



Office of the Fire Marshal and Emergency Management

Review of Fire Protection Services in the City of Sault Ste. Marie

**August 31, 2017
5761 - 2017 Sault Ste. Marie**



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1.0 Executive Summary

1. The Office of the Fire Marshal and Emergency Management (OFMEM) initiated a review of fire protection services in the City of Sault Ste. Marie (SSM) on December 7, 2016. The review was conducted under the Power of the Fire Marshal as set out in sub-clause 9.(1)(a) of the *Fire Protection and Prevention Act, 1997* (FPPA).

Powers of Fire Marshal

9. (1) The Fire Marshal has the power,
(a) to monitor, review and advise municipalities respecting the provision of fire protection services and to make recommendations to municipal councils for improving the efficiency and effectiveness of those services.
2. This review by the OFMEM is being initiated to obtain and confirm an understanding of the current and future level of fire protection services in the City of Sault Ste. Marie. As the Fire Marshal is the principle advisor to government on matters of fire protection in Ontario, and to meet the responsibilities under the Fire Protection and Prevention Act, 1997 (FPPA), that are established for the Fire Marshal, the review was initiated on December 7, 2016.
3. The *FPPA* sets out municipal responsibility to determine the level of fire protection services¹ provided. Sub-clause 2.(1)(a) of the *FPPA* outlines legislated municipal responsibilities. A municipality is meeting the expectations of the OFMEM with respect to its responsibilities at 2.(1)(a) by having at a minimum the following components in place:
 - a. having conducted a simplified risk assessment
 - b. establishment of smoke and carbon monoxide alarm programs
 - c. distribution of public fire safety education materials, and
 - d. conducting inspections upon request or complaint.²

¹ *FPPA* 1997 Chapter 4, Part 1 Definitions: "Fire protection services", as defined in the *Fire Protection and Prevention Act*, 1997 includes,

(a) fire suppression, fire prevention, fire safety education,

(b) mitigation and prevention of the risk created by the presence of unsafe levels of carbon monoxide and safety education related to the presence of those levels,

(c) rescue and emergency services,

(d) communications in respect to anything described in clauses (a) to (c),

(e) training of persons involved in providing anything described in clauses (a) to (d), and

(f) the delivery of any service described in clauses (a) to (e)

² O. Reg. #365/13 now compels specified persons to undertake an assessment of fire safety complaints and requests for approval



4. For sub-clause 2.(1)(b) of the *FPPA*, the OFMEM advises that municipal Councils determine the level of fire protection services to be delivered in accordance with their local needs and circumstances. The *FPPA* provides broad authority for municipalities to determine how they want to provide services including, but not limited to:
 - establishing a fire department
 - purchasing services, and
 - jointly operating and managing a fire department with one or more municipalities.
5. In considering their needs and circumstances, the OFMEM advises municipalities to consider those things that impact on the provision of fire protection services, including, but not limited to:
 - type of service delivery system (full-time, composite or volunteer)
 - economic situation
 - demographic considerations
 - geography and physical layout of the municipality
 - building profile
 - various risks to be protected, and
 - community infrastructure of roads, water systems, hydrants.
6. This review has determined that the City of Sault Ste. Marie is meeting the expectations of the OFMEM by having the components noted above in place. It is the opinion of the OFMEM that the municipality and the SSMFS have adequate programs in place addressing the following:
 - public fire safety education and fire prevention, including well documented fire inspection and enforcement measures
 - a training program that provides staff with job-related knowledge, and training records are well documented
 - overall the pre-incident planning program is thorough, and there is a process in place to update pre-incident plans on a regular basis
 - documentation and records were determined to be in good order, and
 - personal protective equipment (turnout gear) is well maintained.
7. The review identifies areas for the municipality to consider for improvement with respect to some programs, and in the area of municipal fire risk assessment and planning concepts, principles and processes.
8. The review team extends its appreciation to the municipality for their co-operation



and engagement on this project.

9. This report provides 18 recommendations to improve the efficiency and effectiveness of SSMFS fire protection service delivery model. Four appendices have been created:
 - Appendix 1: “City of Sault Ste. Marie Review - Legislation and Principles”
 - Appendix 2: “City of Sault Ste. Marie Review Recommendations”
 - Appendix 3: “Sault Ste. Marie Fire Services Organizational Divisions and Staffing”, and
 - Appendix 4: “Sault Ste. Marie Fire Services Operating Guidelines - Emergency Response (Fire Suppression Services)” Resources.

2.0 Scope

10. In addition to obtaining and confirming an understanding of the current and future planning for levels of fire protection services in the City of Sault Ste. Marie, the review included topics related to the provision of fire protection services such as:
 - municipal fire risk assessment
 - by-laws and agreements
 - organizational structure
 - policies and operating guidelines
 - communications and interaction
 - records management
 - public fire safety education
 - fire inspections and enforcement
 - pre-incident planning
 - fire investigations
 - training
 - personal protective equipment including equipment used for Chemical, Biological, Radiological, Nuclear, and Explosive CBRNE/Hazardous Materials (Hazmat) services, and
 - fire services planning.

3.0 Review Methodology

11. The OFMEM review team utilizes systematic methodologies and principles to conduct the review, including some processes from other recognized public



oversight agencies³. Review team members are assigned tasks and collect information on specific topics.

12. A systematic process is applied to securing sources of information including OFMEM records, municipal records, interviews with municipal staff, review team observations and any other documents pertaining to the scope of the review. The review team conducted scheduled interviews during the period of January 17th - 19th, 2017. As part of the data collection process, the review team followed up with additional requests for information. The process for the review includes the development of evidenced-based recommendations.
13. As benchmarks, the following resources were referenced during the analysis:
 - legislation such as the *FPPA* and *O. Reg.213/07 Fire Code*
 - OFMEM documents such as Public Fire Safety Guidelines (PFSG)
 - OFMEM Technical Guidelines
 - National Fire Protection Association (NFPA) Standards, and
 - best practices for providing fire protection services.

4.0 Fire Protection Services Analysis

4.1 Municipal Fire Risk

14. Subsequent to the site visit by the review team, the OFMEM has become aware that the City of Sault Ste. Marie is undertaking a comprehensive risk assessment through the use of an external consultant.⁴ While this is considered a pro-active measure taken by the municipality there are components within Section 4 and additional recommendations that will assist the municipality.
15. Determining the fire risk in a municipality involves identifying hazards, assessing the potential for loss, determining consequences of fire, examining local infrastructure and analyzing building (property) stock. Further assessment of municipal fire risk involves a formal process which examines, analyzes and evaluates relevant factors unique to a community such as demographics, property stock, road infrastructure and past fire loss statistics.⁵ This information is then used to identify potential fire scenarios, followed by an analysis of likelihood and potential consequences.

³ Used in part are processes found in the practices and guides followed by the Office of the Ombudsman of Ontario.

⁴ <http://www.saultstar.com/2017/06/27/Council-approves-risk-assessment-applicant>

⁵ These factors are outlined in the *OFMEM Fire Risk Sub-Model* (June 2009), which provides guidance to municipalities on comprehensively assessing community fire risk. There are a number of other tools, standards and best practices which may also be used to determine fire risk.



16. The assessment becomes the basis for setting priorities to reduce the likelihood of fires and to mitigate impact if they occur. In addition, the results of a thorough risk assessment should be used as a basis for determining the level, type and amount of fire protection services provided, and should be a critical factor in the development of a community strategic plan for fire protection services.⁶ The risk assessment should be reviewed and updated regularly to remain current with any changes in the municipality such as new residential, commercial or industrial developments, road infrastructure, and demographics.
17. This review indicates that the SSMFS assesses municipal fire risk on an annual basis through a detailed simplified risk assessment (SRA). In addition to the SRA, evidence of assessment of municipal fire risk was found in reports to Council including a presentation related to the Fire Services Organizational Realignment Strategy (realignment strategy)⁷. The following includes an analysis of the key points regarding municipal fire risk found within the SRA, the realignment strategy and reports:
- It is the assessment of the OFMEM that the SRA is well done, and may be considered an enhanced SRA due to the detail and the links found between the assessment process and program development. The current SRA completed by the SSMFS follows a method for analysis, evaluation and assessment of municipal fire risks. As well, the process for completing the SRA applies the format and outline contained within the OFMEM document, PFSG #04-40A-03 *Simplified Risk Assessment*.⁸ As a result of the process and details applied, the SRA includes municipal fire risk information such as:
 - building stock issues in the downtown core
 - the potential for economic stress due to large fires at industrial facilities
 - high risk factors (fire and life safety) associated with care occupancies and Class C⁹ residential type occupancies, and
 - an analysis of community demographics highlighting issues such as, challenges related to delivering educational material to an aging population.

⁶ PFSG #01-02-01: *Comprehensive Fire Safety Effectiveness Model, Considerations for Fire Protection and Fire Prevention in Your Community*

⁷ Reports to Council and presentation provided by the Municipality dated Oct. 2015 – Nov. 2016.

⁸ PFSG #04-40A-03: *Simplified Risk Assessment* describes a simplified risk assessment as including the following components: demographic profile, building stock profile, local and provincial fire loss profiles, information analysis and evaluation, priority setting for compliance and implementing solutions.

⁹ *The Building Code Act, 1992 (Loi de 1992 sur le code du bâtiment) ONTARIO REGULATION 350/06 BUILDING CODE, Table 3.1.2.1 Major Occupancy Classification (forming part of Sentences 3.1.2.1 (1), 3.1.2.2 (1) and 3.11.2.1 (3) indicates that,*

- *Major occupancy means the principal occupancy for which a building or part of a building is used or intended to be used, and is deemed to include the subsidiary occupancies that are an integral part of the principal occupancy.*



- The outcomes from the SRA process are used to develop or update programs and activities associated with public fire safety education, fire prevention and enforcement that are designed to mitigate the risk of fire, such as the following:
 - public education programs designed for target audiences including school programs, kitchen fire safety program, “Don’t Drink and Fry” activities, and programs for seniors
 - prevention initiatives such as inspections and an in-service smoke and carbon monoxide alarm program, and
 - options for enforcement of violations of the *Fire Code* that are designed to assist with addressing the community’s fire safety needs.
- The SRA demonstrates that the SSMFS collects information, such as data from standard incident reports and fire investigation reports, analyzes the findings, and creates a community fire profile. The SSMFS currently uses a data program (CriSys) that enables the collection of organizational and functional data such as: fire suppression data, pre-incident planning, investigations, prevention, training and apparatus and equipment data.
- The SRA is reviewed and updated on an annual basis. With the recent introduction of a Public Educator position, the responsibility for the completion of the SRA is transitioning from the Deputy Chief Fire Education, Prevention and Emergency Management (EM) to the Public Educator
- The analysis of the SRA indicates that the outcomes of the assessment are referenced to assist with public education, prevention and enforcement programs and activities.¹⁰ Based on the statistical data provided by the SSMFS, the positive impact of public fire safety education programs and fire prevention and enforcement measures in Sault Ste. Marie is making a difference in lowering the frequency of fires reported and property loss.
- The current SSMFS SRA includes a statement indicating that it is not designed to assist with the identification of emergency response (fire suppression) components such as: capacity, capability, deployment and reliability, the document does identify some complex fire safety risks within the municipality.

¹⁰ The SRA model used by the SSMFS although considered as an enhanced model, is basically designed to serve the needs of smaller municipalities and can be used as a first step (basic foundation) for larger municipalities that face more complex fire safety challenges within their communities such as: large industrial and assembly type properties, care and detention type occupancies including hospitals and other facilities that house vulnerable occupants, high rise buildings, aging downtown core and multi-unit residential occupancies. See: ⁹PFSG #04-40A-03 *Simplified Risk Assessment*.



- Further assessment utilizing the processes within a thorough and comprehensive risk assessment, as planned to be conducted by the municipality, will enhance the understanding of municipal fire safety risks and provide a set of findings such as:
 - the identification of a full range of potential fire scenarios involving properties across the municipality
 - detailed analysis of the likelihood of occurrence
 - identification of potential consequences when an incident occurs
 - a prioritization of fire risks throughout the municipality, and
 - based on the prioritization of risk identified, the development of fire risk mitigation plans including the identification of emergency response (fire suppression) capabilities and capacity needs.
- In addition to the material found in the SRA, information related to management of municipal fire risk was found in reports to Council and other documentation provided by the municipality.¹¹ As well, some fire risk assessment information was identified through the interview process with senior staff from the SSMFS.
- In some documents, topics for managing municipal fire risk, in particular those addressing emergency response (fire suppression), were observed. In summary:
 - the October 26, 2015, realignment strategy document identifies proposed changes to SSMFS staffing levels along with no anticipated negative impacts on fire response times or an increase in risk.¹²
 - A follow up report in November 2015 highlights that:
 - the support to make decisions to change staffing levels was based on empirical research, best practice reviews and objective analysis, and
 - it is Council's authority to set the levels of service including levels of staffing.¹³

¹¹ Documents provided included reports to Council during the period October 2015 and November 2016

¹² Additional information included in the October 26, 2015 report and presentation to Council:

- an analysis of emergency response calls during a 20 year period highlighting a trend towards decreasing frequency of property fires
- the impact of public fire safety education and prevention programs in reducing the frequency of property fires
- a benchmark for response time of six minutes 90% of the time (from receiving the emergency call to intervention measures at the scene of a property fire)
- response to fires in residential type occupancies expressed through 10 firefighters responding and performing seven fireground tactics
- shift staffing (platoons) of 13 firefighters providing a redundancy factor of 30% towards a working (committed) fire event
- additional measures to obtain firefighters when required through call backs of off duty firefighters and through mutual aid requests, and
- Council's authority within the *FPPA* to determine levels of service.

¹³ Additional information from the Nov. 2015 report informs Council that:

- a call back process is in place for additional firefighters when needed
- mutual aid is not being looked at to supplement fire response, and
- varying deployment models for firefighters and apparatus were described.



- A report to Council dated April 11, 2016,¹⁴ includes the following information:
 - a comprehensive risk assessment will be undertaken in late 2018
 - simplified risk assessments and reviews of fire activities are undertaken regularly, and
 - updates on the impacts of the transition plan (realignment strategy Oct. 26, 2015) on human resources, operational (including response data analysis), financial and consultative activities.
 - A report to Council dated November 21, 2016, identifies municipal fire risk information related to simplified risk assessments and response data analysis.¹⁵
18. In addition to the SRA and reports to Council, the municipality provided a completed Hazard Identification and Risk Assessment (HIRA)¹⁶ that is used to identify types of major emergencies or disasters that could impact the municipality.¹⁷ For example, the risk analysis worksheet within the HIRA identifies and ranks explosions/fires as 5th with description of very high, out of the top ten risks identified through the process. The information contained within a HIRA is used by a municipality to prioritize and develop emergency preparedness plans. The information contained in the HIRA provided by the municipality could be used in conjunction with the findings from a comprehensive risk assessment. This would assist with prioritizing risk mitigation plans and in determining capability and capacity requirements for emergency response (fire suppression) services.
19. Municipal fire risk assessment involving property structures such as a high-rise building, large assembly type occupancy, industrial complex and a fire involving the downtown core were identified in the Building Stock Profile section of the SRA.

¹⁴ Council Report dated April 11, 2016 by City of Sault Ste. Marie Chief Administrative Officer.

¹⁵ Additional information from the report includes:

- an analysis of fires occurring between Nov/15 and Feb/16 indicating they were successfully extinguished with an average of 11 firefighters on scene
- on-going risk assessment through the annual SRA, and
- an internal risk assessment analysis identifying additional operational needs.

Additional details from the Nov. 21, 2016 report include:

- on-going simplified risk assessments and reviews of fire service activities
- staffing adjustment through addition of public fire educator(s) and mechanical officer
- operational review of fire responses pre and post implementation of the realignment strategy including tables indicative of the staff levels, response times and call back of staff
- some comparison of on-duty firefighters per shift to similar municipalities, highlighting that service levels have not been impacted by the change in staffing
- regarding worker safety since staff levels changes, no significant changes in lost time injuries yet a slight increase in minor injuries
- financial analysis of fire loss data including historical and recent (2016) data, and
- overtime costs between Nov/15 and Sept/16 related to fire incidents.

