

Chapter 1

Section 1.13

Ministry of Government and Consumer Services

Technical Standards and Safety Authority

Follow-Up on VFM Section 3.13, 2018 Annual Report

RECOMMENDATION STATUS OVERVIEW						
	# of Actions Recommended	Status of Actions Recommended				
		Fully Implemented	In the Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
Recommendation 1	3	1	2			
Recommendation 2	3	1	2			
Recommendation 3	1	1				
Recommendation 4	5	4	1			
Recommendation 5	3	1	2			
Recommendation 6	1	1				
Recommendation 7	1	1				
Recommendation 8	1	1				
Recommendation 9	4	4				
Recommendation 10	2	1	1			
Recommendation 11	2		2			
Recommendation 12	2	1	1			
Recommendation 13	2	1	1			
Recommendation 14	3	3				
Recommendation 15	1	1				
Recommendation 16	2	2				
Recommendation 17	2					2
Recommendation 18	3	3				
Recommendation 19	1	1				
Total	42	28	12	0	0	2
%	100	67	28	0	0	5

Overall Conclusion

As of September 30, 2020, the Technical Standards and Safety Authority (TSSA) and the Ministry of Government and Consumer Services (Ministry) have fully implemented 67% of the recommended actions in our *2018 Annual Report*. For example, the TSSA established a clear decision-making framework for deciding which programs require ongoing risk-based inspection programs; where frequency of inspections could be reduced or eliminated; and whether other oversight methods, such as licensing conditions or voluntary registration, could be used. It also implemented an oversight process to withhold operating permits for amusement rides with outstanding safety issues, and began random inspections to make sure uninspected rides are not being used. Furthermore, it is now auditing insurance companies to assess whether they are following inspection standards for boilers and pressure vessels.

About 28% of the actions we recommended were in the process of being implemented. In response to our *2018 Annual Report*, the TSSA Board approved (in April 2019) a four-year plan for a major regulatory transformation of the TSSA. As part of this transformation, the TSSA has been addressing some of our recommendations. For example, it is in the process of reviewing, updating and formalizing inspection standards for all safety program areas; assessing where checklists can be used to improve inspection processes; and reviewing operating license requirements to determine if companies should be required to meet specific conditions before renewing licences. The TSSA is also in the process of upgrading and replacing all of its information technology systems to support this regulatory transformation. Throughout this report, we explain how specific items in the transformation plan relate to and address some of our recommendations. We refer to the transformation plan as “Regulatory Transformation Plan” throughout this report.

A further 5% of our recommended actions are no longer applicable because the TSSA found a different solution or, in the case of Upholstered and Stuffed Articles, the Ontario government cancelled the safety program altogether.

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

Background

The Government of Ontario established the Technical Standards and Safety Authority (TSSA) in 1997 with a mandate to promote and enforce public safety on its behalf over a broad range of equipment and industrial operations.

The TSSA promotes and enforces public safety through four programs:

- Fuels Storage and Handling (Fuels);
- Boilers and Pressure Vessels and Operating Engineers (Boilers and Pressure Vessels);
- Upholstered and Stuffed Articles, (subsequent to our 2018 audit, the government has cancelled this program); and
- Elevating Devices, Amusement Devices and Ski Lifts (Elevating Devices).

The TSSA is self-funded through the fees that it charges the organizations it regulates, and receives no government funding. The TSSA is responsible for registering, licensing and inspecting the manufacture, installation, maintenance and operation of the devices and companies it regulates. Until July 1, 2019, when the government cancelled the Upholstered and Stuffed Articles program, the TSSA was also responsible for ensuring that upholstered and stuffed articles sold in Ontario, such as toys, mattresses and furniture, are made with new and clean filling materials, and that their labels correctly describe their contents. The TSSA has the authority to shut down unsafe devices and prosecute companies that do not comply with safety laws.

The Ministry of Government and Consumer Services (Ministry) is responsible for overseeing the TSSA, but we found the Ministry had not ensured that the TSSA was fulfilling its mandate, and we observed that the TSSA's own oversight processes were not fully effective.

Among our significant findings:

- The TSSA did not have consistent inspection standards that all inspectors were required to follow. The TSSA could also not explain why it did not periodically inspect some areas in the fuel sector, such as pipelines, compressed natural gas stations and propane distributors.
- A small number of large elevator-maintenance companies had dominated the Ontario market and for years had been failing to maintain most of the province's operating elevators in accordance with safety laws. The TSSA had tried with little success to have these large companies perform required maintenance and safety tests. When we discussed this issue with representatives of the maintenance companies, their view was that sometimes elevator owners were responsible for poor compliance with safety laws.
- The TSSA's computer system was outdated and contained inconsistent and incomplete information about the safety status of devices and businesses that it regulates. As a result, in 2018, the TSSA renewed the operating licences of over 300 elevators that at the same time were shut down by the TSSA for being unsafe to operate.
- When the TSSA found a mislabelled upholstered and stuffed article that it deemed to be a risk to the public, it ordered the inspected retailer to remove the article from sale. However, we were able to purchase the same mislabelled articles from other stores and online because the TSSA did not check other sources of sale. Also, we were able to purchase one out of every two mislabelled articles from the same inspected stores that the TSSA had ordered to stop selling these articles.

