

1. What's working well in relation to the OPR, and its implementation, and what could be improved?

The OPR is a comprehensive regulation establishing the requirements for the full life cycle of Federally regulated pipelines and associated infrastructure. The Regulation and the supporting *Guidance Notes for the Canada Energy Regulator Onshore Pipeline Regulations* (Guidance Notes) have provided clear direction to Canada's pipeline industry since their introduction in 1999.

Subsection 4(1) of the OPR elevates a number of standards under the auspices of the Canadian Standards Association (CSA) to regulation through adoption by reference:

4 (1) *When a company designs, constructs, operates or abandons a pipeline, or contracts for the provision of those services, the company shall ensure that the pipeline is designed, constructed, operated or abandoned in accordance with the applicable provisions of*

- (a) these Regulations;*
- (b) CSA Z276, if the pipeline transports liquefied natural gas;*
- (c) CSA Z341 for underground storage of hydrocarbons;*
- (d) CSA Z662, if the pipeline transports liquid or gaseous hydrocarbons; and*
- (e) CSA Z246.1 for all pipelines.*

The technical backbone of Canadian pipeline regulations is *CSA Z662 – Oil and Gas Pipeline Systems* (CSA Z662). This nationally accredited standard sets out in detail thousands of requirements including (but not limited to) management systems, pipeline design, materials selection, construction and joining, testing, corrosion protection, operations, maintenance, and abandonment through its adoption by the CER as well as by provincial regulatory authorities such as the Alberta Energy Regulator, the BC Oil and Gas Commission, the Ministry of Energy Resources (Saskatchewan). All Canadian provinces with oil and gas pipeline systems have adopted CSA Z662 through regulation for onshore pipelines.

Canadian pipeline companies are universally required to develop and implement Safety and Loss Management Systems (SLMS's) as set out in Clause 3 of CSA Z662:

3.1.1 *Operating companies shall develop and implement a documented safety and loss management system for the pipeline system that provides for the protection of people, the environment, and property.*

The required content of these SLMS's is set out in detail in Clause 3.1.2 and includes (but is not limited to):

- policy and leadership commitments to the development, implementation, and continual improvement of the safety and loss management system;
- processes for the management of resources including the competency, training, and contractor management;
- communication processes that support the effective implementation of the safety and loss management system;
- document and records management processes;

- documented processes and controls for:
 - risk management;
 - design;
 - material selection, and procurement;
 - construction;
 - operations and maintenance;
 - integrity management;
 - engineering assessments;
 - emergency preparedness, response, and recovery;
 - security management; and
 - deactivation and abandonment;
- management of change; and
- continual improvement including audits.

The requirements in Clause 3.1.1 (coupled with the detailed technical content of the balance of CSA Z662) appear to mirror much of the content requirements within the OPR for Management Systems, Programs and Manuals for quality assurance, joining, construction, operations and maintenance, emergency management, integrity management, safety, security management, etc.

Regulators across Canada have identified requirements over and above those found in CSA Z662 within their regulatory frameworks through instruments like the OPR. These often include requirements for filing or other matters that are unique to the regulatory world but may also include technical requirements where the content of the standard is deemed inadequate or insufficient. When created through direct regulation, these additional requirements apply only within the context of that specific regulation and within the jurisdiction of that specific regulatory authority.

If the CER could strengthen its reliance on CSA Z662 while ensuring the content meets its needs, it could reduce or negate the need for additional technical requirements within the OPR. This would ensure that the same technical regulatory requirements which apply to Federally regulated pipeline systems would apply to all pipeline systems equally across Canada.

Standardized requirements for management systems within Canada would allow for the development of common audit criteria which could be applied equally by regulators, companies or independent auditors for assessment and evaluation. In turn, this could result in significant regulatory efficiencies.

For example, consider a company that operates under the provincial authorities in Alberta and Saskatchewan as well as having some assets under the CER. At present, this company may have its SLMS audited by each of the 3 regulators independently applying their own criteria and methodology. As an alternative, if the requirements were standardized and the audit criteria were consistent, a single audit could replace the current need for 3 audits.

Given the goal of the Federal and provincial technical and safety regulatory regimes is presumably consistent - the safe and environmentally responsible operation of Canada's pipeline infrastructure – a standardized approach as opposed to continued divergence of provincial and Federal regulatory regimes is recommended.

