Office of the Auditor General Performance Audit Report

## Aboveground and Underground Storage Tank Programs

Storage Tank Section, Bureau of Fire Services Department of Licensing and Regulatory Affairs

**April 2022** 

State of Michigan Auditor General Doug A. Ringler, CPA, CIA

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

The auditor general may make investigations pertinent to the conduct of audits.

Article IV, Section 53 of the Michigan Constitution



Performance Audit Aboveground and Underground Storage Tank Programs Storage Tank Section (STS), Bureau of Fire Services (BFS) Department of Licensing and Regulatory Affairs (LARA)

**Report Number:** 641-0436-21

Released: April 2022

LARA's STS is responsible for administering the Aboveground Storage Tank (AST) and Underground Storage Tank (UST) Programs in accordance with the Fire Prevention Code, Public Act 207 of 1941, and Part 211 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, respectively. STS inspects ASTs containing flammable compressed gas, liquefied petroleum gas, flammable liquid, or combustible liquid and inspects USTs containing petroleum-based, hazardous, or other regulated substances. STS expended \$3.3 million during fiscal year 2020. As of April 2, 2021, STS had 25 employees.

Audit Objective		Conclusion		
Objective 1: To assess the sufficiency of STS's efforts to conduct storage tank inspections.		S	Sufficient, with exceptions	
Findings Related to This Audit Objective	Material Condition	Reportal Conditio		Agency Preliminary Response
As of May 1, 2021, 25% of tanks were overdue for a triennial inspection ( <u>Finding 1</u> ).	Х			Agrees
Of the reinspections we reviewed, 50% were completed 1 day to 689 days late, and tanks were not red-tagged at 78% of the facilities with outstanding violations ( <u>Finding 2</u> ).	Х			Agrees
STS lacked a process to ensure timely removal of red tags from tanks at 214 storage tank facilities ( <u>Finding 3</u> ).		Х		Agrees

Audit Objective		Conclusion		
Objective 2: To assess the effectiveness of select LARA security and access controls over Accela.		Moderately effective		
Findings Related to This Audit Objective	Material Condition	Reportal Conditio		Agency Preliminary Response
We identified issues related to assigning, disabling, and removing user access and oversight of system controls. As of April 30, 2021, 3 former State employees had access to storage tank and inspection data for 15 days to 365 days after their departure date ( <u>Finding 4</u> ).		Х		Agrees

Audit Objective		Concl	lusion	
Objective 3: To assess the effectiveness of STS's efforts to ensure the accuracy of its data in BFS's statutory reports.Effective		ctive		
Findings Related to This Audit Objective	Material Condition	Reportab Conditio	le Prel	gency liminary sponse
None reported.		Not applic	able.	

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April 15, 2022

Ms. Orlene Hawks, Director Department of Licensing and Regulatory Affairs Ottawa Building Lansing, Michigan

Dear Ms. Hawks:

This is our performance audit report on the Aboveground and Underground Storage Tank Programs, Storage Tank Section, Bureau of Fire Services, Department of Licensing and Regulatory Affairs.

We organize our findings and observations by audit objective. Your agency provided preliminary responses to the recommendations at the end of our fieldwork. The *Michigan Compiled Laws* and administrative procedures require an audited agency to develop a plan to comply with the recommendations and to submit it to the State Budget Office upon completion of an audit. Within 30 days of receipt, the Office of Internal Audit Services, State Budget Office, is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

Dovg Kingler

Doug Ringler Auditor General

#### TABLE OF CONTENTS

#### ABOVEGROUND AND UNDERGROUND STORAGE TANK PROGRAMS

	Page
Report Summary	1
Report Letter	3
Audit Objectives, Conclusions, Findings, and Observations	
Storage Tank Inspections	8
Findings:	
1. Triennial inspection processes need improvement.	9
2. Improvements needed over reinspection processes.	12
3. Improvement needed to ensure timeliness of red tag re	moval. 14
Select Security and Access Controls	15
Findings:	
4. Security and access controls over Accela need improve	ement. 16
Accuracy of Statutorily Required Report Data	19
Program Description	20
Audit Scope, Methodology, and Other Information	21
Glossary of Abbreviations and Terms	25

