# The Corporation of the City of Windsor Emergency Response Planning & Preparedness

FINAL Internal Audit Report

Prepared as of March 22, 2019

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#### **Limitations & Responsibilities**

This Report was developed in accordance with our engagement letter dated June 2016 and is subject to the terms and conditions included therein. Our work was limited to the specific procedures and analysis described herein and was based only on the information made available at the time we prepared the report. Accordingly, changes in circumstances after the date of this Report could affect the findings outlined herein. We are providing no opinion, attestation or other form of assurance with respect to our work and we did not verify or audit any information provided to us. This information has been prepared solely for the use and benefit of and pursuant to a client relationship exclusively with the Corporation of the City of Windsor. PwC disclaims any responsibility to others based on its use and accordingly this information may not be relied upon by anyone other than the Corporation of the City of Windsor.



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# Internal audit context

# **Background information**

The Legislative Emergency Management: Response Planning & Preparedness Review is part of the risk-based 2018-2019 City of Windsor (CoW) Internal Audit Risk Assessment and Plan approved by the Executive Committee of Council on June 4, 2018. Please refer to Appendix A for details regarding the overall Municipal Emergency Management Program for City of Windsor highlighting areas and processes that were considered in-scope during our review.

The Emergency Management and Civil Protection Act R.S.O 2000 requires municipalities to have an emergency management program in place, including an emergency response plan.

The City's Emergency Management Program Committee's (EMPC) main responsibility is to oversee the development, implementation, and maintenance of the municipal emergency management program, including the Municipal Emergency Response Plan, public education program, training, and exercises. The committee is also accountable for the annual review of the municipality's emergency management program whilst the executive authority for the management and mitigation of a potential or declared emergency lies with the Community Control Group (CCG). Although in general the Municipal EMPC does not play a formal role during emergencies, some of the program committee members are also members of the Community Control Group.

The EMPC approved the City of Windsor Emergency Response Plan (ERP) in April 2015. The plan has 17 annexed documents including subordinate plans such as key contacts, community risk profile, Hazard Identification and Risk Assessment (HIRA), evacuation plan, checklist for consideration of an emergency.

The ERP has been prepared to provide key officials, agencies and departments of the City of Windsor with important emergency response information related to:

- · arrangements, services and equipment; and
- roles and responsibilities during an emergency.

Copies of the City of Windsor ERP may be viewed at City Hall, fire service headquarters, city libraries, and the CoW website.

Recently, the EMPC has been assigned to formulate and update the current processes for the ERP preparedness and management. Updates included revisions to the ERP document, annual ERP training guidelines and content, and coordination of regular program committee meetings.

The Mayor is responsible for declaring an emergency as guided by a checklist developed for this purpose. This decision is usually made in consultation with other members of the CCG. The CCG members report to the Municipal Emergency Operations Center (EOC) located at 1587 Provincial Road, Windsor.

The key EOC responsibilities include:

- Policy and Strategic Direction.
- Site Support & Consequence Management.
- Information Collection, Evaluation & Display.
- Coordination of Agencies & Operations.
- Resource Management.
- Internal & External Communications.

In addition, there is a five-step process available in the Quick Reference Guide in regards to the Action Planning process which is as follows::

- Step 1: Understanding the current situation Building situational awareness.
- Step 2: Identify the objectives/priorities for the next operational period.
- Step 3: Meeting Develop an EOC Action plan for the next operational period.
- Step 4: Obtain approval and distribute the EOC action plan.
- Step 5: Implement EOC action plan and monitor progress.

The City of Windsor 211/311 Manager or alternate is responsible to respond to citizen inquiries under the supervision of the Chief Administrative Officer and in consultation with the Emergency Information Officer (Senior Manager of Communications at City of Windsor) in ensuring timely and accurate information is available to citizens in the interest of public safety.

In addition, Emergency Preparedness Week is conducted by the City to guide the public on emergency response and preparedness. The City also has an agreement with third parties and external utilities provider (such as Enwin) as to help provide the support needed to carry out the emergency operations.

A Recovery Committee is assigned to develop a post emergency recovery strategy including goals and a timeline for the recovery process. This strategy, which will be used to guide the work of The Recovery Committee, incorporates any specific community needs and tasks which have been identified through a review of the Committee's responsibilities.

To achieve consistency with recommended practice, the EMPC also reviews and evaluates municipal activities, such as exercises, actual emergencies, and provides support and resources to the Community Emergency Management Coordinator (CEMC/Fire Chief), based on the current goals and objectives of the emergency management program.

An annual emergency planning training is conducted by the Fire Chief (CEMC) and Emergency Planning Officer for the CCG members as per the provincial legislative requirements 380/04 covering details on notification procedures, roles and responsibilities, notes on declaration of emergency, community risk profile and the process around municipal disaster recovery assistance. For the period under review, a tabletop simulation exercise for an ice storm emergency was also conducted for better emergency response preparedness of CCG members and other external providers in line with their defined roles and responsibilities.

### Scope

The scope of this internal audit included an assessment of the controls in effect for the period December 1, 2017 to November 30, 2018. Emergencies in the last one-two years (2017 to 2018) were also considered in-scope.

# Internal audit objectives

Overall purpose of this internal audit project was to provide a current state assessment of the design effectiveness of controls management has implemented to achieve the following objectives related to Municipal Emergency Management Program.

#### 1. Municipal Emergency Response Planning

a. An Emergency Response Plan (ERP) based upon specific risks and applicable hazards is in place for life/health safety, infrastructure and service disruptions, financial loss, reputation and triggers/criteria for deploying the Emergency Operations Centre (EOC) is implemented and coordination with relevant response teams monitored by the EOC.

