) of the OPR). Analysis could include understanding the activities, type of equipment and number of contractors that will be involved.
- ✓ Develop and implement controls to prevent, manage and mitigate hazards and potential hazards (para 6.5(1)(f) of the OPR).
 - Consider adjusting your company's controls to the scope, scale, and complexity of the third-party project. For example, install signage or temporary fencing to prevent unauthorized access by heavy machinery.
 - Provide safety and emergency management information related to the site to all Workers involved in ground disturbance, including the emergency number, emergency measures, and how to report pipe contact.
- ✓ Establish how changes to the project that could affect pipeline safety will be managed and communicated (para 6.5(1)(i) of the OPR).
- ✓ Communicate safety information to those who will be at the site (para 6.5 (1)(m) of the OPR).
- ✓ Establish proactive monitoring and communication channels including meetings and inspections to stay informed throughout the project (paras 6.5 (1)(m) and (u) of the OPR).
- ✓ Provide clear, plain language documentation outlining safety measures to all parties exposed to the hazards, such as equipment operators.
- ✓ Provide information that clearly explains the pipeline markings in response to a locate request (section 6 of the DPR-O).

From initial review through execution, pipeline companies should integrate management system processes into their oversight of complex third-party projects. The following outlines key regulatory requirements and guidance on how to apply them in the context of complex project oversight.

Pipeline Companies

Provide clear, plain language documentation outlining safety measures to all parties exposed to the hazards, such as equipment operators



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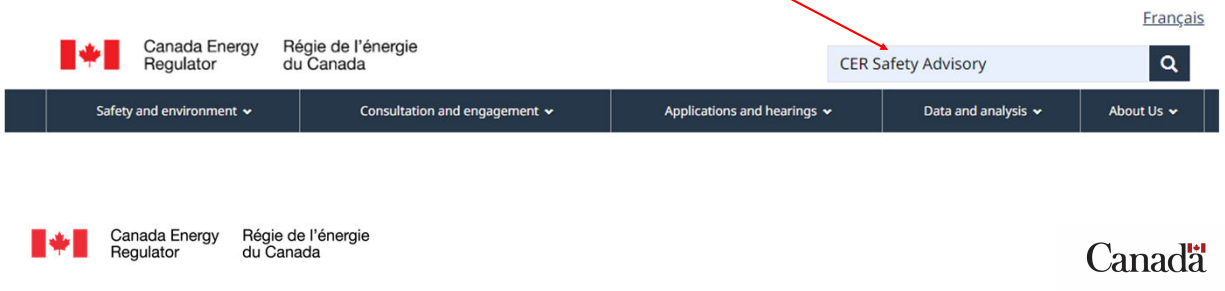
Make it easy to understand the safety measures in the crossing agreements, and make it easily accessible - don't bury this information in Schedule C

References & Further Information

- CER – Damage Prevention Pipeline Company Stakeholder Page (includes links to the OPR, DPR-A, and the DPR-O)
- CER – Damage Prevention Contractors Stakeholder Page
- Guidance Notes – Canadian Energy Regulator Pipeline Damage Prevention Regulation
- Canadian Energy Regulator Act
- Canadian Energy Regulator Onshore Pipeline Regulations
- CSA Z662:23 Oil and Gas Pipeline System

Where do I find Safety and Information Advisories?

- [CER – Safety and Information Advisories](#)
- CER Home/Safety & Environment/Industry Performance/Safety & Information Advisories
- Or type your request in the search box



Breadcrumbs

Questions or
comments?



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