# AUDIT OBJECTIVES, CONCLUSIONS, FINDINGS, AND OBSERVATIONS

### STORAGE TANK INSPECTIONS

BACKGROUND	The Storage Tank Section (STS), Department of Licensing and Regulatory Affairs (LARA), maintains a database of all regulated tanks, conducts inspections of new tank installations, and conducts triennial inspections of existing tanks.
	STS is required to attach a red tag* to a storage tank it determines to be noncompliant, indicating the tank should not be filled. The red tag remains on the tank until an STS reinspection determines all cited violations have been corrected.
	A tank owner/operator can request STS to designate a storage tank as temporarily out of use, indicating the tank has been empty for more than 90 continuous days and the owner/operator intends to put it back into use within 12 months. Storage tanks designated as temporarily out of use remain subject to triennial inspections.
	As of April 30, 2021, STS's database contained 25,073 regulated storage tanks (7,807 aboveground storage tanks [ASTs] and 17,266 underground storage tanks [USTs]) designated as either currently in use or temporarily out of use at 10,725 facilities.
AUDIT OBJECTIVE	To assess the sufficiency of STS's efforts to conduct storage tank inspections.
CONCLUSION	Sufficient, with exceptions.
FACTORS IMPACTING	<ul> <li>STS maintained documentation supporting its completion of all 25 triennial inspections we reviewed.</li> </ul>
CONCLUSION	<ul> <li>STS timely notified owners/operators when it attached red tags to the tanks for the 25 facilities we reviewed.</li> </ul>
	<ul> <li>STS reports supported the inspection and approval of new tank installations for the 31 facilities we reviewed.</li> </ul>
	<ul> <li>As of April 21, 2021, the STS database contained the tank owner name and/or address for 98.7% of the tanks designated as currently in use.</li> </ul>
	<ul> <li>Material conditions* related to the need to improve the triennial inspection and reinspection processes (Findings 1 and 2).</li> </ul>
	<ul> <li>Reportable condition* related to improving the process for removing red tags from tanks (Finding 3).</li> </ul>

\* See glossary at end of report for definition.

#### FINDING 1

Triennial inspection processes need improvement.

6,078 tanks were overdue for triennial inspection.

STS needs to improve its processes to ensure it conducts timely triennial inspections of all ASTs and USTs to help prevent and identify leaks, limiting potential fire and environmental hazards and/or public health risks.

Section 29.5d of the *Michigan Compiled Laws* (through Executive Order No. 2012-14) requires STS to inspect tanks every 3 years for compliance with the Fire Prevention Code and/or the federal Energy Policy Act of 2005.

As of April 30, 2021, STS's database identified 23,985 registered ASTs and USTs, installed prior to May 1, 2018, at 10,164 active facilities. Our analysis of STS's triennial inspections, procedures, and database noted:

- a. STS did not document which specific tank(s) it inspected, and, therefore, could not ensure it inspected all 17,907 tanks during the inspections conducted at 7,707 facilities from May 1, 2018 through April 30, 2021.
- b. As of May 1, 2021, STS had not conducted required triennial inspections of 6,078 tanks (25.3% of the total 23,985 tanks) maintained at 2,457 facilities, as follows:

Time Overdue for Triennial Inspection	Number (Percentage) of Tanks
Less than 6 months	2,482 (40.8%)
6 months to less than 1.0 year	1,674 (27.5%)
1.0 year to less than 1.5 years	759 (12.5%)
1.5 years to less than 2.0 years	301 ( 5.0%)
2.0 years to less than 2.5 years	132 ( 2.2%)
2.5 years to less than 3.0 years	95 ( 1.6%)
3.0 years to less than 4.0 years	89 (1.5%)
4.0 years to less than 5.0 years	8 ( 0.1%)
5.0 years or more	256 ( 4.2%)
Undeterminable*	282 ( 4.6%)
Total	6,078 (100.0%)

\* Installation and/or inspection dates were not documented; therefore, the time overdue for triennial inspection could not be determined.

Our review of 21 tanks included in the backlog and designated as temporarily out of use identified 12 tanks never had a triennial inspection performed and 4 tanks were last inspected at some point from March 2001 through September 2017. Temporarily out-of-use tanks represent a potential environmental contamination source and safety hazard when unattended or unused for an extended period of time.

