

Chapter 7

Contaminated Sites

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Contaminated Sites

Why Report on Contaminated Sites?

7.1 The purpose of this chapter is to inform the Legislative Assembly of the results of our work regarding contaminated sites. We perform work on contaminated sites each year as part of the audit of the Province’s consolidated financial statements. It is important to note that our work on contaminated sites does not include airborne contaminants, such as asbestos.

The Province may be responsible for many contaminated sites

7.2 As part of our audit work this year, we noted 182 sites with known or possible contaminants which the Province may be responsible to remediate (clean up).

Observations are concerning

7.3 We are concerned with the observations noted as a result of our regular financial statement audit of the Province. The recommendations in this chapter do not reflect issues which may be identified through a more extensive examination such as a performance audit. We have included contaminated sites on our list of potential performance audits to consider in the future.

What is a Contaminated Site?

What is a contaminated site?

7.4 The Department of Environment and Local Government (DELG) defines a contaminated site as:

A property or collection of properties where the concentration of specified chemicals in air, soil, or groundwater exceed levels considered acceptable by the Department of Environment and Local Government...¹

How do sites become contaminated?

7.5 A site may become contaminated for many different reasons. Some examples include:

¹ Source: “Guideline for the Management of Contaminated Sites, Version 2 – Definitions, 2003” prepared by the Department of Environment and Local Government

- fuel storage and distribution;
- mining activity;
- waste disposal; and
- marine activity (such as port facilities).

Who Monitors Contaminated Sites?

The Department of Environment and Local Government records manages, and monitors all contaminated sites in the Province

7.6 DELG is responsible for recording, managing, and monitoring all contaminated sites in the Province. This includes privately owned sites, as well as public sites. Public sites include sites owned by the Province or sites where the Province has assumed responsibility. Site holders are required to notify DELG when they are aware a site is contaminated.

How Are Contaminated Sites Presented in the Province's Financial Statements?

Accounting standards require certain contaminated sites to be recorded as liabilities

7.7 Public sector accounting standards require the Province to record a liability for the estimated costs to remediate contaminated sites only if they meet specific criteria. In 2019, the Province was required to record a liability of \$44 million for 79 of its 182 contaminated sites.

7.8 A liability for a contaminated site can only be recorded if the following conditions are met:

- an environmental standard exists;
- the contamination exceeds the environmental standard;
- the government is directly responsible or accepts responsibility for the contaminated site;
- the government plans to remediate or remove the contaminate; and
- a reasonable estimate of the cost of remediating the contaminated sites can be made.

Other examples of what is not included in the liability for contaminated sites

7.9 Other examples of contaminated sites that the Province is not required to record a liability for include:

- privately owned sites; and
- public contaminated sites which the Province has leased to a third-party and the third party is responsible for clean up.

Properties still in productive use are considered environmental liabilities by the Province

7.10 In some instances, the Province has chosen to record an environmental liability (instead of a contaminated site liability) for properties which are still in productive use. For example, the Province recorded a separate environmental liability of \$28 million in 2019 for the areas of the Caribou mine which are currently in productive use.

How is the liability for contaminated sites calculated?

7.11 The liability for a contaminated site is calculated based on an estimate of the costs to remediate or remove the contaminate(s) from the site to meet environmental standards. These cost estimates are based mostly on engineering reports prepared by engineers or other experts who possess the necessary experience and expertise.

7.12 Departments and Crown agencies are responsible for estimating the total cost to remediate their contaminated sites.

How Much is the Liability for Contaminated Sites?