- For almost 20 years, the TSSA had done little to enforce and promote the safety of approximately 65,000 installed and operating boilers and pressure vessels as required under its Act. The TSSA did not know how many devices were operating in Ontario and where they were located. The TSSA told us that these devices were being inspected by insurers, but it was not collecting evidence to confirm this. We also noted that insurance coverage was not mandatory for operating boilers and pressure vessels.
- Ontario was the only province in Canada where boilers and pressure vessels used in agricultural operations were exempt from safety laws.
- The TSSA was responsible for ensuring that owners of fuel storage sites cleaned up their sites after they ceased operations. However, we found that the TSSA was not ensuring that abandoned sites were cleaned up if it could not locate owners to recover costs.

We made 19 recommendations, consisting of 42 action items, to address our audit findings. We received a commitment from the Ministry and the Technical Standards and Safety Authority that they would take action to address our recommendations.

Status of Actions Taken on Recommendations

We conducted assurance work between March 2020 and June 2020. We obtained written representation from the Technical Standards and Safety Authority and the Ministry of Government and Consumer Services that effective September 30, 2020, they have provided us with a complete update of the status of the recommendations we made in the original audit two years ago.

Ministry Does Not Regularly Review the TSSA's Inspection and Licensing Activities

Recommendation 1

To ensure that the TSSA is meeting its mandate to promote and enforce public safety in all regulated sectors under the Technical Standards and Safety Act, 2000, and its regulations and associated codes and standards, we recommend that the Ministry of Government and Consumer Services:

- *establish performance indicators and targets for the TSSA that drive improvement in each of the regulated sectors;*

Status: Fully implemented.

Details

In our 2018 audit, we found that the Ministry of Government and Consumer Services (Ministry) has not been effectively overseeing the TSSA's performance and assessing whether the TSSA is accomplishing its mandate. For example, the TSSA's target for its periodic inspection pass rate was to be "equal to or better than the previous fiscal year." Being "equal to" the previous fiscal year provides no motivation for the TSSA to improve the periodic inspection pass rates in the sectors that it regulates.

In our follow-up, we found that in August 2019, the TSSA and the Ministry completed interjurisdictional research on performance indicators and targets used to evaluate organizations like the TSSA. Based on this research, in April 2020, the Ministry established seven new performance indicators and targets for the TSSA that are designed to drive improvements in each of its regulated sectors. For example, for fiscal year 2020/21, the TSSA has a target to decrease the inventory of high-risk devices by 0.5%. The TSSA published the new seven performance indicators on its website on October 1, 2020.

- *on a regular basis assess the TSSA's performance against these targets;*

Status: In the process of being implemented by June 2021.

Details

In our 2018 audit, we found that the Ministry does not regularly collect sufficient operational information to review the TSSA's licensing and inspection activities, so it does not fully know what the TSSA inspects, how many inspections the TSSA performs each year, and the quality of these inspections.

In our follow-up, we found that according to the Memorandum of Understanding between the TSSA and the Ministry, the TSSA will begin to report to the Ministry, on a quarterly basis, information related to the newly established seven performance targets. Since the performance indicators were approved in April 2020, the Ministry expects to receive the first report from the TSSA in the fall of 2020. It then plans to begin to regularly review the information and assess, on an annual basis, the TSSA's performance against the seven new performance indicators and associated targets. The Ministry expects to conduct the first annual assessment in June 2021 based on the information the TSSA reports during the 2020/21 fiscal year.

- *take corrective actions where necessary.*

Status: In the process of being implemented by June 2021.

Details

During our follow-up, the Ministry informed us that once it completes its first annual assessment of the TSSA against the seven new performance indicators and associated targets, expected in June 2021, it will undertake corrective actions where and if necessary.

Information Technology Deficiencies Impede the TSSA's Operations

Recommendation 2

To further reduce the potential risks to public safety, we recommend that the TSSA:

- *review and update its information technology systems;*

Status: In the process of being implemented by September 2022.

Details

In our 2018 audit, we found that the TSSA's computer system was outdated and that some of the information it contained was inaccurate. For instance, the system did not allow the TSSA to sort and analyze its inspection data to identify trends in non-compliance or the most frequent type of non-compliance in each regulated sector. The TSSA also could not tell how long it took to resolve non-compliance identified by its inspections and its inspection scheduling was done manually.

The TSSA hired a new Chief Information Officer (CIO) in early 2019. During 2019, the CIO led a review of the TSSA's information technology systems to identify any gaps and weaknesses. To address these gaps and weaknesses, in October 2019, the TSSA Board approved a multi-year plan for a major replacement and upgrade of TSSA's information technology systems. At the time of our follow-up, the CIO was in the process of implementing this multi-year plan. For instance, in January 2020, the TSSA moved to an Oracle Cloud system.

According to the schedule in the multi-year plan, the TSSA will replace the information technology systems supporting the Boilers and Pressure Vessels safety program in February 2021, followed by those supporting the other safety programs by September 2022.

- *conduct a review of its renewal process for operating licences in the regulated sectors to determine if any licensed devices and companies should be required to meet specific conditions before their operating licences are renewed;*

Status: In the process of being implemented by June 2023.

Details

In our 2018 audit, we found that the TSSA automatically renews operating licences for the devices

and companies it regulates when it receives payment for them. Renewals are not conditional on meeting any safety requirements (except in the propane sector).