	STS attributed the backlog to persistent staffing shortages and inspection hours lost because of the COVID-19* pandemic.
	We considered this finding to be a material condition because of STS's inability to ensure all currently in-use and temporarily out-of- use tanks were inspected, the number and length of time some inspections were overdue, and the potential safety risk to the public.
RECOMMENDATION	We recommend that STS improve its processes to conduct timely triennial storage tank inspections.
AGENCY PRELIMINARY	LARA provided us with the following response:
RESPONSE	LARA agrees with this recommendation. STS is currently reviewing procedures and will continue to update existing procedures or develop new procedures while working in conjunction with industry and internal stakeholders to improve compliance with the recommendation of the audit finding.
	a. STS supervisory staff have reviewed the current inspector assignment(s) based on facility criterion. By utilizing the mapping tools that are currently being prepared by the Michigan State Police Geographic Information System (GIS) section, the closest inspector will be assigned to reduce unnecessary travel, thereby increasing efficiency of resources and placing more focus on the location of the facility rather than the date of the due/overdue triennial inspection. Additionally, supervisory staff will monitor monthly trends to identify needed changes to improve inspector assignments based on total facility count, geographical assigned work area, and attrition.
	b. Prioritization Methodology of Triennials: STS supervisory staff have prioritized the triennial inspections according to date of last inspection, density of population, tank contents as well as the ability to inspect a facility based on seasonal constraints. Supervisory staff now review and assign inspections based on the prioritized past due triennial inspection list. This process change ensures the prioritized past due triennial inspections are reduced as quickly as possible.
	c. Training and performance management: STS managers and supervisors have provided detailed direction and training concerning the expectations and priorities of addressing overdue inspections. Inspectors have and will periodically be briefed on how data will be reviewed on a weekly basis and adjusted as needed to reduce the number

<sup>\*</sup> See glossary at end of report for definition.

of overdue triennial inspections. Managers and supervisors review weekly inspection trends by inspector and discuss findings, trends, and best practices with each inspector and Bureau of Fire Services (BFS) leadership.

- d. STS has implemented the above-referenced strategies to enhance inspection scheduling, inspection procedures, prioritization of inspections, and training and performance management. Evaluation and monitoring of these strategies since implementation (October 2021) have resulted in an 18% reduction of overdue facility inspections plus those that have come due since then.
- e. The 256 identified tanks that are currently more than 5 years overdue for an inspection are the result of an unknown owner or address. At the time of this response, STS has administratively closed 59 of these tanks leaving 197 to be addressed. We are in the process of identifying and assigning the remaining tanks to staff that will physically visit the owner/address on record to confirm the status of the site. Upon confirmation of the status, STS will complete the administrative closure of these tanks and remove them from the overdue inspection list. We project to have the remaining 197 completed within 180 days from the date of this response. STS has prioritized inspections based on last inspection date instead of facility status which will alleviate future overdue inspections related to an unknown owner or address.

#### FINDING 2

Improvements needed over reinspection processes.

STS needs to improve its reinspection processes to ensure storage tanks with previously identified violations are brought into compliance or red-tagged in a timely manner, limiting potential fire and environmental hazards and/or public health risks.

STS's reinspection procedures 10-02 and 10-04 require:

- Owners/operators to comply with identified violations within 60 days.
- Inspectors to complete reinspection within 15 days or 60 days, depending on the inspection date and the policy effective date.
- Inspectors immediately attach red tags to tanks with remaining violations, unless the owner/operator has a signed executable contract to correct them.

From October 1, 2018 through April 21, 2021, STS conducted triennial inspections at 6,774 facilities that maintained 15,646 tanks classified as currently in use. We reviewed triennial inspection reports of 25 facilities, including 18 facilities for which reinspections were required to be completed by April 30, 2021 and noted:

- a. STS did not complete 9 (50.0%) of the 18 reinspections by the required compliance due date, ranging from 1 day to 689 days late.
- b. STS did not attach red tags to tanks at 7 (77.8%) of the 9 facilities with violations outstanding after the first reinspection and for which the owner/operator had not contracted to correct the violations.

STS indicated miscommunications, miscalculation of dates, and the COVID-19 pandemic hindered its ability to conduct reinspections and/or attach red tags to noncompliant tanks in a timely manner.