The Province has recorded a liability of \$44 million

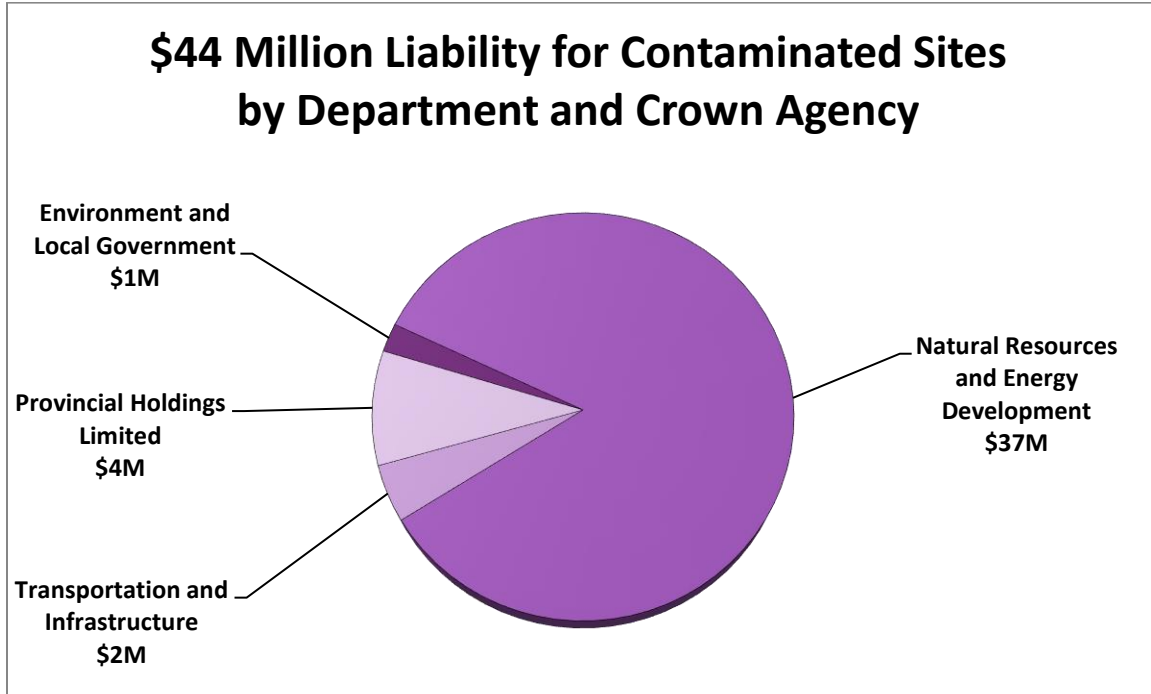
7.13 The Province recorded a liability (the amount it expects to spend in the future) of \$44 million for the remediation of 79 contaminated sites in 2019. The Province reports information relating to contaminated sites in Note 1(f), and Note 13(b) of the consolidated financial statements.

New Brunswick Power Corporation environmental liability is not included

7.14 The New Brunswick Power Corporation (NB Power) has recorded an environmental liability of \$11 million. This amount is not included as part of the Province's \$44 million liability.

7.15 Exhibit 7.1 summarizes the \$44 million liability by department and Crown agency. Most of the liability (\$37 million) relates to three mines in the Department of Natural Resources and Energy Development (DNRED).

Exhibit 7.1 - Liability for Contaminated Sites by Department and Crown Agency



Source: Prepared by AGNB

Department of Natural Resources and Energy Development Engineering Reports are Outdated

Department of Natural Resource and Energy Development has the largest liability

7.16 As noted in Exhibit 7.1, \$37 million of the Province's \$44 million liability for contaminated sites relates to three items at DNRED.

7.17 Each of the three mines have outdated engineering reports which are used to estimate the liabilities to remediate them. Costs from each of these outdated reports are adjusted for inflation each year to estimate the liabilities.

2010 report was used to estimate a \$23 million liability

7.18 The liability to remediate the Nigadoo mine is \$23 million and we found the liability was estimated using costs from an engineering report dated in 2010. This mine represents over half of the Province's \$44 million liability for contaminated sites.

Other outdated reports

7.19 We also found the liability to remediate the area of the Caribou mine which is not in productive use is \$6 million and was estimated using costs from a 2012 report. The

liability to remediate the Restigouche mine is \$8 million and used costs from a 2015 report.

DNRED visits sites annually but does not update costs to remediate

7.20 We were informed DNRED performs site visits every year to assess these mines, but it does not update the estimated costs to remediate them. Using outdated reports increases the risk liabilities for these mines are misstated due to changes in environmental standards or expected costs to remediate.

7.21 In our view, even though these estimates are not materially misstated, obtaining up-to-date engineering reports on a regular basis would improve the accuracy of these estimates. We were informed DNRED is considering receiving updated reports, but no definitive plan has been set.

Recommendation

7.22 We recommend the Department of Natural Resources and Energy Development obtain up-to-date engineering reports in advance of the next provincial audit to support contaminated site liabilities. We recommend the reports subsequently be obtained at least every five years or earlier, if conditions indicate an updated report is needed.

The Province May Become Responsible for Sites Contaminated by Others

The Province is exposed to risk

7.23 In some cases, the Province leases property it owns to individuals or businesses (lessees) for purposes such as mining or aquaculture. These leases result in a significant risk for the Province if the property becomes contaminated while being leased to a third party.

