



THE CORPORATION OF THE TOWN OF AMHERSTBURG

OFFICE OF THE CAO

Mission Statement: As stewards of the Town of Amherstburg, we strive to improve the quality of life of all residents through the delivery of effective, efficient, and affordable services.

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| Author's Name: Michael Mio | Report Date: February 9, 2026 |
| Author's Phone: 519 519-736-6500 ext. 2241 | Date to Council: April 13, 2026 |
| Author's E-mail: mmio@amherstburg.ca | Resolution #: |

To: Mayor and Members of Town Council

Subject: Council Report on The Town of Amherstburg's Public Notification System

1. **RECOMMENDATION:**

It is recommended that:

1. The report from the Fire Chief dated February 9, 2026 regarding the Town of Amherstburg's Public Notification System **BE RECEIVED for information.**

2. **BACKGROUND:**

The purpose of this report is to respond to Council's request regarding the Town of Amherstburg's Public Notification System. Specifically, this report provides an overview of the current state of Amherstburg Alerts (Everbridge Notification System), explores opportunities to improve resident notification, examines the potential introduction or reintroduction of sirens and/or other notification methods, and evaluates whether the Town is meeting its due diligence in providing residents with timely early warning during a nuclear or other type of emergency.

Historically, Sirens in Amherstburg have been used to notify residents of a potential nuclear incident since the early 1960s. Originally installed under a Privy Council Order (PCO 1959-656), the National Attack Warning Siren (NAWS) System was implemented nationwide, including in the communities of Anderdon, Malden, and Amherstburg, to provide warning in the event of a nuclear attack. By 1992, the NAWS system was abandoned due to a lack of maintenance, outdated equipment, and technology that had reached the end of its useful life. The Federal Government decommissioned the system nationwide in favour of more effective solutions.

In subsequent years, sirens were repurposed or replaced locally, particularly within the Tri-Community areas, to specifically alert residents in the detailed planning zone of a potential nuclear incident at the Fermi 2 Nuclear Power Plant. These sirens remained in place until 2024, when they were removed following a comprehensive review of the public notification system. The decision reflected several factors; however, the primary considerations were replacement costs and the reduced effectiveness of sirens when compared with newer, more reliable notification technologies.

To ensure continuity of public notification, Council supported the adoption and continued use of the “Amherstburg Alerts” mass public notification system. This decision was formally endorsed by Council Resolution 20230710-016, ensuring residents continue to receive timely and effective emergency notifications. Council’s decision also ensured that the Town remained compliant with applicable emergency management regulations and provincial requirements, while prioritizing cost effectiveness and respect for ratepayers.

3. DISCUSSION:

Amherstburg Alerts – Public Notification Platform

Current state of Amherstburg Alerts (Notification System)

The Amherstburg Alerts platform is the Town’s all-hazards public notification system. The platform is designed to deliver timely and reliable emergency messages directly to residents through multiple channels, including SMS text messages (cell phones), phone calls (both wired and/or cellular), email, and mobile app notifications.

As of March 23, 2026, there are **11,446** registered contacts on the Amherstburg Alerts platform. Since June 1, 2024, the Town’s ongoing public education campaigns, including targeted campaigns, have resulted in 483 new system subscribers. To continue this growth, regularly scheduled social media outreach and in-person engagement events will remain a priority, ensuring existing and new residents are encouraged to register for early warning alerts.

Alerts are issued by Town staff as necessary. Information is collected and monitored by the Amherstburg Fire Department’s Fire Management Team (FMT), which actively reviews data from Environment Canada, Federal Emergency Management Agency (FEMA), Emergency Management Ontario (EMO), Provincial Emergency Operations Centre (PEOC), Essex Regional Conservation Authority (ERCA), Windsor Essex County Health Unit (WECHU) and other official sources. When potential risks are identified, the FMT assesses the threat level, probability of impact, and possible consequences for residents. Based on this assessment, a decision is made on whether to issue an alert.

In 2025, we issued a total of nine (9) Amherstburg Alerts, including six (6) severe thunderstorm warnings, one (1) Boil Water Advisory, one (1) notification to rescind, and one (1) Test Message.