We considered this finding to be a material condition because of the significance of the exception rates identified, the length of time reinspections were overdue, and the potential safety risk to the public.

We recommend that STS complete reinspections and timely attach red tags to noncompliant tanks.

LARA provided us with the following response:

LARA agrees with this recommendation. STS is currently reviewing procedures and will continue to update existing procedures or develop new procedures while working in

50.0% of reinspections were completed 1 day to 689 days late.

RECOMMENDATION

AGENCY PRELIMINARY RESPONSE conjunction with industry and internal stakeholders to improve compliance with the recommendation of the audit finding.

- a. STS supervisory staff have reviewed the current number of inspector assignment(s) based on facility criterion. By utilizing the mapping tools that are currently being prepared by the Michigan State Police GIS section, the closest inspector will be used to reduce unnecessary travel, thereby increasing efficiency of resources.
- b. Prioritization Methodology of Reinspections: Supervisory staff will review and assign reinspections based on the amount of time from the triennial inspection coupled with severity of violations and ensure timely delivery prohibition (red-tagging) if violations are not corrected.
- c. Training and performance management: STS managers and supervisors will provide detailed direction and training concerning the expectations and priorities of addressing reinspections. Inspectors will be briefed on how data will be reviewed on a weekly basis and adjusted as needed to ensure timely reinspections. Managers and supervisors will review weekly reinspection trends by inspector and discuss findings, trends, and best practices with each inspector and BFS leadership.

FINDING 3	STS needs to improve its process for monitoring storage tanks with a red tag to help ensure owners can promptly return their tanks to full operating capacity when appropriate.
Improvement needed to ensure timeliness of red tag removal.	Upon notification from the owner/operator of compliance, STS procedure 10-03 requires STS to verify compliance and remove red tags from tanks within 2 working days (prior to April 12, 2021, the time frame was within 24 hours).
	Our review of STS's database disclosed that, from October 1, 2018 through April 28, 2021, STS attached red tags to one or more tanks at 391 facilities and removed red tags, at some point, from one or more of those tanks at 214 of those facilities. However, because STS did not document the owner/operator's compliance notification date, it could not ensure it timely removed the red tags.
	STS indicated the notice of compliance, typically conveyed via telephone call from the tank owner/operator, is not logged because doing so takes away from time available to perform the reinspections.
RECOMMENDATION	We recommend that STS maintain appropriate documentation to enable it to monitor the timeliness of red tag removals.
AGENCY PRELIMINARY	LARA provided us with the following response:
RESPONSE	LARA agrees with this recommendation. STS is actively reviewing current procedures and will continue to update existing procedures or develop new procedures while working in conjunction with industry stakeholders to comply with the recommendation of the audit finding.
	a. STS has amended internal documentation used to track the application and removal of red tags to include information related to the time and date that the hazardous materials storage inspector received the request to remove red tags, which will enable it to effectively monitor the timeliness of red tag removals.
	b. Each inspector has been trained on the importance of timeliness of red tag removals. With this renewed emphasis, STS will ensure that red tags are removed in a timely manner as to not interrupt the owner/operator ability to do business.
	c. Additionally, when a red tag is applied, a notification is sent to all members of the STS leadership team so that there is monitoring to the red tag application program. This allows further oversight of the program and reduces the chances of an extended period of time before the red tag is removed.

## SELECT SECURITY AND ACCESS CONTROLS

BACKGROUND	Security controls* are the management, operational, and technical controls designed to protect the availability*, confidentiality*, and integrity* of a system and its information.
	Access controls* limit or detect inappropriate access to computer resources, thereby protecting the resources from unauthorized modification, loss, and disclosure. For access controls to be effective, they should be properly authorized, implemented, and maintained.
	STS uses Accela* to document and monitor storage tank data, inspection schedules, and inspection reports and to compile data for the Bureau of Fire Services' (BFS's) annual report. Accela is a third-party service organization* (TPSO) hosted system.
AUDIT OBJECTIVE	To assess the effectiveness* of select LARA security and access controls over Accela.
CONCLUSION	Moderately effective.
FACTORS IMPACTING CONCLUSION	<ul> <li>Reportable condition related to the need for improved security and access controls (Finding 4).</li> </ul>

<sup>\*</sup> See glossary at end of report for definition.