7.24 The Province has identified 57 properties it leases that have possibly become contaminated by lessees.

The Province is supposed to take steps to mitigate risk

7.25 To reduce the risk of the Province being responsible for cleaning up the leased sites once the leases expire, the Province requires lessees to purchase and maintain insurance on the property while it is being leased or provide financial security as collateral.

Three of ten properties sampled have been leased without proof of insurance

7.26 During our work, we examined a sample of ten leased sites and found instances where steps were not taken to mitigate this risk. We found:

- two instances where DNRED has not obtained proof of insurance from the lessee; and
- one instance where the Department of Agriculture, Aquaculture and Fisheries (DAAF) has not obtained proof of insurance from the lessee.

7.27 We also found DNRED and DAAF do not regularly monitor leased sites to confirm if insurance covers site contaminates based on how the site is being used and if insurance coverage is maintained by the lessee. For example, we noted one instance where DNRED has not obtained updated proof of insurance since 2013.

Province could be responsible to pay for any clean up

7.28 If up-to-date insurance or financial security (collateral) is not in place, the Province could be responsible to pay for the clean up of any contaminates caused by the lessee.

7.29 In our view, the Province is exposed to greater risk if up-to-date insurance or financial security is not in place for property it leases to third parties.

Recommendations

7.30 We recommend the Department of Natural Resources and Energy Development obtain and maintain up-to-date proof of insurance or financial security as collateral for all property it leases to third parties.

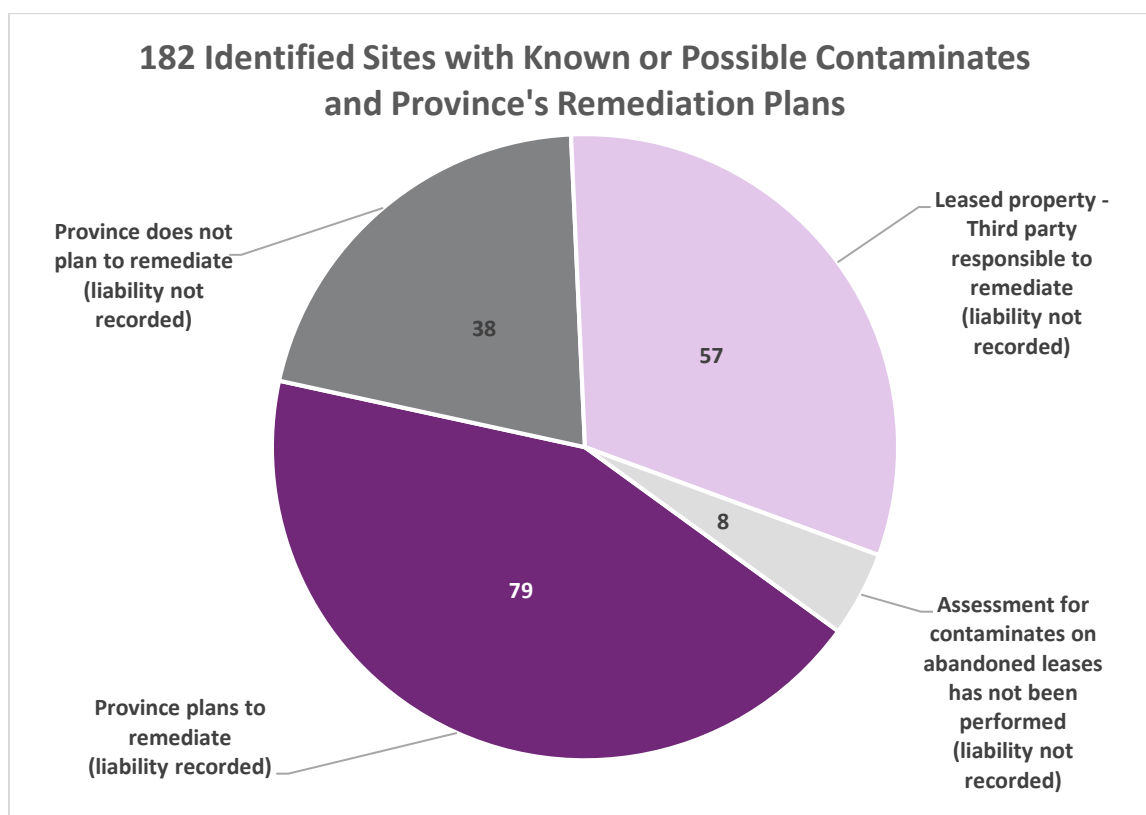
7.31 We recommend the Department of Agriculture, Aquaculture and Fisheries obtain and maintain proof of insurance or financial security as collateral for all property it leases to third parties.