- b. City's leadership reviews, on a periodic basis, the nature of planned/unplanned disruptions experienced within the organization and updates to the ERP and/or composition of the EOC is approved. Leadership communicates roles, responsibilities and changes of recovery teams to appropriate personnel in a timely basis.
- c. Monitoring of the timely execution of response strategies, during an emergency incident/event for compliance with legislation, reporting requirements and alignment with the ERP is performed.

#### 2. Emergency Management Training, Awareness and Continuous Monitoring

- a. Drills and or emergency management exercises and inter-departmental coordination for review of lessons learned/outcomes is performed.
- b. On an ad hoc basis, leadership reviews the results of simulated emergencies/incidents and compares test results to predetermined estimates and criteria for practicality of assumptions required in the ERP.
- c. The City maintains and updates a formal training and awareness program (including development of guidelines for City employees/staff), which is reviewed for appropriateness and/or compliance on a periodic basis.
- d. The City's preparedness culture has been extended to key external parties and the public encouraging them to understand the importance of preparedness with guides/toolkits.

# Specific scope exclusions

Given the nature of the work, risk considerations and budgeted effort, the following elements are explicitly excluded from the scope of the internal audit (refer to Appendix A for further details):

- The design, implementation and operation of the Information and Technology (IT) environment and IT general controls.
- Recovery Plans, Municipal Evacuation Plan, Hazard Prevention and Mitigation.

# **Scope limitations**

• Timely communication of ERP updates could not be validated since version control over ERP documentation is not maintained or current.

# Summary of Internal Audit results

# Report classification

During the course of the internal audit, specific controls were identified which generally address the control objectives of the internal audit, specifically the attainment of legislated emergency management requirements as per the Emergency Management and Civil Protection Act (EMCPA).

Some of the key categories which the City demonstrated compliance with applicable legislation include, but may not be limited to:

- training requirements for alternate CEMCs;
- documentation of Hazard Identification and Risk Assessment;
- identification of critical infrastructure with respect to emergencies;
- formulation of the ERP and municipal emergency control;
- establishment of an EOC; and
- providing emergency management public education.

As per the compliance letter received from the Office of the Fire Marshal and Emergency Management (OFMEM) dated November 6, 2018, the City of Windsor was compliant with the EMCPA in 2017 on review of the documentation submitted by the Community Emergency Management Coordinator (CEMC).

The Emergency Planning Officer (EPO) has been hired since July 2018 who reports directly to the CEMC/Fire Chief. The EPO is responsible for various items including preparing and conducting drills/exercises and annual trainings. Review and update the ERP, HIRA and other related documents. Complete and submit the Municipal Compliance Report as well as coordinating with internal and external stakeholders and building relationships.

Though legislation requirements set out the minimum requirements for municipalities, the City and the EM program team have expressed their desire to implement good practices aligned with the Incident Management System Doctrine, where feasible. These guidelines are provided by the Provincial Emergency Management Office and include specific templates, guidelines and tool kits for municipalities in implementing IMS.

As it pertains to ongoing improvement of City's preparedness, training and emergency simulation processes could be improved. While there is a designated EPO role to manage compliance and training needs, more formal documentation should be implemented to demonstrate compliance with EMCPA and the City's policies/procedures. For example, documentation could be improved to achieve stated objectives in the following areas:

- The process of updating and reviewing the ERP and related response and recovery plans should be documented for clarity and knowledge transfer purposes.
- The documentation associated with notification and initiation of response plans or routine monitoring and documentation of incident analysis/decisions.
- Documented guidelines to design and perform drills/exercises and utilizing outcomes from past exercises or incidents should be developed which should at least cover type and frequency of exercises, pros and cons of each exercise type as well as potential goals regarding hazard coverage.
- Use the currently available "verification of municipal emergency control group training form" to document training when participants cannot attend the in-person training.
- Document minutes of meetings of the EMPC.

Based on the controls identified and assessed for design as part of the internal audit of the Legislative Emergency Management Planning/Preparedness, we have determined that there is reasonable evidence to indicate that:

	No or limited scope improvement	No major concerns noted	Cause for concern	Cause for considerable concern			
For the objectives related to the <b>process of developing the Emergency Response Plan (ERP) and</b> monitoring its execution during planned/unplanned disruptions, including maintaining ERP roles and structures.							
Controls over the process are designed in such a manner that there are:							
Sample tests indicated that process controls were operating such that there are:							
For the objectives related to the <b>reviews</b> , on a periodic basis, updates to the ERP and/or composition of the EOC is approved. Communication of roles, responsibilities and changes of recovery teams to appropriate personnel in a timely basis.							
Controls over the process are designed in such a manner that there are:							
Sample tests indicated that process controls were operating such that there are:							
For the objectives related to monitoring of the temergency incident/event for compliance v							
Controls over the process are designed in such a manner that there are:							
Sample tests indicated that process controls were operating such that there are:							
For the objectives related to <b>drills and or emergency management exercises and review of lessons</b> learned/outcomes is performed							
Controls over the process are designed in such a manner that there are:							
Sample tests indicated that process controls were operating such that there are:	<b>Ø</b>						

	No or limited scope improvement	No major concerns noted	Cause for concern	Cause for considerable concern		
For the objectives related to the review of simulated emergencies/incidents results and comparison of test results to predetermined estimates and criteria						
Controls over the process are designed in such a manner that there are:		<b>O</b>				
Sample tests indicated that process controls were operating such that there are:						
For the objectives related to <b>maintaining and</b>	For the objectives related to maintaining and updating a formal training and awareness programs					
Controls over the process are designed in such a manner that there are:	<b>②</b>					
Sample tests indicated that process controls were operating such that there are:			•			
For the objectives related to <b>overall encouragement of public preparedness and maintenance of guides/toolkits and best practices.</b>						
Controls over the process are designed in such a manner that there are:	<b>②</b>					
Sample tests indicated that process controls were operating such that there are:	<b>②</b>					

Management has provided comprehensive action plans, which we believe will address the deficiencies noted.