The Province of Ontario and the Federal Government rely on the Alert Ready Emergency Alerting System. Alert Ready delivers critical, potentially life-saving alerts to Canadians through television, radio, and LTE-connected and compatible wireless devices. The Alert Ready system was developed with many partners, including federal,

provincial and territorial emergency management officials, Environment and Climate Change Canada, Pelmorex, the broadcasting industry, and wireless service providers.

Together, these partners work to ensure Canadians receive alerts immediately and know when to take action to stay safe. According to the Canadian Radio-Television Telecommunications Commission (CRTC), Long Term Evolution (LTE) cellular phone coverage reaches over 99.5% of Canadians and 97.5% of rural communities. The current approach ensures that the vast majority of the population receives timely and reliable notifications.

While a layered approach that includes multiple alerting methods can enhance redundancy, the combination of Amherstburg Alerts and Alert Ready provides a robust foundation for emergency communications. These systems are more adaptable to various incident types and geographic coverage than traditional sirens, offering the added advantage of message customization and two-way communication capabilities. As such, the current digital alerting framework not only reduces operational costs but also enhances the Town's ability to effectively notify all residents during a wide range of emergency scenarios.

Advantages of a Digital Framework

Having more than one way to alert the public is essential. Amherstburg Alerts and Alert Ready together provide a strong and dependable system. They're more versatile and cost-effective than traditional sirens, with added benefits:

- Reaches people indoors and outdoors (not just those who can hear a siren outside).
- Delivers clear instructions instead of a single tone.
- Targeted by area, so only affected neighbourhoods are notified, no town-wide disruption.
- Multiple channels at once:
 - Amherstburg Alerts (SMS/Text Messages/Email, Mobile Phones/Landlines, or mobile application for iOS, Android devices) for a higher chance of seeing the message.
 - Alert Ready - Radio Stations, Television Stations, Cable Distributors, Satellite Distributors, Wireless/mobile distributors, Social Media Companies, Web-based applications.Accessible for more residents (plain language, links to maps/resources, options to adjust language and format).
- Two-way check-ins and confirmations so officials can see who received/acknowledged alerts.
- Fewer false alarms/confusion—no need to teach residents what different siren tones mean.
- Scales to any event (nuclear, weather, road closures, boil-water advisories, missing persons, evacuation routes, etc.).
- Faster updates as an incident evolves; follow-ups and “all-clear” are simple.
- Audit trails and reporting for after-action reviews and accountability.
- Lower maintenance burden—no towers, rotators, or field hardware to inspect and repair.
- Power and network resilience with carrier/cloud redundancy; no single pole failure point.

Improvement ideas for Notification

As part of annual compliance, the Amherstburg Fire Department's Emergency Management Division conducts mandatory testing of the Public Notification System during Emergency Management Week each May. A focus on the detailed planning zone in 2025 ensured the Bar Pointe and Bois Blanc residents were registered for Amherstburg Alerts, received KI pill distributions, and participated in a public education campaign to prepare for and respond to emergencies such as fires. To continue to strengthen public engagement with Amherstburg Alerts, a series of initiatives will continue to be implemented, including awareness campaigns through launch events, local media, clear slogans, and visible signage; registration drives such as "Sign-Up Week" at community events, partnerships with schools, and Town of Amherstburg bill inserts; demonstrations and practice alerts with live demos and simulated scenarios; training and workshops. The key goal is to make Amherstburg Alerts part of everyday community life, not just something people hear about in a crisis, but something they rely on, trust, and use regularly.

Due Diligence

In 2017, the Province of Ontario updated the Provincial Nuclear Emergency Response Plan (PNERP), reducing the Detailed Planning Zone (DPZ) around the nuclear power plant to 16.1 kilometres (see DPZ Map). As a result, gaps were created in the siren system's coverage, and several sirens were no longer in appropriate locations. This change prompted the administration to evaluate the system's efficacy relative to other solutions.

