



## THE CORPORATION OF THE TOWN OF AMHERSTBURG

### OFFICE OF THE CAO

*MISSION STATEMENT: Committed to delivering cost-effective and efficient services for the residents of the Town of Amherstburg with a view to improve and enhance their quality of life.*

Author's Name: B. Montone	Report Date: May 29, 2023
Author's Phone: 519 736-6500 ext. 2241	Date to Council: July 10, 2023
Author's E-mail: bmontone@amherstburg.ca	Resolution #:

To: Mayor and Members of Town Council

Subject: Public Alerting Considerations and Direction

#### 1. RECOMMENDATION:

It is recommended that:

1. Administration **BE DIRECTED** to proceed with Option # 1, including the decommissioning of the ATI - Siren System, as noted in the report entitled Public Alerting Considerations and Direction dated May 29, 2023; and,
2. Equipment and poles **BE REMOVED** from all current Siren Sites, recycling materials.

#### 2. BACKGROUND:

A component requirement of the Nuclear Emergency Response Plan is to have a Public Alerting system specifically designed for Public Notification during Nuclear Emergencies.

A Public Alerting System (5 Siren Sites) was leased/purchased in June of 2013 for the then Primary Zone (Detailed Planning Zone) of the Municipality. Council in May of 2017 reduced the Primary Zone (Detailed Planning Zone) from 23 km to 16.1 km and as a result there are 3 identified areas within the municipality within the 16.1 km radius. Attached to this report is a map showing the locations.

Currently, we have **155** identified addresses for notification in Zone F2 (Boblo). None of the Households on Boblo Island (Zone F2) can reliably hear any of the current sirens, and we have **388** identified addresses for notification in Zone F1 (Amherst Point, & part of Bar Point). Although many of the households in the southeast quadrant of the zone

can hear notifications, there is a large gap in the North-west quadrant that cannot hear existing Siren site # 5 and would require an additional site to ensure notifications.

If we include the future properties currently under development or soon to be, within the Primary Zone (Detailed Planning Zone) a total of **743** properties for required nuclear notification purposes need to be addressed by the Municipality. This would require 3 additional sites be added to the system.

The siren system currently includes:

## 2 Control Boards and Computers:

1. The main board at Station 2 (3400 Middle Side Rd.)
2. The backup board at Station 1 (271 Sandwich Street South)

## 5 Siren Sites in the Town of Amherstburg:

1. 195 Texas Rd.
2. North Side Rd. (near 2070)
3. Centennial Park (Old Arena site - 209 Victoria St. South)
4. 2568 Fryer and Conc. 2
5. Con 3 South (South of 3857)

A 60-month Lease to Own Agreement was approved by Council and signed in October 2013. The Municipality now owns the equipment, however, it is reaching its end of life with numerous failures. 3 of the 5 sites operate intermittently and significant repair cost would need to be incurred to repair and upgrade the technical equipment and software. (it is estimated at \$165,000.00 for the three sites) and as you can see from the attached map, 4 sites no longer are located in proximity to alert residents in the revised Primary Zone (Detailed Planning Zone).

If the municipality is to meet its legislated obligations with the use of Sirens, 3 new sites are required. Poles, an electrical source and equipment needed to be installed which would be in the range of \$150,000.00, assuming there is municipally owned land available in the required locations. If not, lease agreements would be required at additional cost.

As outlined in the annexed Amherstburg Nuclear Emergency Response Plan:

### **7.3.1 General**

*The Provincial Nuclear Emergency Response Plan details the public alerting requirements for designated municipalities in Ontario.*

### **7.3.2 Criteria for Activation**

*The Public Alerting System in the Primary Zone will be activated by the Community Emergency Management Coordinator under the following conditions:*

1. *When requested by the Provincial Emergency Operations Centre.*
2. *In the case of a nuclear emergency with an ongoing or imminent emission of radioactivity the Municipality is authorized to immediately initiate the public alerting system. The PEOC will issue the appropriate Emergency Bulletin.*

### **7.3.3 Responsibilities**

1. *The Community Emergency Management Coordinator is responsible for activating the Public Alerting System when requested by the Provincial Emergency Operations Centre.*
2. *The Provincial Emergency Operations Centre will coordinate all Emergency Bulletins.*

Public Education Campaigns have taken place regularly in recent years but the Basic messages delivered to residents since the 1990's was about Nuclear Emergencies and residents if they hear the sirens, were advised to *Shelter In Place*, tune to local radio stations, turn off furnaces and A/C. Also residents should prepare for potential evacuation by gathering necessary articles while inside but should NOT evacuate unless directed to do so, and should NOT take the KI (potassium Iodide) pills distributed unless directed to as well.

As identified to previous Councils, actions of, and information for, the public to consider for other emergencies beyond Nuclear, would be different.