#### FINDING 4

Security and access controls over Accela need improvement.

LARA needs to improve security and access controls over Accela to help prevent and detect inappropriate access and protect storage tank data from unauthorized use, modification, or destruction.

State of Michigan Technical Standards 1340.00.020.01 and 1340.00.020.03 require user roles to be documented and user access to be formally approved, based on the principle of least privilege\*. Also, user access must be periodically reviewed, disabled after 60 days of inactivity for assigned user accounts or 365 days of inactivity for generic system user accounts, and removed within 72 hours of an employee's departure.

Also, the State of Michigan Financial Management Guide (FMG) (Part VII, Chapter 1, Section 1000) requires oversight of a TPSO's internal control system when those services have a material effect on the department's operations and reporting. The FMG indicates oversight includes gaining an understanding of the TPSO's controls, obtaining assurance the controls are functioning as intended, and evaluating the effectiveness of the controls on an ongoing basis.

The FMG requires each department to evaluate and document its review of the System and Organization Controls (SOC) report\*, evaluate the impact of the opinion, and determine whether compensating controls exist that mitigate any risks.

We identified 119 active Accela user accounts (including 7 generic system user accounts) with access to storage tank data and 30 disabled user accounts (including 1 generic system user account) as of April 30, 2021. We noted LARA had not:

- a. Documented the date a user's access was granted or disabled, had not periodically reviewed user accounts, and could not provide user role permissions. Therefore, LARA could not ensure access was appropriate, still necessary, or timely removed.
- b. Disabled or removed 14 user accounts for inactivity and/or employment departure, including:
  - 5 (4.5%) user accounts that had not been utilized within 60 days, ranging from 189 days to 445 days, including 2 former State employees' accounts.
  - 2 (28.6%) generic system user accounts that had not been utilized within 365 days, ranging from 504 days to 620 days.
  - 7 (6.3%) additional user accounts that had never been utilized, including 1 former State employee's account.

<sup>\*</sup> See glossary at end of report for definition.

	Although none of the 3 former State employees (who departed 15 days to 365 days prior to April 30, 2021) had logged into Accela after their employment departure date through our April 30, 2021 review date, the risk of unauthorized access remains until the user account is disabled.
	<ul> <li>Obtained signed security agreements for 6 (50.0%) of the 12 user accounts we reviewed.</li> </ul>
	d. Reviewed the two SOC 2, type 2 reports received from October 1, 2018 through April 30, 2021. SOC reports are internal control reports of a TPSO that provide valuable information to enable users to assess and address the risks associated with an outsourced service including system security, availability, processing integrity, confidentiality, and privacy.
	LARA indicated it did not have a process to periodically review the appropriateness of active Accela user accounts.
RECOMMENDATION	We recommend that LARA enhance security and access controls over Accela.
AGENCY PRELIMINARY RESPONSE	LARA provided us with the following response: LARA agrees with this recommendation. STS will review current procedures and will continue to update existing procedures or develop new procedures while working in conjunction with internal stakeholders to comply with the recommendation of the audit finding.
	a. Documentation of user access approval was not tracked previously. BFS now provides user access approval documentation to the user's manager and deputy director. BFS previously did not have access based on user roles/job responsibilities. The department analyst works with the hiring manager or deputy director to designate access needed. User access is labeled in the account modules according to the user's role or area.
	b. Documentation of disabled or removed user accounts was not previously tracked. Now, two procedures exist to address disabled or removed accounts for inactivity or departure. The first is an employee departure procedure in which management notifies the department analyst of a user's departure date and requests disabling of said user's Accela account. The second is our Accela 60- day audit. On a bimonthly basis, the deputy director will send a report to the department analyst showing Accela account access, including the employee's last login date. The department analyst will review and remove any accounts that have been inactive for 60 days or more.

