

Chapter 1

Section 1.10

Management of Contaminated Sites

Follow-Up on VFM Section 3.10, 2015 Annual Report

RECOMMENDATION STATUS OVERVIEW

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	2	2			
Recommendation 2	2	1		1	
Recommendation 3	1	1			
Recommendation 4	2	2			
Recommendation 5	1		1		
Recommendation 6	2	2			
Recommendation 7	2		1	1	
Total	12	8	2	2	0
%	100	66	17	17	0

Overall Conclusion

According to information the ministries and the Provincial Controller's Office provided to us, as of June 23, 2017, of the seven recommendations consisting of 12 actions we made in our *2015 Annual Report*, eight (66%) of the actions had been fully implemented. The ministries and the Provincial Controller's Office have made progress in implementing two (17%) more of the actions recommended.

For example, the government designated a central oversight body with overall responsibility for managing contaminated sites. Also, a central data-

base inventory of all contaminated sites in the province has been developed and implemented. And the ministries finalized the risk prioritization model that ministries will use to assess all remediation funding proposals. Also, the Provincial Controller's Office is in the process of finalizing its Accounting and Financial Reporting Policy and Guidelines for Environmental Contamination.

However, there has been little or no progress on two actions. They will take more time to fully address, specifically:

- providing the public with access to information on contaminated sites for which the government has recorded a liability; and

- providing ministries with guidance for carrying out an annual review of their liability estimates, and carefully monitoring ministry liability submissions to ensure that adjustments are made, where required, before their inclusion in the Province's consolidated financial statements.

The status of actions taken on each of our recommendations is described in this report.

Background

Governments are responsible for cleaning up certain sites in their jurisdictions that have been contaminated by chemicals or other materials that are hazardous to the environment or to human health.

In Ontario, a number of provincial laws deal with environmental protection and contamination. The most comprehensive law is the *Environmental Protection Act*. It states that if contamination in an area for which the Province is responsible causes or may cause an adverse effect on the environment or human health, the government must clean it up. Several ministries and provincial agencies share responsibility for the Province's contaminated sites. They are:

- Ministry of the Environment and Climate Change;
- Ministry of Natural Resources and Forestry;
- Ministry of Northern Development and Mines;
- Ministry of Economic Development, Employment and Infrastructure;
- Ministry of Transportation;
- Ministry of Housing; and
- Government agencies, such as Ontario Place Corporation and the Ontario Mortgage and Housing Corporation.

To fulfill the responsibility of cleaning up contaminated sites, governments need strong systems for identifying the sites in their jurisdictions, assessing the nature and extent of the contamination, implementing programs to mitigate the risks posed

by these sites to the public and the environment, and for remediating these sites for future use.

At the time of our audit in 2015, we noted that there were weaknesses in the government's processes for identifying, measuring, and reporting on its contaminated sites liability. While we were satisfied with the government's efforts to identify all contaminated sites for which it is financially responsible, we wanted to see a continued focus on improving the government's estimate of its financial liability for these sites in the future.

We found that there was no centralized oversight of the way in which ministries managed their contaminated sites and estimated their liabilities in this area.

Additional significant observations included:

- The government needed a centralized inventory of contaminated sites. Without one, it is difficult to get a complete picture of the government's contaminated sites or track the progress of managing them. We found a few instances where more than one ministry reported being responsible for the same contaminated site.
- The Province needed a government-wide process for prioritizing high-risk contaminated sites for remediation. Without a model that captures and prioritizes all contaminated sites, the government risks funding remediation of lower-priority sites and neglecting sites that have a greater impact on the health and safety of the public.
- The government had no overall plan or funding strategy in place for cleaning up its contaminated sites. Although it had identified its high-risk contaminated sites, it lacked a central leader to manage the clean-up process from a government-wide perspective.
- Without clear direction, ministries may make errors in accounting for and reporting the liabilities associated with their contaminated sites. The Provincial Controller's Office provided guidance to ministries on implementing a new accounting standard in this

regard. While this guidance was helpful, the Provincial Controller's Office should provide ministries with additional formal guidance in several areas, including clarifying the types of costs that should be included in the liability calculation, clarifying when and how present value accounting techniques should be applied, and providing approaches to estimating a liability in the absence of an environmental site assessment.

