

Canada Energy Régie de l'énergie Regulator du Canada

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File OF-Surv-OpAud-P384-2021-2022 01 CV2122-255 3 February 2022

Dean Liollio President Plains Midstream Canada ULC 1400, 607 - 8 Avenue SW Calgary, AB T2P 0A7 Email

Dear Dean Liollio:

Canada Energy Regulator (CER) Final Audit Report Plains Midstream Canada ULC (The Auditee or Plains) Audit Topic: Contaminated Sites Management

Please find attached a copy of the final Plains Midstream Canada Contaminated Site Management audit report. This audit was conducted between 3 May 2021 and 9 September 2021, under section 103 of the Canadian Energy Regulator Act.

A redacted version of the final audit report will be posted on the CER's external website. Thus, the Auditee may provide any additional redaction requests to the CER by 10 February 2022.

The CER recognizes its obligations under both the Access to Information Act and the *Privacy Act*, and will consult with affected parties prior to releasing any documents.

During the course of completing this audit, the auditors have identified the following deficiency which is out of scope for this audit. During interviews with Plains staff, they indicated that the Environment Team strives to meet the following overarching Operations goals:

- Goal #1 Eliminate Ruptures, liquid and gas releases;
- Goal #2 Enable response readiness to incidents; and
- Goal #4 Promote discipline in planning and managing operations.

.../2



Plains goals 1 and 2 essentially paraphrase, and do not expand upon, the wording of paragraph 6.3(1)(b) of the *Canadian Energy Regulator Onshore Pipeline Regulations* (OPR). From an environmental perspective these goals are lacking a holistic and lifecycle approach to environmental protection. Subsection 6.3(1) of the OPR states "The company shall establish documented policies and goals to ensure that the purposes referred to in paragraphs 6(a) to (c) are achieved and that its obligations under these Regulations are met." When reviewing section 6 of the OPR, it requires a company to consider the lifecycle of a pipeline and to ensure the protection of property and the environment. The phrase "...protection of property and the environment from the product in the "pipe".

When taking this into consideration, the auditors are of the opinion that Plains goals are lacking environmental content. The OPR has a requirement for an environmental protection program, (section 48), whose requirements are more than just keeping the company's product within the pipe. As part of the environmental protection program, the CER has an expectation that a company will have some sort of contaminated sites plan within its overall structure. To be able to evaluate if the goal(s) is/are being achieved there needs to be applicable objectives and targets associated with the goal to provide further guidance and direction to Plains staff on what needs to be established, implemented, and achieved.

The above discussion on goals does not form a non-compliance for this particular audit as it is not one of the audit protocol questions. The auditors point out the gap to Plains for it to address during its continual improvement cycles.

Attached is a CAPA (corrective and preventive actions) workbook template. The Auditee shall use this template to generate a CAPA plan. This plan will describe the corrective and preventive actions that the Auditee will implement to resolve the deficiencies identified in the Final Audit Report. The CAPA plan shall be submitted to the CER by 7 March 2022.

The CER will monitor and assess the implementation of the CAPA plan. Once the Auditee completes all the action items, the CER will issue an audit close-out letter indicating the end of this audit.

If you require any further information or clarification, please contact Darryl Pederson, Lead Auditor, at

Yours sincerely,

Signed by

Darryl Pederson Lead Auditor Canada Energy Regulator

Attachments: Final Audit Report CAPA Workbook Template

cc: Olivera Blagojevic, Director, Audit Enforcement and Investigation, Canada Energy Regulator, Email

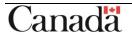
Email Manager, Regulatory Affairs, Plains Midstream Canada ULC, Email



Suite 210, 517 Tenth Avenue SW Calgary, Alberta T2R 0A8

Audit Report

Auditee: Plains Midstream Canada ULC Audit Topic: Contaminated Sites CV2122-255 File: OF-Surv-OpAud-P384-2021-2022 0101 Date: 3 February 2022



Executive Summary

The Canada Energy Regulator (**CER**) expects pipelines and associated facilities within the Government of Canada's jurisdiction to be constructed, operated, and abandoned in a safe and secure manner that protects people, property, and the environment. To this end, the CER conducts a variety of compliance oversight activities, such as audits.

Section 103 of the *Canadian Energy Regulator Act* (S.C. 2019, c.28, s.10) authorizes Inspection Officers to conduct audits of regulated companies. The purpose of these audits is to assess compliance with the *Canadian Energy Regulator Act* and its associated Regulations.

The purpose of operational audits is to ensure that regulated companies have established and implemented both a management system and its associated programs, as specified in the *Canadian Energy Regulator Onshore Pipeline Regulation* (SOR/99-294) (**OPR**).

The Canada Energy Regulator (**CER**) conducted a: **Contaminated Sites** operational audit of Plains Midstream Canada ULC (the **Auditee** or **Plains**) between 3 May 2021 and 9 September 2021.

The objective of this audit is to verify that the auditee manages contaminated sites as a component of its Environmental Protection Program as per the requirements of the OPR.

Of 15 audit protocols that were audited; 12 were deemed to have no issues and three were deemed non-compliant. Table 1 in the audit report summarizes this audit's findings.

While completing this audit, the auditors have identified the following deficiency which is out of scope for this audit. During interviews with Plains staff, they indicated that the Environment Team strives to meet the following overarching Operations goals:

- Goal #1 Eliminate Ruptures, liquid and gas releases;
- Goal #2 Enable response readiness to incidents; and
- Goal #4 Promote discipline in planning and managing operations.

Plains goals 1 and 2 essentially paraphrase, and do not expand upon, the wording of paragraph 6.3(1)(b) of the OPR. From an environmental perspective these goals are lacking a holistic and lifecycle approach to environmental protection. Subsection 6.3(1) of the OPR states "The company shall establish documented policies and goals to ensure that the purposes referred to in paragraphs 6(a) to (c) are achieved and that its obligations under these Regulations are met." When reviewing section 6 of the OPR, it requires a company to consider the lifecycle of a pipeline and to ensure the protection of property and the environment. The phrase "...protection of property and the environment" is purposely broad in scope and it is not limited to just protecting the environment from the product in the "pipe".

When taking this into consideration, the auditors are of the opinion that Plains goals are lacking environmental content. The OPR has a requirement for an environmental protection program, (section 48), whose requirements are more than just keeping the company's product within the pipe. As part of the environmental protection program, the CER has an expectation that a company will have some sort of contaminated sites plan within its overall structure. To be able to evaluate if the goal(s) is/are being achieved there needs to be applicable objectives and targets associated with the goal to provide further guidance and direction to Plains staff on what needs to be established, implemented, and achieved.

The above discussion on goals does not form a non-compliance for this particular audit as it is not one of the audit protocol questions. The auditors point out the gap to Plains for it to address during its continual improvement cycles.

The focus of this audit was Plains' environmental protection program and specifically contaminated sites management. Plains demonstrated that it has processes, procedures, work instructions, and activities in place to manage contaminated sites, both historical in nature and new ones that may occur. The non-compliances identified with this audit are related to gaps in Plains management system and not directly related to contaminated sites management. The auditors are of the opinion that none of the gaps identified during this audit would prevent Plains from operating its system in a manner that is safe and protects the environment.

Within 30 calendar days of receiving the final audit report, the Auditee shall file with the CER a Corrective and Preventative Action Plan (**CAPA**) that details how the non-compliant findings will be resolved. The CER will monitor and assess the implementation of this CAPA Plan to confirm that it is completed in a timely manner.

Note that all findings are specific to the information assessed at the time of the audit as related to the audit scope.

While non-compliant findings exist, the CER believes the Auditee can still construct, operate, and abandon pipelines in a manner that will preserve the safety of persons, the environment, and property.

The final audit report will be made public on the CER website.

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1: Summary of Findings

Canada

1.0 Background

1.1 Introduction

The Canada Energy Regulator (**CER**) expects pipelines and associated facilities within the Government of Canada's jurisdiction to be constructed, operated, and abandoned in a safe and secure manner that protects people, property, and the environment.

Section 103 of the *Canadian Energy Regulator Act* (S.C. 2019, c.28, s.10) authorizes Inspection Officers to conduct audits of regulated companies. The purpose of these audits is to assess compliance with the *Canadian Energy Regulator Act* and its associated Regulations.

The purpose of operational audits is to ensure that regulated companies have established and implemented both a management system and its associated programs, as specified in the *Canadian Energy Regulator Onshore Pipeline Regulations* (SOR/99-294) (**OPR**).

