

AUDITOR GENERAL

Halifax Regional Municipality



Follow-up Review – 2022-23 Audits

Corporate Real Estate
Development and Sale of Industrial Lands,
Land and Building Acquisition and Disposal

Halifax Water: SCADA System

April 2025

April 9, 2025

This **Follow-up Review – 2022-23 Audits**, completed under section 50(2) of the Halifax Regional Municipality Charter, is hereby submitted to the Audit and Finance Standing Committee of Regional Council.

Respectfully,

Original signed by

Andrew Atherton, CPA, CA
Auditor General
Halifax Regional Municipality

**AUDITOR
GENERAL**



Halifax Regional Municipality

Office of the Auditor General
Halifax Regional Municipality
33 Alderney Drive, Suite 620
Dartmouth, NS, B2Y 2N4
www.hrmauditorgeneral.ca
902.490.8407

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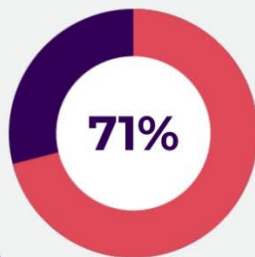
Follow-up Review – 2022-23 AUDITS



**OVERALL
RECOMMENDATIONS
COMPLETED**

Corporate Real Estate Development and Sale of Industrial Lands, Land and Building Acquisition and Disposal Audit

DECEMBER 2022



- 2 outstanding recommendations relate to industrial lands
- Involve both Property, Fleet & Environment and Planning & Development to fully implement

Halifax Water: SCADA System Audit

MARCH 2023



- Public and in-camera recommendations
- 10 of 21 public recommendations completed
- Not implementing 1 in-camera recommendation

AUDITOR GENERAL HALIFAX REGIONAL MUNICIPALITY

APRIL 2025

Corporate Real Estate Development and Sale of Industrial Lands, Land and Building Acquisition and Disposal Audit – December 2022

Implementation Status by Recommendation

Recommendation	Business Unit	Status
1. HRM should develop long-term plans detailing how to meet expected demand for industrial lands, including estimates of when lands will be ready for sale. This should include implementing key recommendations from the 2020 consultant report on HRM's industrial land strategy.	Property, Fleet and Environment Planning & Development	✗
2. Property, Fleet and Environment and Planning and Development should work together to develop detailed plans, with estimated timelines, for completing all work required to expand Aerotech, Ragged Lake, and Phase 14 of Burnside Business Parks.	Property, Fleet and Environment Planning & Development	✗
3. Property, Fleet and Environment should carry forward and complete key outstanding deliverables related to industrial parks in HRM's annual business plans.	Property, Fleet and Environment	✓
4. Property, Fleet and Environment should finalize the new property tracking sheet. The updated sheet should be maintained to include relevant file information.	Property, Fleet and Environment	✓
5. Property, Fleet and Environment should have a process to periodically review properties which are not actively worked on and follow up with HRM business units regarding properties on hold.	Property, Fleet and Environment	✓
6. Property, Fleet and Environment, and Parks and Recreation should finalize and sign the service level agreement between the two business units.	Property, Fleet and Environment Parks & Recreation	✓

Recommendation	Business Unit	Status
7. Property, Fleet and Environment should assess the reasonableness of established timelines for acquisitions and disposals, and determine if timelines should only apply to marketable properties.	Property, Fleet and Environment	✓

*Legend: ✓ = Completed ✗ = Incomplete

Halifax Water: SCADA System Audit – Public – March 2023

Implementation Status by Recommendation

Recommendation	Business Unit	Status
1. Halifax Water should update its IT cybersecurity strategy, including program plans and timelines, to include SCADA (Technical Services).	Halifax Water	✓
2. Halifax Water should implement appropriate project management processes for SCADA.	Halifax Water	✓
3. Halifax Water should develop plans, with timelines, to complete the remaining SCADA master plan cybersecurity recommendations.	Halifax Water	✓
4. Halifax Water should require regular updates on SCADA security risks, plans and projects in management committee meetings.	Halifax Water	✓
5. Halifax Water should provide regular SCADA cybersecurity updates to the Halifax Water Board of Commissioners.	Halifax Water	✓
6. Halifax Water should identify, document, and assess risks to the SCADA system, including developing risk mitigation strategies. This information should be used to determine where to prioritize future cybersecurity assessments.	Halifax Water	✗