As part of its Regulatory Transformation Plan, the TSSA intends to review its licence renewal process to determine if any licensed devices and companies should be required to meet specific conditions. During our follow-up, the TSSA was in the process of reviewing the operating licence requirements for its propane cylinder exchange program. The TSSA informed us that it plans to complete reviewing its renewal process for operating licenses in its remaining safety programs by June 2023.

- *review all renewals of operating licences to ensure that licences of unsafe devices or companies or those that do not meet licensing conditions are not automatically renewed.*

Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA renewed the operating licences for just over 300 elevators that were still shut down by the TSSA as being unsafe to operate. The TSSA granted these renewals because the computer system it uses to process licence renewals is separate from the system it uses for inspections, and no one reconciles the information found in the two systems.

During our follow-up, we found that as of January 2020, the TSSA stopped automatically issuing licences for elevator, ski or amusement devices. Specifically, TSSA upgraded its computer system so it blocks the issuance of a licence to any elevating, ski or amusement device that has been shut down for safety reasons.

The TSSA's Chief Safety and Risk Officer's Key Responsibilities Are Unclear

Recommendation 3

To help its Chief Safety and Risk Officer (Safety Officer) review and report on the TSSA's public safety activities and performance more effectively, we recommend that the TSSA, together with the Ministry of Government and Consumer Services, more clearly and precisely define the Safety Officer's responsibilities and regularly evaluate the Safety Officer's performance against established performance criteria.

Status: Fully implemented.

Details

In our 2018 audit, we found that the Chief Safety and Risk Officer (Safety Officer) contract limited work to a maximum of 60 days per year at a daily rate of \$1,800 and gave only a vague description of the Safety Officer's key responsibilities. As a result, we found the role of Safety Office was not effective in fulfilling its mandate to provide an independent review of TSSA's public safety activities and performance. For example, we found no documentation to indicate that any review had been undertaken, and since 2001, the TSSA has not been fulfilling most of its responsibilities under the *Technical Standards and Safety Act, 2000* with respect to the safety of boilers and pressure vessels.

In our follow-up, we found that the TSSA, together with the Ministry of Government and Consumer Services, more clearly and precisely defined the Safety Officer's responsibilities. According to the new definitions, updated in October 2019, the Safety Officer is now responsible for reviewing, on an annual basis, the TSSA's operations from a public safety perspective, and for recommending how TSSA's oversight processes could be improved. The TSSA also established a new performance framework for the Safety Officer, which was approved by TSSA's Board in September 2019, and hired a new Safety Officer in late 2019.

The TSSA's Public Reporting on Safety Issues Is Incomplete and Inaccurate

Recommendation 4

To help ensure the effectiveness and transparency of its operations, we recommend that, on a regular basis, the TSSA publicly report the following information, after reviewing it for completeness and accuracy:

- the number and type of inspections performed in each safety program area;

Status: Fully implemented.

Details

In our 2018 audit, we found that the information contained in the TSSA's 2017 Safety Report (the latest available at that time) presented an inaccurate picture of the safety risks present in the sectors the TSSA regulates. Each year, the TSSA publishes its Safety Report containing key safety-related information on the sectors it regulates and its evaluation of its own performance. The Ministry and the Chief Safety and Risk Officer are supposed to use the Safety Report to monitor the state of safety of each regulated sector and to evaluate the TSSA's performance. However, we found that by omitting some data and presenting other inaccurate information, the TSSA was underreporting fuel incidents and presenting pass rates that were misleading.

In our follow-up, we found that in its 2019 Safety Report, the TSSA reported the number and type of inspections performed in each safety program area, which gives a more accurate picture of the overall state of safety. The TSSA told us that it will continue to include this information in its future Safety Reports.

- the inspection and compliance rate in each safety program area, including the inspection compliance rate for each elevator maintenance company that operates in Ontario;

Status: In the process of being implemented by September 2022.

Details

In our follow-up, we found that the TSSA reported the inspection and compliance rate in each safety program area in its 2019 Safety Report. However, it did not report the inspection compliance rate for each elevator maintenance company that operates in Ontario, and instead reported the aggregate compliance rate for all elevators in Ontario. The TSSA informed us that it could not report individual company compliance rates because of issues with its outdated information technology systems. Following the expected roll-out of its new information technology systems in September 2022 (see **Recommendation 2** for details), the TSSA plans to begin reporting the inspection compliance rate for each elevator maintenance company.

- *the most common non-compliance issues identified in each safety program area;*
Status: Fully implemented.

Details

In our follow-up, we found that in its 2019 Safety Report, the TSSA reported the most common non-compliance issues identified in each safety program area. The TSSA told us that it will continue to report this information in its future Safety Reports.

- *safety incidents reported by each safety program area;*
Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA under-reported some incidents involving fuels. In our follow-up, we found that in its 2019 Safety Report, the TSSA reported a complete summary of the safety incidents from each program area it regulates. The TSSA told us that it will continue to report this information in its future Safety Reports.

- *the number and result of re-inspections completed in each safety program area.*
Status: Fully implemented.

Details

In our follow-up, we found that in its 2019 Safety Report, the TSSA's reported the number and result of re-inspections completed in each safety program area. The TSSA told us that it will continue to report this information in its future Safety Reports.

Inspectors Are Not Supervised Effectively and Do Not Use Inspection Checklists

Recommendation 5

To improve public safety by ensuring that TSSA's periodic inspections are conducted with greater thoroughness and consistency, we recommend that the TSSA:

- *implement checklists in all of its safety programs where practical;*
Status: In the process of being implemented by June 2023.