2. How can the OPR contribute to the advancement of Reconciliation with Indigenous peoples?

The *Principles Respecting the Government of Canada's Relationship With Indigenous Peoples* (Principles) and the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UNDRIPA) provide the policy and legal background for advancing Reconciliation with Canada's Indigenous people. While they establish a framework for this work – they must be applied within the context of a respectful dialog between the pipeline industry, Indigenous peoples and governments.

Canada's Indigenous people must be fully engaged as equal partners in dialog concerning changes to the OPR. Similarly, they need to be equally engaged in the modernization, maintenance and development of all regulations, acts and policy that may impact their communities, their way of life or their territories.

Canada has a complex legal and regulatory framework governing safety and the protection of the environment during resource development which is not specific to pipeline infrastructure. For example, consider the following examples of projects:

- Construction of a roadway to provide access to a remote community;
- Construction of a pipeline in a new right of way to transport natural gas;
- Construction of a power line to provide service to a mine; and
- Construction of sewer and water lines to service a new subdivision.

While hardly definitive, these are examples of projects that result in essentially the same disturbance to the land base – surveying, cutting and clearing, excavation and ongoing monitoring and maintenance.

These projects may require a wide range of permits and authorizations from multiple provincial and Federal entities including ministries and agencies responsible for forestry, the environment, oil and gas infrastructure, transportation, forestry, heritage, etc. Almost all of these permits and authorizations will require consultation with Indigenous people which is typically done independently on a permit by permit basis by each responsible authority. Subsequent to permitting, many of these authorities will also have other regulatory obligations including inspection, monitoring and reporting as well as enforcement.

There is little consistency in how these projects are applied for, approved, or regulated through their lifecycle yet the impacts associated with them are largely equivalent.

In considering how the OPR can contribute to advancing Reconciliation, the opportunity exists to work with Indigenous people to understand the problems and inconsistencies within the existing regulatory framework (in so far as it applies to pipeline) and, ideally to collaboratively begin to identify opportunities for the development of a policy/regulatory framework which incorporates traditional knowledge and which creates a more rational and meaningful regulatory environment for land/resource development across sectors.

Principle 9 notes that "Reconciliation is an ongoing process that occurs in the context of evolving Indigenous-Crown relationships". In considering Reconciliation in the future revisions to the OPR,

its important that this process consider the complex existing regulatory and policy frameworks not just for pipelines but for all infrastructure. And it's equally important that improvements be made in partnership and collaboration with Indigenous people.

3. How can the OPR contribute to the protection of heritage resources on a pipeline right-of-way during construction, and operations and maintenance activities?

The protection of heritage resources is of fundamental importance in the development of infrastructure projects such as pipelines and those used in the example in the response to Question 2. Provincial policy and regulatory frameworks such as those managed by the Ministry of Land, Water and Resource Stewardship in British Columbia under the *Heritage Conservation Act* are found in every province across Canada. Many of these regimes are currently in the process of adapting and changing in consultation with Indigenous people to advance Reconciliation.

In all these processes, including changes to the OPR, it is essential that governments, Indigenous people and all stakeholders understand the existing policy and regulatory framework. As changes and improvements are made, they should be done in a way that meets the interests of Indigenous people and results in regulatory rationalization and consolidation versus fragmentation and increased complexity.

4. How can the OPR contribute to the protection of traditional land and resource use, and sites of significance for Indigenous peoples on a pipeline right-of-way, during construction, and operations and maintenance activities?

Pipeline design and in particular pipeline route selection is typically informed through engagement and dialog with Indigenous peoples, governments, rights holders and other stakeholders. In many cases, these efforts are successful in protecting traditional lands and resources as well as in the preservation of sites through avoidance or other means such as less intrusive construction methods.

While *Haida v. British Columbia* established it is the duty of the Crown to consult and accommodate the interests of Indigenous people, it is common practice for most pipeline companies to work actively with Indigenous people and communities to understand their interests and respect them in pipeline design and construction. In many cases, this work leads to the development of Industrial Benefits Agreements (or similar) which establish the foundation for an ongoing relationship between the company and the Indigenous signatories.