- We found there was poor documentation to support the calculation of the liabilities associated with contaminated sites. Without adequate documentation, there is a risk that the number of contaminated sites for which the government is responsible and/or the costs associated with cleaning them up could be misstated. There is also the risk that critical information could be lost if staff who have knowledge in these areas leave government.
- The government had no policies or processes for updating financial liability estimates for remediating contaminated sites. Ministries need to monitor their sites and review them annually to determine whether environmental site assessments require updating or whether liability estimates need to be revised to reflect changes in technology, site conditions, environmental standards, inflation or other factors.

We made seven recommendations with 12 actions for improvement and received commitments from the ministries that action would be taken to address our recommendations.

Status of Actions Taken on Recommendations

We conducted our follow-up work between April 1, 2017 and June 23, 2017. We obtained written representation from the Treasury Board Secretariat and the ministries that effective September 1, 2017,

they have provided us with a complete update of the status of the recommendations we made in the original audit two years ago.

Need for Centralized Oversight of Contaminated Sites

Recommendation 1

To ensure that contaminated sites for which the government is responsible are identified and properly assessed, and that provincial liabilities are identified and valued on a timely basis:

- *the government should designate a central unit or ministry group with overall responsibility for managing contaminated sites;*

Status: Fully implemented.

Details

During our 2015 audit, we noted that there was no centralized ministry oversight over the ministries' processes for managing their contaminated sites and estimating their contaminated site liabilities. Without proper oversight, government initiatives are rarely implemented effectively or on a timely basis. This lack of oversight was ultimately responsible for most of the errors and issues identified in our 2015 report.

In February 2017, the Treasury Board/Management Board of Cabinet authorized the Inter-ministerial Contaminated Sites Assistant Deputy Ministers' Steering Committee (Steering Committee) to be responsible for the implementation and management of the co-ordinated approach to provincial contaminated sites. The Ministry of the Environment and Climate Change is the Chair of the Steering Committee. The ministries remain responsible for addressing their inventory of contaminated sites, consistent with any direction provided by the Steering Committee. Therefore, the Steering Committee has the overall responsibility for the management of provincial contaminated sites.

- *The Inter-ministerial Contaminated Sites Assistant Deputy Ministers' Steering Committee should be reconvened to perform an oversight role until this function or co-ordinated team is established.*

Status: Fully implemented.

Details

The Steering Committee reconvened on November 1, 2016. The Steering Committee has representation from all six ministries that have contaminated sites. Representatives from the Treasury Board Secretariat and the Ministry of Finance have been invited to participate as observers to provide advice. As of June 2017, the Steering Committee has met six times since reconvening in November 2016.

Improvements Needed in Tracking, Prioritizing and Funding Remediation of Contaminated Sites

Recommendation 2

To ensure that the government has a complete picture of its existing and potential contaminated sites liability, the stakeholder ministries should ensure that:

- *a centralized database inventory of all contaminated sites is developed and implemented;*

Status: Fully implemented.

Details

At the time of our audit in 2015, we noted that there was a need for a centralized inventory of contaminated sites. Without a centralized inventory, it is difficult to form a complete picture of, or track progress in, managing the government's contaminated sites. In November 2016, the government began housing the centralized inventory of contaminated sites information within the Ministry of Natural Resources and Forestry's Land Information Ontario system. This system is accessible by all ministries with responsibilities for contaminated sites.

- *the public has access to information on contaminated sites for which the government has recorded a liability.*

Status: Little or no progress.

Details

During our audit in 2015, we encouraged the government to provide public information on all contaminated sites. We noted that the federal government already provides information on each of its contaminated sites that the public can access online. At the time, the ministries' responded that they would undertake an analysis to guide decisions on public access to information on contaminated sites. Currently, the government has made little progress on this recommended action.