- c. Documentation of signed security agreements was not previously tracked. Security agreements have since been obtained for all staff and all new staff must have a signed agreement before access is given to Accela going forward.
- d. LARA reviewed the two SOC 2 type 2 reports received from October 1, 2018 through April 30, 2021, and it was determined that the control monitoring needs for Accela were sufficient for system security, availability, processing integrity, confidentiality, and privacy. Because Accela is a TPSO, LARA will review their SOC 2 type 2 reports and complete a Risk Assessment Worksheet on an annual basis.
- e. BFS will work with LARA IT and the Department of Technology, Management, and Budget (DTMB) to integrate the Accela licensing system with the State of Michigan standard single sign-on solution by December 1, 2022, to provide better oversight of user access management.
- f. BFS has developed a bureau-wide policy and procedure to monitor system access controls, including:
  - Disabling user accounts when an employee makes a change in roles or leaves BFS.
  - Requesting access for new staff.
  - Reviewing user access every 60 days.

As part of the updated policy and procedure, BFS management will work with the department analyst to ensure documentation of user access is captured upon hiring, retiring, or transitioning employees. BFS will perform an internal audit every 60 days to ensure the new measures put in place are accurately capturing any necessary changes in a timely manner.

## ACCURACY OF STATUTORILY REQUIRED REPORT DATA

BACKGROUND	Section 29.24 of the <i>Michigan Compiled Laws</i> requires BFS (through Executive Order No. 2012-14) to annually report on the administration of the Fire Prevention Code, Public Act 207 of 1941, which includes storage tank regulatory activities.
AUDIT OBJECTIVE	To assess the effectiveness of STS's efforts to ensure the accuracy of its data in BFS's statutory reports.
CONCLUSION	Effective.
FACTORS IMPACTING CONCLUSION	<ul> <li>STS accurately reported the total number of facilities, tanks, and inspections in BFS's annual reports for fiscal years 2019 and 2020.</li> </ul>

In accordance with Executive Order No. 2012-14, STS, within LARA's BFS, is responsible for administering the AST and UST Programs. STS administers the Programs in accordance with the Fire Prevention Code, Public Act 207 of 1941, and Part 211 of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994.

STS is required to inspect:

- ASTs containing flammable compressed gas or liquefied petroleum gas with a water capacity of more than 2,000 gallons.
- Locations where 2 or more ASTs containing flammable compressed gas or liquefied petroleum gas exist with an aggregate water capacity of more than 4,000 gallons.
- ASTs containing flammable or combustible liquid with a capacity of more than 1,100 gallons.
- USTs with a capacity over 110 gallons containing petroleum-based, hazardous, or other regulated substances that are not exempted by Section 324.21101 of the *Michigan Compiled Laws*. Nonregulated USTs include farm or residential tanks with a capacity of 1,100 gallons or less, tanks storing heating oil for consumptive use on the premises, and septic tanks.

STS expended \$3.3 million during fiscal year 2020 and was funded by the Refined Petroleum Fund, storage tank fees, and the federal Environmental Protection Agency (\$2.6 million, \$0.3 million, and \$0.5 million, respectively). As of April 2, 2021, STS had 25 employees.

## AUDIT SCOPE, METHODOLOGY, AND OTHER INFORMATION

AUDIT SCOPE	To examine the AST and UST Programs and related records. We conducted this performance audit* in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
	As part of the audit, we considered the five components of internal control (control environment, risk assessment, control activities, information and communication, and monitoring activities) relative to the audit objectives and determined all components were significant.
PERIOD	Our audit procedures, which included a preliminary survey, audit fieldwork, report preparation, analysis of agency responses, and quality assurance, generally covered October 1, 2018 through April 30, 2021.
METHODOLOGY	We conducted a preliminary survey to gain an understanding of the AST and UST Programs to formulate a basis for establishing our audit objectives and defining our audit scope and methodology. During our preliminary survey, we:
	<ul> <li>Interviewed STS management and staff to gain an understanding of their responsibilities and activities.</li> </ul>
	<ul> <li>Reviewed applicable State and federal laws, <i>Michigan</i> Administrative Code* rules, procedures, annual reports, and appropriations acts.</li> </ul>
	<ul> <li>Conducted limited procedures related to tank inspections; red-tagged tanks; inactive tanks, including temporarily out-of-use tanks; the collection of tank fees; Accela user access, including account approvals, user privileges, and role design; and the maintenance of tank owner information in the database.</li> </ul>
	<ul> <li>Analyzed STS expenditure and revenue data from October 1, 2018 through March 31, 2021.</li> </ul>
	<ul> <li>Obtained an understanding of and assessed internal control applicable to STS.</li> </ul>
	<ul> <li>Compared facility inspection data related to four inspectors, for one month each from October 1, 2018</li> </ul>

<sup>\*</sup> See glossary at end of report for definition.

through April 21, 2021, with inspector travel logs to corroborate the inspection dates documented in the database.