The Canada Energy Regulator (**CER**) conducted a: Contaminated Sites operational audit of Plains Midstream Canada ULC (the **Auditee** or **Plains**) between 3 May 2021 and 9 September 2021.

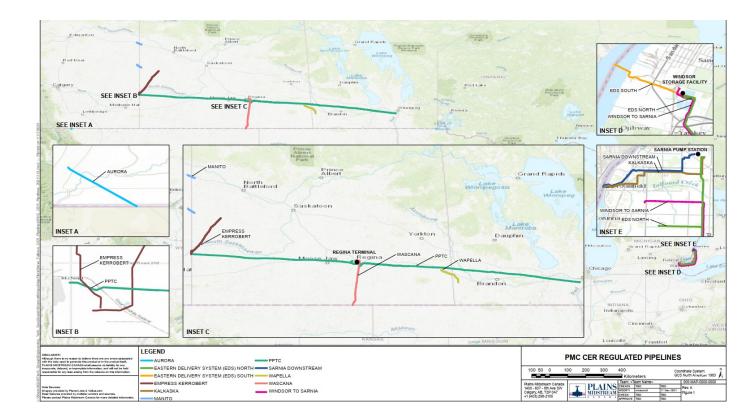
1.2 Description of Audit Topic

While the OPR does not have a specific requirement for contaminated sites, the CER expects the company's Environmental Protection Program to proactively manage contaminated and suspected contaminated sites. The protection of ecological and human health must be maintained throughout a facility's lifecycle, as a result the appropriate management of contaminated and potentially contaminated sites is a critical activity.

1.3 Company Overview

Plains is an indirect subsidiary of Plains All American (**PAA**) Pipeline, L.P. Plains specializes in the transportation, storage, processing and marketing solutions for crude oil, natural gas, and natural gas liquids (**NGL's**) and links petroleum producers with refiners and other customers via pipeline, truck, and rail transportation. Plains also operate facilities for crude oil and NGL storage, separation of NGL from natural gas and fractionation of NGL into specification products.

Plains is headquartered in Calgary, Alberta, with Canadian facilities located in four provinces and it conduct business in eight provinces. Plains has both provincially-regulated and federally-regulated pipelines. The CER currently regulates approximately 704 kilometers of their pipelines as well as their storage facilities in Windsor, Ontario.



2.0 Objectives and Scope

The objectives of this audit are to:

• verify that Plains has a contaminated site management program as a component of its Environmental Protection Program that meets the requirements of the OPR. As part of assessing this objective, the auditors evaluated if the company has the necessary processes, procedures, and work instructions in place to fulfil the requirements of sections 6 and 48 of the OPR.

The following are scope limitations to this audit. First, this audit does not serve as a certificate or approval of any specific remediation activities. Although sampling of site-specific activities was completed, this audit is not a comprehensive assessment of all site-specific remediation activities. Second this audit does not address emergency management and/or incident response practices that would either prevent the creation of a contaminated site or minimize the magnitude of a contamination event.

The table below outlines the scope selected for this audit.

Audit Scope	Details
Audit Topic	Contaminated Sites

Audit Scope	Details
Lifecycle Phases	 ☑ Construction ☑ Operations ☑ Aligned for the second second
Section 55	Abandonment Emergency Management
Programs	□ Integrity Management
	Safety Management Security Management
	 Environmental Protection Damage Prevention
Time Frame	Not Applicable

3.0 Methodology

As part of this audit, the CER Auditors (**auditors**) conducted a review and assessment of a sampling of Plains' management system processes, procedures, work instructions, and environmental program documentation related to contaminated sites. The auditors did not review and assess all management system documentation, nor did they review all environmental protection documentation. A representative sampling of documents and records were selected in order to reduce the chance of error in making the audit findings described herein.

The auditors assessed compliance through:

- Document reviews;
- Record reviews; and
- Interviews.

The list of documents and records that were reviewed, and the list of interviewees are retained on file with the CER.

An audit notification letter was sent to the Auditee on 3 May 2021 advising the Auditee of the CER's plans to conduct an operational audit. The Lead Auditor provided the audit protocol and initial information request to the Auditee on 4 May 2021 and followed up on 25 May 2021 with a meeting with the Auditee staff to discuss the plans and schedule for the audit. Document review began on 4 June 2021 and interviews were conducted between 12 July 2021 and 15 July 2021.

In accordance with the established CER audit process, the Lead Auditor shared a pre-closeout summary of the audit results on 3 August 2021. At that time, the Auditee was given five business days to provide any additional documents or records to help resolve the identified gaps in information or compliance. Subsequent to the pre-closeout meeting, the Auditee provided additional information to assist the Lead Auditor in making their final assessment of compliance. The Lead Auditor conducted a final close out meeting with the Auditee on 9 September 2021.

Audit staff note that this audit was conducted during the Covid pandemic. All interactions with the Auditee were virtual (i.e., though Microsoft Teams). No face-to-face contact between the Auditors and Auditee occurred, and no field inspections were conducted.

4.0 Summary of Findings

The Lead Auditor has assigned a finding to each audit protocol. A finding can be either:

- No Issues Identified No non-compliances were identified during the audit, based on the information provided by the Auditee and reviewed by the Auditor within the context of the audit scope; or
- Non-Compliant The Auditee has not demonstrated that it has met the legal requirements. A corrective and preventive action plan shall be developed and implemented to resolve the deficiency.

Note that all findings are specific to the information assessed at the time of the audit, as related to the audit scope.

The table below summarizes the finding results. See <u>Appendix 1: Audit Assessment</u> for more information.

Audit Protocol (AP) Number	OPR Regulatory Reference	Торіс	Finding Status	Finding Summary
AP-01	6.4(c)	Annual Documented Evaluation of Need	No issues identified	The auditors found no issues of concern with Plains' process to conduct an annual evaluation of need that takes into consideration the human and physical resources required to establish, implement, and maintain the management system and its Environmental Program.
AP-02	6.5(1)(a)	Setting Objectives and Specific Targets	Non-compliant	From a review of the documentation and in discussion with Plains staff, the auditors did not observe any objectives that addressed contaminated sites or remediation in general. While Plains did have environmental targets, none included contaminated sites or remediation activities.

Table 1: Summary of Findings

Audit Protocol (AP) Number	OPR Regulatory Reference	Торіс	Finding Status	Finding Summary
AP-03	6.5(1)(b)	Performance Measures	Non-compliant	After a review of Plains documentation and through interviews, the auditors are of the opinion that Plains does not have documented performance measures for contaminated sites or remediation. While other performance measures exist as part of the Plains management system, none were identified that would relate to contaminated sites. While Plains uses other methods to communicate its environmental liabilities to management, currently there are no documented performance measure(s) to demonstrate improvement of the environmental liabilities pillar as part of the Environmental Protection Program.
AP-04	6.5(1)(c)	Identifying and Analyzing all Hazards and Potential Hazards	No issues identified	The auditors found no issues of concern with Plains' process to identify and analyze all hazards and potential hazards.
AP-05	6.5(1)(d)	Hazard Identification	No issues identified	The auditors found no issues of concern with Plains inventory of its identified hazards as they relate to contaminated sites or to remediation.
AP-06	6.5(1)(e)	Risk Assessment	No issues identified	The auditors found no issues of concern with Plains established and implemented risk assessment process to assess the risks associated with its identified hazards and potential hazards.
AP-07	6.5(1)(f)	Controls	No issues identified	The auditors found no issues of concern with Plains established and implemented process to develop controls associated with its identified hazards and risks and for communicating the controls to anyone who is exposed.
AP-08	6.5(1)(h)	Legal List	No issues identified	Within the objectives and scope of this audit, the auditors had no issues of concern with Plains established and maintained list of legal requirements.

Audit Protocol (AP) Number	OPR Regulatory Reference	Торіс	Finding Status	Finding Summary
AP-09	6.5(1)(j)	Training, Competence and Evaluation	No issues identified	The auditors found no issues of concern with Plains established and implemented process for the training, competence and evaluation of its employees and those working on its behalf.
AP-10	6.5(1)(m)	Communication	No issues identified	The auditors found no issues of concern with Plains established and implemented internal and external communications process.
AP-11	6.5(1)(q)	Operational Control	No issues identified	The auditors found no issues of concern with Plains process for the coordinating and controlling the operational activities of employees and contractors to ensure each person is aware of the activities of others and that they have the information required to complete their duties safely and to protect the environment.
AP-12	6.5(1)(r)	Internal Reporting of Hazards, Potential Hazards, Incidents and Near-misses	No issues identified	The auditors found no issues of concern with Plains established and implemented process for incident reporting, incident management, incident investigation and follow-up.
AP-13	6.5(1)(u)	Inspection and Monitoring	No issues identified	The auditors had no issues of concern with Plains established and implemented process for conducting audits, environmental inspections of its facilities and projects, and for taking corrective and preventive actions when deficiencies are found.
AP-14	6.5(1)(x)	Conducting Annual Management Review	No issues identified	The auditors found no issues of concern with Plains established and implemented process for conducting an annual management review.