Many areas of work are outstanding regarding the extent and nature of public access to information on contaminated sites. These areas include: policy work involving all affected ministries; research on how much information is provided to the public on contaminated sites by other jurisdictions to support future policy considerations; and the development of a paper outlining options for public access for the approval of the Steering Committee.

Recommendation 3

To ensure that the cleanup of high-priority sites is consistently funded before that of low-priority sites, the stakeholder ministries should finalize the risk prioritization model and ensure that ministries use this model to assess all remediation funding proposals.

Status: Fully implemented.

Details

During our audit in 2015, we noted that high-risk sites needed to be prioritized for remediation. Without an Ontario Public Sector-wide risk prioritization model that captured all contaminated sites and prioritized them together, the government risked funding low-priority sites for remediation before high-priority sites that have a higher impact on public health or safety.

The risk prioritization model was finalized in November 2016. The model uses consistent information inputs to assess and score the risk to public health and safety and the natural environment posed by the contamination on each site. When used in combination with the centralized inventory of contaminated sites information, the model provides a score of approximate levels of risk posed by every site. This enables ministries to compare the results among contaminated sites across the province.

The prioritized list of contaminated sites was reviewed by the Steering Committee in November 2016. It recommended that ministries use this list during the fall 2017 Program Review, Renewal and Transformation to support their funding requests in order to remediate current sites with the highest priorities.

Recommendation 4

To ensure that ministries have sufficient resources available to remediate their high-risk sites in a prudent manner, the stakeholder ministries should:

- *co-ordinate the development of a long-term plan for remediating the Province's contaminated sites. The plan should incorporate both an annual and a long-term funding strategy;*

Status: Fully implemented.

Details

During our audit in 2015, we noted that the government had no overall funding strategy or resources allocated specifically for the management of its contaminated sites. The lack of a funding and resource allocation strategy may leave the public exposed to long-term risks to human health or the environment.

The ministries' 2017/18 Program Review, Renewal and Transformation submissions included a long-term plan, co-ordinated by the Ministry of the Environment and Climate Change, outlining the cash flow requirements for the remediation of 65 specific sites. Through future quarterly report-

ing and annual Program Review, Renewal and Transformation processes, the government will continue to review ministries' updates and existing liabilities and the identification of new sites and associated impact. The 2017/18 submission reflects both the annual and long-term funding strategy for remediating the province's contaminated sites. This includes a plan to remediate 65 sites over the next eight years.

- *periodically report to the Treasury Board, on a consolidated basis, their progress in remediating sites under their annual and long-term plans.*

Status: Fully implemented.

Details

During the 2015 audit, we noted that the government needed a system to periodically report on the progress made in remediating contaminated sites. This process would ensure that funding decisions are continually reviewed and revised as needed to reflect the latest available information, and plans adjusted accordingly to ensure resources are dedicated to the highest-risk sites.

Each ministry submitted to the Treasury Board/Management Board of Cabinet through the 2017/18 Program Review, Renewal and Transformation process their plan to remediate contaminated sites. These six submissions were consolidated and reviewed by the Treasury Board/Management Board of Cabinet at one meeting. Starting July 2017, through the quarterly reporting and Program Review, Renewal and Transformation processes, there was one consolidated submission, which reported the progress made by ministries in the remediation of contaminated sites and the long-term plan.

Improvements Needed to Liability Estimation Process

Recommendation 5

To ensure that the government's ongoing contaminated sites liability estimate is reasonably and

consistently calculated, the Office of the Provincial Controller Division should provide formal guidance to ministries on how to account for and measure these liabilities.

Status: In the process of being implemented.

Details

Our 2015 audit noted that improved guidance was needed to ensure consistent liability estimates among the ministries because without clear direction, ministries may make errors in accounting for and reporting their contaminated sites. We further noted that the Provincial Controller's Office could reduce the risk by providing ministries with additional guidance in several areas, such as:

- clarifying the types of costs that should be included in the liability calculation;
- clarifying if, when and how present value accounting techniques should be applied; and
- providing methods to estimate a liability in the absence of an environmental site assessment.