In December 2021, the Province released the PNERP Fermi 2 Implementing Plan, a tailored plan specific to the Town of Amherstburg and the Fermi 2 Power Plant. This version acknowledged a shift from traditional siren systems to more modern, technology-based alerting mechanisms. Section 6.2.1(d) of the Implementing Plan states:

"The all-hazards municipal alerting system (Amherstburg Alerts) in place in the Town of Amherstburg may be used for a nuclear emergency."

This direction supported the use of broader public notification platforms, such as the National Public Alerting System, the Provincial Alert Ready program, and the local Amherstburg Alerts, which deliver notifications via SMS, voice calls, email and mobile applications, which would not only warn residents of an issue but provide detailed instructions on whether to shelter in place, evacuate, etc. This was debated, and the Council passed the recommendations to remove the Siren Network and to continue supporting the Everbridge platform. In 2024, the Province of Ontario began updating the 2017 Provincial Nuclear Emergency Response Plan. The revised plan was tested in March 2025 during the Cobalt Magnet (CM25) exercise. The Town of Amherstburg, along with representatives from all levels of government, participated in a large-scale, week-long cross-border nuclear emergency preparedness exercise conducted jointly by Canada and the United States. CM25 brought together multiple levels of government from both countries to test and strengthen coordinated response capabilities while validating the proposed 2025 Provincial Nuclear Emergency Response Plan. Amherstburg Alerts and the Alert Ready systems were tested and provided the alert notifications required under the current PNERP and Fermi 2 Implementing Plan.

Council requested a report on the reliability of the Public Alerting System currently utilized by the Town of Amherstburg. From a legislative standpoint, we are meeting our requirements under the 2025 Provincial Nuclear Emergency Response Plan and the Fermi 2 Implementing Plan with our Public Notification System. We have no municipally legislated responsibility to notify residents of impending weather, earthquakes, or flooding; however, we have leveraged our Public Notification System, which we use for Nuclear, to notify the public of potential dangers (e.g., boil water advisories) affecting our residents.

Notification of severe weather in Canada is coordinated through the National Public Alerting System (NPAS), a federally led, collaborative system that delivers critical alerts to the public via multiple platforms. This system is supported by Environment and Climate Change Canada, which provides official weather monitoring, forecasting, and alerting services. Environment and Climate Change Canada issues three primary types of weather alerts:

- Advisories – less severe conditions that may cause inconvenience
- Watches – conditions are favourable for severe weather
- Warnings – severe weather is occurring or imminent and requires immediate action

As of November 26, 2025, Canada introduced a colour-coded alert system to better communicate risk and impacts to the public.

All alerts (Advisories, Watches, and Warnings) are now assigned a colour based on severity:

- Yellow – low to moderate risk; be aware and monitor conditions
- Orange – high risk; significant impacts likely, take precautions
- Red – very high to extreme risk; dangerous or life-threatening conditions, act immediately.

Notifications are disseminated through the National Public Alerting System (Alert Ready) layered approach; the notifications include:

- Wireless Emergency Alerts (cell phones)
- Television and radio interruptions
- Environment Canada websites, apps (WeatherCAN), and social media
- Amherstburg Alerts

Potential introduction or reintroduction of sirens

The usefulness and popularity of using fixed-location sirens as an initial or secondary method of alerting residents during a nuclear emergency have declined over the years as emergency communications have shifted toward more reliable, scalable, cost-effective, and informative technologies. This reflects the broader changing landscape in emergency management, where advancements in wireless and digital platforms have replaced older, less versatile, and more costly methods. The federal and provincial governments have both invested in modern public alerting solutions, complemented by the Alert Ready platform, which provides emergency broadcasts via television, radio, and mobile networks across Canada. According to the CRTC, LTE coverage now reaches over 99.5% of Canadians and 97.5% of rural communities, ensuring that the vast majority of the population can receive timely, direct, and reliable emergency notifications. These systems support a multi-layered approach that includes television, radio, traditional landlines, email, SMS text and mobile applications.