Audit Protocol (AP) Number	OPR Regulatory Reference	Торіс	Finding Status	Finding Summary
AP-15	6.6(1)(c)	Correcting Deficiencies	Non-compliant	The annual report does discuss actions taken to correct some of the identified deficiencies through some of the completed assurance activities. However, the report only considers the deficiencies identified through various auditing activities, it does not take into account and report on the activities associated with other types of quality assurance. The OPR does not indicate that companies are to only look at the results of audits and the findings associated with audit work.

5.0 Next Steps

Plains is required to resolve all non-compliant findings through the implementation of a corrective and preventive action (**CAPA**) plan. The next steps of the audit process are as follows:

- Within 30 calendar days of receiving the final audit report, the Auditee shall file with the CER, a CAPA Plan that details how the non-compliant findings will be resolved;
- The CER will monitor and assess the implementation of the CAPA Plan to confirm that it is completed:
 - on a timely basis; and
 - in a safe and secure manner that protects people, property, and the environment; and
- Once implementation is completed, the CER will issue an audit close out letter.

6.0 Conclusion

In summary, the CER conducted an operational audit of Plains related to: Contaminated **Sites**. Of 15 audit protocols that were audited; 12 were deemed to have no issues and three were deemed non-compliant.

Plains demonstrated that it has processes, procedures, work instructions, and activities in place to manage contaminated sites, both historical in nature and new ones that may occur. The non-compliances identified with this audit are related to gaps in Plains management system. The auditors are of the opinion that none of the gaps identified during this audit would prevent Plains from operating its system in a manner that is safe and protects the environment.

Plains is expected to resolve these deficiencies through the implementation of a CAPA Plan. The CER will monitor and assess the implementation of this CAPA Plan, and issue an audit close out letter upon its completion.

Appendix 1: Audit Assessment

Finding Status	No issues identified			
OPR Regulatory Requirement	6.4(c) The company must have a documented organizational structure that enables it to demonstrate, based on an annual documented evaluation of need, that the human resources allocated to establishing, implementing and maintaining the management system are sufficient to meet the requirements of the management system and to meet the company's obligations under these Regulations.			
Expected Outcome	 The company has completed an annual documented evaluation of need. The annual documented evaluation of need discusses the amount of human resources allocated to establishing, implementing and maintaining the management system. The annual documented evaluation of need meets the company's obligations with respect to these Regulations. 			
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Annual Planning Process Environmental Protection Program Sub Element Plan – 2.6 Environmental Management Sub-Element Owners and Sponsors List Operations Management System Program OMS Accountabilities and Authorities Annual Management Review for 2.6 Environmental Management Meeting Minutes 			
Finding Summary	The auditors found no issues of concern with Plains' process to conduct an annual evaluation of need that takes into consideration the human and physical resources required to establish, implement, and maintain the management system and its Environmental Program.			

Detailed Assessment

The Plains Environmental Protection Program (**EPP**) is designed to provide a standardized approach and set the minimum requirements to demonstrate how environmental risk is managed and environmental protection is promoted within Plains. The EPP states that it is to apply to all Plains assets and to all phases of the asset lifecycle. The EPP applies to all permanent and temporary employees of the operations organization along with all contractors, subcontractors, and consultants who are providing services to the operations organization.

For Plains, the evaluation of need assessment requirements is part of the Annual Management Review process. The Annual Management Review process contains a series of probing questions that walks the user through the steps to determine if adequate resources have been allocated to a specific sub-element, such as the environment program.

Previously the Plains Environment Team had assessed the total time working staff has available versus the expected overall time requirements for the sub-element, at which time possible exceedances are then identified. The Environment Team previously identified key and core tasks along with how many hours can be allocated to the various activities based on resources available. The Plains EPP contains five key pillars with one pillar dedicated to Environmental

Liability which is where the contaminated sites work is located. Within this pillar are dedicated resources which complete the contaminated sites work and activities.

Field Operations staff do not set aside specific time for the completion of environmental tasks. Field Operations staff are expected to address environmental activities or hazards, both new as they are identified and ongoing ones, as they arise over the course of the year through their time allotted for Corporate Engagement activities as part of their job descriptions. Work orders through the Plains MAXIMO system do track field operations time spent against environmental activities such as completing environmental inspections. When supervision of a field activity, such as remedial work, is required for a project the Environment Team will involve Field Operations to ensure there are no site conflicts and to ensure safety is maintained. Once this is completed, a Construction Supervisor will then be brought in to supervise the remediation work so the Field Operations staff can complete their regularly scheduled work.

Overall, the auditors found no issues of concern with Plains' process to conduct an annual evaluation of need that takes into consideration the human and physical resources required to establish, implement, and maintain the management system and the environment sub-element.

AP-02 Setting Objectives and Specific Targets

Finding Status	Non-compliant				
OPR Regulatory Requirement6.5(1)(a) A company shall, as part of its management system and the programs refe 55, establish and implement a process for setting the objectives and specific targets to achieve the goals established under subsection 6.3(1) and for ensuring their annu					
Expected Outcome	 The company has a compliant process that is established and implemented. The company has set objectives and targets that are required to achieve the goals established under subsection 6.3(1). All objectives are relevant to the company's management system when considering the scope of the process and their application to section 55 programs. An annual review of the objectives and targets is performed by the company. The review determines if the objectives were achieved or if corrective or preventive actions are needed. 				
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Annual Planning Process Annual Management Review Process Environmental Protection Program Operations Policy 2021 Annual Operations Plan 2021 Sub-Element 2.6 Annual Plan Goals, Objectives, Indicators and Targets Procedure OLT Actions and Decisions Log 				
Finding Summary	From a review of the documentation and in discussion with Plains staff the auditors did not observe any objectives that addressed contaminated sites or remediation in general. While Plains did have environmental targets, none included contaminated sites or remediation activities.				

Detailed Assessment

Plains staff indicated the completion of the Annual Planning Process is the starting point to establishing goals, objectives, and targets. The Plains overarching Operations goals are to be used by all of the sub-elements, which would include the environment program. To increase the granularity of its actions, a sub-element has the ability to establish its own objectives. However, should a sub-element do this, it must ensure there is direct alignment of the sub-element level objectives with the overarching Plains Operations goals and objectives. In addition, sub-elements are to have a 5-year plan to demonstrate how they address the overarching Operations goals and objectives.

Early in the calendar year the planning process is used to determine what the objectives and targets will be. Staff review Plains' priority initiatives for the year to look for possible objectives and targets that need to be added.

The auditors wish to point out that they do believe Plains takes its environmental responsibilities seriously. In reviewing the Plains website, an environmental commitment statement reads:

• [Plains Midstream Canada ULC] commitment to the protection of the environment extends through all phases of project design and construction and complies with all federal and provincial acts and regulations to minimize or avoid adverse environmental effects.

When reviewing Plains' environmental objectives for 2021, none are related to recent or historical contaminated sites or remediation. The objectives within the provided Plains documentation are focussed on determining the environment sub-element maturity level within the Plains Operating Management System. This is combined with the objective of "prevent loss of primary containment" which is only indirectly related to environmental activities and in the auditors opinion is more directly focussed on the emergency management program or sub-element.

Plains' documentation does provide for specific targets that the environment sub-element is planning on achieving in 2021. While none of the targets are specific to contaminated sites, there are targets specific to other various environmental activities. These targets also include references to COVID and the fact that the targets may not be met if safety restrictions dictate otherwise.

The Operations Leadership Team maintains a series of scorecards for the tracking of objectives, targets, and indicators, which is updated quarterly. If any of the objectives or targets are tracking outside of the expected or desired outcomes, staff will add an explanatory note to the scorecard to explain why something is going off-track.

All environmental initiatives are held within the Environment Team and they will then engage other sub-elements to assist in completing many of these initiatives. The Environment Team involves Field Operations with addressing key performance indicators related to environmental activities such as completing the Environmental Inspection Checklist two times per year.

