CANADIAN ASSOCIATION
OF PETROLEUM PRODUCERS

Canada's Oil and Natural Gas Producers

January 30, 2014

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Dear Gentlemen,

Re: CAPP Submission in Response to the Discussion Paper "Advancing Safety in the Oil and Gas Industry: Draft Safety Culture Framework"

On the behalf of our members at the Canadian Association of Petroleum Producers (CAPP), we would like to thank the National Energy Board, the Canada Nova Scotia Offshore Petroleum Board and the Canada – Newfoundland and Labrador Offshore Petroleum Board for the opportunity to comment on the discussion paper entitled "Advancing Safety in the Oil and Gas Industry: Draft Safety Culture Framework".

This is an important element in the ongoing journey of safety performance improvement, one that has the potential to have a significant positive impact. As such, CAPP and our members appreciate the opportunity to provide this feedback and propose a viable path forward. We have also included further detailed comments in the attached document.

For clarity, CAPP is one of the member associations of Enform, the industry's safety association. We broadly support Enform's submission and view our submission as complementary and supportive in terms of clarifying the path forward. Enform has a strong regional presence in Western Canada. However is not as well known in Atlantic Canada, with the exception of their Offshore Well Control Committee (in which industry and the Offshore Petroleum Boards

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participate). Regardless, the focus on safety culture is an opportunity for a consolidated, unified response across the Canadian industry, including offshore operations.

First, and most importantly, we are concerned that the regulators have developed a proposed safety culture framework without sufficient engagement with the industry. While we appreciate this consultation phase, we believe greater progress would be evident if industry had been engaged much earlier in the process. We accept that there is more to be done to improve industry safety performance; however, we believe that to be successful, regulators and industry must cooperate to examine the status of existing regulation, performance and methods to identify where best to seek improvement opportunities. While we agree that safety culture, leadership and management systems play their part, we also believe that there is a significant opportunity to examine existing regulations to identify their effect on current safety performance. By examining the entire status of safety performance and regulation, we believe we can identify substantive improvement opportunities.

We have reviewed the draft safety culture framework that you have provided and believe there are significant gaps that would need to be addressed before the industry could consider its adoption or sanction. We are also concerned that the intended purpose and application of this framework remains unclear or unstated. We would strongly caution against the use of this framework in its current form to develop "Safety Culture Regulations". In our view, the NEB and the two offshore petroleum boards should not proceed in the near term with a regulatory "solution" to the safety culture issue. There is not a sufficient common understanding of the issue and it is not clear that a regulatory approach is necessarily the right method to achieve the desired outcome.

As an alternative, we believe a useful starting point would be to establish a common understanding of the status of safety management and regulation within the industry and in doing so, recognize the progress that has been made to date and the issues / gaps that need to be addressed to further improve safety performance. From this foundation, industry and regulators could jointly identify issues / opportunities and agree on a process to advance the safety agenda, particularly as it relates to safety culture.

We agree that there is a need to focus on improving leadership and the implementation of effective verifiable controls and barriers to prevent major incidents, but we submit that additional regulation alone will do little to advance safety performance. Industry and Regulators should instead collaborate on the facilitation, improvement and implementation of existing tools and systems, clarify expectations for new initiatives and ensure that redundancies that do little to enhance safety are eliminated.

We recommend that this collaboration initially take the form of a joint technical working group, co-chaired by regulator and industry representatives, with a mandate to improve the overall management of safety across the Canadian industry. The primary objectives would be to:

- Support the establishment of a strong working relationship, with involved provincial and federal Regulators, to facilitate the identification and application of practical and effective means to improve safety management across the industry; and,
- To directly engage and align industry so as to realize these improvement opportunities.

Safety Culture is a key dimension of overall safety management. The oil and gas industry welcomes the opportunity to engage with the three Regulators with the collective objective of safety performance improvement across the industry.

Canada's six major oil and gas trade associations - Canadian Association of Geophysical Contractors (CAGC), Canadian Association of Oilwell Drilling Contractors (CAODC), Canadian Association of Petroleum Producers (CAPP), Canadian Energy Pipeline Association (CEPA), Petroleum Services Association of Canada (PSAC), and Explorers and Producers Association of Canada (EPAC) - working with our safety association, Enform, are also committed to improving safety culture in our industry.

To that end, CAPP strongly recommends a cooperative approach with Regulators, other industry associations, and Enform to develop an effective safety culture framework that represents best practice and that can be broadly applied.

As a first step, we encourage the timely formation of the above-referenced joint industry and regulator technical group to realize progress in this key area.