Industrial Benefit Agreements are employed with varying degrees of success by Indigenous people and project proponents across sectors. The end result is often a complex set of agreements which must be managed over time – often requiring significant resources from all parties. Many First Nations manage and maintain dozens of such agreements with proponents (and with government agencies) each of which is often unique.

There may be opportunities for the OPR renewal dialog to address this matter with Indigenous people and to identify more meaningful, effective and less resource intensive methods for ensuring the protection of Indigenous rights and interests which may be impacted by pipelines and other infrastructure projects.

5. How can the use of Indigenous knowledge be addressed in the OPR?

The need for incorporation of Indigenous knowledge in the planning and execution of activities such as those described in the response to Question 2 is essential.

The OPR review may provide an opportunity to engage Indigenous people in the development of more meaningful, effective and less resource intensive methods for ensuring the protection of Indigenous rights and interests throughout the lifecycle of pipelines and other infrastructure projects.

6. How can the OPR address the participation of Indigenous peoples in pipeline oversight?

The CER's Indigenous Monitoring Committee is an excellent example of how Indigenous people can be meaningfully engaged in pipeline oversight.

There are dozens of Indigenous Guardian Programs encompassing a wide variety of activities across Canada including (but not limited to) the monitoring of resource development, environmental monitoring, compliance monitoring and cultural activities such as heritage and language preservation or traditional practices.

These programs play an essential role in the development of long-term relationships between project proponents, provincial and federal governments and Indigenous peoples through:

- Providing meaningful participation by Indigenous people in infrastructure projects such as pipelines;
- Creating relationships between Indigenous peoples, project proponents and government;
- Enhancing the understanding of Indigenous people in the policy and regulatory framework governing projects;
- Providing an avenue for Indigenous knowledge to be employed by governments and project proponents; and
- Providing meaningful employment within Indigenous communities.

The most successful programs to date have been Indigenous designed and led or developed through collaboration between Indigenous people and government as partners.

Looking at the list of projects cited in the response to Question 2, its clear that projects with similar or the same potential impacts on Indigenous rights and interests may not be limited to any single sector such as pipelines. Many Guardian Programs have been designed not around single sectors but instead around the monitoring of all disturbances to the land base.

Significant opportunity exists for expanded programs and funding through collaboration between the Federal and provincial governments.

An approach that could see the CER's program expanded to include linkages with provincial programs and other Federal programs would enhance available funding for Indigenous people to participate in these critical programs.

7. How can the OPR support collaborative interaction between companies and those who live and work near pipelines?

A key element of damage prevention is awareness. The OPR currently contains a requirement for regulated companies to have Damage Prevention Programs under section 47.2 and in accordance with the CER's *Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies*. Section 16 of those Regulations outlines a company's obligations for awareness programs.

By placing these requirements in law through Federal regulation, the same requirements do not apply to provincially regulated pipelines (unless specifically enacted by each provincial regulatory authority). As such, there is no consistent requirement for the content or execution of damage prevention programs across Canada. A significant opportunity exists to migrate the requirements of the CER's Regulations into CSA – either within Z662 or within *CSA Z247 Damage Prevention for the Protection of Underground Infrastructure*.

The requirements for damage prevention programs and, correspondingly, awareness programs could be made universal if contained within CSA and elevated to law through adoption. At the same time, this would mean that a universal audit system could be developed for use by all regulatory authorities replacing the need for individual audits by each jurisdictional authority in situations where companies operate across multiple jurisdictions.

8. How could communication and engagement requirements in the OPR be improved?

The volume of communication and engagement with energy and pipeline companies (as well as companies representing other sectors) can be overwhelming and is often inefficient given the volume of materials as well as the demands on time for meetings and other engagement forums.

Consider a rural community that may have 15 or more pipeline companies as well as producer companies in operation within its boundaries. Requiring each company to have their own engagement program as well as materials for emergency management etc. is at best inefficient and is almost certainly confusing and possibly harmful. Collaboration in the development of consistent messaging and joint sessions could reduce the number of interactions significantly and ensure communication is more effective while fostering enhanced relationships.

9. How could the CER improve transparency through the OPR?

The CSA standards adopted by reference within section 4.1 of the OPR should be made publicly available. This would ensure that these standards which are elevated to regulation are freely available to all.