Plains did have documented targets for its environmental program; however, none were specific to contaminated sites or remediation. While a company can establish policies and goals specific to its operational needs, the OPR requires that CER-regulated companies also establish documented policies and goals to ensure that their obligations under subsection 6.3(1) of the OPR are met. There needs to be a clear line of sight from the overarching corporate goals established in accordance with subsection 6.3(1) of the OPR down to the departmental goals, objectives, and targets and then further to Plains' performance measures. However, the auditors did not observe this direct relationship with respect to objectives and Plains did not adequately explain the link.

Company staff need to know they are to align their daily work activities with the larger corporate level requirements. One of the methods of doing this is to develop smaller scale departmental level objectives and targets that are in alignment with the corporate requirements. As Plains did not demonstrate to the auditors that its process for setting departmental objectives and targets has been properly implemented, Plains is found to be in non-compliance with the regulatory requirement of paragraph 6.5(1)(a) of the OPR and will have to develop a corrective and preventive action plan.

AP-03 Performance Measures

Finding Status	Non-compliant			
OPR Regulatory Requirement	6.5(1)(b) A company shall, as part of its management system and the programs referred to in section 55, develop performance measures for evaluating the company's success in achieving its goals, objectives and targets			
Expected Outcome	 The company has developed performance measures that are relevant to its documented goals, objectives, and targets. 			
	 The following two items will be confirmed in connection with the company's annual report per paragraph 6.6(1)(b): 			
	 The performance measures support the ability to assess the achievement of the company's goals, objectives, and targets. 			
	 The company applies the performance measures to assess its success in achieving its goals, objectives and targets. 			
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Annual Planning Process PMC OLT Scorecard 2021 Q1 PMC OLT Scorecard Goals, Objectives, Indicators and Targets Procedure OLT Actions and Decisions Log 			
Finding Summary	After a review of Plains documentation and through interviews, the auditors are of the opinion that Plains does not have documented performance measures for contaminated sites or remediation. While other performance measures exist as part of the Plains management system, none were identified that would relate to contaminated sites. While Plains uses other methods to communicate its environmental liabilities to management, currently there are no documented performance measure(s) to demonstrate improvement of the environmental liabilities pillar as part of the Environmental Protection Program.			

Detailed Assessment

According to the Annual Planning Process, Plains goals, objectives, targets, and indicators set the direction and the desired outcomes along with providing a basis for the commitment to continual improvement. One of the objectives listed in the document is to ensure performance indicators include those for assessing the company's success in achieving its goals, objectives, and targets.

Within the Environment Sub-Element Plan for 2021, the document states that the purpose of the document is to translate the Operations goals, objectives and targets into sub-element level objectives and activities. Plains staff indicated that it puts in a significant amount of effort at the front end of their work to prevent contamination from occurring in the first place. According to Plains, the key performance measure for contaminated sites is having zero non-conformances which includes meeting all reporting requirements to the CER. During discussions with Plains staff, one target which was not formally documented is to reduce overall environmental liabilities, which includes contaminated sites, on a year-over-year basis.

The documentation provided by Plains included an environmental liability management presentation provided to management. For Plains, environmental liability is related to contaminated sites and remedial activities. The presentation provides a clear update on how Plains is identifying and then reducing its overall environmental liability. While this information is not provided in the form of a performance measure, it does demonstrate that Plains discusses environmental liabilities with management.

According to paragraph 6.5(1)(b) of the OPR, all goals objectives and targets need to have relevant performance measures associated with them to evaluate if they have been achieved. As noted above in AP-02, the auditors did not identify environmental objectives and targets that are related to contaminated sites or remediation. While the OPR does not specifically require environment-themed performance measures, the auditors do expect that all objectives and targets and targets would have relevant performance measures associated with them. As Plains did not have relevant objectives and targets for this audit, the auditors did not have anything to assess that is relevant to contaminated sites or remediation

In review of the documentation provided, the auditors are of the opinion that Plains does have the necessary procedures and work instructions in place and available for staff to generate performance measures once Plains has developed relevant objectives and targets.

After a review of Plains documentation and through interviews, the auditors are of the opinion that Plains does not have documented performance measures for contaminated sites or remediation. While other performance measures exist as part of the Plains management system, none were identified that would relate to contaminated sites. While Plains uses other methods to communicate its environmental liabilities to management, currently there are no documented performance measure(s) to demonstrate improvement of the environmental liabilities pillar as part of the EPP. Plains will have to develop a corrective and preventive action plan for this audit protocol.

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(c) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for identifying and analyzing all hazards and potential hazards
Expected Outcome	 The company has a compliant process that is established and implemented. The methods for identification of hazards and potential hazards are appropriate for the nature, scope, scale, and complexity of the company's operations, activities and section 55 programs. The identification of hazards and potential hazards must include the full life cycle of the pipeline. The company has comprehensively identified and analyzed all relevant hazards and potential hazards. The hazards and potential hazards have been identified for the company's scope of operations through the lifecycle of the pipelines. The identified hazards and potential hazards have been analyzed for the type and severity of their consequences.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Hazard Identification Process Hazard Analysis Process Hazard and Controls Inventory Process Operational Risk Management Process Risk Assessment Process Hazard and Inventory Control Process Environmental Protection Program Hazard and Controls Inventory Risk Register
Finding Summary	The auditors found no issues of concern with Plains' process to identify and analyze all hazards and potential hazards.

AP-04 Identifying and Analyzing all Hazards and Potential Hazards

Detailed Assessment

Plains' documentation indicates that a hazard can be a potential situation or issue that poses a threat to health, property, reputation, or the environment, and it is only when there is a loss of control will an exposure to the hazard take place. Identification of hazards can take place through the completion of Job Hazard Assessments (JHAs), HAZOPs, Management of Change (**MOCs**) and from the operations hazard and controls inventory to name a few. Once hazards have been identified Plains' documentation indicates that background information needs to be gathered to address the following questions:

- Where one can expect to encounter the hazard;
- Who would encounter the hazard;
- What work activities will have the hazard; and
- How the hazard will be triggered to cause a potential failure or loss of control.

Once this step has been completed the Plains process requires the user to determine the inherent risk of the hazard by identifying the likelihood of occurrence and the consequence or seriousness of the hazard occurring. This is followed by examining the existing controls already in place and then determining the residual risk levels assuming all controls have been implemented as designed.

From a contaminated sites perspective, the Environmental Protection Program indicates that a list of contaminated sites is maintained and tracked by the Environment Team. Using soil contamination as an example, Plains staff described to the auditors how a newly identified site would go through these steps. To start, the potentially contaminated site would be entered into the Plains Incident Notification System (PINS) by the person who first identified it. As Plains has no threshold for reporting incidents, all sizes of spills, from a few millilitres to large ruptures must be reported through PINS, and all potentially identified historical contamination must also be reported. The potential identification of contamination triggers an e-mail notification, PINS, that goes to multiple sub-elements within Plains including members of the Environment Team. The Environment Team would review the submitted information to determine what kind of response is required. This can vary from calling in specialist consultants for additional soil sampling to bringing in heavy equipment or the activation of the Emergency Response Plan. Plains indicated that not all PINS notifications actually result in the identification of contamination; however, Plains believes it is very important for their field staff to feel confident they can report all potential issues and it will trigger further assessment. If the impacts are confirmed, and contamination has been identified, and it is the result of Plains activities or from a Plains asset, present or historical in nature, then Plains will assume responsibility for the full remediation of any associated environmental impacts.

Based on the information provided, the auditors found that Plains has a process to identify and manage hazards that it encounters through its daily activities and through projects and maintenance activities.

Section 48 of the OPR specifies the requirement for a company to develop, implement, and maintain an environmental program that anticipates, prevents, manages, and mitigates conditions that could adversely impact the environment. The auditors found that Plains does have a process to identify all of its potentially contaminated sites.

AP-05 Hazard Identification

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(d) A company shall, as part of its management system and the programs referred to in section 55, establish and maintain an inventory of the identified hazards and potential hazards
Expected Outcome	 The company has a compliant inventory that is established and maintained. The inventory includes hazards and potential hazards associated within the company scope of operations and activities through the lifecycle of the pipelines. Hazards and potential hazards are identified across all section 55 programs. The inventory has been maintained, it is current, and is up-to-date including changes made to company operations and activities. The inventory is being used as part of the risk evaluation and controls processes.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Hazard and Controls Inventory Process Environmental Due Diligence Process Environment OPEX Tracking Sheet Environmental Accrural Tracking and Reporting Process Environmental Protection Program Hazard Identification Process Hazard Prevention Program Historical Release Identiifcation Operational Risk Managmenet (ORM) Program
Finding Summary	The auditors found no issues of concern with Plains inventory of its identified hazards as they relate to contaminated sites or to remediation.