Tornados require:

- Sheltering in a basement
- Avoid windows doors and outside walls
- In large buildings avoid unsupported roof areas or get under something sturdy like stairways

In the case of an Earthquake:

- **DROP** where you are, onto your hands and knees. This position protects you from being knocked down and also allows you to stay low and crawl to shelter if nearby.
- **COVER** your head and neck with one arm and hand
- If a sturdy table or desk is nearby, crawl underneath it for shelter
- If no shelter is nearby, crawl next to an interior wall (away from windows)
- Stay on your knees; bend over to protect vital organs
- **HOLD ON** until the shaking stops.
- If under shelter: hold on to it with one hand; be ready to move with your shelter if it shifts
- No shelter: hold on to your head and neck with both arms and hands.

A siren sound does not differentiate actions to be taken nor the event that is approaching.

To address these short comings of the sirens and to leverage broad public use of new technology, the Town of Amherstburg in 2017 purchased and installed the Amherstburg Emergency Mass Notification System, powered by Everbridge.

This system, "Amherstburg Alert" allows us to send messages about situations as they happen and often with at least some notice across multiple devices, including your home phone, mobile device, email, and more. We can provide very specific actions to be taken by residents and inform them as a community emergency evolves and requires the public to act. The annual cost for this tool for 2023 is \$9,135.00 USD and is included in the Fire Departments' approved budget.

We must receive credible, timely and accurate information in advance in order to inform the public. The Everbridge notification system currently has 10,765 contacts registered.

It also should be noted that the Amherstburg Fire Department, although an all hazards response organization, is not organized nor resourced for a weather or seismic service.

The Fire Department is prepared to respond in many ways to assist the public following an emergency, but relies heavily on receiving notification of events and incidents in order to render assistance or guidance.

### **3. DISCUSSION:**

The reliability and audibility of the current Siren System is dependent on many factors, including weather (temperature, wind speed and direction), and proximity of residents in relation to the Siren Sites. Also audibility will depend on where residents are situated in their homes – i.e. inside or outside and whether there is any background noise e.g. yard equipment, traffic, music playing etc. Residents and staff have reported regularly that sirens cannot or have not been heard confirming the short comings of the system.

Our community's safety is our top concern and we want to make sure residents know about emergencies and incidents as they happen.

Currently there are two additional means (listed below) of receiving important public safety information and these channels contribute to our redundancy considerations.

#### **1) The National (Canada Wide) Alert Ready System**

Alert Ready is designed to deliver critical and potentially life-saving alerts to Canadians through television, radio and recently, the LTE cellular network. The Alert Ready system was developed in partnership with federal, provincial and territorial emergency management officials, Environment and Climate Change Canada, The Weather Network, the broadcasting industry and wireless service providers, to ensure the public receive alerts immediately. Information regarding when to take action is important to keep individuals and their families safe

For Example, this system can provide notification in the following situations:

- An Urban Fire that threatens multiple residential or commercial properties
- An Industrial Chemical Incident that poses a threat to public health
- A wildfire that involves a large area of natural combustibles and threatens human safety

The Public can access information on the Alert Ready system at:

<https://www.alertready.ca/>

#### **2) Ontario Warnings system**

This system provides Warnings/Advisories and Alerts regarding tornados and other

weather events.

An Emergency Information Advisory provides information to Ontarians about current or evolving emergency situations or significant events. Advisories may recommend protective actions to take.

The Province issues an Emergency Alert to provide recommended immediate actions to protect citizens, their families and others when there is an imminent threat to life, public safety or property.

### **The Current Siren System**

The emergency siren system within the Nuclear Primary Zone (Detailed Planning Zone) which was designed primarily for the threat of Nuclear Exposure, does not provide the majority of the Amherstburg public with specific information about what type of emergency exists, differing emergency instructions, or appropriate actions to take during an emergency of any kind. (The Primary Zone contains approx. 743 Households of the total of approx..9,300 households within the Municipality)

Council has Options for consideration to provide direction to Administration.

#### **Option #1:**

- a) Continue with the current “Amherstburg Alerts” mass notification system which currently has approx. 10,765 Registered Contacts from the Town of Amherstburg.
- b) Enhance the Public education program regarding resident readiness for the first 72 hours of an emergency.
- c) Strongly promote citizens to register as a means of contact within Amherstburg Alert,
- d) Conduct a door to door campaign to all household within the Detailed Planning Zones; and
- e) Discontinue operating the 5-siren location system in the former Primary Zone and decommission (remove) the equipment and poles. Recycling should be considered for disposal.

Costs for Option #1 a) thru d) can be completed within current departmental resources. The cost for Option #1(e) is estimated to be \$50,000.00 within the 2024 operating budget as a one-time expenditure.