As outlined in prior reports to Council, reintroducing an outdoor siren system in the Town of Amherstburg would be a complex and costly undertaking. Council would first need to determine the intended scope of coverage and purpose of use:

Option A — Nuclear-only, DPZ-limited notification: Install a **minimum of 2 sirens** solely within the DPZ, focused on residents in F1 and F2 for the specific purpose of warning of a nuclear incident that requires protective action (e.g., shelter-in-place or evacuation). Early pricing is estimated at \$38,460 CDN (Tone Only) to \$50,000 CDN (Tone and Voice) per siren, exclusive of infrastructure (poles, hydro, land lease, if needed), engineering, and ongoing maintenance costs. Estimated infrastructure costs are approximately \$25,000 per siren plus annual maintenance. A more detailed costing analysis would be provided should the Council approve this option. (See Emergency Sires Expansion DPZ Cover Map)

Option B — Broader Coverage/All-Hazards notification for the Town of Amherstburg: Install **approx. 30 sirens** to expand beyond F1/F2 and/or use sirens for additional hazards (e.g., nuclear, severe weather, flooding, etc.), which would materially increase capital, operating, and maintenance requirements, as well as public education needs. Early pricing is estimated at \$38,460 CDN (Tone Only) to \$50,000 CDN (Tone and Voice) per siren for equipment only, exclusive of infrastructure (poles, hydro, land lease if needed), engineering, and ongoing maintenance costs. Estimated infrastructure costs are approximately \$25,000 per siren, plus annual maintenance. A more detailed costing analysis would be provided should the Council approve this option. (See Emergency Sires Expansion Town Cover Map)

Option C — Continue to support the current Public Alerting System (Amherstburg Alerts) that satisfies provincial legislation relating to notification of residents in the F1 and F2 areas within the Detailed Planning Zone, and support efforts to ensure that all residents in the Town of Amherstburg are alerted quickly and reliably through multiple redundant channels during any nuclear or municipal emergency.

Any decision to reintroduce sirens in the F1/F2 areas or expand deployment more broadly must consider not just the cost of the siren head and pole (~\$40,000 CDN each), but also the much larger expenses tied to design and engineering, installation, power and backup systems, communications equipment, software, site and lease costs, annual maintenance, and lifecycle replacements.

Expanding siren coverage beyond the DPZ to serve the entire municipality would require an in-depth engineering study (acoustic coverage and sounding map) as well as a significant capital investment (30+/- sirens at an average cost of ~\$ 40,000 CDN plus infrastructure) in addition to substantial ongoing expenses for inspections, maintenance, replacement parts, software updates, utilities, back-up power, communications, and (where applicable) land leases.

4. RISK ANALYSIS:

Legislatively, the current notification system the Town of Amherstburg employs (Amherstburg Alerts), along with Alert Ready, which the Federal and Provincial Governments utilize, meets the notification standards under the Provincial Nuclear Emergency Response Plan and the Fermi 2 Implementing Plan. While there are occasional issues with cellular coverage in the area, Council can install Sirens in the DPZ. Regarding installing a Siren system, no single dedicated staff position is currently assigned to activating the sirens or issuing alerts. Instead, the responsibility falls to members of the FMT, who incorporate this duty into their broader emergency management functions. If the Council recommends implementing sirens, a dedicated alerting position is also recommended. Emergency Management Ontario recommends that municipalities maintain a reliable local alerting system, such as Amherstburg Alerts, to complement the provincial Alert Ready system, which may align with local notifications and or issue alerts based on Provincial or Federal information (i.e. Amber Alert, Earthquake, etc.) in the event of life-threatening or large-scale emergencies. This layered approach ensures residents receive critical warnings through multiple channels, increasing the likelihood of timely response and protective actions.

5. FINANCIAL MATTERS:

Depending on the Council's direction, a more detailed cost estimate will be provided; however, funding for a comprehensive engineering and infrastructure study would be required. Initial pricing of \$38,000 per siren (tone only) to \$50,000 per siren (tone and voice), plus expenses for design and engineering, installation, power and backup systems, communications equipment, software, site and lease costs, annual maintenance, and lifecycle replacements.

6. ASSET MANAGEMENT IMPACTS:

Any assets purchased for a Siren notification system would be adopted into the broader Asset Management Plan for the Town of Amherstburg and future servicing and replacement costs would need to be considered.