# Summary of positive themes

Based on the discussion with management and documentation reviewed to date and conducted by Internal Audit, the following positive themes were noted:

#### **Municipal Emergency Response Planning**

The Emergency Response Plan has been documented with consideration of past example case studies and emergencies faced by the City. It defines emergency and response procedures as per the Emergency Management and Civil Protection Act. The ERP defines the roles and responsibilities of the CCG members responsible for incident management and actions and protocols for escalating and evoking emergency response strategies.

The City has an agreement with the Canadian Red Cross Society for protecting the health, safety and security of citizens, and for basic financial assistance in terms of providing basic needs, shelter and disaster relief. The Emergency Resource Handbook (annexure to ERP) provides details on important resources which can be used by the CCG members in case of operational constraints faced by the City.

The Emergency Operations Center (EOC) located at the Provincial Road location is technically sound and has the necessary telecommunication systems installed. To access the EOC, City staff use their City access cards; members of CCG (City staff) have special access to enter EOC. For non-City staff or non-CCG members, the clerk at the EOC is responsible to check ID and allow entry into the EOC.

The Emergency Information Officer and team is accommodated in the EOC during emergency; they are responsible for informing internal and external stakeholders through various media channels. This team creates media releases on an ongoing basis via news releases, press conferences, and updates via social media which is then used by other departments to spread the same information.

A Mobile Operating Unit is available on site, which operates as a mini EOC. This unit is helpful at times of emergency and can operate near the emergency/incident location to provide first hand information to the EOC.

The Incident Management System (IMS) forms are printed and maintained in the EOC. Further, the forms/documentation during emergency/drills are stored electronically within the City's shared network drive which is accessible to authorized staff only.

On EOC activation, an incident debrief is prepared and shared with the CCG, and an Incident Commander (IC) is appointed. Details pertaining to the incident are captured on IMS 1001 (Consolidated Incident Action Plan) which includes information on the current situation, operations to be undertaken by the respective departments, and objectives for the operational period. IMS 211-B (EOC check -in List) and IMS 207 (Incident Organization Chart), are also completed by the fire clerk as per the instructions/guidance of the IC. These forms are further reviewed and approved by the IC.

#### **Emergency Management Training, Awareness and Continuous Monitoring**

Annually, the City submits a Municipal Compliance Report which is prepared by the Emergency Planning Officer and reviewed by the Fire Chief/CEMC. The compliance report is completed online and uploaded on the provincial web portal. The report is submitted with information satisfying the provincial legislative requirements for Emergency Management within the applicable due date. A compliance letter from the Provincial Emergency Management office is received once the Provincial Emergency Management Field Officer reviews and evaluates the information provided in the report.

The Emergency Planning Officer prepares the annual training material, which is in accordance with the Ontario regulation 380/04, covering details on notification procedures, roles and responsibilities of the CCG members and EMPC, declaration of emergency, HIRA document, and the processes around municipal disaster recovery assistance.

Annually, a simulation exercise/drill is conducted for the CCG members. The most recent exercise/drill that was conducted was for ice storms. This exercise was facilitated by the Emergency Planning Officer in conjunction with the Fire Chief/CEMC. The CCG members and external parties responsible for the management of operations during an incident participated in this exercise. This exercise is a half day event which include events from response to recovery being exercised. During this exercise, IMS forms completed were IMS 1001 and IMS 211-B. A standard debrief template has been formulated by the Emergency Planning Officer to capture the debrief responses from the respective participants of the drill which captures feedback on the process of drill performed, lessons learned and improvement ideas. An after action report was prepared, which was based on summary of responses received by the participants.

Annually, the Mayor announces the proclamation at Council regarding Emergency Preparedness (EP) week, which is televised live. Information regarding EP is posted via intranet as well as seasonal messaging/email are sent to City staff. An EP guide is circulated across the city through various events such as an Earth Day event, EOC Tour, etc. Information about the EP week is made available and helps people prepare during contingency situations.

Summary of findings

Finding	m ·		Rating <sup>1</sup>		75
#	Topic	Significant	Moderate	Low	Management Action Plan
Emergency Response Planning and Compliance Monitoring					
1	Update the Emergency response plan and document process for performing annual update (Design Effectiveness)	-	-	X	The process is already underway and will be finalized after council approves the 2019 edition of the City of Windsor's ERP.
2	Document EMPC meeting minutes as evidence of review for emergency management documentation (Operating effectiveness)	-	-	X	Management has already implemented the recommendations including reference to the findings for Emergency Management Program Committee (EMPC) noted.
Emergeno	cy Response Execution &	Reporting			
3	Implement incident notification and briefing documentation/logging (Design Effectiveness)	-	-	X	Management has created an internal document reflecting the recommendation noted.
Emergeno	cy Management Exercises	S			
4	Develop process guidelines for continuous improvement exercises, documentation and reporting (Design effectiveness)	-	X	-	Debrief will be conducted immediately after each exercise. Will create a document that catalogues the relevant exercise design element in 2019.
Emergeno	cy response trainings				
5	Review completeness of annual ERP training provided to the staff (Operating effectiveness)	X	-	-	Process to ensure and document training will be implemented immediately. Additional training to all WFRS clerical staff will be provided.
Emergeno	cy Preparedness				
No Findings - refer to Consideration for improvement #2: " Implementation of Public Notifications Procedures and Alert Systems"					
Total		1	1	3	

 $<sup>{\</sup>bf 1}$  See Appendix A for Basis of Finding Rating and Report Classification

# Summary of significant findings

Internal audit identified one (1) significant finding related to the operating effectiveness of controls, specifically:

a) **Review completeness of annual ERP training provided to the staff:** Steps to comply with Ontario Regulation 380/04 Training Requirements should be taken by reviewing a complete list of members which require the training against the sign-in sheet for training facilitated annually. Materials should be shared with participants and acknowledgement of "verification of municipal emergency control group training form" should be completed by members specifically who are not able to physically attend the training.