#### **Option #2:**

- a) Consider purchasing and installing the 3 siren sites (# 6,7,8 on the attached map) and equipment necessary to ensure notification to all of the residents within the Detailed Planning Zone.
- b) Upgrade the technical equipment and software for the ATI system and include an upgrade for current site #5
- c) Decommission, remove and recycle sites 1,2,3 & 4
- d) Continue with the current “Amherstburg Alerts” mass notification system which currently has approx. 10,765 registered contacts from the Town of Amherstburg
- e) Enhance the public education program regarding resident readiness for the first

- 72 hours of an emergency.
- f) Strongly promote citizens to register a means of contact within Amherstburg Alert, and
  - g) Conduct a door to door campaign to all households within the detailed planning zones.

The cost estimated for Option #2 a) thru c) is estimated to be \$400,000.00 which has not been included in the 2023 5 year Capital forecast. This would require adding this amount into the 2024 Capital Budget expenditures. In addition should municipally owned property not be available in the optimal locations for these additions use/lease arrangements would be necessary at an unknown cost. Items d) thru g) can be completed within current departmental resources.

### **Option # 3:**

Utilizing the same legislated criteria and taking into consideration the ongoing growth in the community, staff have investigated a FM Radio-Based and satellite notification system to replace the 5-siren site system.

For resiliency, the FM signal provides bandwidth consistency while other systems such as cellular are affected by consumer consumption and range.

The product and service also sends automated NOAA weather warnings and targeted Provincial/local emergency information directly from the Ontario Province Office of Emergency Management and/or other authorized originators. Such messages can include information regarding Amber Alerts, severe weather, acts of terrorism, evacuation notices and re-unification instructions.



Units are placed in the homes within the Detailed Planning Zone and would receive messages when sent. The units are powered by 110 v/ac and have a battery backup for power interruption.

Similar to the siren systems which are negatively affected by wind direction, ambient noise etc., these units also have a “disadvantage” in that citizens would be required to be inside the home to hear the alert in a timely way.

Details of Option #3:

- a) 5-year software License: \$175,000 USD;
- b) Annual Support \$20,000 USD per year;
- c) ALERT FM Receivers (800-1000 units) \$99,000;
- d) Discontinue operating the 5-siren location system in the former Primary Zone and decommission (remove) the equipment and poles. Recycling should be considered for disposal - \$50,000.00 one-time cost;
- e) Continue with the current “Amherstburg Alerts” mass notification system which currently has approx. 10,765 registered contacts from the Town of Amherstburg
- f) Enhance the public education program regarding resident readiness for the first 72 hrs of an emergency.;
- g) Strongly promote citizens to register a means of contact within Amherstburg Alert, and,
- h) Conduct a door to door campaign to all household within the detailed planning zones.

Approximate costs for a) \$175,000 USD each 5 years b) \$20,000 USD/ year in Operating dollars c) & d) \$150,000 USD one-time costs which have not been included in the 2023 5 year Capital forecast. This would require adding this amount into the 2024 Capital Budget expenditures. Items e) thru h) can be completed within current departmental resources.

#### **4. RISK ANALYSIS:**

Failure to direct any of the noted options would result in public criticism and a decline in the public’s confidence in the Municipality. Liability may accrue to the Municipality should a future catastrophe occur with no direction for the public.

It is very important that the public be provided with accurate information and guidance. As opposed to other sources of information which may only be partly accurate which could result in needless worry and panic, accidents and additional injury caused by inappropriate guidance.

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**5. FINANCIAL MATTERS:**

Option	Action	Estimated Cost
<b># 1</b>	a) thru d)	Funded within current budget
	e)	\$50,000
<b>Total-Option 1</b>		<b>\$50,000</b> one-time operating \$
<b>#2</b>	a) thru c)	\$400,000*
	d) thru g)	Funded within current budget
<b>Total-Option 2</b>		<b>\$400,000</b> 2024 New Capital \$
<b># 3</b>	a) thru d)	\$ 525,000
	e) thru h)	Funded within current budget
<b>Total-Option 3</b>		<b>\$345,000USD (approx. \$475,000 cdn.) + disposal</b>  \$175,000 operating each 5 years \$20,000 operating Base increase \$150,000 2024 New Capital \$

*\*Suitable sites would require locations, if not currently owned by the municipality, use/lease arrangements would be necessary at an unknown cost.*

**6. CONSULTATIONS:**

Kelcom Communications - Tim Schweyer  
Alert FM global security systems – Matthew Straeb  
ATI systems- Antonio P. Cracchiolo

**7. CONCLUSION:**

At all times, regardless of the type of event, we are very cognizant of public concern, and are focused on providing, accurate information, from which decisions can be made and appropriate actions taken.

It is suggested that the largest immediate positive impact to public safety can be achieved utilizing emergency preparedness public education activities in advance and a reliable public messaging tools when required. Option # 1 will ensure the municipality meets its obligations to notify the public for Nuclear and other community emergencies.

  
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Bruce Montone  
Fire Chief

## Report Approval Details

Document Title:	Public Alerting Considerations and Direction.docx
Attachments:	- Amherstburg Map 1 - sirens new Zones.pdf
Final Approval Date:	Jul 4, 2023

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



Tracy Prince



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Kevin Fox