Should the CER move forward with regulatory rationalization through the greater use of CSA as the basis for management systems and programs currently required within the OPR, additional transparency could be provided through the development of third-party audit criteria and the use of certifying authorities (similar to the requirements found in regulations governing offshore development in Canada) across both provincial and federal regulatory regimes – all of which could be fully transparent.

10. Gender and other intersecting identity factors may influence how people experience policies and initiatives. What should the CER consider with respect to:

- a. those people implementing the OPR; or**
- b. those people who are impacted by the operational activities addressed in the OPR?**

The OPR currently contains numerous requirements for various programs largely aimed at safety and environmental protection throughout a project's lifecycle.

Construction programs, abandonment and other pipeline activities may have impacts on persons based on gender or identity. While these are often considered through GBA+ analysis at the application stage, the impacts may not always be associated with projects subject to an application review or hearing.

The CER should consider a requirement for the screening of company activities through a GBA+ lens as part of their SLMS.

11. How can the OPR support a predictable and timely regulatory system that contributes to Canada's global competitiveness?

Regulatory standardization coupled with meaningful collaboration as partners with Indigenous people can provide certainty and predictability for pipelines and other infrastructure projects.

12. How can the OPR support innovation, and the development and use of new technologies or best practices?

Clause 1.8 of CSA Z662 (adopted into regulation through reference as previously described) states:

It is not the intent of this Standard to prevent the development of new equipment or practices, or to prescribe how such innovations are to be handled.

The CER should consider a standard exemption process (perhaps defined within the OPR) which would provide clear direction on how to employ new technologies or practices which are potentially at variance with the requirements of the OPR or its reference standards.

13. What company-specific or industry-wide performance metrics could the CER consider to support enhanced oversight and transparency for CER-regulated facilities?

Standardized reporting should be developed between Federal and provincial regulators allowing amalgamation and comparisons of data across Canada (and ideally globally). The development of such metrics may entail changes to reporting criteria including the definition of an “incident” within the OPR.

14. Are there opportunities within the OPR for data and digital innovation that could be used by the CER and by companies regulated by the CER?

In addition to standardized reporting and terminology as described in the response to Question 13, there are likely advantages to be gained through dialog with other regulatory agencies on compliance management and assessment prioritization tools. This question should be discussed amongst regulatory agencies and with the regulated industry to identify where innovation in data collection and use could enhance the performance of both regulators and the regulated industry.

15. How can the OPR be improved to address changing pipeline use and pipeline status?

The technical requirements for changes in service or status should properly be addressed within CSA Z662 ensuring equivalent safety and environmental protection for all Canadian pipelines. Reporting requirements should be included within the OPR – ideally consistent with reporting requirements at the provincial level.

16. What further clarification, in either the OPR (e.g. structure or content), or in guidance, would support company interpretation and implementation of management system requirements?

As discussed in the response to Question 1 – further clarification regarding the interpretation and implementation of management system requirements would best be done through CSA or other collaborative forums with other Canadian regulators. Both Federal and provincial regulatory regimes should seek equivalent safety and environmental goals. And – if the same goals are sought then there should be no need for additional requirements over and above the common basis within the standards. Of course, if the requirements within CSA are deficient with respect to regulatory needs, they should be upgraded to meet the needs of Canadian regulators. Upgrading CSA means all pipelines in Canada benefit from the improvements rather than a singular jurisdiction.

17. How should information about human and organizational factors, including how they can be integrated into a company’s management system, for both employees and contractors, be provided in the OPR, and/or described in related guidance?

Human and organizational factors such as competencies, training, accountabilities, and organizational structure must be defined in accordance with SLMS requirements in CSA Z662 clause 3.1.2 paragraphs a through c:

The safety and loss management system shall cover the life cycle of the pipeline system and shall include the following elements:

- a) a clearly articulated policy and leadership commitment to the development, implementation, and continual improvement of the safety and loss management system;*
- b) an organizational structure with defined responsibilities and authorities that supports the effective implementation and communication of the safety and loss management system;*
- c) a process for the management of resources, including:
 - i) the establishment of competency requirements;*
 - ii) a training program that includes a process for evaluating the effectiveness of the training provided and for maintaining training records; and*
 - iii) contractor selection and performance monitoring that ensures services are performed in a manner that conforms to the requirements of the safety and loss management system;**

Additional guidance is provided in the Commentary which accompanies CSA Z662.