Detailed Assessment

Plains indicated the Hazard and Controls Inventory (Inventory) is designed to be used by office staff and not necessarily at the Operations field level. The Inventory is used to guide and inform activities for the field level, but it doesn't necessarily get used at the field level.

Plains' documentation indicates that the Inventory is reviewed and updated at a minimum on an annual basis. Sub-elements can update it whenever there is a significant change such as the major revisions to a control. However, a sub-element cannot make changes to another sub-element's hazards or controls, it can only make a recommendation to the sub-element that a change should be contemplated. According to the Hazard and Controls Inventory process for each individual hazard, the hazard definition, example consequences, and the controls are reviewed and updated where changes need to be made. The process document also indicates that the Process Owner is required to periodically conduct quality assurance activities to ensure the process is working as designed.

After reviewing Plains' documentation and the completion of the interviews, the following information was identified for Plains' risk register.

- The Risk Register is set up by functional group and operating area;
- The Risk Register is useful to help set up controls in the regions; and
- The Risk Register is a tool for Subject Matter Experts (**SME's**) to apply to determine if the controls put in place are adequate for what is required to reduce risk to an adequate level.

The Inventory, from an environmental perspective, lists hazards such as air emissions, and surface water. To make the document easier to use, the table includes example consequences, one of which is environmental liabilities, which is where the contaminated sites program for Plains resides.

The EPP is made up of 5 pillars with contaminated sites management placed under the Environmental Liabilities pillar. The Environmental Accrual Tracking and Reporting process states that an environmental liability can be identified through various avenues such as asset or land acquisitions, a new incident or release, or through the discovery of historical or previously unknown contamination. Each individual site, if not under active remedial work, is to be re-evaluated at least every five years, earlier if applicable regulations are modified, or if other new information that would affect the liability estimate is identified.

The auditors found no issues of concern with Plains' inventory of its identified hazards as they related to contaminated sites or remediation.

AP-06 Risk Assessment

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(e) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for evaluating the risks associated with the identified hazards and potential hazards, including the risks related to normal and abnormal operating conditions
Expected Outcome	 The company has a compliant process for evaluating risks that is established and implemented. The method(s) for risk evaluation confirm that the risks associated with the identified hazards (related to normal and abnormal operating conditions) are based on referenced regulatory standards and are appropriate for the nature, scope, scale, and complexity of the company's operations, activities, and are connected to the purposes and intended outcomes of the section 55 programs. Risks are evaluated for all hazards and potential hazards and includes normal and abnormal conditions. Risk levels are monitored on a periodic basis and as-needed, and re-evaluated for changing circumstances. Risk tolerance/acceptance criteria is determined for all hazards and potential hazards.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Environmental PINS Response Guidance Document Environmental Protection Program Environmental Risk Ranking Evaluationi Tool Management of Change Procedure Operational Risk Management Matrix Operational Risk Management Process Release Response and Remediation Management Risk Register Procedure
Finding Summary	The auditors found no issues of concern with Plains established and implemented risk assessment process to assess the risks associated with its identified hazards and potential hazards.

Detailed Assessment

The Plains Risk Register Procedure is used to document the identification of hazards, assess risks, develop new risk controls and to document the review, approval, and implementation of proposed controls. Once hazards and potential hazards have been identified they are assigned an inherent risk ranking by developing a consequence and likelihood rating. An inherent risk is a risk that has no controls in place, and it provides the users an idea of how 'risky' a hazard is without steps or actions in place to control it. Once the inherent risk is determined, the existing controls are added, and a new consequence and likelihood rating is developed to determine what the residual risk level of the hazard would be. If the risk level for the hazard is still higher than what has been determined to be an acceptable level, additional controls are added to further reduce the risk to a point where the risk becomes acceptable to the end user(s). As part of the Plains operational risk matrix, the risk rating section of the document states what level of management / supervision is required to approve a task or activity that has a residual risk ranking that is higher than what is normally allowed to carry out the activity. As an example, if an activities risk rating is scored as High Risk, and the recommended mitigation plan or controls

cannot be implemented then the Accountable Director is required to approve and accept the risk exposure.

The Plains Risk Register has a column dedicated to the Hazard Conditions which describes whether the hazard is encountered during normal operation, abnormal operation, or emergency operations. The Risk Register Procedure defines abnormal conditions as:

• An abnormal condition is an event that is outside of normal operation, but is also reversible. Abnormal hazards should only be found during this operating condition and not during normal conditions.

From an environmental perspective, one of the objectives of the EPP is to support response during abnormal conditions to minimize the possibility of environmental impacts.

Plains indicated that all of its contaminated sites have an environmental risk ranking exercise completed on them to determine the level of risk associated with the site. This risk ranking is based on the Canadian Council for Ministers of the Environment (**CCME**) guidance and includes three separate stages as part of the risk ranking. The stages are as follows:

- Hazard factors (i.e., physical state, volume or area of soil contamination);
- Exposure Pathways factors (i.e., potential for groundwater contamination or migration); and
- Receptor factors (i.e., known adverse effects, potential impact on drinking water supply).

A score is developed for each stage and added together to form an overall score for the individual site. The scores are divided into the following categories:

- Class 1 Very High Risk action required;
- Class 2 High Risk action likely required;
- Class 3 Medium Risk action may be required;
- Class 4 Low Risk action not likely required; and
- Class I Insufficient Information address data gaps if it's a site of interest or concern.

Once a site has been risk ranked, it will be kept up to date and the process repeated when there are significant changes to its status. Plains indicated the risk ranking plays a role in determining what activities will be carried out at each site, as there are limited resources available to the Environment Team.

If the site is going to require significant additional work to address contamination, an environmental liability within Plains financial system will be created for the site. An environmental liability can also be created when a new asset is purchased, and it contains a contaminated site. As part of the purchase process, any required environmental assessment work is completed and then a remedial action plan is developed and implemented for the site. Plains senior management is kept informed of the work through ongoing quarterly meetings.

Plains indicated that they do have protocols available to be used when working around hydrocarbons, and if contamination levels are significant, they can implement them for such things as benzene monitoring. Plains also indicated that when they are planning a project that will be working in or around known contaminated soils or groundwater, they will work with the contractor to add specific content to the Site Safety Plan to ensure that proper controls are added to the project to protect for human and ecological health.

In summary, through document and record review, and interviews, the auditors found no issues of concern with Plains established and implemented process to assess the risks associated with its identified hazards.

AP-07 Controls

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(f) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards, potential hazards and risks and for communicating those controls to anyone who is exposed to the risks
Expected Outcome	 The company has a compliant process for developing and implementing controls. The method(s) for developing controls are appropriate for the nature, scope, scale, and complexity of the company's operations and activities and section 55 programs. Controls are developed and implemented. Controls are adequate to prevent, manage and mitigate the identified hazards and risks. Controls monitored on a periodic basis and as-needed and re-evaluated for changing circumstances. Controls are communicated to those exposed to the risks.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Environmental Protection Program Developing Controls Standard Procedure Operations Procedure Decision Process Surface Water Discharge Criteria Procedure Guidance for Dewatering Trenches Plains Groundwater Monitoring Program General Construction Environmental Protection Plan Environmental Planning Process
Finding Summary	The auditors found no issues of concern with Plains established and implemented process to develop controls associated with its identified hazards and risks and for communicating the controls to anyone who is exposed.

Detailed Assessment

The Plains Developing Controls SP document provides the details and required guidance to enable controls to be developed in a consistent manner. The MOC, communications, and document control processes are all connected to and a part of the controls process. Plains' approach uses the Hierarchy of Controls with a breakdown structure that steers the user through a series of steps to assess the options available including bringing in other sub-elements and the MOC process. The same process is applied if amending an existing control or developing an altogether new control. Regardless, once a new control is developed, or an existing one is amended, the document requires the outcome to be communicated to all that need to know and may require the MOC process to be initiated. The MOC process has environmental inclusion as part of it. Through this process the Environment Team can alert the planning or construction staff that wherever they are planning work there might be a contamination component to it.

Plains indicated controls are divided into two general categories, preventative and mitigative.