Recommendation	Business Unit	Status
7. Halifax Water should establish documented plans and timelines to complete the outstanding recommendations from the 2016 and 2019 consultant reports.	Halifax Water	✓
8. Halifax Water should review and update its SCADA cybersecurity policies, ensuring they cover all key cybersecurity areas, and formally communicate policies to employees.	Halifax Water	✗
9. Halifax Water should document and implement its SCADA cybersecurity procedures. This should include developing plans and timelines for when they will be complete.	Halifax Water	✗
10. Halifax Water should develop policies and procedures to manage physical access, including regular monitoring.	Halifax Water	✗
11. Halifax Water should review existing physical access and remove access that is not required for an individual's job.	Halifax Water	✗
12. Halifax Water should develop a procedure to manage third-party access to the SCADA system which addresses cybersecurity best practices.	Halifax Water	✗
13. Halifax Water should develop and implement a policy for acceptable use of removable media on SCADA assets. This should be communicated to all employees who work with or around SCADA.	Halifax Water	✗
14. Halifax Water should implement a process to review, approve, and monitor software installed on SCADA laptops.	Halifax Water	✗
15. Halifax Water should provide SCADA system users with regular training or information to increase awareness of SCADA security risks, policies, and procedures.	Halifax Water	✓
16. Halifax Water should implement a process to maintain regular backups of the SCADA system.	Halifax Water	✗

Recommendation	Business Unit	Status
17. Halifax Water should identify and document all critical SCADA assets, including determining the number of spare parts to keep on hand. This should be linked to contingency plans.	Halifax Water	✗
18. Halifax Water should develop and implement a process to track and manage inventory of spare parts.	Halifax Water	✗
19. Halifax Water should finalize and implement cybersecurity training awareness campaigns.	Halifax Water	✓
20. Halifax Water should follow up to help ensure employees complete mandatory security awareness training.	Halifax Water	✓
21. Halifax Water should reduce the number of users with domain administrator privileges to a small number who require this level of access for their jobs.	Halifax Water	✓

*Legend: ✓= Completed ✗= Incomplete

Background

The Office of the Auditor General, Halifax Regional Municipality, follows up audits previously reported by the office after 18 months. These follow-up reviews report the progress management had made implementing changes recommended by the Auditor General.

Objective and Scope

We completed a follow-up review of two reports released in 2022-23.

- Corporate Real Estate Development and Sale of Industrial Lands, Land and Building Acquisition and Disposal Audit
- Halifax Water: SCADA System Audit

Our objective was to provide review level, or limited assurance, on HRM management's implementation of recommendations from these reports. A limited assurance engagement provides a lower level of assurance than an audit. Conclusions are based on reasonability of what management tells us, and limited testing, rather than detailed testing, as would be found in an audit. This allows us to focus limited resources on new audits, while still providing assurance that management is addressing the issues we identified in past audits.

Our approach included discussing implementation with staff; reviewing policies, guidelines and processes; and other procedures we considered necessary.

This limited assurance engagement was conducted in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001 Direct Engagements published by the Chartered Professional Accountants of Canada.

We apply CPA Canada's Canadian Standard on Quality Management 1. Our staff comply with the independence and ethical requirements of the Chartered Professional Accountants of Nova Scotia Code of Conduct.

Contact Information

Office of the Auditor General
Halifax Regional Municipality
33 Alderney Drive, Suite 620
Dartmouth, NS, B2Y 2N4

Phone: 902 490 8407

Email: auditorgeneral@halifax.ca

Website: www.hrmauditorgeneral.ca

X: [@Halifax AG](https://twitter.com/HalifaxAG)