Details

During our 2018 audit, we accompanied TSSA inspectors on a number of inspections in each of the safety program areas and found that the inspectors were not using a checklist or any other document for guidance. For example, the TSSA elevator inspector did not collect information to show that every main mechanical part had been inspected and to record each part's condition. The only key information documented in the inspection report related to non-compliance with safety laws that the inspector identified.

During our follow-up, we found that as part of the Regulatory Transformation Plan, the TSSA is reviewing all its inspection practices and assessing where the use of checklists would be practical. The TSSA did implement checklists in its propane cylinder exchange program (in August 2019) and in its tanker truck inspection program (in November 2019). At the time of our follow-up, the TSSA was in the process of reviewing the practicability of using checklists in its other safety programs. The

TSSA informed us that it expects to complete this work by June 2023.

- *formalize its inspection standards, including those with respect to:*
 - *the type and amount of inspections that should be performed;*
 - *the number of samples that inspectors should select and inspect or test;*
 - *inspection pass and fail criteria; and*
 - *minimum record-keeping requirements;*

Status: In the process of being implemented by June 2023.

Details

In our follow-up, we found that as part of the Regulatory Transformation Plan, the TSSA is reviewing, updating, and formalizing its inspection standards for all its safety program areas. As discussed later in this report under Recommendations 10 and 14, the TSSA formalized its inspection standards for fuel oil distributors (in November 2019) and heating contractors (in April 2020). At the time of our follow-up, the TSSA was in the process of formalizing its inspection standards for escalators, ski lifts and pipelines, which it expects to complete by the end of 2020. The TSSA informed us that it expects to complete its review and formalize its inspection standards for the remaining safety program areas by June 2023.

- *implement an inspector oversight process that includes an after-the-fact review and/or re-inspection of completed inspections.*

Status: Fully implemented.

Details

In our 2018 audit, we found that TSSA inspectors were not supervised effectively. To check if inspectors were carrying out inspections properly, each inspector would be accompanied by a supervisor on at least two inspections each year, and awarded a performance score. In the presence of a supervisor, inspectors are motivated to do well—and in fact, when we reviewed the inspection performance

scores awarded in 2017, we found that nearly all inspectors had passed with almost perfect scores.

In our follow-up, we found that in May 2019, the TSSA implemented an after-the-fact inspector oversight process for all its safety programs. Safety program supervisors are now required to randomly select and review two inspection reports per month for each inspector and check if the inspection was conducted and documented properly. During quarterly staff meetings, supervisors are now also required to communicate to staff common inspection deficiencies that they found in the previous quarter.

No Continuing Education Requirement for Most TSSA-Certified Technicians and Mechanics

Recommendation 6

To reduce the risk to public safety and help ensure that licensed mechanics and technicians remain qualified, we recommend that the TSSA implement, where needed, a continuing education requirement as a condition of recertification.

Status: Fully implemented.

Details

A coroner's inquiry into the death of an elevator mechanic in 2005 recommended that the TSSA implement a continuing education requirement for elevator mechanics as a condition of recertification. In 2011, the TSSA adopted this recommendation for elevator mechanics, but in our 2018 audit we found the TSSA had not adopted a continuing education requirement for any other mechanics/technicians that it certifies.

In our follow-up, we found that in January 2019, the TSSA implemented a continuing education requirement for all ski-lift mechanics. We also found that in late 2019, the TSSA reviewed its safety incident data and held consultations with industry stakeholders to determine if additional continuing education requirements should be implemented for any other mechanics/technicians

that TSSA certifies. At the conclusion of this work, the TSSA determined that there was no immediate need for any additional continuing education requirements. The TSSA informed us that it will continue to monitor its safety incident data and assess if a need arises for any additional continuing education requirements for the mechanics/technicians that it certifies.

The TSSA Continues to Collect Fees That Exceed the Cost of Operating Two of Its Four Safety Programs

Recommendation 7

To ensure that fees charged reasonably reflect the cost of operating each specific safety program and that some safety programs are not being used to cover the costs of running other programs, we recommend that the TSSA conduct a review of its fee structure and publicly report the fee revenues collected from and costs of enforcement in each safety program area.

Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA collects fees for some safety programs that exceed the cost of operating them, and that cross-subsidization of other program occurs, even though the memorandum of understanding between the Ministry and the TSSA prohibits this. Our analysis of the TSSA's financial information found that over the past five years, the Elevating Devices and the Upholstered and Stuffed Articles safety programs' fees were in surplus; we further found that the surplus was being used to cover the costs of the Fuels and the Boilers and Pressure Vessels safety programs.

In our follow-up, we found that the TSSA reviewed its fees in early 2019 to determine what changes were necessary so that each program could be self-sustaining. In August 2019, the TSSA increased its fees in all sectors, including the Fuels and the Boilers and Pressure Vessels safety programs. The fee increase is being phased in over three years, with the final increase scheduled to

take effect in May 2021, at which time each program will be close to full cost recovery. The TSSA told us that to make sure that each of its safety programs remains self-sustaining, it plans to increase its fees each year, starting in 2022, to match the rate of inflation. Starting in October 2019, the TSSA also began to publicly report in its Annual Report the fee revenues collected from and costs of enforcement in each safety program area.