**OBJECTIVE 1** To assess the sufficiency of STS's efforts to conduct storage tank inspections.

To accomplish this objective, we:

- Analyzed Accela data as of April 30, 2021 to determine whether STS conducted timely triennial storage tank inspections.
- Reviewed triennial inspection documentation for 25 of 15,646 storage tanks (maintained at 6,774 facilities) inspected by STS from October 1, 2018 through April 21, 2021 to determine whether:
  - STS obtained all required documentation and applicable tank registration fees from the owners/operators.
  - STS conducted timely inspections and reinspections.
  - STS completed an inspection report of the facility.

We randomly and judgmentally selected our sample. Therefore, we could not project the results to the overall population.

- Reviewed documentation related to 25 of the 1,709 storage tanks designated as temporarily out of use as of April 21, 2021 to determine when STS last inspected the facility associated with the tank and whether the temporarily out-of-use status was appropriate.
- Analyzed Accela data as of April 21, 2021 to determine whether storage tank owner information (i.e., name and address) was documented.
- Reviewed inspection reports and other records for 25 of the 600 storage tank facilities STS identified as having performed new tank installation inspections and 10 of the 95 additional facilities we identified with new tank installations from October 1, 2018 through April 21, 2021 to determine whether STS completed the inspections and approved the facilities' installation of the tanks.
- Reviewed inspection reports related to 25 of the 391 facilities where STS attached red tags to one or more

	storage tanks from October 1, 2018 through April 28, 2021 to determine whether STS documented the compliance issue warranting the red tag(s), notified the on-site facility owner/operator, and timely removed the red tags. Also, we called the owners/operators of 10 of the 25 facilities to inquire about STS's timeliness of removing the red tags. Unless otherwise indicated, our samples were randomly selected to eliminate bias and enable us to project the results to the respective populations.	
OBJECTIVE 2	To assess the effectiveness of select LARA security and ac controls over Accela.	
	To accomplish this objective, we:	
	• Discussed State of Michigan technical standards with LARA, including periodic review of user accounts, and evaluated the 119 active and 30 disabled user accounts as of April 30, 2021 to determine compliance with the standards.	
	<ul> <li>Reviewed 12 of 119 STS Accela user accounts active as of April 30, 2021 to determine whether:</li> </ul>	
	<ul> <li>User agreement forms were completed.</li> </ul>	
	<ul> <li>Access was appropriate for the users' job responsibilities.</li> </ul>	
	Our sample was randomly selected to eliminate bias and enable us to project the results to the entire population.	
	<ul> <li>Compared the 112 Accela users who had active, nongeneric user accounts as of April 30, 2021 with the Human Resources Management Network* employment records to determine whether all active users were current State employees.</li> </ul>	
	<ul> <li>Observed 1 user perform various functions in Accela to determine which activities his/her assigned user role allowed.</li> </ul>	
	<ul> <li>Reviewed the Accela SOC 2, type 2 reports received from October 1, 2018 through April 30, 2021 and inquired as to whether LARA or STS reviewed them.</li> </ul>	

\* See glossary at end of report for definition.

OBJECTIVE 3	To assess the effectiveness of STS's efforts to ensure the accuracy of its data in BFS's statutory reports.
	To accomplish this objective, we compared the number of tanks, facilities, and completed inspections reported in BFS's annual reports for fiscal years 2019 and 2020 with STS Accela data.
CONCLUSIONS	We base our conclusions on our audit efforts and any resulting material conditions or reportable conditions.
	When selecting activities or programs for audit, we direct our efforts based on risk and opportunities to improve State government operations. Consequently, we prepare our performance audit reports on an exception basis.
AGENCY RESPONSES	Our audit report contains 4 findings and 4 corresponding recommendations. LARA's preliminary response indicates that it agrees with all of the recommendations.
	The agency preliminary response following each recommendation in our report was taken from the agency's written comments and oral discussion at the end of our fieldwork. Section 18.1462 of the <i>Michigan Compiled Laws</i> and the State of Michigan Financial Management Guide (Part VII, Chapter 4, Section 100) require an audited agency to develop a plan to comply with the recommendations and to submit it to the State Budget Office upon completion of an audit. Within 30 days of receipt, the Office of Internal Audit Services, State Budget Office, is required to review the plan and either accept the plan as final or contact the agency to take additional steps to finalize the plan.