Administrative controls are reviewed on a minimum of a 3-year basis in alignment with Plains Governance Management Process This activity is completed in-house with the use of internal SME's. The embedded sub-element assurance plan is not an audit, but is another form of assurance activity that conducts an assessment of various controls from the hazard and controls inventory to ensure they are working as designed.

After a review of the Plains documentation and conducting interviews with staff, it appears that Operations staff 'pulls' the controls information from the various corporate groups for a project. Whereas the headquarters corporate groups are 'pushing' the information out to the regions for use. Anyone can identify a gap that has been missed in this process and request assistance.

The Environment Team uses the Environmental Planning process from the Environmental Protection Program to determine what controls need to be established for a project or activity. For construction type of projects, the Environment Team will work with Field Operations and the contractor(s) during the Project Kick-Off meeting to identify hazards and their associated controls. The Environment Team may add some input into the Site-Specific Safety Plan where specific controls are required to protect human health at a work site. Another option used by the Environment Team to ensure they have all of the controls in place, and everyone has been made aware of them is through either the Site-Specific Environmental Protection Plan or the Plains General Environmental Protection Plan; one of these two is always included with construction projects. The Environment Team follows up with assurance activities to ensure the environmental protection measures are understood and implemented.

In summary, the auditors found no issues of concern with Plains established and implemented process to develop environmental controls associated with its identified hazards and risks.

AP-08 Legal List

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(h) A company shall, as part of its management system and the programs referred to in section 55, establish and maintain a list of those legal requirements
Expected Outcome	 The company has established and maintained a list of legal requirements. The list has been communicated to appropriate personnel. The list has been maintained and is up-to-date based on the company scope of operations, its activities, including new and existing legal requirements. The list includes all legal requirements for all section 55 programs. The legal list has been developed to the clause level of the applicable regulation and standards.
Relevant Information Provided by the Auditee	The following key documents and records are related to this finding: - Regulatory Requirements Management Process - Regulaotry Requirements Program
Finding Summary	Within the objectives and scope of this audit, the auditors had no issues of concern with Plains established and maintained list of legal requirements.

Detailed Assessment

In the assessment of this Audit Protocol question, the auditors did not look at the processes, procedures and related documentation used for the development and the establishment of the legal list. The focus of this audit is on the outcomes of those processes and procedures, and specifically the environmental portion of the legal list.

Through the Regulatory Requirements Management process, Plains has outlined the steps it uses to identify, assess, communicate, and implement new or updated regulatory requirements, codes of practice and standards. The Regulatory Information Management System (**RIMS**) is generally focused on the applicable acts, regulations, standards, and other assorted legal requirements that make up the Plains legal list. The RIMS system may be used to list aspirational documents that are not an act or a regulation; these documents are still considered a priority for Plains. An example of a document on this list is the CER's Remediation Process Guide.

Changes required as a result of a change somewhere in Plains legal list are rolled out to the sub-elements involved and the sub-elements are then required to update their documentation / processes as required.

In summary, within the objectives and scope of this audit, the auditors had no issues of concern with Plains' list of legal requirements.

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(j) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for developing competency requirements and training programs that provide employees and other persons working with or on behalf of the company with the training that will enable them to perform their duties in a manner that is safe, ensures the safety and security of the pipeline and protects the environment
Expected Outcome	 The company has a compliant process for developing competency requirements and training programs.
	 The company has defined what competency requirements are required.
	 Training programs are traceable and trackable to the defined competency requirements and effective at achieving the desired competencies.
	 Employees and those working on behalf of the company are competent to carry out their assigned work.
	 Provide persons working with or on behalf of the company with adequate training applicable to section 55 programs and the management system.
Relevant Information	The following key documents and records are related to this finding:
Provided by the Auditee	- Competency and Training Management Program
Auditee	- Environmental Protection Program
	- Functional Competency Checklist
Finding Summary	The auditors found no issues of concern with Plains established and implemented process for the training, competence and evaluation of its employees and those working on its behalf.

AP-09 Training, Competence and Evaluation

Detailed Assessment

According to the Competency and Training Management Program (**CTMP**), "*The Competence and Training Management Program in its entirety is designed to fulfil the requirements of the Canadian Energy Regulator (CER) Onshore Pipeline Regulations.*" The Competence and Training Management Program goes on to say that by identifying competence requirements for individual roles, providing training to develop competence, assessing functional competence, and providing records of training completion and competence assessment that Plains will address its commitment to safety.

Plains has developed functional competency models which are a collection of competencies that define the skills and knowledge required for a specific role. Plains looks at functional competencies as competencies defined by a job task that are precise enough to be meaningful, useful, and assessable. They need to include a combination of knowledge, skills and abilities that are objective and measurable. Plains' documentation indicates that functional competency models are reviewed and revised every 3 years, or after one of the following activities:

- MOC request;
- expansion projects; and
- corrective actions taken after an incident.

Functional competencies have been rolled out for all of Operations. Functional competencies are generally evaluated by supervisors; however, SME's can be brought in as required for some specific competency checks.

Plains indicated that competency can be checked through one of two pathways:

- 1. the verification of required training completion, including the successful completion of a final exam or quiz; and
- 2. includes all of number 1 above along with a functional competency assessment.

The CTMP indicates that training is either externally sourced or internally developed to meet the functional competency requirements for relevant job roles. Mandatory training is based on compliance requirements and assigned to those that must be aware of it.

All training that is taken as part of the CER's protection programs, such as environmental protection, has a built-in quiz component to it. Plains does offer several environmental-specific training courses such as the EPP 101 course and the Environmental Planning course. The EPP 101 course does have a focus on identifying hazards and environmental liabilities. The EPP 101 course is assigned to anyone who works under the Plains Operations Management System.

Plains indicated that project contingent workers, (i.e., non-Plains workforce) can be assigned the EPP 101 course through ISNetworld® prior to coming onto a Plains project or facility. As part of ongoing activities, Plains indicated it is currently working on developing site-specific training packages for select Plains facilities.

In summary, the auditors had no issues of concern with Plains' training, competence, and evaluation framework.

AP-10 Communication

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(m) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for the internal and external communication of information relating to safety, security and protection of the environment
Expected Outcome	 The company has a compliant process that is established and implemented. The methods for both internal communication and external communication are defined. The company is communicating internally and externally related to safety, security and protection of the environment. Internal and external communication is occurring and it is adequate for the management system and section 55 program implementation.
Relevant Information Provided by the Auditee	The following key documents and records are related to this finding: PMC Communication Program PMC Communication Process Environmental Protection Program
Finding Summary	The auditors found no issues of concern with Plains established and implemented internal and external communications process.

Detailed Assessment

According to the Plains Communication Program, it was put in place to support Plains sub-elements and Functional Group owners, which includes the environment program, with the implementation of corporate and regulatory communication requirements. The overall intent of the Communications Program is to offer a more organized and consistent approach to both internal and external stakeholder engagement and communications. During interviews Plains staff stated that communications is there to support the sub-elements with their communication plans and needs over the course of the year. According to the Plains Communication Program, all sub-elements are to have their own annual Communications Plan in place. A sub-elements communication plan is to detail the activities to communicate information relating to safety, security, and the protection of the environment with both internal and external stakeholders such as contractors, emergency responders, and regulators.

The Plains Communications and Stakeholders Relations Program has been designed to include all internal and external communications activities conducted by Plains in an effort to provide consistent coordinated, and timely communications. The owners of all sub-elements, which includes environment, are responsible for the execution of their internal and external communication activities that are within their respective communication plans.

When reviewing the EPP, it has elements of a communications strategy built into it along with a link back to the Communications Process for additional support. Part of the internal communications plan activities include developing HSSE bulletins, providing environmental content for reports to communities and stakeholders and to promote environmental protection at various meetings.

During interviews Plains staff indicated the Environment Team does conduct direct communications with regulators and in the various areas/ regions of Plains when required.

The Plains Communications team indicated that if it were brought into a project where historical contamination had been identified and it was impacting landowners off of the ROW or off of a facility footprint it would also use their Stakeholder Engagement staff and Land Agents to assist in the external communications.

In summary, the auditors had no issues of concern with Plains internal and external communications process.