Thank you for your consideration of our submission.

Sincerely,

Dave Collyer
President, CAPP

CC: David Pryce, Vice-President, Operations, CAPP
Brad Herald, Manager, Health & Safety, CAPP
Paul Barnes, Manager, Atlantic Canada, CAPP

CAPP
CANADIAN ASSOCIATION
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Comments on NEB Safety Culture Discussion Paper and Framework January 30, 2014

1.0 Introduction

We support the promotion of shared learning, understanding and communication and believe there is considerable value in collaboration with Regulators to reach an agreed and transparent strategy on how to improve safety culture in organizations. We believe that the engagement and involvement of industry is crucial to provide the understanding, leadership and technical resources necessary to build on the significant improvements that industry has already made in this area.

Over the last 10 years, a number of oil and gas industry organizations, particularly, the American Petroleum Institute (API), the Society of Petroleum Engineers (SPE) and the International Oil and Gas Producers (OGP), have published a wealth of information, recommended practices and guidance on safety management systems, safety culture, process safety and leadership. We believe there may be greater value in implementing existing safety culture models than developing new ones.

Safety Culture has been a major focus for the industry for many years and there are a considerable number of learnings and examples within our industry. We agree that improving and re-enforcing safety culture is an important part of safety management; however we believe that the starting point should be to establish an initial common understanding of "safety culture" as it applies to the oil and gas industry.

1.1 CAPP Position on the Regulation of Safety Culture

One key element missing in the framework is the recognition that the regulators themselves have a significant impact on safety culture. We support comments made by the Canadian Energy Pipeline Association (CEPA) in their submission, specifically that the draft framework does not recognize the unintended consequences of regulators and regulation on the industry's management of safety.

Regulators are in a unique position to provide leadership, clarify expectations and support industry as it strives to improve safety performance.

It is not helpful that the Regulators seem to be unclear or undecided as to what use will be made of this safety culture framework going forward. This creates an issue in providing feedback, since the application of the framework is currently unknown to us. For example, the use of this model as part of future safety regulation would do little to advance (and could actually restrict) the development of safety culture in the industry as it comes into conflict with existing non-regulated models, best practices and industry guidelines currently being used effectively by industry. It is our belief that whatever framework or tools are developed, it should be left to individual organizations to decide

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how best to apply them based on the risks they manage. Regulators can then examine the effectiveness of implementation and resulting performance accordingly.

2.0 Safety Culture in the Oil and Gas industry

The oil and gas industry has long recognized the key role played by a positive safety culture as a component part in delivering personal safety, and in the prevention of major incidents. Over many years, oil and gas operators and their contracting companies have worked together to build and improve safety culture across the industry. These efforts, which extend from employee performance assessments to contractor selection and from site/facility safety orientations to supervisor leadership and competency, have played a significant role in the management of safe operations for decades. We contend that safety culture should be viewed not as the "emerging discipline" as suggested in the NEB framework, but rather as part of a long journey of safety performance improvement, which we have been on for some considerable time.

2.1 Learning from Events

We agree that the impetus for many safety improvement initiatives has been from major events that have occurred across all process industries. The Upstream Petroleum Industry Task Force on Safety (UPITFOS 1988) Recommendations resulted in many changes to the way that safety is managed across the industry. The Task Force stated that it *"strongly believes that the ultimate responsibility for improved safety performance lies with senior management of individual companies in the industry"*. This statement remains valid today.

Probably the most significant event in the oil and gas industry occurred in July 1988, when the offshore production platform Piper Alpha was lost in the North Sea resulting in 167 fatalities. The Cullen Report into this disaster has been the framework for many Regulations and changes in the management of safety across the global oil and gas industry, including in Canada. However, Lord Cullen stated, at the 2013 UK Oil & Gas conference on the 25th anniversary of Piper Alpha, that "*no amount of regulations can make up for deficiencies in the quality of management of safety. That quality depends critically on effective safe leadership at all levels and the commitment of the whole workforce to give priority to safety*".

In October 2013, the International Oil and Gas Producers Association, OGP, (of which CAPP is a member) published "Shaping Safety Culture through Safety Leadership" which specifically addresses many of the points raised by your draft framework and we believe makes a major contribution to this Safety Culture discussion, including how the prevailing Safety Culture can act as a barrier against the complacency, omissions and violations which often lead to incidents. In publishing this guidance the OGP aim to provide a consistent approach to training, management and best practice across the industry and we would recommend that it is a an excellent starting point for a discussion on safety culture.