What is Planned for the 182 Sites?

Not all sites are expected to be cleaned up

7.32 Exhibit 7.2 provides a summary of the planned treatment of sites with known or potential contaminates (excluding airborne contaminates) which the Province may be responsible to remediate.

Exhibit 7.2 - 182 Identified Sites with Known or Possible Contaminates and Province's Remediation Plans



Source: Prepared by AGNB based on information provided by departments and Crown agencies (unaudited)

The Province does not plan to remediate at least 38 sites

7.33 We note in Exhibit 7.2, the Province does not plan to remediate 38 contaminated sites even though in most cases environmental standards have been exceeded. During our work, we were informed the clean up of certain sites may not be cost-effective for the Province. In some cases the Province has found an alternative to remediation.

7.34 We also note in Exhibit 7.2:

- 57 sites are leased to third parties and remediation is the responsibility of the lessee.
- The Province intends to remediate 79 sites for which it has recorded a contaminated site liability.
- Eight sites have been abandoned by lessees and assessments for contaminants have not been performed.

Who is Responsible for the 182 Contaminated Sites?

Six departments and one Crown agency have contaminated sites

7.35 There are six departments and one Crown agency with contaminated sites. Exhibit 7.3 shows the number of contaminated sites by department and Crown agency for the last three years.

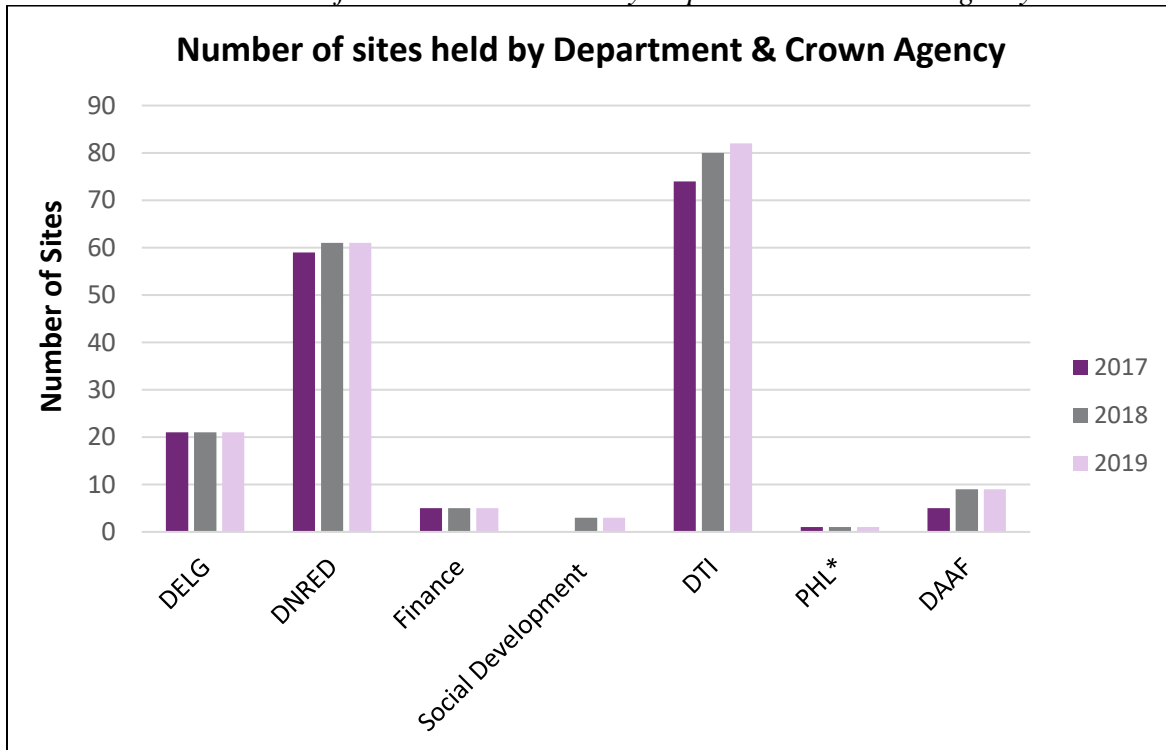
DTI is responsible for fuel contaminates

7.36 The Department of Transportation and Infrastructure (DTI) is responsible for 82 contaminated sites. Contaminates at these sites relate mostly to fuel related activities from maintenance depots and district garages.