AP-11 Operational Control

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(q) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for coordinating and controlling the operational activities of employees and other people working with or on behalf of the company so that each person is aware of the activities of others and has the information that will enable them to perform their duties in a manner that is safe, ensures the safety and security of the pipeline and protects the environment
Expected Outcome	 The company has a compliant process that is established and implemented. The methods for coordinating and controlling operational activities are defined. Employees and other people working with or on behalf of the company are aware of the activities of others. Employee's operational activities are planned, coordinated, controlled, and managed. People working for or on behalf of the company: are pre-qualified for their assigned duties to ensure safety, the security of the pipeline and to protect the environment; are assigned work plans that have been reviewed by the company and are assessed for the interoperation with the work to be performed by other people working on behalf of the company; and have adequate oversight performed by company representatives for their assigned tasks to ensure safety, security of the pipeline and the protection of the environment.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Define and Communicate Role Accountabilities and Authorities Process Authorization to Work Process Safe Work Permit Field Level Hazard Assessment Process
Finding Summary	The auditors found no issues of concern with Plains process for the coordinating and controlling the operational activities of employees and contractors to ensure each person is aware of the activities of others and that they have the information required to complete their duties safely and to protect the environment.

Detailed Assessment

The Authorization to Work process is used at Plains to ensure higher risk work activities are performed safely. The process is applied to all operational activities in all operational areas. The process is designed to communicate the hazards and required controls. The Authorization to Work Process states that the objective of the process is to ensure that high risk work, and work that has the potential to be high risk, are executed under the authority of the permit issuer. Another objective of the process is to ensure that equipment preparation and controls, hazards and operational requirements have been identified and communicated to the permit receiver, so the work can be safely implemented at the work or project site. High risk work may not be initiated until not only the operations staff is satisfied the work can be carried out safely, and in an environmentally responsible manner, but the process also requires Operations leadership, or a second level of acknowledgement, before the work may begin.

High risk work can include concurrent work activities where Operations staff need to consider all of the activities that are occurring at the site at a given time to ensure they are compatible with each other, and one activity doesn't put another group at unnecessary risk. In this respect, operations sets both a spatial and temporal boundary around an activity to keep all workers safe. Operations issues a detailed permit that lists and addresses specific hazards. If a hazard is identified during the completion of the activity that has not already been identified, work is stopped, and a new permit needs to be issued.

As an output of the Authorization to Work process, Plains indicated that any work which is considered to be medium risk or higher requires a safe work permit to be issued. As an example, all ground disturbance work is considered a high-risk activity, therefore the installation of bore holes for groundwater monitoring wells would require a Safe Work Permit to be issued by the site. Inherent risks in water sampling would lead it to be considered a medium risk and as a result require a safe work permit which would specify what the contractors can and can't do.

Plains indicated that depending on the scope and scale of an environmentally-related project, the Environment Team may bring in a Construction Supervisor. This would also bring in another layer of controls to a worksite and it would allow the Plains Operations staff to focus on their routine day to day tasks and not have to provide oversight to a project that they may have very little knowledge of.

Plains indicated that at the permitting stage of an activity, the tickets of any contractors are reviewed and verified. This is followed by the completion of the site orientation which makes all workers aware of the existing onsite hazards. This is followed by a meeting where the Site Safety Plan is discussed and updated as required. As previously discussed in this report, additional environmental controls related to contaminated sites may be added to the Site Safety Plan if it is deemed warranted.

Plains indicated that work is allowed to be completed at a site with known contamination without acknowledging that contamination is present if the planned activity is compatible. An example provided during the interviews was re-painting the exterior of an existing building at a facility with known soil contamination. As the painting work is not expected to create a soil disturbance, Plains does not consider it necessary to add the contamination to the safe work permit or the Field Level Hazard Assessments (**FLHA**).

In addition to the completion of a Safe Work Permit, other controls are applied to add another layer of oversight and protection. FLHAs must be completed on a daily basis to identify work site hazards and controls with a focus on situational hazards and be updated as site conditions change. Completing an FLHA identifies the applied hazards which is part of building an overall holistic hazard and controls approach for the activity.

In summary, the auditors had no issues of concern with Plains' process for the coordinating and controlling the operational activities of employees and contractors to ensure each person is aware of the activities of others and that they have the information required to complete their duties safely and to protect the environment.

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(r) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for the internal reporting of hazards, potential hazards, incidents and near-misses and for taking corrective and preventive actions, including the steps to manage imminent hazards
Expected Outcome	 The company has a compliant process that is established and implemented. The company has defined its methods for internal reporting of hazards, potential hazards, incidents and near-misses. Hazards and potential hazards are being reported as required by the company's process. Incidents and near-misses are being reported as required by the company's process. The company has defined how it will manage imminent hazards. The company is performing incident and near-miss investigations. The company's investigation methodologies are consistent and appropriate for the scope and scale of the actual and potential consequences of the incidents or near misses to be investigated. The company has defined the methods for taking corrective and preventive actions. The company can demonstrate through records that all corrective and preventative actions can be tracked to closure.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Hazard Prevention Program Safety Incident Management Procedure Hazard Identification Reporting Procedure Incident Reporting and Investigation Program
Finding Summary	The auditors found no issues of concern with Plains established and implemented process for incident reporting, incident management, incident investigation and follow-up.

AP-12 Internal Reporting of Hazards, Potential Hazards, Incidents and Near-misses

Detailed Assessment

Plains indicated that all sub-elements, which includes environment, must use the Incident Reporting and Investigation Program (**IRIP**) reporting process for all aspects of a facilities lifecycle. The IRIP program sets the minimum requirements with respect to incident management. The sub-element owners under section 55 of the OPR protection programs provided subject matter expertise in the development of Plains incident investigation and guidance documentation. Plains staff indicated there is no allowance for customization of this process by any of the sub-elements. The purpose of the IRIP goes on to state:

- all incidents and near misses are reported immediately;
- incidents are investigated thoroughly;
- root causes are identified;
- appropriate corrective or preventative actions are identified and implemented; and
- results and lessons learned from incidents are communicated internally and externally as required.

The IRIP provides a definition of an environmental incident, "An environmental incident is an undesired event, situation or hazardous condition that causes or has the potential to cause, adverse impact on the environment, specifically air, soil, surface water, groundwater, vegetation, wildlife and/or wildlife habitat." The auditors are of the opinion that this definition would include the reporting of contaminated sites either recent or historical in nature.

PINS is used to promptly report all incidents and near misses to stakeholders and acts as a permanent record of the incident notification time. Plains staff indicated that reporting timelines are "*without delay*" for all incidents and near misses. A newly identified contaminated site would initially be reported as a PINS internally before being classified as reportable to the CER. Plains Environment staff indicated they look at every single release incident every week and as part of that review they look for trends and other anomalies that would then be reported monthly and quarterly to management. Some incidents have lessons learned developed as part of the corrective actions to provide a communication tool for the rest of Plains staff.

Plains staff indicated that there is no internal threshold for reporting a spill volume. As a result, some spill reporting volumes can be very small, i.e., a few hundred millilitres, but all are entered into PINS for further review. Plains indicated that it is important to the company, as a whole, to develop a reporting culture within their employees so it is willing to accept incident reports that can be on a very small scale.

Plains indicated the most commonly used approach to incident investigation is through TAPROOT®. All corrective actions developed as a result of the investigation must address the findings of the investigation. It is expected that all corrective and preventative actions are implemented to reduce the probably of recurrence.

Hazard identification and reporting is done following the Hazard Identification Reporting (**HID**) Procedure. This procedure is applicable to Plains staff and any contractors that it hires. Some of the objectives of this procedure include:

- ensuring hazards are either eliminated or mitigated to an acceptable risk level;
- ensuring lessons learned from HID reporting is shared; and
- ensuring the HID procedure supports the IRIP and the Hazard Prevention Program (**HPP**) where applicable.

In summary, the auditors found no issues of concern with Plains established and implemented process for incident reporting, incident management, incident investigation and follow-up.

AP-13 Inspection and Monitoring

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(u) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for inspecting and monitoring the company's activities and facilities to evaluate the adequacy and effectiveness of the programs referred to in section 55 and for taking corrective and preventive actions if deficiencies are identified
Expected Outcome	 The company has a compliant process that is established and implemented. The company has developed methods for inspecting and monitoring their activities and facilities. The company has developed methods to evaluate the adequacy and effectiveness of the programs referred to in section 55. The company has developed methods for taking corrective and preventive actions when deficiencies are identified. The company is completing inspections and monitoring activities as per the company's process. The company retains records of inspections, monitoring activities, and corrective and preventive actions implemented by the company.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Operations Management System Internal Audit (2018) Sub Element 2.6 Environmental Management Operations Assurance Process Environmental Inspection Procedure Annual Management Review Process Annual Management Review Sub-Element 2.6
Finding Summary	The auditors had no issues of concern with Plains established and implemented process for conducting audits, environmental inspections of its facilities and projects, and for taking corrective and preventive actions when deficiencies are found.