¹⁶ *Emergency Management and Civil Protection Act R.S.O. 1990*, Chapter E.9. Municipal emergency management programs

2.1 (1) Hazard and risk assessment and infrastructure identification

(3) In developing its emergency management program, every municipality shall identify and assess the various hazards and risks to public safety that could give rise to emergencies and identify the facilities and other elements of the infrastructure that are at risk of being affected by emergencies. <https://www.ontario.ca/laws/statute/90e09>.

¹⁷ The HIRA was provided by Paul Milosevich, Deputy Fire Chief Prevention, Public Education and Emergency Management. Information included in the email from the Deputy included; "...indicating our current top ten, in order of risk, for our community. Also find attached the worksheets used to derive the list. This in-depth review was performed in 2014 and remains current. Our process is to review these worksheets annually, and if no changes are evident, perform an "in-depth" HIRA on five year intervals."



While the SRA indicates concerns should a fire impact the previously noted types of structures, the document does not include additional assessment of the fire risks involving the structures. The SRA does identify Class C residential occupancies as experiencing the highest frequency of fire occurrences in the municipality.

20. The use of some components of a comprehensive fire risk assessment model¹⁸ was discussed during an interview with the SSMFS Fire Chief. However, documentation was not provided demonstrating that the model was applied during the fire risk assessment process utilized by SSMFS. For example, documents highlighting detailed assessments and analysis of major fire scenarios for properties such as an industrial complex, large assembly buildings or the downtown core were not provided.
21. The process associated with providing adequate emergency response (fire suppression) coverage and additional resource needs for simultaneous or concurrent calls, including an emergency response (fire suppression) to Batchawana First Nation Reserve, was described as being managed through a call back system. The on-duty Platoon Chief is empowered to determine the activation of a call back of firefighters and activation of apparatus. In addition, the risk associated with simultaneous or concurrent property fire calls was discussed during interviews. The potential scenarios involve SSMFS fire suppression staff committed to an incident as noted above and an additional fire emergency call is received for services within the City or within the fee for fire suppression service area. The processes currently used for the timely provision of adequate resources to manage simultaneous or concurrent calls should be assessed to ensure the most efficient measures are in place to manage the potential fire risk scenarios.
22. The review indicated that a process was utilized by the SSMFS to analyze some components related to emergency response (fire suppression), in particular, firefighter capability and capacity needs for a basic residential structure fire type risk. Documentation was not provided indicating that the analysis process included other municipal fire risk type properties such as those that could be identified as high and extreme type risks.

¹⁸ The OFMEM Fire Risk Sub Model was mentioned by the Fire Chief as being a reference when looking at the municipal fire risk assessment in SSM.



23. While some analysis and assessment of municipal fire risk has been completed, Council and the SSMFS could strengthen and create a reliable and valid decision-making process through the completion of a comprehensive risk assessment. It would be beneficial to Council to have a full understanding of the municipal fire risks, the capabilities, capacity and reliability of emergency response (fire suppression) services and the systems supporting emergency response (fire suppression) services. The process and outcomes from a comprehensive risk assessment would provide valuable information towards an increased understanding of the community risk profile and assist with determining the most appropriate strategies for fire protection services, based on local needs and circumstances.
24. Council and the SSMFS should consider acting on the following topics to further enhance a more comprehensive understanding and advance the decision-making process for the management of municipal fire risks:
- Several OFMEM documents and processes related to a comprehensive risk assessment are available for reference including:
 - *Comprehensive Fire Safety Effectiveness Model* (PFSG: 01-02-01)
 - *Fire Protection Review Process* (Public Fire Safety Guideline (PFSG: 01-01-01)
 - *Planning and Growth Practices* (PFSG: 04-58-12), and
 - *Operational Planning: An official Guide to Matching Resource Deployment and Risk* (PFSG: 04-08-10)
 - With respect to the process used by the SSMFS to assess the capabilities and capacity of 10 firefighters responding to a basic residential fire and performing fire ground tactics,¹⁹ it would be beneficial to apply a more thorough evaluation process. Methods and processes such as the OFMEM critical task matrix or similar analytical and assessment tools and processes should be applied. The outcomes would identify details regarding capabilities, capacity and reliability of fire suppression staff while at the same time assist with identifying limitations in the performance of fire suppression tactics at a basic residential fire. Prior to the implementation of the realignment strategy, the same process could have been applied to assess a staffing compliment of 13 firefighters on the scene of a basic residential fire.

¹⁹ From: Fire Services Report to Council – Fire Services Organizational Realignment. 2015 10 26. Page 13.



- Additionally, the critical task matrix or other similar process and resources²⁰ provides methods to analyze and assess the needs and potential limitations in fire suppression capabilities and capacity for other types of fire risks, such as those identified through a comprehensive risk assessment as: low, moderate, high and extreme levels of risk²¹.
- As noted in the report to Council October 26, 2015, a six-minute benchmark 90% of the time is described as a best practice and the report indicates that it should be maintained.²² It would be beneficial to confirm that the benchmark of a six minute response time 90% of the time describes a realistic service level for the SSMFS.²³ In addition, the SSMFS should ensure that response times are consistently recorded across all platoons and frequently analyzed to evaluate performance and to validate that the benchmark is realistic and being achieved.
- In addition to describing the service level for a basic residential fire, it would be beneficial to describe the service levels for other levels of risk across the municipality such as those potentially identified through the comprehensive risk assessment and described as low, moderate, high and extreme.²⁴ The process would also include identifying the criteria and resource needs for service levels in the areas of:
 - simultaneous or concurrent calls
 - fire suppression services provided through a fee-for-service agreement, and
 - resources in the event of mutual aid activation or requests for assistance from neighbouring international communities.
- Having risks identified and a clear articulation of service levels would assist the municipality and the SSMFS in assessing:
 - the impact of staffing changes on fire suppression capabilities
 - capacity needs and limitations for fire suppression based on the fire risk presented by a type of property, and
 - the reliability of suppression, rescue and other services provided by SSMFS.

²⁰ Additional resources may include: *National Fire Protection Association (NFPA)*, *National Institute of Standards and Technology (NIST)*, and *Commission of Fire Accreditation International (CFAI)*.

²¹ From: Fire Services Report to Council – Fire Services Organizational Realignment. 2015 10 26. Page 14.

²² From Fire Services Report to Council – 2015 10 26 page 3: “Best practice, standard response times are based on a 6 minute response, 90% of the time, from Call Taking to Intervention.”

²³ From Fire Services Report to Council – 2015 10 26 page 3: “Best practice, standard response times are based on a 6 minute response, 90% of the time, from Call Taking to Intervention.”

²⁴ Note that recent SSMFS operating guidelines developed to meet the requirements of a *Ministry of Labour* Order identify response protocols for row housing and high rise buildings. A summary of the operating guidelines can be found in Appendix 4. A document indicating an assessment of fireground capabilities for property fires involving row housing or high rise buildings was not provided.



- It would be beneficial to examine the internal process for call back of staff when needed during a working fire, or at times of simultaneous emergency calls. There may be opportunities for process improvements that will enhance the reliability of response resources. There are systems such as automated calling that could be implemented that would provide a greater degree of reliability, that off duty staff would be able to respond in a timely manner for the positions and duties that may be required i.e. Platoon Chief, Captain, Firefighter, Communications Operator or Senior Officer. In addition, there are options that can be assessed such as developing an on-call schedule and paper system as a reasonable means of improving staff reliability in the event of a need for call back.

25. This sub-section within the report identifies the importance of completing a comprehensive municipal fire risk assessment. Additional topics and documents were provided to further enhance the understanding and advance the decision-making process for the management of municipal fire risks. In summary, the outcomes of the risk assessment, findings from further analysis of topics included in this section should assist the municipality with:
- determining levels of service across the municipality
 - the allocation and distribution of fire service resources
 - the capacity and capabilities of the fire service to respond and manage a range of actual risks identified as low, moderate, high and extreme risk levels²⁵
 - the reliability of the emergency response (fire suppression) system and resources, and
 - setting out the critical factors supporting the development of short and long term operational and strategic planning for the SSMFS.

²⁵ Appendix 4 *Sault Ste. Marie Fire Services: Operating Guidelines: Emergency Response (Fire Suppression Services) Resources* has been developed for the purpose of assisting the SSMFS. In summary the Appendix includes:

- an overview of the current state of operating guidelines for emergency response (fire suppression services) and the assignment of resources
- tables that summarized the recently implemented operating guidelines for emergency response, and
- operating guideline #600-13 *Fire Vehicle Deployment Strategy* describing the assignment of staff to emergency response vehicles/apparatus and a table reflecting the assignments.

In addition the following link to PFSG #04-08-10 *Operational Planning: An Official Guide to Matching Resource Deployment and Risk* is included for consideration by the SSMFS moving forward with determining resource needs.

<http://www.mcscs.ius.gov.on.ca/english/FireMarshal/FireServiceResources/PublicFireSafetyGuidelines/04-08-10.html> This document includes the critical task matrix form/tool that can be used by the SSMFS to identify the capabilities of fire suppression resources (firefighters) at scenarios involving different levels of fire risk.



Recommendation #1

The Municipal Council of the City of Sault Ste. Marie should ensure that a comprehensive municipal fire risk assessment is completed. Subsequent to the review, the OFMEM has been advised that the Municipal Council of the City of Sault Ste. Marie is conducting a comprehensive municipal fire risk assessment. Therefore, it is anticipated that the comprehensive risk assessment is completed and the findings applied to further enhance the understanding and advance the decision-making process related to the management of municipal fire risks and associated resources.

Recommendation #2

The Municipal Council of the City of Sault Ste. Marie should ensure that an evaluation of the capabilities and limitations associated with fire suppression and fireground tactics is conducted, and with reference to the findings from a comprehensive municipal fire risk assessment.

Recommendation #3

The Municipal Council of the City of Sault Ste. Marie should ensure that service levels for fire protection services are clearly described, documented, implemented and monitored on a regular basis.

Recommendation #4

The Municipal Council of the City of Sault Ste. Marie should ensure that the SSMFS call back system for additional staff required during an emergency is assessed to determine if there are opportunities to improve the efficiency and reliability of the system, and implement changes as appropriate.

4.2 Administration and Governance

26. The administration and governance of a fire service may be guided by an establishing and regulating by-law (E&R by-law), other fire related by-laws,²⁶ Council resolutions, agreements, policies, operating guidelines, and the interaction of the fire

²⁶ An E&R by-law is a municipal Council document governing the affairs for fire protection services meeting the community's needs and circumstances. Under S. 14 of the *Municipal Act, 2001*, municipal by-laws cannot conflict with or frustrate the purpose of federal or provincial statutes or regulations or legislative instruments.



service with other municipal services/departments, committees and officials. Through by-laws or resolutions, municipal Council is provided the means to identify the core services for the fire service and the types and level of fire protection services it will provide, based on the local needs and circumstances.²⁷

4.2.1 Establishing and Regulating Bylaw (E&R bylaw)

27. An E&R by-law is a municipal Council document outlining policy for fire protection services that can be utilized to demonstrate how the municipality meets the needs and circumstances that Council determines are necessary. In doing so, a municipal E&R by-law can state the type and level of fire protection services provided and may include policy direction in such areas as:
 - legislative requirements that may impact the delivery of fire protection services (i.e. *Fire Protection and Prevention Act*, *Occupational Health and Safety Act*, and *Environmental Protection Act*)
 - Fire Marshal Directives
 - best practices (i.e. *Ontario Fire Service Section 21 Advisory Committee Guidance Notes*, *NFPA* standards)
 - general functions and core services to be delivered
 - goals and objectives of the department
 - general responsibilities of fire department personnel
 - organizational structure
 - authority to proceed beyond established response areas
 - authority to apply costs to property owner for fire investigations, and
 - authority to effect necessary department operations, in consultation with the City of Sault Ste. Marie legal resources.
28. The SSMFS provided E&R By-law #2001-80, *Being a By-law to Re-establish a Fire Services for the City of Sault Marie*. The following enhancements to the E&R by-law should be considered during the next review and update of by-laws:
 - updating the reference to the current *Municipal Act*
 - fire protection services are included and can be further expanded on by describing types and levels of fire protection services
 - an organizational chart appended to the by-law that reflects the current state of the fire service
 - stating the fire service mission, goals and objectives in the by-law or referred to as an appendix to the by-law
 - general responsibilities of all fire department members outlined in the by-law or

²⁷ These may include by-laws to authorize or regulate the following: records retention, service delivery agreements (i.e. for inspections or investigations), open air burning, fees for service, cost recovery for demolition during fires and fire investigations, the safe handling, storage, sale and discharge of fireworks and anything requiring Council authorization.



- referred to in an appendix
- authorization for carrying out necessary operations, including the enforcement of municipal by-laws that relate to fire protection services, and
 - reference to legislative requirements that may impact the delivery of fire protection services (i.e. *Occupational Health and Safety Act* and the *Environmental Protection Act*).

Recommendation #5

The Municipal Council of the City of Sault Ste. Marie should ensure that the Establishing & Regulating By-law is kept current by reviewing and updating as necessary.

4.2.2 Fire Protection Services - Related By-laws

29. Municipal Councils have the authority to develop and pass other by-laws that may impact fire protection services within the municipality and support the delivery of levels of service.
30. All by-laws provided by the municipality that support the delivery of fire protection services were reviewed. The following opportunities for improvements should be considered by the municipality during the next review and update of the by-laws:
 - By-law #2011-58: *A By-law to appoint Fire Prevention Officers for the purpose of enforcing By-laws #2009-82 and #81-404*, includes wording describing the enforcement of two by-laws that have been repealed. The by-law should be updated to reference applicable by-laws that may still be in place.
 - By-law #2003-246: *To Authorize an Agreement with the City and The Batchewana First Nation of Ojibways of the Rankin Indian Reserve to Provide Fire Protection for the Rankin Reserve*, includes article 5.(b) that indicates the agreement shall terminate on December 31, 2008. The article continues to say that the First Nation shall give the Fire Services at least 90 days written notice of its intention to renegotiate a new agreement. The municipality should review the agreement and confirm that the agreement is current.
 - By-law #98-11: *To Appoint a Deputy Fire Chief*, identifies a person that is no longer a Deputy Fire Chief with SSMFS. It would be beneficial to update the by-law to reflect the current Deputy Fire Chiefs and staff in those positions or consider repealing this by-law.



- By-law #95-54: *Property Standards*, includes wording that supports the provision of fire protection services. The document includes some property standards that reflect fire and life safety that can be found in the *FPPA* and the *Fire Code* i.e. Section 5.3 Smoke Alarm and Fire Alarm. During the next review and update of the by-law, it would be beneficial to cross-reference the fire and life safety articles in the property standards, to ensure they align with the current legislation and regulations.
- By-law #90-90: *A By-law to Establish the Retention Period of Documents and Records of the Corporation*, includes reference to the *Municipal Act* dated 1980. During the next review of the by-law it would be beneficial to update the reference to the current *Municipal Act* and attach the updated *Schedule 20 Fire*, as provided to the review team by the SSMFS.
- *Schedule A to By-law #83-122, A By-law Between 705952 Ontario Limited and the City*, describes the monitoring of alarm system services that the review team was advised is no longer provided by the SSMFS. During the next review it would be beneficial to confirm the service is no longer provided.
- By-law #78-37: *Respecting Fire Prevention Conditions for Prevention Fires and the Spreading of Fires, and for the Preservation of Life by Measures Introduced for the Purpose of Fire Prevention and Fire Protection*, includes reference to legislation such as the *National Fire Code 1975* and *The Energy Act 1997* and some related regulations. The by-law should be updated to reflect current legislation for the provision of fire protection services such as included in the *FPPA* and *O. Reg. #213/07 Fire Code*.

Recommendation #6

The Municipal Council of the City of Sault Ste. Marie should review all fire related by-laws to ensure currency, are approved, and that they remain in effect.