# Management comments

Management has reviewed the findings and recommendations found within this report. Specific details regarding each finding can be found later in the document under each respective heading.

The report correctly identifies the City has maintained compliance with the Emergency Management and Civil Protection Act (EMCPA). It has also identified during the audit process that emergency management activities can vary as the EMCPA is not prescriptive in every aspect of Municipal Emergency Management; meaning there are options available in achieving compliance and not all requirements are clearly defined within the Act.

Most importantly, this report captures the underlying attitude of WFRS and the City regarding Emergency Preparedness in that mere compliance is not the goal of the program; there is a desire to achieve a level of performance greater than the minimum requirements. The majority of the findings and subsequent recommendations in this report are items that bring the City and Emergency Preparedness to a level that exceeds the minimum requirements set out in the act. WFRS is committed to providing the highest level of service to the public and will utilize the management action plans to achieve the highest level of preparedness possible.

Management would like to thank PwC for their professionalism during this audit.

Name: Stephen Laforet

Title: Fire Chief / CEMC

Date: March 18, 2019

# Detailed observations

1. Update the Emergency response plan and document process for performing annual update (Design Effectiveness)			<b>Overall Rating:</b> Low
Impact:	Low	Likelihood:	Likely

#### Observation:

The Emergency Response Plan (ERP) was approved by the Council in April 2015. The plan provides guidelines for key officials, agencies and City departments regarding important emergency response information. Management makes regular updates to the annexures associated to ERP regarding response planning and preparedness strategies, and to CCG members details and their roles. The ERP does not address the following:

- explicit reference to the agreements with third parties in annexures;
- reference list to the associated annexures;
- explicit roles for the ERP review and approval processes/procedures (e.g. role of EMPC or CLT);
- description requirements for maintaining version control or the last update date;
- updated address information for one of the three EOC sites; and

Evidence of annual review of ERP and associated annexures, and timely communication of updates to stakeholders, is not maintained. As per management, the Emergency Response Plan update is in progress and will be presented to the Council for approval by Q2 2019.

#### Implication:

Information may not be referenced in a central document for a ready access leading to potential inconsistent application or untimely use.

#### Possible root cause:

Clear standards to structure the ERP have not been formally defined and approved.

#### Recommendation:

The current control for maintaining and updating key emergency management documents noted above should be updated/enhanced as follows:

- Maintain or create separate repository of key documents (City dashboard or shared server).
- Continue to use the central EOC email inbox for staff (e.g. CCG members or department leads) to inform EMPC/delegate of changes required to annexures.
- Log of changes requested/proposed is prepared and reviewed/monitored periodically.
- As updates are made to documents, prior versions should be decommissioned/removed from central repository.
- Documents should be updated with the latest date or version reference.
- A process for timely communication should be agreed to with stakeholders and EMPC.
- Communication via email should be sent reminding relevant stakeholders to review updates to the documents/repository (based on the last update date).

Prior to the upcoming updates and subsequent annual review of the ERP, management should formally document a process/procedure around steps and roles in annual ERP review and communication to relevant stakeholders and include reference to annexures.

*Also, refer to finding #2 recommendations* 

Update the Emergency response plan and doc annual update (Design Effectiveness), continu	Overall Rating: Low	
Management Action Plan		
Action Plan: Management agrees with the findings and	Responsible Party:	Emergency Planning Officer
recommendations. An improvement to the annual update process will be beneficial. The process is already underway and will be finalized after council receives and approves the 2019 edition of the City of Windsor's Emergency Response Plan.	Due Date:	Q3 2019

2. Documentation of EMPC meeting minutes and retention of annual review of emergency management documentation (Operating effectiveness)			<b>Overall Rating:</b> Low	
Impact:	Impact: Low Likelihood:			

The Emergency Program Committee (EMPC) annually reviews the ERP to assess if any change/update is required. As per the terms of reference document, one of the objectives of the EMPC is to review and make recommendations on the City's ERP and after action reports for exercises and emergency responses. The EMPC is also required to make recommendations on emergency management enhancements and corrective actions based on lessons learned, and conduct an annual emergency management program review to verify that the program is operating in compliance with the Act and Regulations. Review of the Terms of Reference is required to be performed as needed or when a new member has been appointed.

Evidence of EMPC's annual review of the ERP, annexures or the After Action Report from the simulated exercises, as well as involvement in reviewing the compliance reports or relevant training materials or outcomes for the period under review, is not maintained (e.g. meeting minutes).

#### **Implication:**

Updates to documents or key decisions subsequent to the EPMC review may not be complete, timely or accurate.

#### Possible root cause:

Evidence of key functions of performing oversight activities by the EMPC is not retained.

#### **Recommendation:**

Review of key oversight activities in the form of EMPC meeting minutes should be documented. Standing agenda the annual EMPC meeting should be developed. The TORs should be updated by adding an objective to review updates to annexures. *Also refer to finding #4 recommendations*.