Potential Safety Risks Poorly Managed in Propane and Liquid Fuels Sector

Recommendation 8

To reduce the risk of potential incidents in the propane sector, we recommend that the TSSA adopt as soon as possible the Propane Expert Panel's recommendation for its risk-based inspection program and use all relevant information found in the Risk and Safety Management Plans to establish a risk score used to determine propane facility inspection selection methodology.

Status: Fully implemented.

Details

In late 2008, the Propane Expert Panel (appointed by the Ontario government in response to the Sunrise propane explosion in Toronto) made several recommendations aimed at improving safety in the propane sector. In our 2018 audit, we found that although propane companies have been submitting Risk and Safety Plans to the TSSA as recommended by the panel, the TSSA was not using this information to determine the location of the highest-risk propane facilities, or to establish the risk-based inspection approach recommended by the panel.

In our follow-up, we found that in early 2020, the TSSA entered pertinent information found in the Risk and Safety Plans into its database. Using this information, the TSSA then assigned a risk score for each propane facility, which it used to develop a risk-based schedule that it will be following for its inspections of large bulk propane storage and filling plants and refill centres in fiscal 2020/21.

Recommendation 9

To help ensure that the TSSA's rationales for regulatory oversight are clearly based on evidence and its decisions balance public safety with the costs of regulatory compliance, we recommend that the TSSA establish a clear decision-making framework for when it is justifiable to:

- request the Ministry of Government and Consumer Services to license businesses operating in a specific sector;
- implement an ongoing risk-based periodic inspection program;
- reduce the frequency of inspections or eliminate inspections; and
- use other oversight methods, such as licensing conditions or voluntary registration.

Status: Fully implemented.

Details

The *Technical Standards and Safety Act, 2000* provides the TSSA with broad inspection powers to inspect any fuel facilities and equipment that it deems necessary, establish inspection programs, and request the Ministry introduce new licensing requirements. However, in our 2018 audit, we found that the TSSA's requests to the Ministry for licensing requirements and its decisions to implement inspection programs were not always based on accurate information about potential safety risks. We also found that the TSSA had not developed a clear, evidence-based framework for deciding when to implement a periodic inspection program for the businesses that it licenses. Furthermore, the TSSA had not inspected any unlicensed businesses that must comply with safety laws to see if they present a safety hazard to the public that would justify requiring them to be licensed and/or periodically inspected.

In our follow-up, we found that the TSSA established, in April 2020, a new risk-based decision-making framework ("framework") for all its safety program areas, after receiving input from an expert panel consisting of seven professionals from aca-

demia and leading inspection agencies. The TSSA began applying the framework to its safety programs to decide which ones require ongoing, risk-based inspections; where frequency of inspections could be reduced or eliminated; and what other oversight methods, such as licensing conditions or voluntary registration, could be used. The TSSA informed us that it plans to complete the review of all its safety programs using the new framework by June 2023.

Recommendation 10

To reduce the risk of fuel oil contamination from fuel oil tanks and hazardous carbon monoxide releases from fuel-burning equipment, we recommend that the TSSA as soon as possible:

- require fuel oil distributors to submit inspection reports of oil tanks they service to the TSSA as part of their annual licensing conditions;

Status: In the process of being implemented in an alternative way.

Details

Fuel oil is used to heat homes as an alternative to natural gas. The TSSA is required to inspect fuel oil distributors to ensure they are inspecting fuel oil tanks and delivering fuel oil only into safe tanks. However, in our 2018 audit, we found that the TSSA did not conduct periodic inspections of fuel oil distributors and did not collect any information from them to ensure they are inspecting the fuel tanks. At the time of our 2018 audit, there were 158 licensed fuel oil distributors operating in Ontario.

In our follow-up, we found that the TSSA launched, in November 2019, a new inspection program for fuel oil distributors instead of requiring them to submit inspection reports of the oil tanks they service as part of their annual licensing conditions. The new inspection program includes a physical examination of oil distributors' records and inspection reports for the oil tanks they service. The TSSA believes this would better ensure that oil distributors are inspecting all the oil tanks they

service, and not just submitting records of a few completed inspections. Inspections under the new program were scheduled to begin in April 2020, but have been postponed to November 2020 given COVID-19 restrictions.

- *Together with the Ministry of Government and Consumer Services (Ministry), develop an action plan outlining the specific steps the Ministry and the TSSA plan to take with oil distributors and tank owners to improve the safety of oil tanks.*

Status: Fully implemented.

Details

In our follow-up, we found that the TSSA worked with the Ministry to develop an action plan in November 2019 that outlines the specific steps the TSSA plans to take with oil distributors and tank owners to improve the safety of oil tanks. As part of this plan, the TSSA launched a new inspection program of fuel oil distributors in November 2019, which includes a physical examination of their records and inspection reports for the oil tanks they service. Due to COVID-19 restrictions, inspections under this new inspection program are scheduled to start in November 2020. The TSSA and Ministry informed us that once the inspection results are gathered and available, expected some time in late 2021, they will assess the results to determine if any additional steps need to be taken to improve the safety of oil tanks, possibly directly with the tank owners.

Contamination from Fuel Facilities Allowed to Continue

Recommendation 11

To reduce the risk of contamination of source water, we recommend that the TSSA:

- *work together with pertinent implementing bodies for source water protection plans and the Ministry of Environment, Conservation and Parks on developing a plan to identify the*

location of private fuel storage sites that pose a significant threat to source water;

Status: In the process of being implemented by December 2020.