4.2.3 Fire Protection Service Delivery Agreements

31. A fire protection service delivery agreement is a municipal contract with other municipalities, agencies, individuals or companies which clearly outlines responsibilities, terms and conditions for providing or receiving fire protection services. The fire protection services agreement documents provided by the municipality were assessed for currency and content related to the delivery of fire protection services, in particular public fire safety education, fire safety standards and enforcement and emergency response services (fire suppression).



32. In summary, based on the documents provided by the municipality, active agreements in place include:
- a fire protection service agreement in place for fire suppression services to Batchewana First Nations Rankin Indian Reserve as noted earlier in this report,
 - an agreement with the Ministry of Natural Resources and Forests (MNR)
 - a mutual aid agreement with Algoma District
 - an agreement with Prince Township for emergency response dispatch service
 - a Mutual Aid Compact with Chippewa County, Michigan, USA for cross-border mutual aid response service for emergencies and disasters
 - a procedural agreement between the Sault Ste. Marie Police Service and Her Majesty the Queen in right of Ontario as represented by the Ministry of Community Safety and Correctional Services operating through the Office of the Fire Marshal & Emergency Management, and
 - a memorandum to establish and operate a Level 2 Provincial Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE)/Hazardous Materials (Hazmat) team.
33. An agreement to provide response services to Garden River Fire Department should be repealed as the service is no longer provided. SSMFS Notice #1100-10 *Emergency Calls to Garden River Reserve*, states that SSMFS does not respond to fire alarms on Garden River First Nation.
34. It is noted that a number of agreements have been in place for a considerable period of time (i.e. 1984 Mutual Aid Compact with Chippewa County, Michigan, USA). It would be beneficial to Council and the SSMFS to review the fire protection service agreements, to ensure they reflect current arrangements and practices.

4.2.4 Organizational Structure

35. Organizational structure establishes a format for effective fire service administration and operation. It sets the chain-of-command, which provides clear and concise direction to fire department members. Municipal Council is responsible for determining the best structure for its fire service.
36. The organizational structure of a fire service is a key component in meeting the types and levels of fire protection services established by the municipality. The organizational structure may be uniquely tailored to support the level of services and a municipality's needs and circumstances.
37. Resources and personnel are key factors in meeting the goals and objectives of established levels of fire protection services in a municipality. Efficient and effective management of a fire protection service delivery model is facilitated through clearly identified roles, responsibilities, programs and processes within the fire service



organization.

38. The review team assessed the organizational structure of the fire services through an analysis of:
- the municipal fire service organizational chart
 - guidance and direction provided within the SSMFS
 - reporting relationship with Council
 - divisions within the SSMFS
 - available job descriptions and comparison to current work practices, and
 - promotional process.
39. The SSMFS organizational chart dated August 2016 illustrates the positions, hierarchy and reporting relationships across the organization. The divisions within the fire service are Administration, Fire Prevention and Operations. Operations includes Communications, Training and Logistics, and Support Services. *Appendix 3* shows the divisions and staffing within the SSMFS at the time of the review. In addition, the Appendix includes the August 2016 organizational chart provided by SSMFS.
40. Analysis of the SSMFS organizational chart dated August 2016, indicated that the position for Communications Operator is not included in the organizational chart, however the position is currently active within the organization.
41. Reporting and the provision of direction within the hierarchy of the organization follows a “chain-of-command” principle.²⁸ The fire service provides direction to staff in several ways including meetings, command structure at emergency incidents, and through written documentation in the form of operating guidelines, notices and memorandums.
42. Through the Fire Chief and Chief Administrative Officer (CAO), Council is informed about the fire service operations and organizational structure, particularly information related to the impact of the realignment strategy within the fire services. In addition the SSMFS produces an annual report which includes subjects such as fire services

²⁸ Reporting within the SSMFS:

- Deputy Chief Fire Operations. Training and Logistics and Deputy Chief Fire Education, Prevention and Emergency Management report to the Fire Chief
- Assistant Chief Training and Logistics reports to: Deputy Chief Fire Operations, Training and Logistics
- Firefighters report to: Captains
- Captains report to: Platoon Chiefs
- Platoon Chiefs report to: Deputy Chief Fire Operations, Training and Logistics
- Public Educator reports to: Deputy Chief Education/Prevention/EM
- Fire Prevention Officers report to: Deputy Chief Education/Prevention/EM
- Office Supervisor reports to: Fire Chief
- Support services mechanic reports to: Mechanical Officer
- Mechanical Officer reports to: Assistant Chief Training & Logistics Division



statistics and highlights of key achievements.

43. The Fire Chief at the time of the review assumed management of the fire service in January 2015. His portfolio included the fire service, emergency medical services, and emergency management for the City. Two Deputy Fire Chiefs and two administrative support staff assist the fire chief with the overall administration of the fire service.
44. The Deputy Chief Fire Operations, Training and Logistics is supported through functions conducted by the Assistant Chief Training and Logistics, and a shared administrative position. Support services are managed through the Assistant Chief Training and Logistics, with most activities performed at Station 4. Currently the SSMFS does not have a Training Officer position; however documents related to the realignment strategy indicate that the position may be filled in the future. The Communications/Dispatch Centre is within the portfolio of the Deputy Chief Fire Operations, Training and Logistics and is located at Station 1. The centre is staffed by Communications Operators (junior cadet) positions within the fire service. When needed, fire suppression staff may staff the communications centre.²⁹
45. Within the SSMFS Fire Prevention Division, located at Station 1, the Deputy Chief Fire Education, Prevention and Emergency Management is supported through a contingent of four Fire Prevention Officers, a Public Educator and a shared administrative staff position. The realignment strategy indicated the need for two Public Educator positions. At the time of the review, one Public Educator position was in place. The second Public Educator position had been withdrawn from the SSMFS at the time of the review.
46. There are four fire stations across the City with Station 1 – Main Hall located at 72 Tancred Street. A Platoon Chief position oversees the on-shift suppression staff across all stations. At each station there is a Captain position responsible for the firefighters and duties within the respective station. In addition, the Captains and Platoon Chiefs manage the delivery of training for each platoon.
47. An analysis of job descriptions indicates that some have been recently updated³⁰ or developed, while there are others that should be considered for review and updating. There are some opportunities to review, update and develop job descriptions within the SSMFS such as:
 - The Assistant Chief – Training and Logistics position is included on the

²⁹ At the time of the review a Training Officer position had not been filled.

³⁰ Recently updated job descriptions include: Deputy Chief Fire Education, Prevention and Emergency Management (August 2016), Deputy Chief Fire Operations (August 2016), Office Supervisor (September 2016), Mechanical Officer (September 2016) and Public Educator (September 2016).



organizational chart although no job description was provided.

- The current job description for the Fire Prevention Officer includes a statement indicating the performance of fire suppression duties as directed. During interviews with senior staff it was stated that Fire Prevention Officers do not perform fire suppression services. Additionally, the recently filled Public Educator position will be responsible for public education programs that were conducted by the Fire Prevention Officers and the annual review and update of the SRA. A review and update of the Fire Prevention Officer's job description will provide additional clarity in roles and responsibilities.
- There are several job descriptions (for example the Fire Chief's position) that could be reviewed and updated to ensure they reflect current roles and responsibilities of the positions within the SSMFS.³¹

48. Promotion in the fire service is identified in Article 10 of the Collective Agreement between the Association and the City (February 1, 2014 to January 31, 2015). In addition, Notice #1400-33, *Policy and Procedures to Qualify for the Positions of Captains and Platoon Chiefs – Fire Suppression Division* outlines the policy and procedures to qualify for the positions. Training records indicate staff are receiving training in subjects to meet the job requirements of officer positions. The Deputy Chief Operations, Training and Logistics described a process for the placement of staff in acting officer positions in preparation for full-time assignment.

49. In summary:

- The organizational structure and reporting relationships are in place to support the administration of the fire service and the delivery of fire protection services.
- Through a chain-of-command principle and the use of multiple communications processes, (including operating guidelines, notices and in some cases memorandums), the fire service is provided guidance with respect to functions, activities and operations.
- Opportunities for enhancements to job descriptions exist.
- Through an ongoing reporting process, Council is informed by the Fire Chief through the CAO about the fire service organizational structure, particularly related to the realignment strategy planning efforts and recent restructuring within the fire service.

³¹ Fire Prevention Officer (Oct 19, 2004), Communications Operators (May 15, 2007), Clerk Stenographer (July 2002), Firefighter (October 19, 2004), Captain (July 2006), Platoon Chief (March 2007) and Fire Chief (revised April 1, 2002). During development of the job description for the Fire Chief, cross reference with the E&R By-law to ensure consistency.



Recommendation #7

The Municipal Council of the City of Sault Ste. Marie should consider having in place documents that set out the current reporting relationships, duties, roles and responsibilities for all positions within the SSMFS.

4.2.5 SSMFS Internal and External Communication and Interaction (SSMFS, Municipal departments, Provincial Mutual Aid and International Agreements)

50. The depth of communication and interaction helps internal and external departments and agencies to understand the type and level of fire protection services provided. Communication processes and seamless and efficient interaction between the fire service, other municipal services and external agencies, associations and organizations promotes the best possible customer service, and may reduce municipal liability and risk. To achieve this, clear procedures and processes for exchanging information, managing workload and managing records should be in place.
51. Communications across the SSMFS organization occurs through multiple means such as:
 - the senior management team (Fire Chief and Deputy Chiefs) meet formally every Tuesday to discuss a workplan for the organization³²
 - the Deputy Chief Operations, Training and Logistics meets with Platoon Chiefs to discuss certain emergency response services reports, the achievement of targets/benchmarks or concerns related to the incident
 - the Deputy Chief Fire Education, Prevention and Emergency Management described an informal process of communication within the Fire Prevention Division, and the process was described as manageable
 - through issuance of notice documents, operating guidelines (OGs) and memorandums
 - having a process in place for sharing information, including OFMEM Communiqués
 - the CriSys data base and records management system
 - operating guidelines and notices on desktop computers in all stations and accessible to all staff, respective of their needs for their position and level of authority for access
 - through the development of an annual training schedule, and
 - the creation of a fire services annual report

³² From interview with the Fire Chief conducted Jan. 19, 2017.



52. Interviews with SSMFS Senior Officers and written responses received from municipal departments revealed that the fire service has developed and maintains lines of communication and interaction with Council and other municipal departments through processes such as the following:
- the fire chief reports to Council through the CAO position
 - the complementary application of the *Ontario Building Code (OBC)* and the *Fire Code* to ensure fire and life safety in buildings is taking place through the interaction and communications processes described by the Chief Building Official and the Deputy Chief, Fire Education, Prevention and Emergency Management³³
 - the fire service interacts with other municipal departments, health agencies and emergency services organizations locally, through the formation of coalitions and membership on committees, and
 - by-law enforcement³⁴, planning, public utilities commission³⁵ and the legal department³⁶ described positive communications and interaction experiences with the SSMFS.
53. The activation of the provincial Mutual Aid Plan may include a request for assistance from the SSMFS from neighbouring communities or a request for assistance in to the City to support the SSMFS. Although the use of mutual aid is described by SSMFS as a very infrequent event, it would be beneficial to assess and determine the capability, capacity and reliability of the system. For example, an assessment would include the following topics and outcomes:
- determining the level of training of firefighters within the regional mutual aid partners will assist in assessing the capabilities of the firefighters at a property fire
 - the assessment should include a process that analyzes a range of fire scenarios, providing potential outcomes such as the potential number of emergency responders available and approximate time to respond to provide aid upon notification, and
 - identification of the compatibility of communications, firefighting equipment and apparatus.

³³ Excerpt from written submission by the office of the SSM Chief Building Official: "The expertise shared among both departments has resulted in positive outcomes for the Municipality."

³⁴ Excerpt from written submission by the SSM office of Bylaw Enforcement: "Each agency has an understanding and background for the duties they are expected to carry out, collaboration occurs when regulation from one agency will produce greater results."

³⁵ Excerpt from written submission by the SSM Public Utilities Commission: "PUC works collaboratively and has a good working relationship with Fire Services."

³⁶ Excerpt from written submission by City Solicitor's office: "Legal enjoys the informal and friendly relationship."



54. In advance of potentially having to place the call for assistance, access to resources for emergency response (fire suppression) such as from neighbouring USA municipalities, the Coast Guard and the Canadian Armed Forces should be clarified and confirmed in written agreements. Additionally, the cross-border mutual aid compact with Chippewa County, Michigan, USA identifies the potential for requests for mutual assistance. It would be beneficial to confirm the resources and processes for communications and assistance.
55. The SSMFS policies, notices and operating guidelines provided for the review did not include the subject of mutual aid at the provincial or international level. Operating Guideline #600-07 *Response to Incidents on the International Bridge* provides guidance for a response to an emergency on the international bridge, however the operating guideline did not include topics for emergency response into Chippewa County.
56. In the event that mutual aid assistance is activated through the provincial system or through international agreements, it would be beneficial to have in place policies and operating guidelines for such subjects as:
- the initial response
 - processes for communications
 - availability and process for requesting resources
 - use of the incident management system
 - compensation criterion
 - continuity of coverage for the City of Sault Ste. Marie, and
 - the process for recovery and renewed readiness of the SSMFS from the emergency event.
57. In summary,
- there are processes in place for communications across the SSMFS
 - feedback from municipal departments indicates a positive and functional working relationship with the SSMFS
 - the management of fire risk could be strengthened through an assessment of provincial mutual aid system involving the SSMFS, including topics such as activation, potential resources, capability, capacity, reliability and compatibility, and requirement for policies and operating guidelines, and
 - enhancements to the understanding of access to additional resources through other sources such as across the international border or through military organizations could be achieved through dialogue and development of policies and operating guidelines.



Recommendation #8

The Municipal Council of the City of Sault Ste. Marie should consider an assessment of the capability, capacity, reliability and compatibility of resources that may be requested through the provincial mutual aid system, through local or regional organizations or through international agreements.

Through the assessment, consideration should be given to the need for the development and implementation of policies and operating guidelines designed to guide decisions and determine a course of action depending on the needs and circumstances.

4.2.6 Policies and Operating Guidelines

58. Policies and operating guidelines (OGs) ³⁷ are used by the fire services to ensure that their personnel perform services and functions in a specific and routine manner, promoting operational continuity and consistency in the delivery of fire protection services.
59. The creation, implementation, regular review and revision of policies and guidelines contributes towards:
 - ensuring consistent levels of performance within the SSMFS
 - reducing municipal liability
 - demonstrating due diligence, and
 - addressing the need for safety of personnel and training.
60. The review team requested all policies, operating guidelines, notices, memorandums and similar type documents pertaining to the scope of the review. ³⁸

³⁷ A policy is a principle or rule to guide decisions and achieve rational outcomes. A guideline is a statement to determine a course of action.

³⁸ Approximately 126 operating guidelines were provided, 127 Notices provided and 1 policy related to Tiered Response Dates on operating guidelines ranged from about 2003 – 2017.

Some operating guidelines associated with emergency response services (fire suppression) were updated in 2017 to reflect compliance with a Ministry of Labour Order. During the interview with the Deputy Fire Chief Operations, Logistics and Training it was tabled that the operating guidelines are going through an additional review facilitated through the Platoon Chiefs.

Dates on Notices ranged from about 2002 – 2015. A revision appears to have taken place in 2012 as numerous Notices include a revision date of 2012.