Management Action Plan		
Action Plan: Management agrees with the findings and recommendations.	Responsible Party:	Emergency Planning Officer
Management has already implemented the recommendations including reference to the EMPC noted in finding #4.	Due Date:	Complete

3. Implement incident notification and briefing documentation/logging (Design Effectiveness)			<b>Overall Rating:</b> Low
Impact:	Low	Likelihood:	Likely

Response triggers including Daily Situation Report, and Media Notification System Activation from members of Community Control Group exists to help Emergency program members in evaluating risks and executing appropriate response protocols/plans. In addition, analysis/review of incident details prior to evoking the EOC is performed. On review of the Emergency Response processes at the City, we noted the following:

• **Monitoring and tracking notifications:** A standard process to log notifications received from various stakeholders in event of a threat, hazard, potential incident which results in analysis is not documented at the point of notification. The current process is to document (via IMS 201) the analysis/consultation if EOC activation/emergency declaration is to occur.

The process to archive the specific daily situation reports and/or other response triggers/notifications that were used to perform the initial analysis of the possible threat/emergency/EOC activation/public preparedness messaging and communication is not documented.

#### Implication:

Key decisions or risk analysis will not be retained from initial notification to response approval or initiation.

#### Possible root cause:

No specific guidelines are available from the province in terms of defining emergency levels and the logging of notifications that lead to potential threats/incidents. Comparative review of the ERP considering similar size municipalities to support completeness is not performed.

#### Recommendation:

Process to log initial analysis of (and subsequently monitor and track decisions) the notifications received from various stakeholders in the event of a threat/hazard/potential incident which can lead to EOC activation/emergency declaration should be established. The information captured within this log should include, but may not be limited to the following:

- Notification source (daily situation report, rail notification, city staff etc.).
- Incident/notification name.
- Incident/notification date and time.
- Medium of information received i.e. verbal, email, report etc.
- Level of incident at time of notification for monitoring purposes.
- Summary of discussion (people involved in discussion).
- Decision(s) made (routine monitoring, EOC activation etc.) with reference to public preparedness messages.
- Notes or comments describing risks to life safety, capacity to respond, property and customer service.

This document can be further used to complete the IMS 201 form "Incident Briefing" at the time of EOC activation.

Process to archive specific daily situation reports and/or other response triggers that are used to perform the initial analysis of the possible threat/emergency/EOC activation/public preparedness messaging and communication should be documented.

Also refer to Consideration for Improvement# 1.

Management Action Plan			
Action Plan: Management agrees with the findings and	Responsible Party:	Emergency Planning Officer	
recommendations. Management recognizes and agrees that the implementation of a tracking form may be useful. Historically the information regarding the genesis of an incident is captured in the Incident Briefing section of the IMS forms, however; not all of the specific details identified in the recommendation are included. Management has created an internal document reflecting	Due Date:	Complete	
the recommendation noted above to be used in future events.			

,			Overall Rating: Moderate
Impact:	Medium	Likelihood:	Likely

To annually conduct the drill/exercise for CCG members, the Emergency Planning Officer prepares the drills/exercises module by taking consideration of past incidents and past drills/exercise experience/results.

Subsequent to the incident/drill, a debrief template is sent to participants via email to collect responses in terms of lessons learned/improvement ideas. On review, noted the following across two control improvements categories:

#### Drills and/or emergency management exercises and review of lessons learned/outcomes:

- Protocols/guidelines to design and perform such exercise/drill and outcomes from exercises or real
  emergency scenarios are not defined/documented. For example, protocols/process to document/track timely
  communication of the lessons learned with the stakeholders prior to incorporating it in the future
  drills/exercises has not been established.
- On review of debrief responses for the September 20, 2018 ice storm drill exercise for five (5) sampled participants, management had not received responses as of the date of our fieldwork.

# Leadership review and documentation of results and comparison of test results to predetermined estimates and criteria:

- Absence of process wherein leadership reviews the results of simulated emergencies/incidents and compares test results to predetermined estimates.
- Absence of debrief exercise being conducted for the flood incident 2017.
- The debrief summary/after action report was not shared with EMPC and participants for review.
- Absence of process to track and periodically report on the progress made in implementing the after action report recommendations, to the EMPC and participants.

#### Implication:

Risk of issues not being addressed in a timely manner and these issues are likely to be repeated during the next exercise or live event. Untimely approval if any extra funds are needed or the change requires updates to existing policies. Unidentified opportunities to retest any significant changes to ensure that the desired results are achieved.

#### Possible root cause:

Common planning procedures, frequency, roles, outcomes, reporting and communication for emergency drills/exercises, with minimum standards of adherence, have not been defined. Feedback from participants is not mandatory and after action reports are not mandatory for undeclared emergencies.

#### **Recommendation:**

**Developing/Conducting Exercises:** A documented guideline to design and perform drills/exercises and utilizing outcomes from past exercises or incidents should be developed. The guideline should include, but may not be limited to:

• type of exercises (seminar, table top, workshop, games, drills, functional, full scale).

#### Recommendation, continued

- use of case studies and past emergencies/incidents for preparing simulation facts (from notification source to recovery planning).
- frequency of the exercises (and or exceptions in circumstances of lessons learned from real incidents).
- pros and Cons of each exercise type.
- location of drills (depending on characteristics of the simulated scenario).
- incident notification source.
- reference to multiple modes of communication techniques or approaches during an incident (including unplanned disruptions to communications).
- incidents occurring during planned/scheduled City events vs. unplanned disruptions.
- coverage across several existing recovery plans, response plans or third party agreements.
- requirements for obtaining feedback (including from third parties).
- criteria or expectations across various emergency levels (and increases or decreases to the assessed threat level during an incident).
- potential goals regarding hazard coverage.
- whether after action reports are required for un-declared emergencies (Simulated or real-life).
- scheduling, cost sharing and other exercise planning activities.