Also in 2013, the Enform Board of Directors, representing all six major Canadian oil and gas trade associations, identified Safety Culture, Process Safety and Safety Performance Measurement as its key strategic initiatives for 2014 and beyond. Enform is supportive of the OGP's recommendations on safety culture, and are also developing initiatives in alignment with them for the Canadian industry.

2.2 Recent Canadian Industry Safety Performance

As you may be aware, CAPP requires its members to report all employee and contractor recordable injuries. An examination of the last 8 years of data (2004 to 2012) reveals that the overall industry total recordable rates have more than halved over this period. In addition to the reduction in the total number of overall injured personnel, the total number of safety exposure hours worked by CAPP members and their contractors has doubled. We believe these results represent the considerable effort made by industry to improve overall safety performance and demonstrate that the industry has been focused on improvement in safety culture and safety performance for some time.

2.3 Leadership

We agree, and confirm our own experience has shown, that strong senior leadership commitment is fundamental to ensuring that appropriate resources are made available so that employees and contractors put safety ahead of commercial pressures.

We would also like to emphasize the key role of front line work supervisors - empowered by senior leaders - to build and improve overall safety culture. It is for this reason that the industry spends considerable resources to train first level supervisors in this accountability. As an example, Enform published the Supervisor Competency Guideline for use in the Western Canada conventional oil industry. The guideline offers a perspective on the competencies required for supervisors to achieve superior site management outcomes in health, safety, environment, operations and social responsibility and activities, knowledge and skills that are expected to enhance a supervisor's performance.

2.4 Safety Management Systems

Safety management systems, commonly coupled with environmental compliance requirements, have long been used to implement policy and standards consistently across organizations in the oil and gas industry. We recognize that this is, and will remain, a work in progress as new hazards and challenges confront the industry, new personnel join our workforces and new regulations are introduced.

We agree that there have been, and continue to be, issues relating to the implementation of management systems. These are not unique to the oil and gas industry. One key issue is the need to provide significant documentation to meet regulatory requirements as proof of compliance. This has contributed to creating a paradigm, in some workforces, that management systems are over-documented bureaucratic mechanisms that do little to improve overall safety. The link between management systems, control of risk and personal attitudes to safety can sometimes be lost as a result. This is unfortunate, as we agree that effective and fully implemented management systems are key to ensuring safe operations.

We also believe that every management system requires a robust system of assurance to validate the active monitoring processes and performance indicators required to ensure that the management system remains effective.

2.5 Building a Safety Culture

We believe a positive Safety Culture is a learned behavior whose impact is felt most at the front line of our business - where our workforce faces the most risk. It is a primary tenet of risk management that those most at risk should be most involved in its management. For this reason we believe that there needs to be a concerted effort to simplify the approach to safety culture in a way that engages our workforce. Whereas the proposed framework builds on established incident and barrier management concepts, there is a real need to translate this into meaningful and effective methods for building a safety culture across industry.

The most effective results come from moment to moment focus on safety by supervision and the gradual individual acceptance that all unplanned events and incidents are preventable - when the tools, controls, barriers and systems provided, are applied effectively. In this way, safety is given the highest priority by all members of the workforce because they have understood and accepted their accountability, not because regulations require it.

For safety to be the highest priority in day to day work, first line supervisors need to continuously coach and enforce performance expectations. It is through this leadership that personnel learn and then demonstrate the behaviors that reflect this accountability.

2.6 Process Safety

Process Safety has been a particular focus for the industry over recent years and this has resulted in numerous initiatives within the industry to improve the management of barriers that prevent the loss of primary containment and the escalation that typically leads to major events. Two OGP publications in use by the industry were specifically developed to address this - "Asset Integrity – the key to managing major incident risks "and "Process Safety: Recommended Practice on Key Performance Indicators". In addition, The American Petroleum Institute published Recommended

Practice 754 and related performance metrics, which is currently being applied by CAPP to require the reporting of process safety events by its members.

2.7 Contractor Management

The oil and gas industry contractor workforce contribute approximately 75% of the total exposure hours and yet suffer 85 % of the injuries. This is partly due to their "hands on" work that increases their risk. But it is also a result of the challenges faced by license holders to build and maintain a positive safety culture with a dynamic work force. For this reason, license holders expend considerable resources on the prequalification processes to select contractors they believe have the competency to perform the work safely and to ensure that they bring their own positive safety culture to the work site.

When implementing a contractual arrangement, we believe that care must be taken in imposing or implying client level standards on the contractor. There are concerns that this prevents or removes some elements of growth and responsibility from that contractor.