61. The SSMFS has in place a system that includes operating guidelines, notices and memorandums designed to guide and provide direction for performance of workplace duties and responsibilities. Notices and operating guidelines include an index to assist with locating the needed document and all documents are accessible to staff on all desktop computers. The annual training plan produced through the Deputy Fire Operations, Logistics and Training includes a component highlighting an ongoing review of notices and operating guidelines by each platoon.
62. Through further analysis of the documents and interviews with administration it was determined that:
- varying descriptions of notices and operating guidelines were provided by Senior Officers during the interview process
 - differing accounts were provided as to the frequency and scope of updates to the notices and operating guidelines
 - the analysis highlighted a notice within the current index that is not a standard practice at the SSMFS. Notice #1400-07 *Standby Policy* describes a policy that is not in place for standby for emergency call-out, including the provision of a cell phone to staff for receiving the call that is not in place, and
 - there is the potential when using two or more different types of documents (operating guidelines, notices and memorandums) to communicate work practices and expected performance, that staff may encounter inconsistencies or gaps in the information needed, when researching notices, operating guidelines or memorandums in order to conduct work activities.³⁹
63. The following opportunities for improvements to the system, including policies, operating guidelines and notices are offered for consideration by the municipality:
- consider a review of the documents and consolidation into one set, such as operating guidelines for the SSMFS
 - establish a schedule and change-management process for the review and updates to the documents, and consider developing an operating guideline on this subject
 - while reviewing the documents consider including or referencing *Section 21 Guidance Notes* where applicable for the SSMFS
 - where appropriate, reference the staff training requirements to perform the work and include that subject in the documents, and

³⁹ During the assessment of the documents it was necessary to cross reference the index of OGs with that of the Notices (and in some cases memorandums) to ensure all descriptions/guidelines related to the subject being reviewed were captured. For example OG #100-01 *Protective Clothing and Equipment* and Notice #100-01 *Care, Maintenance and Identification of Personal Protective Equipment (PPE)* both include direction to staff for use, care and other user requirements related to PPE. Staff must read and understand both documents associated with PPE.



- consider developing operating guidelines to support programs and activities noted in other sections of this report, such as an operating guideline addressing the review and update of fire protection services by-laws and agreements, and responsibility and process for annual review and update of the SRA.

Recommendation #9

The Municipal Council of the City of Sault Ste. Marie should ensure the consolidation of notices, operating guidelines, applicable memorandums and similar type document into one set of guidelines for the SSMFS.

4.3 Records Management

64. Management of fire service records is critical to meeting the organization's core business needs while supporting the effective delivery of fire protection services. A comprehensive records management system:
- is based on the main divisions or functional areas of the fire service
 - is supported by operating guidelines
 - identifies the location of records and methods of securing records
 - clearly identifies the levels of authorization to access records, and
 - defines the back-up process and frequency for the records.
65. Fire service records are municipal records and therefore subject to the *Municipal Act, 2001* and the *Municipal Freedom of Information and Protection of Privacy Act, 1990*.⁴⁰ As such, a municipality shall retain and preserve the records of the municipality and its local boards in a secure and accessible manner, and may establish retention periods during which the records of the municipality must be retained and preserved.⁴¹

⁴⁰ Source: OFMEM, PFSG #04-60-12 *Records Management*.

Fire department records are municipal records, and therefore subject to the *Municipal Act* and the *Municipal Freedom of Information and Protection of Privacy Act*.

⁴¹ Source: *Municipal Act, 2001* Retention of records

254. (1) A municipality shall retain and preserve the records of the municipality and its local boards in a secure and accessible manner and, if a local board is a local board of more than one municipality, the affected municipalities are jointly responsible for complying with this subsection. 2001, c. 25, s. 254 (1).

Retention periods

255. (1) Except as otherwise provided, a record of a municipality or local board may only be destroyed in accordance with this section. 2001, c. 25, s. 255 (1).

(3) A municipality may, subject to the approval of the municipal auditor, establish retention periods during which the records of the municipality and local boards of the municipality must be retained and preserved in accordance with section 254. 2001, c. 25, s. 255 (3).



66. Fire department records should be maintained systematically in written documents, computer systems, staff notebooks and other formats. Records are imperative to meet various legislative requirements, demonstrate due diligence, and outline actions taken. They are essential in legal proceedings. Documented information assists in planning for future needs, and is useful for designing and evaluating programs and services.
67. A by-law⁴² and schedule applicable to the fire service for municipal records management was provided for the review. In practice, the management of records is split into the divisions within the fire service, with the Senior Officer of the division retaining oversight of respective records i.e. Deputy Chief Fire Education, Prevention and Emergency Management manages fire prevention records. SSMFS electronic records are entered and retained within the CriSys system. A Senior Officer provides the oversight of the CriSys system ensuring the system is maintained and is meeting the needs of the fire service.
68. SSMFS has systems and workplace practices in place for records management including:
- secure storage⁴³
 - division of labour for management of records
 - authorization levels for access to records within the CriSys system
 - retrieval of records
 - recording of communications for emergency responses
 - recording of vehicle and equipment records, training records
 - back-up systems for digital data, and
 - the identification of records management is noted in several operating guidelines and notices.
69. As noted in Subsection 4.2.2, it would be beneficial to update the Records Retention by-law to include the updated *Schedule 20 Fire* that was provided to the review team.

⁴² By-Law #90-90: *Records Retention, Schedule 20*

⁴³ Fire prevention and property file room on 2nd floor in Station #1 complete with process for authorized access only.



4.4 Public Fire Safety Education, Smoke Alarm and Home Escape Planning Program

70. Public fire safety education is designed to increase knowledge, and develop or change attitudes and behaviours. It encompasses a wide spectrum of programs, activities and media campaigns presented to diverse audiences. The distribution of public fire safety education materials is a component of the fire protection services model a municipality may have in place to address its responsibilities within sub-clause 2.(1).(a) of the FPPA. Additional components, strongly advised by the OFMEM for all municipalities, include a smoke and carbon monoxide alarm program.
71. A municipality's public fire safety education activities should be based on a current fire risk assessment, fire call data and the results of fire investigations (i.e. the cause, origin and circumstances of fires).
72. In addition to the distribution of public education information, a public fire safety education program should have goals and objectives, be monitored and continuously evaluated.
73. The SSMFS applies a wide variety of methods to deliver public fire safety education messages. There are several established programs that include activities and functions geared towards children and seniors. The media and static signs are utilized to promote fire prevention and public fire safety messages. The use of social media, including Facebook, Twitter and Instagram are utilized to promote fire prevention and fire safety.
74. A number of public fire safety education programs, activities and initiatives have written goals and objectives which reflect the municipal fire risk assessment . For example, goals and objectives are in place for a number of elementary school programs, a cooking program geared to high school students, and the in-service smoke alarm program.
75. The fire service conducts a wide variety of public fire safety education programs, initiatives and activities which are detailed in a documented plan.⁴⁴ Public fire safety education programs, initiatives and activities target high risk groups and occupancies identified in the SRA. By developing partnerships with organizations, businesses and the media, SSMFS has been very successful in reaching into the community, promoting public fire safety education and fire prevention.

⁴⁴ 2017 Public Education Report



76. A variety of programs, initiatives and activities have been developed to promote seasonal fire safety (Christmas, Halloween) and to address seasonal fire hazards (BBQ, campfires). Programs and activities target hazards that are identified in the SRA, i.e. negligent cooking. In addition, fire investigation data is used to develop and set priorities for public fire safety education programs and activities, i.e. the Kitchen Fire Safety Program, and pillar wraps at the Essar Centre.
77. Public fire safety education in the City of Sault Ste. Marie is enhanced by the involvement of suppression crews in the smoke alarm and home escape planning program, and in carbon monoxide alarm initiatives. As well, their involvement in activities such as the Community Christmas for Children program, the YMCA Healthy Kids Day, the Kidz Summer Festival, and numerous other activities contribute to the promotion of public fire safety education in the City of Sault Ste. Marie.
78. The addition of a Public Educator to the Fire Prevention Division provides a dedicated resource for the delivery of public education. Since the Public Educator has been in place, additional activities such as the use of Facebook and Instagram have been implemented. The addition of this dedicated position allows the fire prevention officers to commit their time to inspection and enforcement activities.
79. In conclusion, the SSMFS is demonstrating a pro-active public fire safety education program. An aggressive schedule for initiatives and activities is in place which is consistent with OFMEM's strong emphasis on the promotion of the first line of defence – “public fire safety education”. It would be beneficial to develop a fire prevention policy that describes the components of the public fire safety education efforts for risks identified through the municipal fire risk assessment process.

Recommendation #10

The Municipal Council of the City of Sault Ste. Marie should ensure the development of a fire prevention policy that describes the components of the public fire safety education efforts for identified risks.



4.4.1 Smoke Alarm and Home Fire Escape Planning Program and Carbon Monoxide Alarm Program

80. An effective smoke alarm program includes activities to ensure that residential occupancies meet the requirements of the fire code.
81. The SSMFS has a number of progressive programs in place that address smoke alarm and home fire escape planning. For example:
 - An in-service fire safety awareness program is utilized for checking smoke alarms in residential properties throughout the city. Although this program focuses on smoke alarm and home escape planning, the home is also checked to see if carbon monoxide alarm(s) are present when required. A pamphlet containing information on smoke alarms, carbon monoxide alarms, home escape planning, and public fire safety education is also shared. If there are no working smoke alarms, a loaner smoke alarm is left, with follow up conducted by the Fire Prevention Division to ensure compliance with the *Fire Code*. If a carbon monoxide alarm is required and not present, follow up is conducted by the Fire Prevention Division to ensure compliance with the *Fire Code*.
 - Fire crews attending emergency alarms regularly check for working smoke alarms and/or working carbon monoxide alarms. If the residence does not have at least one working smoke alarm or a carbon monoxide alarm (if required), a “loaner” is left with the occupant. Workplace practice includes the notification of the Fire Prevention Division for follow-up to ensure compliance with the *Fire Code* and retrieve the device(s) on loan.
 - While providing an open-air burning permit for a residential property, a condition of granting the permit includes a check by the fire service for installed and operating smoke and carbon monoxide (when required) alarms.
 - Through a senior’s fire safety program, a visit from the Fire Prevention Division to change batteries/install smoke alarms and provide educational material may be initiated when the need is identified by a service provider (home care, meals on wheels); a family member, or if the visit is requested by the senior resident.
 - Information regarding smoke alarms and home fire escape planning and carbon monoxide alarms is shared in many ways including school programs, presentations to various senior groups, the media (radio, newspaper and Sootoday website), displays at events, pillar wraps at the Essar Centre, sign boards throughout the community, and through social media (Facebook, Twitter and Instagram).



82. The review team found that there are multiple documents that describe various smoke alarm and carbon monoxide alarm activities. For example:
- There are two memorandums⁴⁵ that describe the In-Service Fire Safety Awareness Program.
 - Notice #1700-15 *Distribution of Loaner Smoke Alarms and Carbon Monoxide Detectors*, dated April 16, 2015, describes the program whereby fire crews check for working smoke and carbon monoxide alarms while attending emergency alarms.
 - OG # 1700-02 *Issuing Open-Air Burning Permits & Responding to Burning Complaints* states that if a permit is being issued to a residential dwelling, the home must be checked for working smoke alarms.
 - The SRA states “Approval for open air burning is predicated on entering the home to ensure the smoke and CO alarms are located properly and maintained”.
83. When reviewing programs, consideration could be given to blending the multiple activities and functions under the umbrella of one smoke alarm program including home escape planning and carbon monoxide alarms. The program, complete with goals, objectives, performance measures and clear evaluation and assessment processes, would provide the fire service with indicators of the effectiveness of the program, while addressing the priorities from a comprehensive municipal fire risk assessment.

Recommendation #11

The Municipal Council of the City of Sault Ste. Marie is encouraged to maintain and enhance an already good program by developing a comprehensive program that includes the smoke alarm program, home escape planning and carbon monoxide alarm program, in addition to goals, objectives, performance measures as well as evaluation and assessment processes.

⁴⁵ Memorandum dated May 11, 2009, In-Service Fire Safety Awareness Program issued by FPO Provenzano and Memorandum dated May 11, 2015, 2016 In-Service Fire Safety Awareness Program issued by DC Milosevich.



4.5 Fire Safety Inspections and Enforcement

84. Building owners are responsible for ensuring buildings are maintained according to the requirements of the *Fire Code*. Buildings conforming to the *Fire Code* may prevent or reduce the impact of fire events and provide a greater degree of protection for occupants and responding firefighters. Fire services have a vested interest in ensuring buildings are maintained according to the *Fire Code* for the safety of their personnel and the public, to meet legislative requirements, and to potentially reduce municipal liability.
85. In addition to a program to address inspections based on request or complaint, a municipality may develop and implement post-fire and post-response fire safety inspections, and a routine fire safety inspection program for all high and extreme risk buildings. A routine inspection program is an effective way of ensuring that targeted properties achieve an acceptable level of safety.⁴⁶
86. The Sault Ste. Marie Fire Prevention Division base their fire safety inspection program on pre-determined types of occupancies, the previous year's standard incident report data, and fire investigation data. Inspections on complaint or request are assigned to a Fire Prevention Officer (FPO) for evaluation and resolution. This workplace practice is consistent with the requirements set out in O. Reg. #365/13.⁴⁷
87. A review of inspection records and the assessment process used by the review team during spot audits indicates that the Fire Prevention Officers are trained in the application of the requirements of the *Fire Code* with the exception of the training required for approving of fire safety plans in vulnerable occupancies. The Fire Prevention Division uses the enforcement options available to them such as Inspection Orders, Part I Certificates of Offence, and Part III Information and Summons. The FPOs use their discretion when applying measures to enforce fire code requirements as outlined in OG #1700-03 *Fire Code Inspections*. The OG also details the requirement that a copy of an inspection order that requires repairs, alterations or installations made to a building be provided to the Chief Building Official.

⁴⁶ Fire Prevention Effectiveness Model – Position Paper. Section II: Program Selection, Development & Implementation

⁴⁷ O. Reg. #365/13: Mandatory Assessment of Complaints and Requests for Approval:



88. In practice, the Fire Prevention Division applies a system and related processes for the management of fire prevention documents and records. Inspection records are primarily stored in the CriSys system, with hard copy of documents stored in the property files located in a secure location. The requirement for a follow-up inspection is diary dated in the database that provides a method for tracking and highlighting due dates for the respective Fire Prevention Officer. The system facilitates the rapid retrieval of follow-up inspection reports and other related information that may be required by the Fire Prevention Division.
89. Suppression staff conduct annual in-service smoke alarm checks along with home escape planning. They also check for carbon monoxide alarms during the site visit. The "Residential and Apartment Fire Safety Program" tracking sheets completed by the suppression crews are given to the Fire Prevention Division, and the Fire Prevention Officers follow up with any occupancy that is not compliant with the *Fire Code*. The in-service home inspection program is focused on Class C residential occupancies identified through the SRA as representing the highest risk for loss of life and property.
90. The assessment by the review team found a good system in place. Files were up to date, there was no backlog of inspections, and there were no outstanding time lags regarding *Fire Code* enforcement measures. Regular and consistent processes and practices are in place for updating, retaining and retrieving documentation.
91. In order to formalize the process utilized by the SSMFS, operating guidelines should be developed for the communication and management of occurrences of multiple alarms at the same property, and for the assessment and determination of the need for a fire safety inspection when a complaint or request is received.

Recommendation #12

The Municipal Council of the City of Sault Ste. Marie should consider the development and implementation of operating guidelines for the SSMFS that address:

1. Internal communications processes and the management of occurrences of multiple false alarms at the same property address.
2. Assessment and determination of the need for conducting a fire safety inspection when a complaint or a request is received.



4.5.1 Inspection Spot Audits and Review of Inspection Files

92. OFMEM “Technical Guideline #01-2012⁴⁸: *Fire Safety Inspections and Enforcement*” (OFM TG #01-2012) outlines best practices to be followed. Fire safety inspection practices must be systematic. Inspection files should include inspector’s notes, building audits, fire alarm and protection systems verifications, photographs, building plans, occupancy permits, fire safety plans, and enforcement records as applicable.
93. As part of evaluating the fire services’ fire safety inspection program OFMEM staff conducted inspection spot audits⁴⁹ and reviewed inspection files. The OFMEM utilized Municipal Property Assessment Corporation data to identify twenty (20) high-risk type occupancies and conducted spot audits on the occupancies. Sixteen (16) of the audits were compared to fire safety inspection records conducted by the Fire Prevention Division in 2016. Four (4) of the audits were conducted on occupancies that had not been inspected in 2016.
94. Occupancy types audited by the review team and inspected by the Fire Prevention Division included Group C multi-residential, Group B care and care and treatment, retirement homes and Group F industrial. The inspection records and the audits indicated that the Fire Prevention Officers were very thorough and knowledgeable in their fire safety inspection practices. *Fire Code* references in reviewed inspection orders were compared to O. Reg. #213/07 as amended, for accuracy and were found to be accurate. Follow-up inspections⁵⁰ are conducted in a timely fashion, actions taken are thoroughly documented in the CriSys system, and hard copies are kept in property files.