**Collecting feedback:** Management should establish protocols to collect the debrief responses after the conclusion or within a week of the drills/exercise so that improvement ideas/lessons learned are captured timely. A short debrief meeting should be conducted with participants to discuss the lessons learned summary based on the responses received.

**Post-exercise report:** The results of the debriefing should be used to prepare a post-exercise report including recommendations for improvement. To support lessons identified (if any) are accepted and addressed by the organization, the post-exercise report should be distributed to all exercise participants, other relevant personnel and interested parties. If significant issues have been identified in an exercise, the organization should consider repeating the exercise, after corrective actions have been put in place.

Leadership review/commitment: Formulate a process wherein leadership reviews the results of simulated emergencies/incidents and compares test results to predetermined estimates and criteria for practicality of assumptions required in the ERP. As an alternative to this control, where key roles have a designated alternate, on a rotational basis the primary and alternate should participate as observers document communication, interactions and the environment of the primary individual and/or broader EOC. For example the alternate CEMC can observe the primary CEMC and EOC operations to document and capture lessons learned and compare expected results to actual results.

Further, management should track and periodically report on the progress made in implementing it to the EMPC and the participants. This can be done via creating a spreadsheet with the action, who it is assigned to, priority, date for completion and indicate if it needs to be included in the next exercise.

Management Action Plan		
Action Plan: While management acknowledges the finding and recommendations put forth by Internal Audit regarding this matter, management disagrees with	Responsible Party:	Emergency Planning Officer
various elements of the recommendation and Internal Audit's assessment of risk related thereto. As noted under possible root causes, a debrief is not a requirement of the EMCPA. Historically, a debrief is conducted after a declared emergency as was the case for the 2016 tornado incident. In any case where significant concerns exist, a debrief would be conducted. The absence of a debrief does not create any operational deficiencies.	Due Date:	Q4 2019
Management agrees with some of the recommendations. The recommendations associated with this finding are not required under the act and although not specifically documented, the process and considerations surrounding exercise design and selection are consistent with what is identified in the recommendations.		
<i>Exercises</i> : The determination of the type of exercise is currently conducted using the criteria identified in the recommendation. Exercise determination is consistent with good emergency management practices. The addition of a process to document exercise selection/determination would aid in keeping an account of the rationale behind decisions, however is not required under the EMCPA.		
Management will create a document that catalogues the relevant exercise design elements and will begin this process for the 2019 exercise.		
<b>Collecting Feedback</b> : Due to the historically low response rates of participant feedback, a debrief will be conducted immediately after each exercise while participants are present. This will begin in 2019.		
<b>Post-exercise report</b> : The 2018 exercise was followed up with a post exercise report; however, completion of the report fell outside of the timelines associated with the audit.		
<b>Leadership review / commitment</b> : Due to training requirements, it would not be feasible or recommended for roles to be focused on review rather than the training role. Emergency Management Windsor has invited the EMO Field Officer to its annual exercise for the purpose of review and expert feedback. Due to scheduling, this is not always possible however at a minimum, management endeavors for the exercise to be reviewed and for consultation to occur between the EMO Field Officer, Emergency Planning Officer, and the CEMC. The EMO Field Officer will be attending the 2019 exercise planning meeting and will be extended an invitation to be present at the 2019 exercise to observe and provide feedback.		

<ol> <li>Review completeness of annual ERP training provided to the staff (Operating effectiveness)</li> </ol>		Overall Rating: Significant	
Impact:	High	Likelihood:	Likely

As per the Ontario Guidance Note 2018-01-01 (supplement to the Ontario Regulation 380/04 Training Requirements) dated February 6, 2018, it is the responsibility of every municipal EMPC and municipal emergency management control group to annually demonstrate an adequate level of training. On review of the annual ERP training records, training records for one out of five sampled participants (note that 62 participants attended) was not found.

The Ontario Incident Management System (IMS) forms are used to assist with incident management processes and procedures, as well as to represent a record of decisions and actions. Currently only verbal instructions are provided to those responsible for preparing IMS forms.

In addition, the attributes on training covering the training type, participants and staff responsible to deliver the training has not been documented in the ERP.

#### **Implication:**

Risk of non-compliance with legislative requirement due to an inability to demonstrate completeness in terms of acknowledgement and awareness of required mandatory training. Key members responsible for managing emergencies may not receive required training.

#### Possible root cause:

Complete list of staff members requiring mandatory training is not maintained or compared to attendance sign-in sheets. Training records for trainings provided on filling of IMS forms to clerks not retained.

#### **Recommendation:**

Management should take steps to comply with the above documented legislative requirements by maintaining a complete list of staff members which require the training. The sign-in sheet should be compared to identify staff which did not attend training. Training deck should be shared with participants and acknowledgement of "verification of municipal emergency control group training form" should be completed by members specifically who are not able to physically attend the training. This form already exists however it should be used consistently.

Formal documented training to clerks completing the IMS forms should be provided.

The ERP should be updated with attributes on training covering the training topics including: IMS forms completion, drills/exercises, HIRA etc.), participants, acknowledgement process/form and staff responsible to deliver the training.

# Management Action Plan: While management acknowledges the finding and recommendations put forth by Internal Audit regarding this matter, management disagrees with various elements of the recommendation and Internal Audit's assessment of risk related thereto. Consultation with the EMO Field Officer occurs regularly throughout the year and more so during the time when annual compliance reports are being Responsible Party: Planning Officer Oue Date: Q4 2019

completed. A good working relationship has been established which helps identify any impediments to achieving compliance. Remedial measures can be identified and agreed upon to ensure the City achieves compliance but more importantly remains prepared. As stated above, management does acknowledge this finding as important and will take measures to reduce the possibility of clerical or record keeping errors in the future.