DNRED is responsible for mines

7.37 DNRED is responsible for 61 contaminated sites, many of which are mines. Of the 37 mines held by the Province, most are either active or under lease where lessee is responsible for remediation.

Exhibit 7.3 - Number of Contaminated Sites by Department & Crown Agency



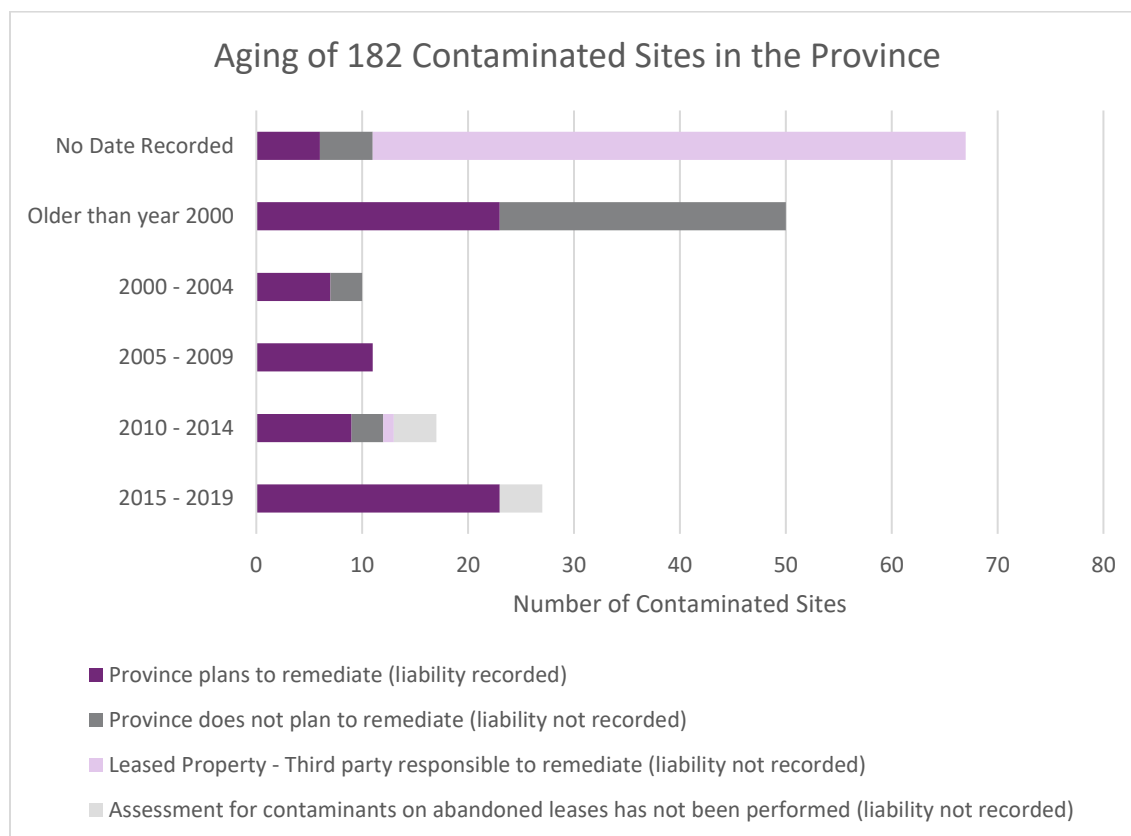
Source: Prepared by AGNB based on information provided by departments and Crown agencies (unaudited)

**PHL=Provincial Holdings Ltd.*

Some Contaminated Sites Have Existed for Over 20 Years

7.38 Exhibit 7.4 presents an aging analysis of the Province's 182 contaminated sites.

Exhibit 7.4 - Aging of 182 Contaminated Sites in the Province



Source: Prepared by AGNB based on information provided by departments and Crown agencies (unaudited)

7.39 We note in Exhibit 7.4, 50 sites have been contaminated for more than 20 years with no full remediation.

7.40 We will continue to monitor how the Province manages remediation of its contaminated sites in our future audit work.