If additional requirements are contemplated, they would apply consistently across Canada to all pipeline infrastructure should they be incorporated in CSA as an alternative to amendments to the OPR.

18. How can the OPR improve the connection between company safety manuals and the overarching Safety Management Program, for both employees and contractors?

The CER is unique among Canadian pipeline regulatory authorities in that it has delegated authority regarding employee and contractor safety under the *Canada Labour Code* (last publicly available agreement updated between the CER and Employment and Social Development Canada on April 6, 2016). Provincially, employee and contractor safety is most commonly regulated by provincial occupational health and safety organizations such as WorkSafe BC.

The safety of persons during the full life cycle of pipeline infrastructure is paramount – regardless of how the regulatory framework applies. Perhaps an organization like the Western

Regulators Forum could convene a special session (or sessions) to review the safety performance of regulated companies and to discuss how they (as oil and gas regulatory agencies) might change the regulatory framework to improve the safety performance of the pipeline industry.

It's worth noting that recent data from the Bureau of Labour Statistics in the United States for 2020 indicates that the incident rate per 100 full time workers was between 0.5 and 1.8 for incidents resulting in an absence from work for all forms of pipeline transportation and 0.3 for pipeline construction. The rate of incidents for Government over the same reporting period was 2.1. Similar data for Canadian industry from Employment and Social Development Canada shows a reported injury frequency of 0.72 for the Federally regulated pipeline sector in 2019 – the lowest frequency in the *2019 ANNUAL REPORT Occupational Injuries Amongst Employees Under Federal Jurisdiction*.

19. How can respect and personal workplace safety be assured at CER regulated sites?

The existing regulatory regime as referenced in the CER's letter dated 15 April 2021 entitled *All Company Letter regarding conduct in the field and associated enforcement actions* provides the necessary tools for ensuring compliance and a respectful workplace. There should be ZERO tolerance for behaviours and actions which contradict the regulatory framework or threaten the safety of persons. The *Canada Labour Code* and the CER's *Enforcement Policy* provide a comprehensive enforcement framework that can be used effectively for both education and punitive action.

20. How should the CER be more explicit about requirements for contractor management?

Compliance meetings provide a useful mechanism for the promotion of compliance and for highlighting areas of regulatory importance – such as contractor management.

In reviewing the CER's website and materials, it's uncertain if planned Compliance Meeting's still form part of the annual compliance plans. While it's recognized that regulated companies must understand the regulatory framework and manage for compliance – periodic meetings between the regulator and companies provide an invaluable tool for communication and for ensuring companies are aware of areas of concern for the CER (and other regulators).

21. How should the OPR include more explicit requirements for process safety?

The need for process safety is implicit within clause 3.1.2 *Safety and Loss Management Systems* of CSA Z662.

There may be some advantage in incorporating *CSA Z767 Process Safety Management* (or elements thereof) if a decision is made to incorporate requirements more explicitly for process

safety within the OPR. CSA Z767 has been adopted by the BC Oil and Gas Commission for application within oil and gas facilities in BC (*Oil and Gas Processing Facility Regulation*) and as such already applies to companies regulated by both the CER and the BC Oil and Gas Commission.

22. How can the OPR drive further improvement to the environmental performance of regulated companies?

Environmental protection programs which govern how the environment is protected throughout the lifecycle of pipelines have been required now for more than 20 years under the CER. Similar plans are often (typically) required as an outcome of provincial environmental assessments (and likely other avenues as well).

If the requirements for broader environmental protections programs could be moved from the OPR into a standard under CSA (or perhaps a protocol developed by the Western Regulators Forum) then these could be consistent across Canada and potentially reduce duplication and complexity.

Having a singular standard for such programs would allow for clarification of the role of project specific plans for environmental protection within full lifecycle programs – all of which would be captured under a company’s management system (ideally the SLMS within CSA Z662 for uniformity and simplicity).