Most of the contractors in our industry have established safety management systems and many are accredited and certified by independent audit through the Enform Certificate of Recognition Program. Many of the cultural defense descriptors contained in the draft Safety Culture Framework are included in these Enform COR audits. Enform serves as a certifying partner for this program and audits around 3,000 employers health and safety management systems annually in British Columbia, Alberta, and Saskatchewan. Operator's often conduct their own audits of key contractor's safety management systems as well.

2.8 Safety is Good Business

We recognize that safety is good business and without the active and successful management of the hazards our industry face, the industry would compromise its access to the resource and social license to operate.

3.0 Conclusion

The oil and gas industry continues to look for opportunities to improve overall safety performance and we acknowledge that overall safety culture across our industry is not uniform and there are opportunities for improvement.

We believe that the best results will be obtained by a joint systematic examination of all the contributors to safety performance in our industry today. In carrying out this analysis, we can build a strategy that industry can implement, not necessarily through increased process / procedures and

regulation, but rather by identifying proven opportunities for improvement and enabling their success by working together towards this common objective.

3.1 Proposed Way Forward: Opportunity for Collaboration and Demonstration of Leadership

We recognize the opportunity that is presented here to collaborate with Regulators to improve safety culture in the industry. We propose that the key potential areas of collaboration be:

- Definition of Safety Culture
- Learnings and Best Practices
- Development of a Safety Culture Model
- Identification of Appropriate Performance Metrics
- Development of Appropriate Tools and Training
- Alignment of Enform's COR Program
- Development of Audit Protocols
- Communications Plan
- Industry Perception Study

Appendix A - Specific Comments on the Draft Safety Culture Framework

Learning from Organizational Events	The model presented merges cultural concepts with Reason's barrier model to develop a safety culture framework. The work is based on learning's from incidents examined by a DnV Study that examines events that occurred from 1982 and 1995. This is a selective approach that omits more recent learning's which we believe would offer a more complete understanding and be more useful, particularly Piper Alpha, and more recently Texas City. Both events had a significant impact on the development of safety management systems and safety culture in the oil and gas industry globally. As a result the framework fails to recognize the enormous efforts that have been made, and learning's that have been applied by the industry to improve safety management over the last 25 years.
DnV Study	This particular DNV study was published in 2011 but covers events that occurred between 1982 and 1995, leaving a near 20-year gap to the present day. By making specific reference to this study, the framework infers that no progress has been made in the advance of safety culture in the intervening time period. There is no reference to the considerable quantity of safety culture and process safety focused work carried out by the industry, including many studies and publications by the American Petroleum Institute (API), the Society of Petroleum Engineers, (SPE) and the International Oil and Gas Producers (OGP) and does not refer to the considerable improvements in safety performance that have been made by the oil and gas industry over the past 20 years. In our discussions with Regulators we believe there would be considerable benefit to be gained by referring to and including material from these and other industry sources.
Emerging Discipline	We would contend that Safety Culture is not an emerging safety discipline, but rather one that the oil and gas industry has focused on for many years. Many major changes have occurred as a result of this focus, including recognizing the need to increase the overall effectiveness of safety management systems and to actively instill a positive safety culture at all levels.
Leadership	Strong leadership is fundamental to successful safety management. While senior leadership sets the strategic direction and performance standards – it is the day-to-day work site supervision that delivers the results. These leaders set the behavioral expectations and reinforce the values necessary to build and maintain a positive safety culture.

	We believe that in order to develop the correct attitudes and resulting behaviors time as well as commitment to develop the required learned behaviors. This understanding of long-term commitment appears to be missing from the draft framework, along with the understanding that this time is also needed for the individual connection to be realized and to gain that understanding of the safety impacts on, and from other factors, such as asset integrity, environmental impact and operational performance. There needs to be a foundation through leadership to instill and build the safety culture. The draft framework seems to suggest that safety culture is solely process driven. We believe that a strong safety culture occurs when that individual connection between personal safety and process safety in a way that affects or changes behavior. Leadership facilitates that connection through the implementation of the management system and the continuous coaching of safety behaviors.
Reporting and Information Sharing	We agree that supporting the reporting of incidents (including near misses), appropriate investigation for cause and the prompt sharing of lessons learned is fundamental to improving safety culture and performance. Coupled with a just / no blame culture the identification of root causes for failure is very important. We observe that there is a tendency to use generic models and processes to identify physical or human causes and not enough attention is paid to the identification of latent causes. Latent cause identification encourages organizations to look more closely at their culture and what causes certain poor behaviors to be acceptable.
Regulatory Influence	We agree with the direction that improving and re-enforcing safety culture is an important part of safety management; however, we believe there is considerable opportunity and benefit in establishing a common understanding of "safety culture". The draft framework does not appear to discuss or consider the means by which the regulators can influence safety culture while minimizing the unintended consequences of their influence. As noted in the framework, there is considerable complexity and learning still to be gained by studying the complex behaviors of people and organizations. We support the Canadian Energy Pipeline Association (CEPA) position, that the NEB is in a unique position to provide leadership and support industry as it strives to improve strengthen safety culture and improve safety performance. In particular, we agree that the NEB and other Regulators should look for opportunities to remove disincentives to safety performance improvements. This includes, penalizing companies who do not meet specific stretch goals as they strive for operational excellence, three-way collaboration on auditing, the