Details

During our 2018 audit, we investigated whether the TSSA had started to inspect private fuel storage sites, as it agreed to do in November 2014 at the time of our audit of the Source Water Protection Program. While the TSSA had a plan in early 2015 to start inspecting these sites, it never did because it said that it is difficult to locate these sites, as they are not required to be licensed. The TSSA continued to investigate reported fuel incidents involving private fuel storage and issue orders for any non-compliance with safety laws. In 2017, the TSSA analyzed the information from its fuel spill investigations on private properties and found that about 85% of the sites did not fully comply with applicable fuel storage safety laws.

In our follow-up, the TSSA told us that it had met with the Ministry of Environment, Conservation and Parks, and the Ministry of Government and Consumer Services in December 2019 to begin developing a plan to identify the location of private fuel storage sites that pose a significant threat to source water. The TSSA informed us that it expects this plan to be finalized in December 2020.

- *where further action is needed, establish a risk-based periodic inspection program for private fuel storage sites that pose a significant threat to source water.*

Status: In the process of being implemented by May 2021.

Details

In our follow-up, we found that as part of the plan to identify the location of private fuel storage sites that pose a significant threat to source water, the TSSA has proposed to the Ministry of Government and Consumer Services and the Ministry of the

Environment, Conservation and Parks to combine the TSSA's current risk-based methodology and the Ministry of the Environment, Conservation and Parks' existing source water risk framework. Once the inspection approach is finalized and sites are identified, the TSSA committed to begin risk-based inspections of these sites in May 2021.

Recommendation 12

To reduce the risk of contamination spreading on and beyond abandoned fuel sites, we recommend that the TSSA:

- *update its memorandum of understanding with the Ministry of the Environment, Conservation and Parks and work together to develop and implement a centralized database inventory of all abandoned fuel sites and a risk prioritization model to identify high-risk sites;*

Status: Fully implemented.

Details

In our 2018 audit, we found that negotiations between the TSSA and the Ministry of the Environment, Conservation and Parks (Ministry of the Environment) had been going on for over six years to clarify responsibilities related to abandoned fuel sites. However, no changes had yet been made to the memorandum of understanding signed in 1997, and the problem of cleaning up abandoned fuel sites remained unresolved.

In our follow-up, we found that the TSSA and the Ministry of the Environment had signed an updated memorandum of understanding in September 2019 that clarifies and strengthens the wording describing the TSSA's and the Ministry of the Environment's responsibilities for abandoned fuel sites. We also found that in April of 2019, the TSSA gave the Ministry of the Environment its most up-to-date listing of abandoned fuel sites. The Ministry of the Environment used this information to create a centralized database inventory of abandoned fuel sites. In March 2020, the Ministry of the Environment developed a model to prioritize

high-risk abandoned fuel sites, and began to apply this model to its inventory of abandoned fuel sites.

- *work together with the Ministry of Government and Consumer Services and the Ministry of the Environment, Conservation and Parks to develop a long-term funding strategy to remediate abandoned fuel sites.*

Status: In the process of being implemented by November 2021.

Details

In our 2018 audit, we found that the TSSA is not ensuring that abandoned fuel sites are cleaned up, which increases the risk of environmental contamination. Because the TSSA operates on a cost-recovery basis, it has no extra funds available to cover the cost of clean-up or removing oil storage tanks safely when owners abandon sites without proper remediation as required by safety laws. At the time of our 2018 audit, the TSSA's records showed that there were about 300 abandoned fuel storage sites (primarily old abandoned gas stations) with a total of 740 fuel tanks, where the owners could not be located to recover clean-up costs.

In our follow-up, we found that in late 2019 the TSSA together with the Ministry of Government and Consumer Services and the Ministry of the Environment, Conservation and Parks began working on a long-term funding strategy to remediate abandoned fuel sites. The TSSA told us it plans to submit the final version of the strategy to the government for approval by November 2020.

No Inspection of Oil and Natural Gas Pipelines

Recommendation 13

To reduce the risk of pipeline safety incidents, we recommend that the TSSA:

- *review its current oversight practice for pipeline operators against best practices from other jurisdictions;*

Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA itself does not inspect pipelines, but instead relies on the pipeline operators to conduct their own inspections. Once every five years, the TSSA then audits the pipeline operators' records of inspections and records of their pipelines' incident history, operation manuals and employee training requirements. While safety laws require the TSSA to license pipeline operators, they do not prescribe how, and at what frequency, the TSSA should inspect their pipelines. Despite two major pipeline leaks in Ontario since the TSSA's inception in 1997, we found that the TSSA has not updated or changed its practices for inspecting pipeline operators.

In our follow-up, we found that in December 2019, the TSSA reviewed its oversight practices for pipeline operators against best practices from Alberta, British Columbia, and a number of jurisdictions in the United States, such as New York and California.

- *move toward a risk-based oversight approach based on each pipeline operator's specific safety risks.*

Status: In the process of being implemented by November 2020.

Details

During our follow-up, the TSSA informed us that it is developing a new risk-based approach to its oversight of pipeline operators based on the inter-jurisdictional review of best practices that it completed in December 2019. The TSSA plans to ask the Ministry of Government and Consumer Services to review its new oversight program in the second half of 2020. At the time of our follow-up, the TSSA was collecting information that will help it assess the risk of each pipeline operator. Once this work is done, the TSSA expects to implement the new risk-based oversight program of pipeline operators in November 2020.