7. CONSULTATIONS:

Randy Reid - Director, Nuclear Radiological & Scientific Response Programs,
Emergency Management Ontario

Audrey J. Brown – Senior Nuclear Instructor – Emergency Preparedness DTE
Energy – Fermi 2 NPP

8. CORPORATE STRATEGIC ALIGNMENT:

Vision: Preserving our past while forging our future.

| <i>Amherstburg Community Strategic Plan 2022 - 2026</i> | |
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| <p style="text-align: center;">PILLAR 1 Deliver Trusted & Accountable Local Government</p> <ul style="list-style-type: none"> ✓ Improve trust between council and staff, and residents, by strengthening governance and internal accountability structures. ✓ Deliver transparent and efficient financial management. ✓ Increase effective communication and engagement with residents. <input type="checkbox"/> Develop our staff team, resources, and workplace culture. ✓ Continue to deliver strong core municipal services. <input type="checkbox"/> Ensure Amherstburg is an inclusive accessible and welcoming community committed to reconciliation. | <p style="text-align: center;">PILLAR 3 Encourage Local Economic Prosperity</p> <ul style="list-style-type: none"> <input type="checkbox"/> Encourage development of commercial and industrial lands. <input type="checkbox"/> Continue to promote local tourism industry, especially overnight accommodation. <input type="checkbox"/> Continue to facilitate downtown development for residents and visitors. ✓ Continue to leverage partnership opportunities with other provincial, federal, and local governments, agencies, and organizations. |
| <p style="text-align: center;">PILLAR 2 Invest in Community Amenities and Infrastructure</p> <ul style="list-style-type: none"> ✓ Maintain safe, reliable and accessible municipal infrastructure and facilities. <input type="checkbox"/> Increase access to recreation opportunities for all ages. <input type="checkbox"/> Finalize and execute plans for town-owned lands (e.g. Duffy’s site, Belle Vue) <input type="checkbox"/> Create public access to water and waterfront <input type="checkbox"/> Prioritize opportunities to reduce environmental impacts of Town operations and increase Town resilience to climate change. | <p style="text-align: center;">PILLAR 4 Shape Growth Aligned with Local Identity</p> <ul style="list-style-type: none"> <input type="checkbox"/> Define and communicate a vision for the Town’s future and identity. <input type="checkbox"/> Promote and plan for green and “climate change ready” development. <input type="checkbox"/> Review and implement policies that promote greater access to diverse housing. <input type="checkbox"/> Protect the Town’s historic sites and heritage. <input type="checkbox"/> Preserve the Town’s greenspaces, agricultural lands, and natural environment. |

9. CONCLUSION:

In summary, while legacy sirens once served a vital purpose in an era of limited technology, the Town's current digital alerting framework (Amherstburg Alerts), alongside the federal and provincial Alert Ready system, meets the requirements of the Provincial Nuclear Emergency Response Plan and the Fermi 2 implementing plan and provides the intended redundancy. Beyond nuclear notifications, this platform enables clear, incident-specific action steps for residents, reduces financial burden, and significantly improves the speed and reach of emergency communications across a wide range of scenarios. Recognizing that pockets of weak cellular coverage remain, we are actively advocating with senior levels of government for additional cell towers and related infrastructure upgrades, working with phone carriers and Innovation, Science and Economic Development Canada (ISED), and offering municipal siting support and streamlined approvals where appropriate.

A handwritten signature in black ink that reads "Michael Mio". The signature is fluid and cursive, with the first name "Michael" written in a larger, more prominent script than the last name "Mio".

Michael Mio
Fire Chief/CEMC

Report Approval Details

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|----------------------|--|
| Document Title: | Council Report on Sirens and Emergency Communications.docx |
| Attachments: | - DPZ Map.pdf - Emergency Sirens Expansion DPZ Cover Map.pdf - Emergency Sirens Expansion Town Cover Map.pdf |
| Final Approval Date: | Mar 30, 2026 |

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to Tracy Prince was completed by delegate Yufang Du

Tracy Prince



Melissa Osborne



Valerie Critchley

No Signature - Task assigned to Kevin Fox was completed by workflow administrator Sarah Sabihuddin

Kevin Fox