	development of standards and metrics and the use of third party verification and assurance
James Reason's Swiss Cheese Model	The framework makes extensive use of Reason's model and outlines 4 negative dimensions as additional threats penetrating Technical, Organizational and people barriers and the positive dimensions as shielding the barriers from the negative dimensions. Our view is that these negative dimensions degrade, or compromise barriers put in place by management. In terms of the Swiss Cheese model, this creates new holes, aligns holes and makes the holes larger. A positive safety culture reinforces the barriers, disperses holes, removes some holes and makes most holes smaller. We are unsure that it is appropriate to reflect negative and positive dimensions as threats and new barriers in Reason's model. Perhaps more rigorous definition or approach is needed or a wider discussion to improve understanding and use.
Use of Framework Descriptors	A number of the descriptors used in the framework are subject to wide interpretation. We see them as useful but we would contend that as part of a Regulatory framework greater accuracy and definition is required to avoid misunderstanding, misrepresentation and lack of clarity. References to "time and workload pressures", "excessive budgetary pressures" are quite subjective. We would propose that by collaborating on the development of this framework a more practical and objective set of descriptors could be developed allowing them to be part of an industry safety culture self-assessment tool or audit protocol. In addition, a number of the descriptors imply the use of incentive programs regarding safety, which we largely discourage due to their unintended consequences. They could in fact add confusion, rather than clarity to current practices, and be harmful to the intended results of the program. It is not clear within the framework how the descriptors will be used or applied by Regulators. We also do not see any reference to existing and well accepted industry practices, industry benchmarks and assessment methods that are used to guide and qualify decisions taken by management, with respect to implemented safety programs, maintenance backlog or preventative actions.
Work Planning and Maintenance Backlog	We would suggest that we have some differences in understanding of asset integrity management with particular regard to maintenance backlogs. Organizations that are considered to have high-level safety and reliability systems can have many weeks of various types of maintenance backlog in their planning

	and scheduling process. Your position would be more complete if it referred specifically to 'safety critical elements'. This may be an issue of terminology – perhaps backlog is not the correct term and it would be more useful to see this as 'overdue' maintenance. We believe some further discussion is required to clarify this and gain a common understanding.

Appendix B - References

1. The Report of the Upstream Petroleum Industry Task Force on Safety, 1988, Canadian Petroleum Association, Independent Petroleum Association of Canada, Canadian Association of Oilwell Drilling Contractors, Petroleum Services Association of Canada and Small Explorers and Producers Association of Canada.

2. Cullen, The Hon. Lord W. Douglas (1990). The public inquiry into the Piper Alpha disaster. London: H.M. Stationery Office.

3. Finding Petroleum, Review: Lord Cullen - what have we learned from Piper Alpha? Published September 16th 2013. From remarks made at the Oil and Gas UK Conference on the 25th Anniversary of Piper Alpha.

4. Shaping Safety Culture through Safety Leadership, International Organization of Oil and Gas Producers Report Number 452, published October 2013.

5. Responsible Canadian Energy Shared Data collected by the Canadian Association of Petroleum Producers.

6. Guideline on Supervisor Competency, October 2013, Enform

7. Asset Integrity – the key to managing major incident risks, International Organization of Oil and Gas Producers Report Number 415, published December 2008.

8. "Process Safety: Recommended Practice on Key Performance Indicators". International Organization of Oil and Gas Producers Report Number 456, published 2011.

9. Measuring Process Safety, American Petroleum Institute Recommended Practice (RP) 754, Process Safety Performance Indicators for the Refining and Petrochemical Industries, published April 2010.

10. Reason James, Human error: models and management. British Medical Journal. 2000