As of June 2017, the Provincial Controller's Office was in its final stage of reviewing its Final Draft Accounting and Financial Reporting Policy and Guidelines for Environmental Contamination (Policy and Guidelines). The Provincial Controller's Office is targeting a release date of the Policy and Guidelines by the end of September 2017. The planned implementation date will be retroactive to April 1, 2017 to be used for the 2017/18 fiscal year.

Recommendation 6

To ensure that future decisions and cost estimates for remediating contaminated sites are based on the best information available, and to prevent errors and inconsistencies, the stakeholder ministries should:

- *improve the supporting documentation they maintain regarding contaminated site liability estimates. Documentation should include explanations of how the contaminated site was identified, what risk-based approaches were used to identify high-risk sites, what remedi-*

ation strategies were selected, how they were chosen, and what assumptions were used in determining and estimating liabilities;

Status: Fully implemented.

Details

During our 2015 audit, we found that the ministries' documentation to support their contaminated sites liability estimates was often incomplete. Without adequate documentation, there is a risk of misstating the number of contaminated sites the government has responsibility for and/or the cleanup costs associated with these sites. We noted the following areas that required improvement:

- site identification processes inadequately documented;
- risk-based approaches inadequately documented;
- remediation strategies inadequately documented; and
- valuation approach inconsistently applied.

Since our audit, the ministries have improved the quality of their documentation regarding contaminated site liability estimates. The ministries' documentation for the contaminated sites they are responsible for now includes the following:

- explanations of how the contaminated site was identified;
 - what risk-based approaches were used to identify high-risk sites;
 - what remediation strategies were selected and how they were chosen; and
 - what assumptions were used in determining and estimating liabilities.
- *periodically review sites that have been classified as low risk to ensure that this classification remains valid.*

Status: Fully implemented.

Details

All ministries have a process in place to annually review low-risk sites to ensure this classification remains valid. Currently, there is only one site that is classified as low risk on the priority

list of contaminated sites for the province. The Ministry responsible for this site follows the process annually.

Recommendation 7

To ensure that the contaminated sites liability estimates reflect newly available relevant information:

- *the stakeholder ministries should implement a process for annually reviewing all of their liability estimates. This process should include a review of remediation costs incurred to date and an assessment of those costs in relation to the recorded liability to determine if the liability estimate needs to be updated;*

Status: In the process of being implemented.

Details

Our 2015 audit noted that the government had no policies or processes requiring ministries to incorporate newly available information into their assessments and liability valuations of contaminated sites. Without formal updating processes, there is a risk that the calculations supporting the government's reported contaminated sites liability will lose accuracy over time.

Currently, five of the six ministries have a process in place to annually review all of their liability estimates. This annual process includes a review of costs incurred to date for remediation, and a review of any new information that may result in a change to the liability estimate. Therefore, this recommendation is fully implemented for five of the six ministries.

However, this recommendation is in the process of being implemented for one of the six ministries. The remaining ministry annually reviews and

updates its liability estimates, but this process does not include all sites. For the sites that are currently not annually reviewed, this ministry plans to review and update the previous liability estimates for its sites with the results of updated assessments. Those assessments will be performed over a three-year period starting April 1, 2017 and ending March 31, 2020.

- *once established, the central unit or ministry group should provide the ministries with guidance for carrying out this annual exercise, and carefully monitor ministry liability submissions to ensure that adjustments are made, where required, before their inclusion in the Province's consolidated financial statements.*

Status: Little or no progress.

Details

As of June 2017, the Steering Committee was waiting for the Accounting and Financial Reporting Policy and Guidelines for Environmental Contamination (Policy and Guidelines) to be finalized before moving forward with this recommended action. As noted under **Recommendation 5**, as of June 2017, the Provincial Controller's Office is in its final stage of reviewing the Policy and Guidelines. The planned date to initiate the Policy and Guidelines will be retroactive to April 1, 2017 to be used for the 2017/18 fiscal year. The Steering Committee plans to review the final Policy and Guidelines to develop a single package of consistent guidance to address our recommendation from 2015. The Steering Committee plans to have this single package available late fall 2017 so it can be used by the ministries to support 2017/18 year-end work.