23. How can the connection between the Environmental Protection Plan, specific to an individual pipeline, and the company’s Environmental Protection Program, designed for a company’s pipeline system, be improved?

See the response to Question 22 previous.

24. How can contaminated site management requirements be further clarified, in the OPR or in guidance?

Once deleterious materials or contaminants are introduced to the environment through spills, emissions, or other mechanisms – they are rarely (if ever) confined to the immediate Federally regulated footprint of the infrastructure. As such (and as noted in the Discussion Paper) – both Federal and provincial legislation and regulatory regimes apply. This makes remediation complex as companies must meet with multiple levels of Government in executing their initial response and subsequent site remediation which may take years.

Perhaps, the CER could consider equivalency agreements (or similar) with provincial authorities for remediation and reclamation – accepting a single regime and established criteria for remediation which would be consistent with the surrounding environment outside of the confines of the Federal infrastructure.

25. Are there any matters related to the Emergency Management Program in the OPR that require clarification? If so, what are they? Are there any matters for which further guidance is required?

As noted in the Discussion Paper (paraphrased for clarity):

CSA Z246.2 Emergency preparedness and response for petroleum and natural gas industry systems (CSA Z246.2) allows a standardized approach to be taken across jurisdictions when coordinating an emergency response process.

The CER, in collaboration with their colleagues in the Western Regulators Forum and across the balance of Canada should work collectively to ensure that the requirements within CSA Z246.2 fulfill their regulatory needs. Having a uniform and well-regulated basis for emergency management within Canada's pipeline and energy sector is critical to safety and environmental protection.

In addition, the CER and its colleagues should continue/expand their work with other Regulatory agencies responsible for emergency management and response ensuring that practices are shared across sectors and enhancing opportunities for mutual aid.

26. How could the requirement for a Quality Assurance Program be improved or clarified in the OPR?

The requirements within *CSA EXP 13:21 Quality assurance requirements for pipe and components* appear suitable for large pipeline corporations and large-scale projects. The standard could be difficult to apply to smaller projects or singular material purchases by smaller companies.

Perhaps the CER could work with material suppliers and CSA or a similar standards organization to ensure that materials sold within Canada conform to more stringent quality assurance and quality requirements. This approach would shift the onus for auditing and verification from regulated companies to the manufacturers. The CER could then seek authority (ideally in collaboration with provincial regulators) to audit and ensure that standards are being met.

Companies would still be required to ensure the materials they purchase are fit for service per their SLMS's clause 3.1.2(f).

27. How can the OPR incorporate the key issues identified in the Safety Advisory regarding the strength of steel and the relative strength of the weld area?

The requirements for welding and joining contained within CSA Z662 are extensive and (excepting the issues under investigation by the Pipeline and Hazardous Materials Safety Administration and the CER) comprehensive. The best way to ensure the continued safety of all of Canada's pipelines is to incorporate changes as may be necessary for welding high strength pipe into CSA Z662 directly – so that they apply to every pipeline in Canada and not just those regulated by the CER.

If a more immediate approach is needed, the CER has used the *Notice of Proposed Regulatory Change* (NOPRC) process effectively in the past. Such an approach should be used in collaboration with other Canadian regulators ensuring consistent safety and practices.

28. What are your recommendations for compliance promotion at the CER?

There is an opportunity for regulators having authority over pipelines in Canada to collaborate in the promotion of compliance. The Federal and provincial regulatory frameworks governing the lifecycle of pipelines in Canada is complicated as outlined in many of the responses contained within this document. Shared messaging would help clarify how safety and environmental protection for pipelines across Canada is practically and effectively regulated as well as helping all Regulators with regulatory integration and rationalization.

Common reporting and performance metrics between regulators will further assist in helping all audiences understand how the CER and other Canadian regulators are delivering on their mandates effectively and responsibly. It would also allow sharing of compliance intelligence readily across jurisdictions reducing potential duplication and increasing regulatory efficiency.

29. How do you want to be engaged by the CER in the development of technical guidance?

While the question is specific to the development of technical guidance it is presumed there will also be opportunities to further contribute to the development of amendments to the OPR itself.

We would like to continue to provide input and advice to both the development of the regulatory amendments and the technical guidance as they advance – through forums or through more opportunities such as has been provided with the Discussion Paper.