⁴⁸ *Fire Safety Inspections and Enforcement* Technical Guideline (OFM TG #01-2012).

<http://www.mcscs.ius.gov.on.ca/english/FireMarshal/Legislation/TechnicalGuidelinesandReports/TG-2012-01.html>

⁴⁹ An inspection spot audit follows a systematic and structured process designed to assess the fire safety inspection practices utilized by a fire department. A spot audit inspection is typically an unannounced fire safety inspection of a selected property. The type and number of properties selected typically depends on the scope and complexity of the fire risks in a community. Additionally the process includes, a review of documents associated with enforcement of the Fire Code and a follow up process and a review of selected fire safety plans and the process for approval.

⁵⁰ Operating Guideline #1700-03 *Fire Code Inspections* speaks to re-check (follow-up) inspections.



4.5.2 Building Fire Safety Plans Including Vulnerable Occupancies⁵¹ Requirements

95. Under the *Fire Code* an approved⁵² fire safety plan (FSP) is required for specific buildings or premises. Without an approved fire safety plan⁵³ a building owner is not compliant with the regulation. The lack of an approved fire safety plan for higher risk occupancies is a significant occupant safety risk.
96. Fire safety plans are submitted to the SSMFS for evaluation and approval for occupancies that require them under Section 2.8 of the *Fire Code*.⁵⁴ OG #1700-09 *Fire Safety Plan Review & Approval* provides guidance for the review and approval process and speaks to the use of a Fire Safety Plan Audit Checklist.
97. It was identified during the on-site visit that some fire safety plans were being approved by Fire Prevention Officers who were not authorized to do so. Subsequent to the on-site visit, SSMFS has provided the review team with a signed letter of designation from the Fire Chief appointing all members of the Fire Prevention Division as Chief Fire Officials for the purpose of approving fire safety plans. It was also identified that Fire Prevention Officers approving fire safety plans for vulnerable occupancies did not have the required *Improving Fire Safety for Vulnerable Ontarians: Training for Chief Fire Officials* on-line course offered through the *Public Service Health & Safety Association*. Therefore, per the *Fire Code* in the absence of this training, the FPOs cannot approve FSPs for Vulnerable Occupancies⁵⁵.

⁵¹ There are eight Fire Marshal directives, as follows: 2016-001 *Notification Requirements for Serious Fire Risks in Long Term Care and Retirement Homes*, 2015-002 *Reporting of Fires and Explosions Requiring Investigation*, 2015-001 *Standard Incident Report (SIR) Filing*, 2014-003 *Inspections of All Buildings*, 2014-002 *Vulnerable Occupancies – Fire Drill Scenarios, Fire Drill Observations, Fire Safety Inspections*, 2014-001 *Registry of Vulnerable Occupancies*, 2002-001 *Disposal of Material or Thing Removed Under the Authority of Clause 15. (1)(c) of the Fire Protection and Prevention Act, 1997, As Amended*; and 1998-001 *Tubular Doors Under Retrofit*

⁵² Ontario Regulation #213/07 *FIRE CODE*, approved means approved by the Chief Fire Official.

⁵³ Ontario Regulation #213/07 *Fire Code*, Section 2.8 Emergency Planning, Sentences 2.8.1.1 (1) and 2.8.2.1. (1).

⁵⁴ Operational Guideline #1700-09, *Fire Safety Plan Review & Approval* lists the steps to take for a fire safety plan to be reviewed and approved by the Chief Fire Official

⁵⁵ Care Occupancies, Care and Treatment Occupancies, and Retirement Homes - Mandatory Training

Owners, landlords, property managers of vulnerable occupancies and the fire service are reminded that as of January 1, 2017, Articles 1.2.3.2. and 1.2.4.2. of Section 1.2 (Qualifications) of Division C of the *Fire Code*, come into force. Article 1.2.3.2. requires persons responsible for implementing fire safety plans in vulnerable occupancies to have successfully completed a qualification course acceptable to the Fire Marshal. Article 1.2.4.2. requires Chief Fire Officials who are responsible for approving such fire safety plans to have also completed a qualification course acceptable to the Fire Marshal. Specifically:

- Persons responsible for implementing fire safety plans are required to take the course, "Improving Fire Safety for Vulnerable Ontarians: Training for Owners/Operators of Care Occupancies, Care/Treatment Occupancies and Retirement Homes"
- Chief Fire Officials responsible for approving fire safety plans are required to take the course, "Improving Fire Safety for Vulnerable Ontarians: Training for Chief Fire Officials"



98. It would be beneficial for fire safety plans to be shared with fire suppression staff so that applicable information can be incorporated into pre-incident plans, i.e. utility shut-offs, floor plans and emergency contacts.
99. Under O. Reg. #213/07 as amended, O. Reg. #364/13, O. Reg. #365/13⁵⁶ and Fire Marshal Directives, requirements for vulnerable occupancies include an annual fire safety inspection, an up-to-date and approved fire safety plan, an annual fire drill using a scenario prepared by the occupancy owner and approved by the Chief Fire Official of the fire services, a fire service assessment of performance targets for the drill, and recording of the drill by the Chief Fire Official. Recently introduced Fire Marshal Directive #2016-001 provides direction to assistants to the Fire Marshal regarding *Notification Requirements for Serious Fire Risks in Long Term Care and Retirement Homes*.
100. The inspection program for vulnerable occupancies was assessed by:
- reviewing fire safety inspections files
 - confirming that the Chief Fire Official who is responsible for approving a fire safety plan for a building containing a care occupancy, a care and treatment occupancy or a retirement home has successfully completed a program or course acceptable to the Fire Marshal
 - conducting spot audits
 - assessing the use and understanding of applicable legislation and Fire Marshal Directives as demonstrated through the SSMFS records, and
 - determining that fire services practices are congruent with Fire Marshal Communiqués and OFMEM TG #01-2012 *Fire Safety Inspections and Enforcement*.
101. The assessment revealed that:
- vulnerable occupancies have been proactively identified by the Fire Prevention Division and are registered with the OFMEM
 - FPOs conduct fire safety inspections using the inspection checklist provided by the OFMEM
 - FPOs conduct approved fire drill scenarios and evaluate and approve fire safety plans

⁵⁶ O. Reg. #364/13 *Mandatory Inspection – Fire Drill In Vulnerable Occupancy*, O. Reg. #365/13 *Mandatory Assessment of Complaints and Requests for Approval*, O. Reg. #213/07 as amended (Fire Code)



- as previously noted, the FPOs approving fire safety plans for vulnerable occupancies did not have the required *Improving Fire Safety for Vulnerable Ontarians: Training for Chief Fire Officials* on-line course offered through the *Public Service Health & Safety Association*, and
- FPOs demonstrate an understanding and apply the principles of the applicable Fire Marshal Directives.

102. When a review of the program for managing vulnerable occupancies is conducted, it would be beneficial to the program to develop and implement operating guidelines, to support the program and promote operational continuity and consistency within the SSMFS.

Recommendation #13

The Municipal Council of the City of Sault Ste. Marie must ensure that SSMFS Fire Prevention Officers take the training necessary to approve Fire Safety Plans (FSP) for Vulnerable Occupancies (VO), if they are to continue to do so. Any VO FSPs approved post December 31, 2016 in the absence of the required training need to be reviewed and approved by personnel that have the required training.

4.5.3 Assistants to the Fire Marshal

103. Assistants to the Fire Marshal derive their authority to enforce legislation and the *Fire Code* from the *FPPA*.⁵⁷ Since the *FPPA* identifies specific persons as “assistants to the Fire Marshal”, these designated people have a statutory role and shall follow the Fire Marshal’s Directives in carrying out this *Act*. Assistants to the Fire Marshal must be familiar with all provisions of the *FPPA* pertaining to their duties and with the *Fire Code*. There is also a need to ensure that assistants to the Fire Marshal are trained and qualified to carry out their responsibilities.⁵⁸

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⁵⁷ *FPPA* 11. (1) The following persons are assistants to the Fire Marshal and shall follow the Fire Marshal’s Directives in carrying out this *Act*:

(a) the fire chief of every fire department
(b) the clerk of every municipality that does not have a fire department
(c) any member of a fire prevention bureau established by a municipality
(d) every person designated by the Fire Marshal as an assistant to the Fire Marshal

⁵⁸ For additional information related to roles and responsibilities see: OFMEM, PFSG, #04-38-13: Role of Assistants to the Fire Marshal (re Fire Suppression)



104. Assistants to the Fire Marshal are provincial offences officers under the *Provincial Offences Act (POA)*.⁵⁹
105. Action taken by an assistant to the Fire Marshal should be based on options found in legislation. The use of legislation to address contraventions/hazards formally assigns responsibility to the building owner or designate and, where applicable, allows for charges under the *POA* if required. The use of recommended enforcement measures contributes towards the managing of municipal fire risk and liability.
106. All members of the Fire Prevention Division are designated as assistants to the Fire Marshal and have obtained their identification cards. The members have received training through the Ontario Fire College in the authority and duties of an assistant to the Fire Marshal.
107. Through a review of Inspection Orders, Part I Certificates of Offence, and Part III Information and Summons, as well as other documentation found in property files, it was noted that the members of the Fire Prevention Division have a strong understanding of their roles and responsibilities as assistant to the Fire Marshal.

4.6 Pre-incident Planning

108. Pre-incident planning (pre-planning) is the process of preparing a plan in advance for emergency operations at a given occupancy. Pre-planning considers a number of factors, including firefighting strategies and tactics, other emergency activities, and building characteristics (i.e. size, occupants, number of stories, type of construction, building materials, fire protection systems, etc.). The involvement of officers, prevention and fire suppression staff in the pre-planning process improves emergency response and the quality of pre-plans.
109. A pre-plan increases fire suppression effectiveness and enhances public and firefighter safety. Pre-plans should exist for high and extreme-risk properties identified in a comprehensive municipal fire risk assessment.

⁵⁹ *Provincial Offences Act* R.S.O. 1990, CHAPTER P.33 Interpretation. 1. (1) In this Act, "provincial offences officer" means a police officer or a person designated under subsection (3); ("agent des infractions provinciales"). Designation of provincial offences officers (3) A minister of the Crown may designate in writing any person or class of persons as a provincial offences officer for the purposes of all or any class of offences. R.S.O. 1990, c. P.33, s. 1 (3)



110. SSMFS officers and suppression crews complete new pre-plans and review and update existing pre-plans. Notice #300-01 *Pre-Fire Plans* assigns the review and revision of pre-plans and states that officers are required to conduct tours to identify and prioritize structures that have yet to be pre-planned.
111. In addition to the formal process identified in Notice #300-01, an informal process for identification of properties is being used whereby the Fire Prevention Division informs suppression of properties that should be pre-planned. Although the municipal fire risk assessment (SRA) identified some high risk occupancies, there is no document or policy that identifies the need for them to be pre-planned or determines pre-planning priorities.
112. Firefighters have received training on developing pre-incident plans and receive training on the actual pre-plans as they are used during training exercises. Pre-plans are developed using a pre-plan checklist that contains many components of best practices. The checklist can be strengthened by consistently capturing in pre-plans, and including key items such as estimated fire flow calculation, predicated strategies, and information regarding exposures.
113. Copies of all pre-plans are located in the dispatch centre and in the Platoon Chief's command unit. Pre-plans for buildings within a station's respective response area are kept in the station's pumper making them available to be referenced during response.
114. Overall, the OFMEM found that the pre-incident planning program is well done. There are a significant number of pre-plans in place and there is a process for updating them as needed. The pre-incident planning program can be enhanced through the development and implementation of an operating guideline that includes guidance in the following areas:
- connects to the current municipal fire risk assessment (and future comprehensive risk assessment when completed) to assist with determining properties that should be pre-planned-in particular high and extreme risk type properties
 - ensures that the pre-plan identifies the processes to access additional resources, such as through the District of Algoma Mutual Aid Program regional agreements in the event of a major fire emergency
 - links pertinent information found in fire safety plans to the pre-incident plan for a respective property, i.e. utility shut-offs, floor plans, and emergency contacts



- refers to best practices and standards⁶⁰ for pre-incident planning, and
- includes reference to standardized pre-incident plan templates that will promote consistency in completion and content of pre-plans.

Recommendation #14

The Municipal Council of the City of Sault Ste. Marie should ensure the development of an operating guideline for pre-incident planning and include the enhancement opportunities noted above, that will further strengthen the program.

4.6.1 Municipal Water Supply for Firefighting Purposes

115. Hydrants, where installed, are critical components of fire protection services-and in particular fire suppression. A program should be in place for the testing, maintenance and marking of hydrants providing water for fire suppression services.
116. The municipal water supply in Sault Ste. Marie is owned by the Public Utilities Commission. The system is managed and operated by PUC Services Inc., a company owned by the City. PUC Services Inc. has Standard Operating Procedure (SOP) #SSM-W D-005 Hydrants – Overview that outlines the hydrant maintenance program. The SOP includes direction that hydrants are to be accessible and clear from snow.
117. Fire flow tests are to be conducted on water distribution systems to determine the rate of flow available at various locations for firefighting purposes. Per the Fire Code, municipal hydrants shall be maintained in operating condition.⁶¹ Hydrants shall be inspected annually.⁶² Hydrants shall be colour-coded indicating their respective available liters-per-minute capacity.⁶³
118. OFMEM staff observed snow accumulation in some areas resulting in hydrants that were obstructed and not readily available for use. Subsequent to the site visit, steps to address this were taken by the Public Utilities Commission with an advertisement in local newspapers asking residents to advise the PUC of any fire hydrant that has not been cleared.

⁶⁰ NFPA 1620: Standard for Pre-Incident Planning” (NFPA 1620).

⁶¹ Fire Code Part 6 Subsection 6.6.4.

⁶² Fire Code Part 6 Subsection 6.6.5.

⁶³ Fire Code Part 6 Subsection 6.6.6.1



119. In addition (and subsequent to the review site visit), documentation was provided by the municipality to show that hydrants are inspected annually as required by the *Fire Code*.
120. SOP #SSM-WD-004 *Hydrants – Fire Flow Testing* states that the purpose of the procedure is to describe the process used to perform fire flow tests. The document directs employees to refer a PUC document identifying chapter six of AWWA M17 “Flow tests” for general instructions.
121. Documentation was provided showing that flow testing was last conducted in 2009. A follow up e-mail after the site visit from PUC personnel verified that the data provided was the most current flow testing undertaken by PUC for colour coding hydrants. Further, it stated that the PUC will carry out testing in the second and third quarters of 2017, and that over the period from 2017 to 2021. The PUC will implement an annual program with the goal to retest or revalidate the entire system by the end of the 5-year period.
122. The review revealed that there is a process in place whereby the fire service is advised of a hydrant that is out of service and when the hydrant is back in service.

4.7 Fire Investigations

123. Fire investigations are an important component of overall fire protection services provided by the municipality. Information collected during investigations is a valuable tool in developing effective fire protection services. Fire investigations should be completed for all fires and explosions.
124. In addition, assistants to the Fire Marshal must follow Fire Marshal Directive 2015-002: “*Reporting of Fires and Explosions Requiring Investigation*.” Additionally, every fire department as described in subsection 1.(1) of the *FPPA* must complete a standard incident report for every response made by a fire department following Fire Marshal Directive 2015-001: “*Standard Incident Report (SIR) Filing*.”
125. The assessment revealed that SSMFS is complying with Fire Marshal Directive 2015-002: “*Reporting of Fires and Explosions Requiring Investigation*” and Fire Marshal Directive 2015-001: “*Standard Incident Report (SIR) Filing*”.
126. Further assessment included a review of the fire investigation program, including fire investigation/fire scene assessment practices (including staff training), by-laws, the sharing of investigation findings, rules of evidence, collection and preservation of evidence, response data, and operating guidelines.