Fuel-Burning Appliances: Improper Installation and Maintenance

Recommendation 14

To reduce the risks of carbon monoxide releases due to poor fuel-burning equipment installation and maintenance, we recommend that the TSSA:

- *as part of its annual licensing conditions require fuel-burning installation and maintenance companies to submit to the TSSA a list of all employed technicians;*

Status: Fully implemented through a different method.

Details

In our 2018 audit, we found that the TSSA's inspection of companies that install fuel-burning equipment was inadequate despite the risk of carbon monoxide releases. Once every three years, the TSSA inspected the companies it licensed by visiting the sites of completed jobs to determine if the work performed by their technicians complied with applicable safety laws. However, we found that the TSSA only inspected a small portion of jobs that were pre-selected by the companies; as such, many of the certified technicians had never been inspected. Furthermore, we found that of those jobs that had been inspected over the previous five years, TSSA's records indicated that, on average, 43% of installation and maintenance jobs failed the inspection.

In our follow-up, we found that the TSSA decided against keeping lists of certified technicians and inspecting individual jobs. The TSSA told us it had begun to collect these lists from its licensed companies in 2019, but found it difficult to keep them up to date as technicians changed employment, moved between companies, or performed work for multiple companies. Instead, starting in April 2020, the TSSA began inspecting, on a three-year cycle, the licensed companies that employ the technicians. During the new inspection process, the TSSA checks each company's records to verify that the company complies with its legal obligation to install only approved equipment, employ only

certified technicians, and have a quality-assurance program in place to ensure that its technicians comply with required safety laws when performing installations and maintenance jobs. As of May 2020, the TSSA inspected 548 licensed companies, and told us that by May 2023 it plans to inspect the remaining 8,500 licensed companies.

- *develop and implement a robust centralized information system that tracks the number of technicians working for each company;*

Status: Fully implemented through a different method.

Details

In our follow-up, we found that in April 2020 the TSSA stopped inspecting individual jobs completed by certified technicians and instead began to inspect the licensed companies that employ the technicians. As a result of this change, the TSSA no longer needs to track the number of technicians working for each company and this action item is no longer applicable.

- *select a number of technicians from each company for inspection, ensuring that over time all technicians are inspected.*

Status: Fully implemented through a different method.

Details

In our follow-up, we found that in April 2020, the TSSA stopped inspecting individual jobs completed by certified technicians, and this action item is no longer applicable.

Most Ontario Elevators and Escalators Are Not in Compliance with Safety Laws: Situation Is Getting Worse

Recommendation 15

To improve compliance with safety laws in the Elevating Devices sector, we recommend that the TSSA, together with the Ministry of Government and

Consumer Services (Ministry), develop an action plan outlining specific steps the Ministry and TSSA plan to take with elevator owners and maintenance companies to resolve current safety issues and bring the safety law compliance rate to an acceptable level.

Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA conducted inspections of elevating devices to ensure that they are built and installed in accordance with safety laws. However, we found that the TSSA lacked strong enough enforcement powers to deal with the large elevator maintenance companies that for years have not maintained most of Ontario's operating elevators in accordance with safety laws.

In our follow-up, we found that the TSSA, together with the Ministry of Government and Consumer Services (Ministry), developed an action plan in 2019 that outlines specific steps that the Ministry and TSSA would take together with elevator owners and maintenance companies to resolve current safety issues and bring the safety law compliance rate to an acceptable level. As part of this plan, starting in early 2019, the TSSA began holding regular monthly meetings with the four large elevator maintenance companies to discuss how best to resolve elevator safety issues and improve safety law compliance.

In October 2019, the TSSA launched an education and outreach program for elevator owners to help them identify and resolve high-risk issues with their elevating devices. In late 2019, the TSSA also completed a review of its historical inspection data and found that while there are a high number of inspection non-compliance orders, most of them are not high risk, or are due to administrative-type issues. The TSSA is now in the process of using this information to update its elevator inspection practices to focus more on high-risk non-compliance. Also, in July and August 2020, the Ministry consulted the public on a proposed update of safety laws that would allow the TSSA to administer financial penalties to elevator owners and contractors who do not comply with safety laws.

The TSSA Does Not Know if Uninspected Amusement Rides Are Being Used

Recommendation 16

To improve the safety of amusement park rides, we recommend that the TSSA:

- *implement an oversight process to ensure that operating permits are issued only to rides that have been inspected and found to be safe after any safety issues are remedied;*

Status: Fully implemented.

Details

In our 2018 audit, we found two unsafe amusement rides with a TSSA operating permit in use at one of the largest street festivals in Ontario. We investigated why the TSSA had issued operating permits to these rides and found that the TSSA had previously inspected these two rides and identified the same safety problems that we found; however, the TSSA inspector who did the initial inspection never followed up, as required, to check if the safety problems had been fixed before issuing operating permits.

In our follow-up, we found that in January 2020, the TSSA updated its policies and stopped issuing operating permits to inspected amusement rides with any outstanding high-risk safety problems. The operating permits are now issued only after the high-risk safety problems are remediated.

- *establish an inspection process to ensure that only rides with valid operating permits are in use.*

Status: Fully implemented.