Management agrees with some of the recommendations, which will be outlined below:

- Where personnel cannot attend training, a process to ensure and document training will be implemented and in place immediately for the 2019 training sessions.
- Track for members of the Community Control Group that have received training.
- Continue to utilize the "verification of municipal emergency control group training form".

There is a significant amount of latitude afforded to the municipality when it comes to the use of IMS forms. IMS is scalable and as such, a municipality determines which forms are required for each event. Within each form there are areas which completion is optional.

While this may be the case, management appreciates the potential confusion that can result from inconsistent practices and therefore agrees to provide additional training to all WFRS clerical staff so that IMS forms are consistently completed in their entirety as applicable, not just during a single event but from incident to incident.

# Considerations for improvement

#### 1. Implementation of Public Notification Procedures and Alerts System

#### Observation

The City of Windsor 211/311 Manager or Alternate is responsible to respond to citizen inquiries under the supervision of the CAO and in consultation with the EIO to facilitate timely and accurate information available to citizens in the interest of public safety. The Senior Electronics Technician has the prime responsibility for emergency radio tele-communications during a declared emergency at various locations including evacuation centres, hospitals, and other key responding agencies.

Status updates are posted via Facebook and Twitter.

The City is also able to use the Federal/Provincial Notification System (Alert Ready) to issue alerts to specific geographical areas.

On review, it was noted that currently the City does not have its own public notification system to issue alerts directly on people's preferred devices, including email, home phone, cell phone, and fax machine.

#### **Considerations**

Cost benefit analysis for implementing or subscribing to the third party public notification system should be performed which can support the benefits associated with added features i.e. focus on those benefits that are available with provincial notification alert program.

The system should facilitate disseminating of information quickly and efficiently in case of an emergency directly on people's preferred devices, including email, home phone, cell phone, and fax machine.

City could also circulates preparedness guide 72 hour emergency kit and other evacuation procedures to be followed in case of an emergency.

#### 2. Documentation and Completion of IMS forms and IMS Training

#### **Observation:**

- a) The Ontario Incident Management System (IMS) forms are used to assist with incident management processes and procedures, as well as to represent a record of decisions and actions. In addition, details within these forms are a source of information for communication and messaging to the public during an incident, and such messaging is retained for future reference. The IMS doctrine suggests that IMS forms that are deemed as applicable should be used. Based on our review of documentation standards/processes we noted:
  - Currently, IMS forms including 1001 (Consolidated Incident Action Plan), 207 (Org Chart) and 211-B (EOC Check-In List) are being used to document the incident processes manually. In addition to these, there are 19 other IMS forms that are currently not used. 13 out of the 19 IMS forms are a part of IMS 1001 and appear as sections to the 1001 form. The other six have not been needed by City.
  - Details and sign-off for preparer and approver were not captured.
  - Certain optional sections within the IMS forms were left blank without documenting rationale (e.g. "section is not required or applicable").
  - In regards to training documentation, a list of members requiring recommended IMS training is not maintained.
- b) We noted that a central document management system has not been implemented to collect or retain information regarding emergency management. Emergency management information systems provide timely, accurate and complete information to assist with emergency management and performance measurement and public reporting.

#### **Considerations**

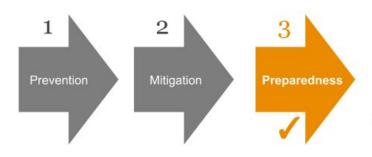
- a) IMS forms package should be evaluated and applicability of forms that are currently not used should be considered based on applicability/requirement. Where IMS training is not a legislated requirement, the City should develop a procedure/guidelines to address training needs for those staff members where IMS training is recommended. This internal requirement can be integrated into learning management system maintained by Human Resources.
- b) Management should consider deploying a document management system for submission and recording of IMS forms to facilitate completeness. Such a system could be developed or procured in collaboration with the County of Essex. The key details to consider include but are not limited to:
  - managing training content to facilitate awareness of staff on what to do, who to call and what information is available to them when they need it most with access to relevant plans, procedures and documentation.
  - maintaining up to date plans and version control.
  - accurately reporting all incidents throughout the year.
  - recording drills/exercises carried out throughout the year.
  - completing forms using online forms accessible from mobile devices.
  - managing consistency communication messages with templates and pre-approved forms
  - Completion of Command Post Inspection Sheet by accountable party (pre-populate relevant forms name/title of responsible person).

# Appendix A: Overview of Emergency Management Internal Audit Scope

The following diagram provides an overall view of the Municipal Emergency Management Program for City of Windsor highlighting areas and processes that were considered in-scope (checked marks/bolded font) during our review.

#### Municipal Emergency Management Program (City of Windsor)

#### **Emergency Management and Civil Protection Act**



#### **Potential** Response Triggers

Anticipated weather conditions Notification System Activation from members of Community Control Group



#### 3 Preparedness (included in scope bolded)

- Training (as required per EMCA and Ontario Guidance 2018-01-01)
- **Emergency Resource** Handbook
- Public Preparedness
- Emergency
- Simulations/Exercises Evacuation Planning
- IMS Forms Package

#### Not included in scope

- . Disruptions to City's IT Systems or
- **Business Continuity and Disaster Recovery Plans**
- Windsor Fire and Rescue Services Windsor Police Services
- **Emergency Notification System**
- Crisis Management (non-public safety risk)
- Cyber/Privacy Attack
  - 311 and 211 Essex-Windsor Emergency
- Medical Services (EMS)

- Search and Rescue

#### Emergency Response Plan (per

4 Response (included in scope bolded)

- Ontario Reg. 380/04 of EMCA)
- Community Control Group
  - Incident Management System (IMS)
- **Emergency Operations** Centre(EOC) and Action **Planning Process**
- Media and Communication
- Agreements with Red Cross City Evacuation Plan

- Harrow Research Centre PlanAmherstburg Nuclear Emergency
- Response Plan and Evacuation Centre Plan

FOOTNOTE the details/description and source is Ontario Ministry website.