127. Responsibility for investigations is identified in the FPO job description. Notice⁶⁴ #1400-10 *Call-Out Procedure for Fire Investigation & Scene Security* that sets out the procedure to contact the on-call FPO when their expertise is required to determine origin and cause of a fire.
128. The four FPOs and the Deputy Chief Fire Education, Prevention and Emergency Management have received training in fire and explosion investigations from the National Association of Fire Investigators International (NAFI). Additionally, three of the four FPOs and the Deputy Chief Fire Education, Prevention and Emergency Management, are graduates of Ontario Fire College Fire Prevention Officers program, and have completed the Fire Cause Determination course. The Fire Chief has delegated the authority to conduct fire investigations to the positions of Deputy Chief Fire Education, Prevention and Emergency Management and to the FPOs.
129. The Sault Ste. Marie Fire Service, the Sault Ste. Marie Police Service (SSMPS), and the OFMEM are signatories to a Memorandum of Understanding (MOU) for fire investigations. During multi-agency investigations when the fire investigation does not meet Fire Marshal's Directive 2015-002 thresholds for dispatching an OFMEM investigator, the SSMPS will take responsibility for the seizure and storage of evidence.
130. The assessment further identified that:
- fire investigation data is used to develop and set priorities for public fire safety education programs, and activities i.e. the Kitchen Fire Safety Program, pillar wraps at the Essar Centre, etc.
 - there is follow-through on identified fire safety issues from municipal and OFMEM assisted investigations, and
 - fire investigation records are retained in a secure location and are accessible by authorized personnel only.
131. When reviewing the fire investigation program consideration should be given to developing and implementing operating guidelines for conducting interviews and for the sharing of information between the Fire Prevention Division and Operations Division regarding the outcomes of fire investigations.

⁶⁴ Notice #1400-10 *Call-Out Procedure for Fire Investigation & Scene Security*



4.8 Training

132. Training of fire services personnel is required under the *Occupational Health and Safety Act (OHSA)* administered by the Ministry of Labour.⁶⁵ The Council of a municipality is deemed to be the employer. As such, Council is obliged to ensure that all members of their fire department are trained and equipped to provide the services delivered. In addition, the Ontario Fire Service Advisory Committee⁶⁶ develops the “*Ontario Fire Service Section 21 Committee Guidance Notes*”. These documents may form an integral component of a fire service’s training program.
133. In addition to formal external training opportunities, regular training opportunities should also exist in the workplace. Along with enhancing job performance, demonstrating competence through documented regular training and experience increases credibility in court proceedings.
134. A review of Fire Prevention Division training records shows that the Deputy Chief Fire Education, Prevention and Emergency Management and the FPOs have been “grandfathered” to NFPA 1041 *Fire Service Instructor Level 1*, NFPA 1031 *Fire Inspector Level 1*, NFPA 1035 *Public Information Officer* and NFPA 1035 *Fire & Life Safety Educator Level 1*. In addition, training records indicate that they have attended training provided through the OFMEM (Fire Safety Inspection & Enforcement, Vulnerable Occupancies seminar), *Ontario Building Code* courses, and courses to maintain their “Certified Fire and Explosion Investigator” designations.
135. As identified in Subsection 4.5.2 of this report *Building Fire Safety Plans Including Vulnerable Occupancies Requirements*) the FPOs approving fire safety plans for vulnerable occupancies did not have the required *Improving Fire Safety for Vulnerable Ontarians: Training for Chief Fire Officials* on-line course offered through the *Public Service Health & Safety Association*. As noted previously, if the FPOs are to continue approving FSPs for VOs, they require this training.

⁶⁵ Section 25 of the *OHSA* describes various duties of employers, including:

- 25.(2)(a) “An employer shall, provide information, instruction and supervision to a worker to protect the health or safety of the worker”; and
- 25.(2)(h) “An employer shall, take every precaution reasonable in the circumstances for the protection of a worker.”

⁶⁶ The objective of the Ontario Fire Service Advisory Committee on Occupational Health & Safety under Section 21 of the Occupational Health & Safety Act is to advise and make recommendations on matters relating to the occupational health and safety of all firefighters in the Province of Ontario. Secondary objectives include the development of a Manual of Health and Safety Guidance Notes for fire services in Ontario. The manual will outline recommended equipment and procedures to be used by workers in the fire service to prevent injury or illness, and will comply with the intent and provisions outlined in the Act. <http://www.oafc.on.ca/section-21>



136. The SSMFS 2015 Annual Report provides information regarding National Fire Protection Association (NFPA) grandfathering equivalency conducted through the OFMEM, for members of the Operations Division. The majority of firefighters received equivalency to NFPA 1001 *Firefighter Level I and II*. All officers received equivalency to NFPA 1021 *Levels I and II*. In addition, 49 members were granted equivalency to NFPA 1041 *Fire Service Instructor Level I*. The report includes projections for further staff training in 2016.
137. Further analysis of the SSMFS training program was conducted by reviewing the following information:
- documentation and records management subject matter related to the first two lines of defence and fire suppression duties, including CBRNE/Hazmat
 - annual training plans
 - qualifications of staff, and
 - the internal process for sharing of important information.
138. Based on the records and information provided to the review team, other than the training course for FSP approval for VOs, SSMFS staff are receiving the necessary training to perform the expected services and duties for their respective positions within the fire services.
139. A review of firefighter training records indicates that SSMFS has an effective internal training program that is well documented and planned. Training opportunities are obtained through an internal employer-approved training program, and evident within the training records reviewed. External training opportunities including venues such as the Ontario Fire College are utilized by the SSMFS.
140. An annual training plan for emergency response services (fire suppression and other services) staff is produced through the office of the Deputy Chief Operations, Training and Logistics, and delivered through on-shift-Captains, Platoon Chiefs and subject experts within the staff. The records indicate the training is executed in a consistent manner across the four platoons. Training records are retained through the use of the computer platform called CriSys.
141. Training records indicate that staff assigned to CBRNE/Hazmat response team have met the NFPA 472 *Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents* or equivalent OFC courses commensurate to the level of response provided by the department as per provincial MOU response commitments. In addition, the annual training plan includes Hazmat/CBRNE training for staff having duties and responsibilities as per the provincial MOU response commitment.



142. A review of lesson plans, training safety plans and training records indicated that the municipality includes references to certain Section 21 Guidance Notes such as:
- GN 7-1 *Health and Safety During Practical Training Sessions*
 - GN 7-2 *Training Requirements*, and
 - GN 7-3 *Documentation of Training*.
143. Additional review demonstrated that there are internal processes in place for sharing of workplace information such as:
- Fire Marshal Directives and Communiqués, and
 - new or revised fire service operating guidelines and notices.
144. Currently the Deputy Chief Fire Operations, Training and Logistics oversees the training program with the assistance of the Assistant Chief, Training and Logistics. The review team noted in documentation provided that a Training Officer position was identified through the realignment strategy and report to Council.
145. In general, the SSMFS has a robust training program in place. Other than the training needed for the FPOs approving fire safety plans for Vulnerable Occupancies, staff are receiving the necessary training to perform the expected services and duties for their respective positions within the fire services.

4.9 Equipment and Section 21 Guidance Notes for Health and Safety

146. Municipal Council, as the employer, and any fire department personnel who perform supervisory work have a legal responsibility to ensure that staff are trained and provided with the necessary equipment needed to safely conduct the tasks they are assigned.
147. The *Occupational Health and Safety Act (OHSA)* provides criterion for the provision of equipment, materials and protective devices used by the worker.⁶⁷ In summary, equipment, materials and protective devices shall be maintained in good condition, and used as prescribed by the worker.

⁶⁷ Section 25 of the *OHSA* describes various duties of employers, including

- 25.(2)(a) "An employer shall, provide information, instruction and supervision to a worker to protect the health or safety of the worker"; and
- 25.(2)(h) "An employer shall, take every precaution reasonable in the circumstances for the protection of a worker."



4.9.1 Personal Protective Equipment

148. Under clause 25(1)(b) of the *Occupational Health and Safety Act* (OHSA), employers have a duty to maintain equipment in good condition. Clause 25(2)(h) of the OHSA also requires the employer to take every precaution reasonable in the circumstances for the protection of a worker and so the care and maintenance of structural firefighting personal protective equipment (PPE) is of the utmost importance. O. Reg. #714/94: *Firefighters - Protective Equipment*⁶⁸ sets out the requirements for employers to provide firefighters who may be required to perform interior structural fire suppression duties with structural firefighting garments.⁶⁹
149. All PPE should be kept clean as soiled or dirty elements may expose firefighters to hazardous chemicals and reduce the effectiveness of the protection it is intended to provide. It is also important that soiled or contaminated PPE not be transported in a personal vehicle, taken into the fire fighter's home or into the living quarters of a fire station unless in an approved gear bag or container.⁷⁰
150. The review team assessed operating guidelines (OG #100-01 *Turnout Gear and Accessories* and #100-05 *Turnout Gear and Accessories*), notices (Notice #100-01 *Care, Maintenance & Identification – Personal Protective Equipment*) and practices related to the issue, care, maintenance, inspection and replacement of personal protective equipment (PPE). As well, the review assessed the operating guidelines and notices to see if references were made to O. Reg. #714/94⁷¹ and applicable to Section 21 Guidance Notes⁷².

⁶⁸ <https://www.ontario.ca/laws/regulation/940714>.

⁶⁹ <http://www.ontariocanada.com/registry/view.do?postingId=4543> highlights requirements for employers to provide firefighters who may be required to perform interior structural fire suppression duties with structural firefighting garments that meet or exceed the requirements of:

- The National Fire Protection Association (NFPA) 1971 "*Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*", 2007 Edition, in the case of garments manufactured on or after March 1, 2007; or,
- The Canadian General Standards Board (CGSB) CAN/CGSB-155.1-M88 Standard, "*Firefighters' Protective Clothing for Protection Against Heat and Flame*" in the case of garments manufactured before March 1, 2007.

⁷⁰ Section 21 Guidance Notes GN #4-8 4-8: *Care, Maintenance, Inspection and Replacement of Structural Firefighting Personal Protective Equipment*",

⁷¹ O. Reg. #714/94: *Firefighters - Protective Equipment*. (Under *occupational health and safety act, r.s.o. 1990, c. O.1*)

<https://www.ontario.ca/laws/regulation/940714>

⁷² Application of the following Section 21 Guidance Notes was assessed : "4-8: Care, Maintenance, Inspection and Replacement of Structural Firefighting Personal Protective Equipment", "2-7: Reporting Exposures to Biological, Chemical or Physical Agents", "4-9: Respiratory Protection Program (SCBA)", "4-2: Eye Protection", "4-1: Firefighter Protective Equipment", "4-6 Firefighter Helmets", "4-13 Personal Protection During Fire Investigation Operations", and "6-23: Safety During Salvage and Overhaul".



151. The review included assessing thirty percent (30%) of PPE ensembles located at each fire station. Overall, PPE described as bunker gear ensembles are very well maintained, are in good condition, and meet NFPA 1971 Standard ⁷³ as required by O. Reg. #714/94. It was noted that some balaclavas should be checked for expiry dates or had tags missing to indicate dates. As well the assessment indicated that no soiled or contaminated PPE is transported in a personal vehicle, taken into the firefighter's home or into the living quarters of a fire station.
152. The review indicated that the fire service has in place operating guidelines (OG #400-01 *Removing Defective or Broken Equipment from Service*) and notices (Revised Notice #400-16 *Service Requests – Fire Services' Equipment* and Notice #400-21 *Equipment out for Service or Repairs*) for the management of defective equipment, including a "tag out" system and process for communications when the equipment is removed from service and when returned to service.
153. Enhancements to the management processes for PPE could be made through the development and implementation of operating guidelines for the identification of replacement timelines, or other criteria for determining a need for replacement,⁷⁴ and to promote consistency across the fire service regarding the frequency for inspection of PPE.

4.9.2 Respiratory Protection

154. Firefighters may be exposed to hazardous dust, mist, fumes, gas, vapour and smoke as a condition of their work. Employers should make every effort to prevent exposure to such hazards, and protect workers when exposure cannot be prevented.⁷⁵
155. SSMFS provided a document titled *Respiratory Protection Program SSMFS*. In addition, there are notices and operating guidelines that are associated with the program such as:
- OG #400-06 *Filling SCBA Cylinders*
 - OG #400-03 *Donning SCBA*
 - Notice #200-07 *Breathing Air Logs*, and
 - Notice #400-17 *SCBA Air Cylinder Air Changes*.

⁷³ NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting 2007 Edition.

⁷⁴ In reference to GN 4-8, and NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

⁷⁵ Guidance Note #4-9: Respiratory Protection Program" outlines specific measures for a comprehensive respiratory protection program to prevent exposure and protect workers



156. The review indicated that the SSMFS program includes reference to Section 21 Guidance Note #4-9 *Respiratory Protection Program*. A review of workplace practices related to the respiratory program and care and maintenance of components of breathing air systems and units highlighted some topics for consideration by the SSMFS, as follows:

- Notice #200-07 *Breathing Apparatus Log Books* should be reviewed and confirmed that the instructions provided in the notice are being followed. The log books are to be utilized by the Officer at each Station recording the date, time, and use of SCBA, and that each has been returned to service. A review of the log books in Halls 1 and 4 reveal that the instructions are not followed consistently.
- *CSA Standard Z94.4-11 Selection, Use, and Care of Respirators*, is referenced in the *SSMFS Respiratory Protection Program*. Section 11.3.3.1.3 of the CSA Standard identifies that steel and aluminum cylinders over 15 years old shall have the interior of the cylinder inspected at least annually by a qualified person when the cylinders are in current use. During the review some cylinders did not have indicators confirming that annual visual inspections had been completed, nor were records made available. The SSMFS should review the program and standard to confirm that the air cylinders are maintained and ready for use.
- Section 5 Training of the *SSMFS Respiratory Protection Program* indicates that a SCBA technician should be appointed to perform maintenance and repairs on SCBA, and that qualified training that meets manufacturer's standards will be provided. The section goes on to say that the technician shall be re-certified as per recommendations of the manufacturer. The SSMFS provided Scott Specialist Level Maintenance Course certificates for their technicians. The certificates were dated April 2006 and indicated that they were valid for 2 years from issue date. Staff conducting work on SCBA components at the Specialist Level should be re-certified.
- Section 7 of the *SSMFS Respiratory Protection Program* indicates that a maintenance log will be kept to document air quality tests, filter replacement tests, repairs and overhauls, and routine scheduled service. At the time of the review, a maintenance log was not located. The SSMFS should follow-up to ensure that a maintenance log is in place as described in their respiratory protection program.
- The SSMFS should develop and implement an operating guideline describing a regular review of the program and related notices and OGs.



157. At the time of the on-site review, SSMFS records indicated that 76 firefighters were past-due for fit testing. Subsequent to the site visit, confirmation of current fit testing for all members of the fire services was received.

Recommendation #15

The Municipal Council of the City of Sault Ste. Marie should ensure that a review of the *SSMFS Respiratory Protection Program* is conducted, ensuring that it is current and that workplace practices meet the requirements of the program.

4.9.3 Reporting Program for Exposures to Biological, Chemical or Physical Agents

158. The potential for exposure to various biological, chemical or physical agents is a routine condition of fire protection activities. The Workplace Safety and Insurance Board (WSIB) does not maintain records of exposures that do not result in medical aid or time off work. Since such exposures could result in future occupational illness or disease, recording exposures may help to determine the cause. Permanent workplace records should be kept for all real and suspected exposures.⁷⁶
159. A completed exposure form meeting the intent of GN 2-7 *Reporting Exposures to Biological, Chemical or Physical Agents* was provided. When reviewing the program, consideration may be given to including guidelines for exposure reporting, and ensuring that a process for the review of completed exposure forms by the Joint Health and Safety Committee is included.

4.9.4 Safety During Salvage and Overhaul

160. Operating guidelines addressing tactics and tasks related to safety during salvage and overhaul were reviewed. The documents include some criterion applicable to Section 21 Guidance Note 6-23 *Safety During Salvage and Overhaul*. In addition, Notice #900-07 *Contacting Union Gas Technicians* and Notice #200-04 *Electrical Damage* relating to electrical and natural gas safety provide direction to contact utilities when there is a fire.

⁷⁶ "Guidance Note #2-7: Reporting Exposures to Biological, Chemical or Physical Agents" outlines additional components of an exposure reporting program and provides a sample exposure report which includes important information that should be recorded.