Detailed Assessment

All sub-elements, which includes environment, are required to have embedded assurance plans to conduct their own assurance activities, such as inspections, throughout the year. Embedded assurance plans take the controls put in place for an activity and verify the control is working as planned and the type of assurance activity is adequate.

Plains indicated that contaminated sites do not directly have any assurance activities that directly assess them. Instead, they are assessed indirectly when other aspects of the environmental program are assessed. The main assurance activity that would be used to assess contaminated sites would be the Environmental Inspection Checklist. This checklist does have direct and indirect questions that would gather information regarding the status of contaminated sites. However, these checklists are only used for facilities and not the right-of-way. The Environmental Inspection Checklists are completed for facilities two times per year, spring and fall, by the field Operations staff. The completed checklists are then subject to a quality review by the Environment Team.

Through discussions with Plains staff, they indicated the right-of-way is also assessed for the possibility of new contamination through aerial patrols. An example of an aerial patrol checklist was provided, and it does have categories, such as evidence of leaks, that demonstrate Plains is monitoring its pipelines for potential new contamination. Plains provided an example of a completed patrol report on one of their provincial assets where additional follow-up by Operations staff was required.

Plains indicated that to ensure all OPR protection programs are audited for OPR sections 53 and 55 requirements, a 3-year cycle of audits has been developed. The last time the Environment Program was audited was 2018, and it is scheduled again for this year. These large audits include activities such as assessing the competency of their auditors and include both field and office components to the audit. This internal audit cycle includes a corrective and preventative action plan (**CAPA**) component which requires ensuring the CAPA meets the intent of the audit finding. Plains made available the 2018 environment audit report, findings, and CAPA plans for review by the auditors.

When considering the purchase of a new asset, Plains staff indicated that the property is assessed for environmental issues which includes contaminated sites. Plains staff indicated that they do a comparison of the practices carried out by the seller to their own practices to look for gaps that could then be reflected in the overall state of the property.

In summary, the auditors had no issues of concern with Plains established and implemented process for conducting audits, environmental inspections of its facilities and projects, and for taking corrective and preventive actions when deficiencies are found.

Finding Status	No issues identified
OPR Regulatory Requirement	6.5(1)(x) A company shall, as part of its management system and the programs referred to in section 55, establish and implement a process for conducting an annual management review of the management system and each program referred to in section 55 and for ensuring continual improvement in meeting the company's obligations under these Regulations
Expected Outcome	 The company has a compliant process that is established and implemented. The company's methods for conducting the management review are defined. The company has defined methods for reviewing the management system and each section 55 program. The company has maintained records to demonstrate the achievement of meeting obligations under these Regulations is continually improved; The company has identified, developed, and implemented corrective actions as part of it continual improvement.
Relevant Information Provided by the Auditee	 The following key documents and records are related to this finding: Annual Management Review Process 2020 AMR – SE 2.6 Environmental Management OMS Assessment Process Sub-Element Annual Management Review Form Template
Finding Summary	The auditors found no issues of concern with Plains established and implemented process for conducting an annual management review.

AP-14 Conducting Annual Management Review

Detailed Assessment

Plains provided its Annual Management Review process document. The document outlines a nine-step process to completing the Annual Operations Report and submitting it to the CER. The process reviews the following topics as part of its performance assessment:

- performance to goals, objectives, and targets;
- completion of planned activities;
- assurance activities related to regulatory and business requirements;
- adequacy of resources to complete planned activities; and
- recommendation for the following year.

Management review starts with looking at what was actually achieved vs. what was planned. Plains indicated it expects there to be a difference between the two as it is not possible to forecast everything that will happen over the course of a year. The Annual Report is developed as an end product to satisfy not only the CER but other regulators and their requirements as well. Plains indicated it does not want to develop multiple reports/documents that all report essentially the same information.

The Annual Report is not the only mechanism of engagement to get information in front of senior management. Contaminated sites do have an impact on the financial reporting for the company as liabilities need to be set up for each contaminated site. As a result, reporting on contaminated sites is also provided outside of Operations to account for the financial impacts to the company.

Each of the sub-elements do their own management review where the level of detail is more granular than what is found at the annual management review level. At this granular level of review, each Pillar of the EPP undergoes a detailed review, which includes contaminated sites. For the Annual Review report, each sub-element develops an executive summary that becomes an appendix to the report.

For this audit, Plains provided the 2020 Annual Management Review for the environment program sub-element. The Annual Management Review document brings together a review of the sub-elements performance in achieving its objectives, targets, indicators, completion of planned activities, and adequacy of resource requirements to allow for continual improvement. The following categories show some of the content of the Annual Management Review:

- review of performance to sub-element objectives and targets;
- review of completion to current year planned activities;
- review of assurance activities related to regulatory and business requirements; and
- review of resource requirements.

In summary, the auditors found no issues of concern with Plains established and implemented process for conducting an annual management review.

AP-15 Correcting Deficiencies

Finding Status	Non-compliant
OPR Regulatory Requirement	6.6(1)(c) A company shall complete an annual report for the previous calendar year, signed by the accountable officer, that describes the actions taken during that year to correct any deficiencies identified by the quality assurance program established under paragraph 6.5(1)(w).
Expected Outcome	- The company has completed an annual report for the previous calendar year that is signed by the accountable officer.
	 The annual report discusses the actions taken to correct identified deficiencies.
	 The discussion of quality assurance of the management system is based on the program established and implemented in accordance with the requirements of paragraph 6.5(1)(w) of the OPR.
Relevant Information	The following key documents and records are related to this finding:
Provided by the Auditee	- 2020 Annual Operations Report
Finding Summary	The annual report does discuss actions taken to correct some of the identified deficiencies through some of the completed assurance activities. However, the report only considers the deficiencies identified through various auditing activities, it does not take into account and report on the activities associated with other types of quality assurance. The OPR does not indicate that companies are to only look at the results of audits and the findings associated with audit work.

Detailed Assessment

In review of the 2020 Annual Operations Report, the Summary of Operations Assurance states that the Operations Assurance Program manages audits and assessments that the Operations leaders use to verify performance. However, the Annual Operations Report only contains the results of audits and audit findings, there is no discussion of what other assurance actions were undertaken in the last year, such as inspections. Section 53 of the OPR requires companies to include more than just audits as part of their overall assurance program.

According to the Corrective Action Management Plan (**CAMP**) document, the Operations Management System and related programs require several types of assurance activities, which together are managed as the integrated assurance framework as part of the Operations Assurance Program. The different types of assurance activities are:

- operations management system and program assessments which are designed to evaluate operational performance, along with the continuing suitability, adequacy, and effectiveness of the program;
- operations management system, program and compliance audits which are designed to evaluate implementation and compliance requirements; and
- external audits which are conducted by regulators, stakeholders, consultants among others.

When the auditors reviewed the summary of Operations Assurance Program completed actions from the 2019 Annual Operations Report, the auditors identified that Plains included both audits and other internal quality assurance activities. While the auditors were unable to review the entire 2019 report, the fact that the appendices of the report include this type of information would suggest that in the past Plains provided additional information to the accountable officer for their review.

In the 2020 Annual Operations Report there were no environment-specific corrective actions being tracked as the last environment audit was conducted in 2018. The auditors wish to note, that Plains' documentation states the next internal environmental program audit is to take place in the 2021 calendar year.

Plains demonstrated it had completed an annual report for the previous calendar year and it is signed by the accountable officer. The annual report does discuss actions taken to correct some of the identified deficiencies through some of the completed assurance activities. However, the report only considers the deficiencies identified through various auditing activities, it does not take into account and report on the activities associated with other types of quality assurance. The OPR does not indicate that companies are to only look at the results of audits and the findings associated with audit work. As a result, Plains will have to develop a corrective and preventive action plan.

Appendix 2:	Terms and	d Abbreviations
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Term/Abbreviation	Definition
CAMP	Corrective Action Management Plan
САРА	Corrrective and Preventative Action Plan
CCME	Council for Ministers of the Environment
СТМР	Competency and Training Management Program
EPP	Environmental Protection Program
FLHA	Field Level Hazard Assessment
HID	Hazard Identification Reporting
HPP	Hazard Prevention Program
IRIP	Incident Reporting and Investigation Program
JHA	Job Hazard Analysis
MOC	Management of Change
PINS	Plains Incident Notification System
RIMS	Regulatory Information Management System
SME	Subject Matter Expert
SSOP	Site-specific operating procedure