## **GLOSSARY OF ABBREVIATIONS AND TERMS**

Accela	The TPSO-hosted system STS uses to document storage tank records, inspections, inspection schedules, and findings.
access controls	Controls that protect data from unauthorized modification, loss, or disclosure by restricting access and detecting inappropriate access attempts.
AST	aboveground storage tank.
availability	Timely and reliable access to data and information systems.
BFS	Bureau of Fire Services.
confidentiality	Protection of data from unauthorized disclosure.
COVID-19	The disease caused by a new coronavirus called SARS-CoV-2. It is a potentially severe illness often characterized by fever, coughing, and shortness of breath. The World Health Organization learned of the virus in December 2019.
effectiveness	Success in achieving mission and goals.
FMG	State of Michigan Financial Management Guide.
Human Resources Management Network	The State's integrated human resources system that processes personnel, payroll, and employee benefits data.
integrity	Accuracy, completeness, and timeliness of data in an information system.
LARA	Department of Licensing and Regulatory Affairs.
material condition	A matter that, in the auditor's judgment, is more severe than a reportable condition and could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the judgment of an interested person concerning the effectiveness and efficiency of the program. Our assessment of materiality is in relation to the respective audit objective.

Michigan Administrative Code	A compilation of all adopted rules and regulations in effect in the State of Michigan. Each rule has been assigned a rule number, which appears at the beginning of each rule in the text of the <i>Michigan Administrative Code</i> .
performance audit	An audit that provides findings or conclusions based on an evaluation of sufficient, appropriate evidence against criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision-making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.
principle of least privilege	The practice of limiting access to the minimal level that will allow normal functioning. Applied to employees, the principle of least privilege translates to giving people the lowest level of user access rights they can have and still do their jobs. The principle is also applied to things other than people, including programs and processes.
red tag	A notice attached to a tank which indicates that addition of a regulated substance into the tank is prohibited by law.
reportable condition	A matter that, in the auditor's judgment, is less severe than a material condition and falls within any of the following categories: a deficiency in internal control; noncompliance with provisions of laws, regulations, contracts, or grant agreements; opportunities to improve programs and operations; or fraud.
security controls	Controls safeguarding an entity's data from unauthorized access or modification to ensure its availability, confidentiality, and integrity.
STS	Storage Tank Section.
System and Organization Controls (SOC) report	Designed to help organizations that provide services to user entities build trust and confidence in their delivery processes and controls through a report by an independent certified public accountant (CPA). Each type of SOC report is designed to meet specific user needs:
	<ul> <li>SOC 1 (Report on Controls at a Service Organization Relevant to User Entities' Internal Control Over Financial Reporting) - Intended for user entities and the CPAs</li> </ul>

auditing their financial statements in evaluating the effect of
the service organization's controls on the user entities'
financial statements.

•	SOC 2 (Report on Controls at a Service Organization	
	Relevant to Security, Availability, Processing Integrity,	
	Confidentiality, or Privacy) - Intended for a broad range of	
users that need information and assurance about a service		
	organization's controls relevant to any combination of the	
	five predefined control principles.	

There are two types of SOC 1 and SOC 2 reports:

- Type 1 Reports on the fairness of management's description of a service organization's system and the suitability of the design of the controls to achieve the related control objectives included in the description, as of a specified date.
- Type 2 Includes the information in a type 1 report and also addresses the operating effectiveness of the controls to achieve the related control objectives included in the description, throughout a specified period.
- SOC 3 (Trust Services Report for a Service Organization) -Intended for those needing assurance about a service organization's controls that affect the security, availability, or processing integrity of the systems a service organization employs to process user entities' information, or the confidentiality or privacy of that information, but do not have the need for or the knowledge necessary to make effective use of a SOC 2 report.
- SOC for Cybersecurity. Intended to communicate relevant information about the effectiveness of an organization's cybersecurity risk management programs.

TPSO	third-party service organization.

UST underground storage tank.



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