4.9.5 Safety During Fire Investigation Operations

161. Two operating guidelines are in place that address personal protection during fire investigation operations. OG #1700-05 *Personal Protective Equipment* and OG #1700-14 *Fire Investigations Safety & PPE* provide guidance that differs regarding the use of SCBA and Powered Air Purifying Respiratory devices by FPOs when conducting investigation. It is suggested that the OGs be reviewed and-based on current practice in the workplace-consideration be given towards amending OG #1700-05 to remove the requirement for the use of SCBA.

4.9.6 Hazmat and CBRNE Equipment

162. Equipment for response to Hazmat and CBRNE incidents should be maintained and ready for deployment as per the Provincial Memorandum of Understanding with the OFMEM.
163. Provincial Response Level 2 Team Equipment was assessed to ensure it is being maintained and ready for operational deployment. PPE was found to be in compliance with inspection and testing requirements. Air monitoring detectors were found to be maintained according to manufacturer's specifications.

4.9.7 Integrating Section 21 Guidance Notes in Operating Guidelines and Practices

164. The Ontario Fire Service Advisory Committee develops the *Ontario Fire Service Section 21 Advisory Committee Guidance Notes*.⁷⁷ These documents may be considered and referenced in applicable policies and operating guidelines related to equipment and other programs within the fire service.
165. The analysis of several operating guidelines indicated references made to components of Section 21 Advisory Committee Guidance Notes (GNs) while in other OG improvement opportunities exist to include reference to GNs i.e. Notice #200-10 *Exposure to Communicable Diseases*.
166. The municipality and the SSMFS should consider the integration of Section 21 Guidance Notes and best practices into applicable operating guidelines.

⁷⁷ The objective of the *Ontario Fire Service Advisory Committee* on Occupational Health & Safety under Section 21 of the *Occupational Health & Safety Act* is to advise and make recommendations on matters relating to the occupational health and safety of all firefighters in the Province of Ontario. Secondary objectives include the development of a Manual of Health and Safety Guidance Notes for fire services in Ontario. The manual will outline recommended equipment and procedures to be used by workers in the fire service to prevent injury or illness, and will comply with the intent and provisions outlined in the Act. <http://www.oafc.on.ca/section-21>



5.0 Current and Future Planning

5.1 Current State

167. Evidence of planning within the SSMFS was found in documents provided by the municipality and the SSMFS, and described during an interview with the Fire Chief. Planning was demonstrated as occurring across the fire services as a whole and within the divisions in documents and activities such as:⁷⁸
- the October 2015 *Fire Services Organizational Realignment Strategy* (realignment strategy) was presented and approved by Council. During interviews, the realignment strategy was described as the three-year business plan (2015 to 2018) for the SSMFS⁷⁹
 - an annual training plan produced and implemented through the Deputy Chief Fire Operations, Logistics and Training
 - public education, prevention and enforcement objectives highlighted in the annual SRA prepared by the Deputy Chief Fire Education, Prevention and Emergency Management, and
 - a SSMFS annual report was last produced in 2015.
168. Additional analysis of documentation provided by the municipality indicated that there was frequent communication regarding planning between Council and the SSMFS, and that Council was involved in the planning for the delivery of current fire protection services. The planning process and follow-up reports provide Council with information about the existing and planned capabilities and capacity of emergency response service (fire suppression) services to a basic residential fire emergency. As well, some criteria applicable to levels of service are described.⁸⁰

⁷⁸ Additional information related to planning was found in:

- a March 2015 a report to Council highlighted that a new comprehensive business plan for the SSMFS would be undertaken to provide recommendations in conjunction with a spending review and 2016 budget deliberations
- a June 2015 report to Council indicates that a comprehensive strategic, business or master plan for the SSMFS is not in place and that a business plan would be presented in October 2015⁸¹
- an additional document with a June 2015 date provides an outline of the terms of reference for a master fire plan
- additional realignment strategy "follow up" reports to Council on the progress of the plan
- a weekly planning meeting with SSMFS senior officers is conducted with the intent of developing a workplan
- the SSMFS annual report (2015) included topics such as:
 - an organization wide goal for emergency services,
 - several primary response objectives, and
 - several targets for achievement in the follow year. Source:

Transcribed interview with Fire Chief January 18, 2017, p 8.

⁷⁹ The Council report dated Oct. 26, 2015, highlighting the fire service organizational realignment plan includes a statement indicating Council's authority to determine levels of service. Several descriptors related to levels of service are included in the report yet not clearly described as such to Council i.e.:

- a six minute response time 90% of the time is the benchmark that should be maintained
- proposed staffing level and staffing alternatives based on event:
- 17 per platoon with 13 on duty
- call back of off shift staff
- resources obtained through mutual aid partners

⁸⁰ The Council report dated Oct. 26, 2015, highlighting the fire service organizational realignment plan includes a statement indicating Council's authority to determine levels of service. Several descriptors related to levels of service are included in the report yet not clearly described as such to Council i.e.:



169. The planning by Council and the SSMFS sets out the process steps for change within the fire services (through the realignment strategy), and indicated no anticipated impact to SSMFS service levels. In summary, the focus of the planning is on topics such as:

- the realignment strategy and adjustments to staffing levels
- a mix of emergency medical services priorities
- efforts to understand what a comprehensive risk assessment is and when it should be conducted
- preparing and delivering ongoing updates to Council on the progress of the realignment plan, and
- workplan development between the SSMFS Senior Officers.

5.2 Future State

170. The realignment strategy and follow-up reports to Council included topics related to future planning. Additionally, future planning considerations were discussed during interviews with the SSMFS Senior Officers. These included:

- no anticipated changes to the realignment strategy during 2017 and 2018
- a proposed station location study to be initiated in the fall of 2017
- in conjunction with the station location study, a comprehensive risk assessment will be conducted. (both projects are to be completed by the end of 2018)
- opportunities to assess the realignment of the staffing model based on the outcomes of the station location study
- a need to submit capital budget requests in future
- a need to update the E&R By-law to include descriptions of core services and levels of service
- a need to review and update job descriptions
- a need to review and update operating guidelines and notices
- concepts associated with a fluid, dynamic staffing model will be considered, resulting in staffing compliments to meet demands versus a static model
- potential improvement to the pre-incident planning program through enhanced use of technology
- potential relocation of the communications room operation to another service

-
- a six minute response time 90% of the time is the benchmark that should be maintained
 - proposed staffing level and staffing alternatives based on event:
 - 17 per platoon with 13 on duty
 - call back of off shift staff
 - resources obtained through mutual aid partners
 - flexible staffing model
 - 10 firefighters committed to a fire



- provider
- additional emphasis on public education and fire prevention activities i.e. increased in-service inspections by Platoons, and potential for an additional Public Educator position, and
- the potential for filling a Training Officer position for the SSMFS.

5.3 In Summary

171. Municipalities are responsible for the establishment, funding and delivery of fire protection services in accordance with Part II Section 2 of the *FPPA*. In addition to *FPPA* Part II Section 2.(1)(a) responsibilities, a municipality shall provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.⁸¹ The overall objective becomes one of providing the optimum level of fire protection to the community in keeping with the local needs and circumstances.
172. Local circumstances have a significant effect on which factors are most important as a municipality assesses different options available for its fire protection system. In the final analysis, the level of fire protection services provided is determined through decisions made by and support provided through municipal Council.
173. When analyzing and determining the optimum model including types and levels of fire protection services, the planning process and decision making capabilities may be strengthened by involving several inter-related components such as the following:
- specialized expertise in fire protection services
 - the municipal fire risk
 - capabilities and capacity of the existing fire protection system
 - a thorough understanding and appreciation of a municipality's economic circumstances from a fire protection services perspective, and
 - the encouragement of a planning process that includes interaction between Council with its policy-setting responsibilities, the municipality with its corporate management objectives, and the fire service with its operational expertise.
174. As well, planning for the SSMFS and the provision of fire protection services could

⁸¹ *Municipal responsibilities*

2. (1) Every municipality shall,

(a) establish a program in the municipality which must include public fire safety education with respect to fire safety and certain components of fire prevention; and

(b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.



be enhanced by applying a more systematic planning process, providing the means for the development of a consolidated strategic plan and supporting operational plans. The systematic methodology should clearly link the SSMFS planning strategies to the respective strategic goals and objectives of the City. The following components and processes are provided for consideration as opportunities to improve the planning process for Council and the SSMFS:

- When considering a systematic planning process for the SSMFS, the following subjects could be incorporated as components of the process:
 - a needs analysis
 - a comprehensive municipal fire risk assessment
 - organizational structure and workload management analysis
 - assessment of the most effective and efficient use of resources for emergency response service (fire suppression), and
 - performance and evaluation measures.
- While conducting a needs analysis, a critical component is the identification of the most effective use of resources for emergency response service (fire suppression). This is essential to describing the desired service level, and assists with defining planning objectives.
- As well, planning within the fire services should include implementing processes to monitor, evaluate and measure the achievement of goals and objectives related to fire protection services-in particular identifying realistic and achievable benchmarks associated with the provision of emergency response service (fire suppression).
- Expanding on a needs analysis and identification of resources for optimal services, Council and the SSMFS should consider proceeding with a station location study. The findings from the study should assist in determining such items as:
 - optimal locations and number of fire stations for the city
 - opportunities that may highlight optimal arrangements for staffing, apparatus and equipment at stations, and
 - response times and service levels.
- A detailed E&R By-law sets out Council's expectations for the delivery of fire protection services. By updating the current E&R By-law, Council and the SSMFS would have details and specifics relating to subjects such as the scope of core services, and the types and levels of service. With updated details in the E&R By-law, planning by Council and the SSMFS would be enhanced when determining and assessing the service levels and reliability of service provision, in reference to the municipal fire risks identified through the comprehensive risk assessment.
- The utilization of a more defined strategic planning process by the municipality and



the SSMFS would enhance the planning process and outcomes. The strategic planning process for fire protection should enable the municipality to determine the best allocation of resources to achieve an acceptable level of fire protection.

Strategic planning is a valuable tool in identifying management options-guided through operational plans-for providing the desired fire protection service levels to the municipality. Ideally the document should cover a long-range planning period of five to ten years. Ultimately, a good plan should lead to a more fire-safe community.

- In addition, the outcomes of the planning process for strategic plan development should address topics such as the services' programs or projects, the basis for the fire service budget, and timelines or schedules for developing and maintaining the fire protection system that has been accepted and approved by Council. Additional contents of the plan should provide a clear and concise overview of subjects such as approved services and levels of service, organizational goals and objectives, mission statement, and program evaluation processes.

Recommendation #16

The Municipal Council of the City of Sault Ste. Marie should continue the planning process for the SSMFS and work towards completing the requirements for the development of a consolidated strategic plan and supporting operational plans for the SSMFS.

Recommendation #17

The Municipal Council of the City of Sault Ste. Marie should ensure that core services and levels of service for fire protection services provided by the SSMFS are developed, approved and implemented.

6.0 Office of the Fire Marshal and Emergency Management Conclusion: *Fire Protection and Prevention Act, 1997 – Municipal Responsibilities*

175. This review has identified a number of recommendations and suggestions for consideration by the municipality to improve the effectiveness and efficiency of fire protection services. The recommendations are included in the body of this report, and listed separately in "Appendix 2: City of Sault Ste. Marie Review Recommendations".



176. The OFMEM will continue to monitor fire protection services in the municipality through regular communications and interaction. The OFMEM is available on-request to assist the municipal Council and the SSMFS.
177. It is recommended that the City of Sault Ste. Marie and the SSMFS develop a prioritized implementation plan based on the findings and recommendations within the report. The OFMEM is available to assist Council, if requested, on topics such as additional detail about the recommendations, suggestions, analysis, advice and assistance during implementation.

Recommendation #18

It is recommended that the Municipality of the City of Sault Ste. Marie develop an implementation schedule for the OFMEM recommendations contained within this report.

Signed in Sudbury, ON
August 31, 2017

Art Booth
A/Assistant Deputy Fire Marshal, Field and Advisory Services



Appendix 1: City of Sault Ste. Marie Review: Legislation and Principles

1.0 Legislative Authority to Conduct Reviews

This review was conducted under the authority of the *FPPA* which states:

1. *FPPA, Part III Fire Marshal - Powers of the Fire Marshal*

9.(1) *The Fire Marshal has the power*

- (a) *to monitor, review and advise municipalities respecting the provision of fire protection services and to make recommendations to municipal councils for improving the efficiency and effectiveness of those services*

1.1 Service Delivery Review Part 1: Fire Protection Services - Fire Protection and Prevention Act, 1997

2. The powers of the Fire Marshal, municipal responsibilities for fire protection services, and the fire chief's responsibilities, powers and ability to delegate are outlined in the *FPPA*. The OFMEM review process is based on this legislation.

2.0 Part II – Responsibility for Fire Protection Services, *Fire Protection and Prevention Act, 1997*

3. The *FPPA* establishes responsibility for fire protection services. For example, in Part II - Responsibility for Fire Protection Services, the legislation outlines municipal responsibilities as follows:

Municipal responsibilities

2. (1) *Every municipality shall,*

- (a) *establish a program in the municipality which must include public fire safety education with respect to fire safety and certain components of fire prevention; and*
(b) *provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstance*

Methods of providing services (The *FPPA* outlines options for providing fire protection services.)

2. (2) *In discharging its responsibilities under subsection (1), a municipality shall,*

- (a) *appoint a community fire safety office or a community fire safety team, or*
(b) *establish a fire department*



4. When a fire department is established the fire chief's responsibilities, powers and ability to delegate are outlined as follows:

Fire chief, municipalities

6. (3) *A fire chief is the person who is ultimately responsible to the council of a municipality that appointed him or her for the delivery of fire protection services.*

Powers of fire chief

6. (5) *The fire chief may exercise all the powers assigned to him or her under this Act within the territorial limits of the municipality and within any other area in which the municipality has agreed to provide fire protection services, subject to any conditions specified in the agreement.*

Delegation

6. (6) *A fire chief may delegate his or her powers or duties under Sections 14, 19 and 20 and such other powers and duties as may be prescribed to any firefighter or class of firefighters, subject to such limitations, restrictions or conditions as may be prescribed or set out in the delegation.*

3.0 Municipal Responsibilities – Fire Prevention and Public Fire Safety Education, Clause 2.1(a), *Fire Protection and Prevention Act, 1997*

5. Municipalities are strongly encouraged to implement the advice of the OFMEM in meeting their responsibilities under the FPPA at sub-clauses 2.1(a) and 2.1(b).
6. The *FPPA* places responsibility on municipal councils to determine the level of fire protection services provided⁸². As noted previously, Clause 2.1(a) of the Act outlines legislated municipal requirements. The OFMEM, pursuant to legislated responsibilities, strongly advises that the following components would meet the expectations of the OFMEM for municipalities in Ontario with respect to responsibilities as set out in sub-clause 2.1(a):
- a. Conducting a simplified risk assessment;
 - b. Establish smoke and carbon monoxide alarm programs;
 - c. Distribute public fire safety education materials; and
 - d. Conduct inspections upon request or complaint.⁸³

⁸² *FPPA* 1997 Chapter 4, Part 1 Definitions: "Fire protection services", as defined in the *Fire Protection and Prevention Act, 1997* includes,
(a) fire suppression, fire prevention, fire safety education,
(b) mitigation and prevention of the risk created by the presence of unsafe levels of carbon monoxide and safety education related to the presence of those levels,
(c) rescue and emergency services,
(d) communications in respect to anything described in clauses (a) to (c),
(e) training of persons involved in providing anything described in clauses (a) to (d), and
(f) the delivery of any service described in clauses (a) to (e).

⁸³ O.Reg. 365/13 now compels specified persons to undertake an assessment of fire safety complaints and requests for approval.



7. In January 2014, the Ontario government enacted two regulations pursuant to the FPPA to protect Ontarians⁸⁴. These regulations are further supported by four compulsory Fire Marshal directives⁸⁵. These regulations and directives now form part of the requirements for the delivery of fire protection services.