Details

In our 2018 audit, we found that the TSSA does not have a program in place to conduct random inspections of amusement parks to find out if any uninspected amusement devices are being operated. We found that in New Jersey, the agency responsible for inspecting amusement rides, the

Carnival and Amusement Ride Safety Unit of the Department of Community Affairs, conducts random inspections to ensure that park operators operate only inspected devices.

In our follow-up, we found that the TSSA established a new program to conduct random inspections of operating rides. During the summer of 2019, the TSSA visited 75 events/locations and conducted random inspections to determine if any active amusement devices were being operated without a valid permit. Due to the impacts of COVID-19, most of the amusement devices were shut down during summer of 2020 and as a result the TSSA did not conduct any random inspections. The TSSA informed us that once COVID-19 restrictions are lifted and the amusement devices become operational again, it will resume its inspections.

Upholstered and Stuffed Articles Safety Program

Recommendation 17

To significantly improve the effectiveness of its upholstered and stuffed products safety program, we recommend that the TSSA:

- *develop and implement an action plan to improve this program so that its inspection and enforcement resources are used effectively and most efficiently to protect public safety;*

Status: No longer applicable.

- *ensure that inspectors have the required training and equipment.*

Status: No longer applicable.

Details

In our 2018 audit, we reviewed the TSSA's inspection and enforcement practices in the Upholstered and Stuffed Articles program and questioned how effective this safety program was in protecting public safety. On July 1, 2019, the Government of Ontario revoked the Upholstered and Stuffed Articles Regulation, effectively eliminating this safety program altogether.

The TSSA Does Not Know the State of Safety of Almost All Boilers and Pressure Vessels Located in Ontario

Recommendation 18

To start fulfilling its responsibilities under the Technical Standards and Safety Act, 2000, with regard to the safe operation of boilers and pressure vessels, we recommend that the TSSA:

- establish inspection standards for boilers and pressure vessels and ensure that insurance companies are following these standards when conducting their inspections;

Status: Fully implemented.

Details

In our 2018 audit, we found that since 2001, the TSSA has not been fulfilling most of its responsibilities under the Act when it comes to the safe operation of boilers and pressure vessels. The TSSA did not know how many boilers and pressure vessels operated in Ontario, where they were located, and whether they were maintained and inspected. The TSSA was also not collecting required information from insurance companies and was not issuing the Certificates of Inspection for insured operating devices. This meant that the vast majority of boilers and pressure vessels in Ontario were, at the time of our 2018 audit, operating outside the law, and that the overall safety status of this sector was not known.

In our follow-up, we found that the TSSA implemented an insurer audit program to assess whether insurers are conducting required inspections. All boiler and pressure vessel inspectors must follow the National Board of Boiler and Pressure Vessel Inspectors and the American Society of Mechanical Engineers inspection standards. Inspectors must also pass examinations administered by both TSSA and the National Board of Boiler and Pressure Vessel Inspectors to obtain a certificate of competency. As of May 26, 2020, the TSSA completed 10 insurer audits and four audits of inspection agencies that conduct inspections on behalf of some insurers

to make sure that they comply with the required inspection standards.

- use the information collected from insurers to develop and implement a robust centralized system that tracks the number of boilers and pressure vessels that operate in Ontario, their location and their safety status;

Status: Fully implemented.

Details

In our follow up, we found that in late 2018, the TSSA implemented a centralized system that tracks the number of boilers and pressure vessels that operate in Ontario, their location, and their safety status. As of May 25, 2020, there were just over 26,000 boilers and pressure vessels that were entered and tracked in the centralized system. The TSSA informed us that new boilers and pressure vessels are added to its system as they are inspected. Under the current three-year inspection cycle, the TSSA expects to have all the remaining boilers and pressure vessels entered and tracked in its centralized system by the end by August 2021.

- start collecting required information from insurance companies, review this information, and issue Certificates of Inspection for insured boilers and pressure vessels.

Status: Fully implemented.

Details

In our follow-up, we found that in late 2018, the TSSA started to collect Records of Inspection from insurance companies for boilers and pressure vessels. We also found that, since that time, the TSSA has been reviewing the Records of Inspection and using them to issue Certificates of Inspection for insured boilers and pressure vessels.

Boilers and Pressure Vessels Used for Agricultural Purposes Exempt from Safety Laws: TSSA Is Concerned for Public Safety

Recommendation 19

To reduce the risk of public safety in the agricultural sector, we recommend that the Ministry of Government and Consumer Services assess the current exemption of agricultural operations from safety laws pertaining to boilers and pressure vessels and elevating devices.

Status: Fully implemented.

Details

In our 2018 audit, we noted that Ontario is the only province in Canada where boilers and pressure vessels used in agricultural operations such as greenhouses, mushroom farms, maple syrup farms, and wineries are exempt from safety laws. At that time,

an estimated 600 to 700 agricultural operations were exempt from safety laws, even though their boilers are typically larger than home water heaters and can operate at much higher temperatures and pressures. We found as well that agricultural operations are also exempt from safety laws pertaining to elevating devices.

In our follow-up, we found that in 2019, the Ministry of Government and Consumer Services (Ministry) assessed the current exemption of agricultural operations from safety laws pertaining to boilers and pressure vessels and elevating devices. As a result of this assessment, the government revoked this exemption in July 2020. The current exemption of agricultural operations from safety laws pertaining to elevating devices has remained in place. The Ministry informed us that its assessment of the elevating devices exemption did not support the need for revocation.