**Source:** The Five Components of Emergency Management in Ontario as prepared by the Office of the Auditor General of Ontario using data from the Ministry of Community Safety and Correctional Services.

# Appendix B: Basis of findings rating and report classification

Findings rating matrix

Audit Findings Rating		Impact		
		Low	Medium	High
Likelihood	Highly Likely	Moderate	Significant	Significant
	Likely	Low	Moderate	Significant
	Unlikely	Low	Low	Moderate

### Likelihood consideration

Rating	Description
Highly Likely	History of regular occurrence of the event.     The event is expected to occur in most circumstances.
Likely	History of occasional occurrence of the event.     The event could occur at some time.
Unlikely	History of no or seldom occurrence of the event.     The event may occur only in exceptional circumstances.

# **Impact consideration**

Rating	Basis	Description
HIGH	Dollar Value <sup>2</sup>	Financial impact likely to exceed \$250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	Internal Control Significant control weaknesses, which would lead to financial or fraud loss.
		An issue that requires a significant amount of senior management/Board effort to manage such as:  · Failure to meet key strategic objectives/major impact on strategy and objectives.  · Loss of ability to sustain ongoing operations:  - Loss of key competitive advantage/opportunity  - Loss of supply of key process inputs  · A major reputational sensitivity e.g., Market share, earnings per share, credibility with stakeholders and brand name/reputation building.
		<b>Legal/Regulatory</b> Large scale action, major breach of legislation with very significant financial or reputational consequences.
MEDIUM	Dollar Value	Financial impact likely to be between \$75,000 to \$250,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	Internal Control Control weaknesses, which could result in potential loss resulting from inefficiencies, wastage, and cumbersome workflow procedures.
		An issue that requires some amount of senior management/Board effort to manage such as:  · No material or moderate impact on strategy and objectives.  · Disruption to normal operation with a limited effect on achievement of corporate strategy and objectives  · Moderate reputational sensitivity.
		<b>Legal/Regulatory</b> Regulatory breach with material financial consequences including fines.
LOW	Dollar Value	Financial impact likely to be less than \$75,000 in terms of direct loss or opportunity cost.
	Judgemental Assessment	Internal Control Control weaknesses, which could result in potential insignificant loss resulting from workflow and operational inefficiencies.
		An issue that requires no or minimal amount of senior management/Board effort to manage such as:  · Minimal impact on strategy  · Disruption to normal operations with no effect on achievement of corporate strategy and objectives  · Minimal reputational sensitivity.
		Legal/Regulatory Regulatory breach with minimal consequences.

 $<sup>^{\</sup>rm 2}$  Dollar value amounts are agreed with the client prior to execution of fieldwork.

# Audit report classification

Report Classification	The internal audit identified one or more of the following:	
Cause for considerable concern	<ul> <li>Significant control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met.</li> <li>An unacceptable number of controls (including a selection of both significant and minor) identified as not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>Material losses have occurred as a result of control environment deficiencies.</li> <li>Instances of fraud or significant contravention of corporate policy detected.</li> <li>No action taken on previous significant audit findings to resolve the item on a timely basis.</li> </ul>	
Cause for concern	<ul> <li>Control design improvements identified to ensure that risk of material loss is minimized and functional objectives are met.</li> <li>A number of significant controls identified as not operating for which sufficient mitigating backup controls could not be identified.</li> <li>Losses have occurred as a result of control environment deficiencies.</li> <li>Little action taken on previous significant audit findings to resolve the item on a timely basis.</li> </ul>	
No major concerns noted	<ul> <li>Control design improvements identified, however, the risk of loss is immaterial.</li> <li>Isolated or "one-off" significant controls identified as not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>Numerous instances of minor controls not operating for which sufficient mitigating back-up controls could not be identified.</li> <li>Some previous significant audit action items have not been resolved on a timely basis.</li> </ul>	
No or limited scope for improvement	<ul> <li>No control design improvements identified.</li> <li>Only minor instances of controls identified as not operating which have mitigating back-up controls, or the risk of loss is immaterial.</li> <li>All previous significant audit action items have been closed.</li> </ul>	

# Appendix C: Limitations and responsibilities

## Limitations inherent to the Internal Auditor's work

#### Internal control

Internal control systems, no matter how well designed and operated, are affected by inherent limitations. These include the possibility of poor judgment in decision-making, human error, control processes being deliberately circumvented by employees and others, management overriding controls and the occurrence of unforeseeable circumstances.

# Future periods

Our assessment of controls is for the period specified only. Historic evaluation of effectiveness is not relevant to future periods due to the risk that:

- the design of controls may become inadequate because of changes in operating environment, law, regulation or other; or
- the degree of compliance with policies and procedures may deteriorate.

# Responsibilities of management and Internal Auditors

It is management's responsibility to develop and maintain sound systems of risk management, internal control and governance and for the prevention and detection of irregularities and fraud. Internal audit work should not be seen as a substitute for management's responsibilities for the design and operation of these systems.

We endeavour to plan our work so that we have a reasonable expectation of detecting significant control weaknesses and, if detected, we shall carry out additional work directed towards identification of consequent fraud or other irregularities. However, internal audit procedures alone, even when carried out with due professional care, do not guarantee that fraud will be detected.

Accordingly, our examinations as internal auditors should not be relied upon solely to disclose fraud, defalcations or other irregularities which may exist.



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