4.0 Municipal Responsibilities – Other Fire Protection Services as Necessary, Clause 2. (1)(b), *Fire Protection and Prevention Act, 1997*

8. For sub-clause 2.(1)(b) the OFMEM advises that municipal councils determine the level of fire protection services to be delivered in accordance with their local needs and circumstances. The FPPA provides broad authority for municipalities to determine how they want to provide services including, but not limited to:
 - Establishing a fire department;
 - Purchasing services; and
 - Jointly operating and managing a fire department with one or more municipalities.
9. In addition, while considering their needs and circumstances, the OFMEM advises municipalities to consider those things that impact on the provision of fire protection services, including, but not limited to:
 - Type of service delivery system (full-time, composite or volunteer);
 - Economic situation;
 - Demographic considerations;
 - Geography and physical layout of the municipality;
 - Building profile;
 - Various risks to be protected; and
 - Community infrastructure of roads, water systems, hydrants.
10. A municipality should identify its fire risks through a municipal fire risk assessment⁸⁶ as part of determining which fire protection services are necessary and establishing levels of fire protection services. As the principal advisor on fire protection services, the fire chief is responsible for assessing community fire risk and making recommendations to council. In consideration of municipal needs and circumstances, council is responsible for determining and establishing fire protection services and allocating adequate resources.

⁸⁴ Ontario Regulation 364/13 Mandatory Inspection – Fire Drill In Vulnerable Occupancy; O. Reg. 365/13 Mandatory Assessment of Complaints and Requests for Approval

⁸⁵ Directives are made through powers afforded to the Fire Marshal, as described in Section 9.(1)(b) of the FPPA to enhance fire protection services. FPPA, 9.(1) states “The Fire Marshal has the power, (b) to issue directives to assistants to the Fire Marshal respecting matters relating this Act and the regulations.” The directives referred to here are: 2016-001 Notification Requirements for Serious Fire Risks in Long Term care and Retirement Homes; 2014-001 Registry of Vulnerable Occupancies; 2014-002 Vulnerable Occupancies – Fire Drill Scenarios, Fire Drill Observations, Fire Safety Inspections; 2014-003 Inspections of All Buildings.

⁸⁶ The OFMEM [Fire Risk Sub-Model](#) (June 2009) is a component of the Comprehensive Fire Safety Effectiveness Model, which is a tool that serves as a basis for the objective evaluation of fire protection services in a municipality.



11. The review team evaluated fire protection topics and services such as the following related to Clause 2.(1)(b) by considering:

- the municipality's approach to municipal fire risk assessment
- fire-related bylaws
- fire-related agreements
- fire related policies and operating guidelines
- organizational structure
- fire protection services provided, and
- current and future planning within the fire services

5.0 Fire Marshal Directives, Clause 9. (1)(b), *Fire Protection and Prevention Act, 1997*

12. Directives are issued by the Fire Marshal under the authority of the *FPPA* when there is a need to achieve consistency in the application of certain technical or administrative requirements related to the Act or regulations:

Part III Fire Marshal - Powers of the Fire Marshal

9. (1) *The Fire Marshal has the power*

(b) To issue directives to assistants to the Fire Marshal respecting matters related to this Act and the regulations;

13. It is the responsibility of every assistant to the Fire Marshal to follow the directives⁸⁷. Assistants to the Fire Marshal are designated under the *FPPA*.

Assistants to the Fire Marshal

11. (1) *The following persons are assistants to the Fire Marshal and shall follow the Fire Marshal's directives in carrying out this Act,*

(a) the fire chief of every fire department

(b) the clerk of every municipality that does not have a fire department

(c) any member of a fire prevention bureau established by a municipality, and

(d) every person designated by the Fire Marshal as an assistant to the Fire Marshal

⁸⁷ There are eight Fire Marshal directives, as follows: 2016-001 Notification Requirements for Serious Fire Risks in Long Term Care and Retirement Homes, 2015-002 Reporting of Fires and Explosions Requiring Investigation, 2015-001 Standard Incident Report (SIR) Filing, 2014-003 Inspections of All Buildings, 2014-002 Vulnerable Occupancies – Fire Drill Scenarios, Fire Drill Observations, Fire Safety Inspections, 2014-001 Registry of Vulnerable Occupancies, 2002-001 Disposal of Material or Thing Removed Under the Authority of Clause 15. (1)(c) of the *Fire Protection and Prevention Act, 1997, As Amended*; and 1998-001 Tubular Doors Under Retrofit.



6.0 Public Fire Safety Guidelines

14. To assist municipalities in meeting their legislative responsibilities, the OFMEM has developed *Public Fire Safety Guidelines (PFSGs)*, and strongly recommends that municipalities utilize these to develop their own unique programming. These PFSGs are being updated to reflect the OFMEM's amended perspective on sub-clauses 2.(1)(a) and 2.(1)(b).

7.0 Office of the Fire Marshal and Emergency Management's Three Lines of Defence

15. As a principled approach to delivering effective and efficient fire protection services, the OFMEM advocates the "Three Lines of Defence"⁸⁸ to prevent and mitigate fire loss, injury and death, and to promote firefighter safety. These are:
- public fire safety education
 - fire safety standards and enforcement, and
 - emergency response
16. The first two lines of defence focus on preventing fires. When fires occur, the third line of defence is available to respond and lessen the impact.
17. With public fire safety education and fire prevention as priorities, the delivery of fire protection services is modernized, by realigning the traditional approach in which emergency response was the predominant focus of the fire service.

⁸⁸ The "Three Lines of Defence" are founded on the principles outlined in Honourable John B. Webber's 1983 report, "Report of the Public Inquiry into Fire Safety in Highrise Buildings".



Appendix 2: City of Sault Ste. Marie Review Recommendations

Recommendation #1

The Municipal Council of the City of Sault Ste. Marie should ensure that a comprehensive municipal fire risk assessment is completed. Subsequent to the review, the OFMEM has been advised that the Municipal Council of the City of Sault Ste. Marie is conducting a comprehensive municipal fire risk assessment. Therefore, it is anticipated that the comprehensive risk assessment is completed and the findings applied to further enhance the understanding and advance the decision-making process related to the management of municipal fire risks and associated resources.

Recommendation #2

The Municipal Council of the City of Sault Ste. Marie should ensure that an evaluation of the capabilities and limitations associated with fire suppression and fireground tactics is conducted, and with reference to the findings from a comprehensive municipal fire risk assessment.

Recommendation #3

The Municipal Council of the City of Sault Ste. Marie should ensure that service levels for fire protection services are clearly described, documented, implemented and monitored on a regular basis.

Recommendation #4

The Municipal Council of the City of Sault Ste. Marie should ensure that the SSMFS call back system for additional staff required during an emergency is assessed to determine if there are opportunities to improve the efficiency and reliability of the system, and implement changes as appropriate.

Recommendation #5

The Municipal Council of the City of Sault Ste. Marie should ensure that the Establishing and Regulating By-law is kept current by reviewing and updating as necessary.

**Recommendation #6**

The Municipal Council of the City of Sault Ste. Marie should review all fire related by-laws to ensure currency, are approved, and that they remain in effect.

Recommendation #7

The Municipal Council of the City of Sault Ste. Marie should consider having in place documents that set out the current reporting relationships, duties, roles and responsibilities for all positions within the SSMFS.

Recommendation #8

The Municipal Council of the City of Sault Ste. Marie should consider an assessment of the capability, capacity, reliability and compatibility of resources that may be requested through the provincial mutual aid system, through local or regional organizations or through international agreements.

Through the assessment, consideration should be given to the need for the development and implementation of policies and operating guidelines designed to guide decisions and determine a course of action depending on the needs and circumstances.

Recommendation #9

The Municipal Council of the City of Sault Ste. Marie should ensure the consolidation of notices, operating guidelines, applicable memorandums and similar type document into one set of guidelines for the SSMFS.

**Recommendation #10**

The Municipal Council of the City of Sault Ste. Marie should ensure the development of a fire prevention policy that describes the components of the public fire safety education efforts for identified risks.

Recommendation #11

The Municipal Council of the City of Sault Ste. Marie is encouraged to maintain and enhance an already good program by developing a comprehensive program that includes the smoke alarm program, home escape planning and carbon monoxide alarm program, in addition to goals, objectives, performance measures as well as evaluation and assessment processes.

Recommendation #12

The Municipal Council of the City of Sault Ste. Marie should consider the development and implementation of operating guidelines for the SSMFS that address:

1. Internal communications processes and management of occurrences of multiple false alarms at the same property address.
2. Assessment and determination of the need for conducting a fire safety inspection when a complaint or a request is received.

Recommendation #13

The Municipal Council of the City of Sault Ste. Marie must ensure that SSMFS Fire Prevention Officers take the training necessary to approve Fire Safety Plans (FSP) for Vulnerable Occupancies (VO), if they are to continue to do so.

Any VO FSPs approved post December 31, 2016 in the absence of the required training need to be reviewed and approved by personnel that have the required training.

**Recommendation #14**

The Municipal Council of the City of Sault Ste. Marie should ensure the development of an operating guideline for pre-incident planning and include the enhancement opportunities noted above, that will further strengthen the program.

Recommendation #15

The Municipal Council of the City of Sault Ste. Marie should ensure that a review of the SSMFS *Respiratory Protection Program* is conducted, ensuring that it is current and that workplace practices meet the requirements of the program.

Recommendation #16

The Municipal Council of the City of Sault Ste. Marie should continue the planning process for the SSMFS and work towards completing the requirements for the development of a consolidated strategic plan and supporting operational plans for the SSMFS.

Recommendation #17

The Municipal Council of the City of Sault Ste. Marie should ensure that core services and levels of service for fire protection services provided by the SSMFS are developed, approved and implemented.

Recommendation #18

It is recommended that the Municipal Council of the City of Sault Ste. Marie develop an implementation schedule for the OFMEM recommendations contained in this report.



Appendix 3: Sault Ste. Marie Fire Services Organizational Divisions and Staffing⁸⁹

Division/Position	Staff
Administration	
Fire Chief	1
Office Supervisor	1
Administrative Staff	2
Sub total	4

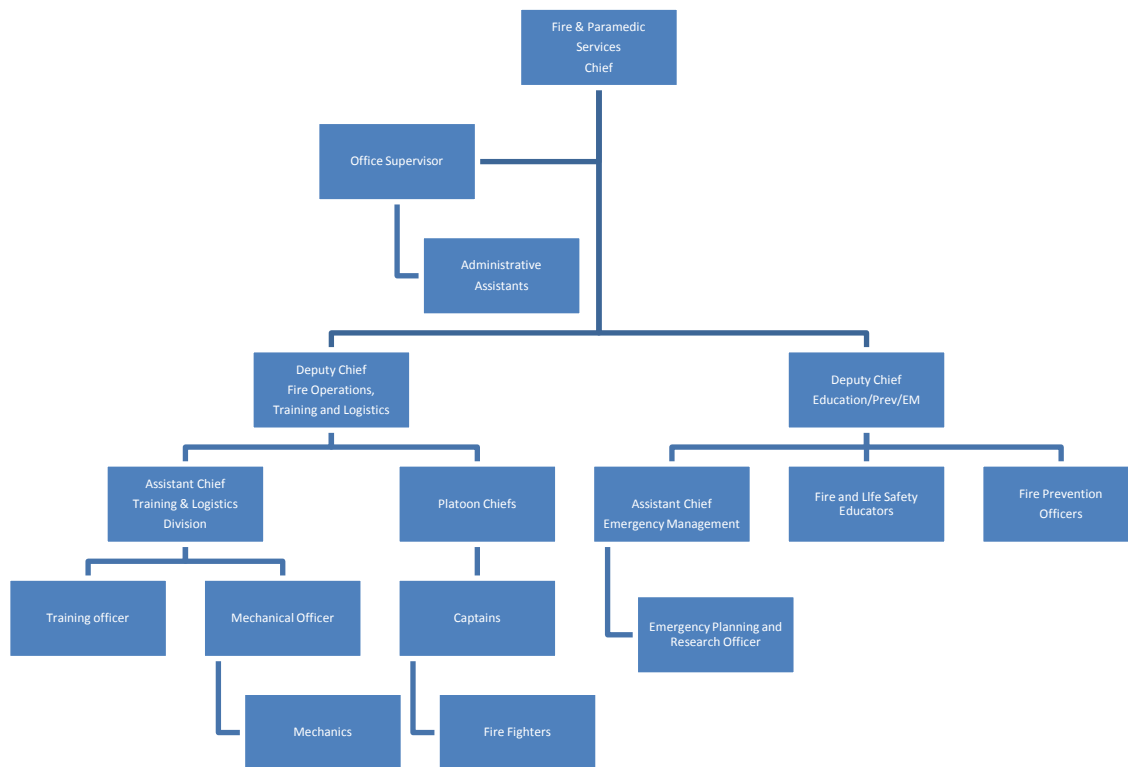
Division/Position	Staff
Positions within Fire Prevention	
Deputy Chief Education, Prevention and Emergency Management	1
Fire Prevention Officers	4
Public Educator	1
Sub total	6

⁸⁹ The following documents were referenced while developing the table:
Fire-EMS Org. Chart August, 2016
Fire-EMS Senior Org. Chart December, 2016
Organizational Plan Staff Correspondence December 22, 2016
Job descriptions as provided by the SSMGS, and Platoons 2017, staffing.



Division/Position	Staff
Positions within Operations (fire suppression division)	
Deputy Chief Fire Operations, Training and Logistics	1
Assistant Chief Training and Logistics	1
Mechanical Officer	1
Mechanics	2
Platoon Chief	4
Captain	16
Firefighter	56
Communications	4
Sub total	85

Total Staff	95



Please note that at the time of the review the Training Officer position has not been filled.



Appendix 4: Sault Ste. Marie Fire Services: Operating Guidelines: Emergency Response (Fire Suppression Services) Resources

5.1 Operating guidelines supporting the fire services in the provision of emergency response (fire suppression services)

OG # and Name	Date of Issue	Revised	Revised after MOL order
600-01 Single Family Dwellings	May 1996	March 30, 2016	January 27, 2017
600-02 Response to Row Housing Units	January 1994	March 30, 2016	January 27, 2017
600-03 Response to High-Rise Buildings	June 6, 2016		January 27, 2016
600-06 Support Operations for Airport Crash Truck	June 2000	April 29, 2016	
600-12 Response to Aircraft Incidents at the Sault Ste. Marie Airport after Normal Operating Hours	June 25, 2007	April 29, 2016	
600-13 Fire Vehicle Deployment Strategy	August 24, 2016		
100-01 Turnout Gear and Accessories	March 22, 1994	February 16, 2016	January 27, 2017
200-03 Entry Control S	December 2001	March 4, 2003	December 9, 2016
200-05 Rapid Intervention Team (RIT)	June 19, 2003	March 2016	January 27, 2017
800-01 Emergency Scene Management	January 2004	August 2008	December 9, 2016
800-02 Incident Command Functions	August 1, 1995	August 2008	January 27, 2017



5.2 Summary of recently implemented operating guidelines for emergency response (fire suppression services)

The following charts are developed by the OFMEM based on information provided by SSMFS

Type of Occupancy	1 st Response Apparatus	1 st Response Staff	2 nd Response Apparatus	2 nd Response Staff
Single family dwellings in fire related incidents OG: 0600-01	District Pumper	3 (min. staffing) Captain and 2 FF	As directed by the PC with remaining response apparatus	Minimum 4 FF pump crew called back
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional FF as determined by PC
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional dispatcher as determined by PC
	Command Unit	Platoon Chief		Additional PC as determined by initial on duty PC
	Initial Response 3 pumps 1 command unit	10 staff		When possible the Platoon Chief shall notify appropriate Senior Fire Management
	Remaining pump crew responding (slow response as directed by platoon chief (PC))	3 (min. staffing) Captain and 2 FF		
Total available	4 pumps or 3 pumps and 1 tanker as determined by PC	12 Firefighters 1 Incident Commander		
<p>On scene operations and staff:</p> <p>If offensive/interior attack is initiated by the Incident Commander entry shall not occur until second arriving pumper company and Platoon Chief has arrived.</p> <p>Entry Control and RIT must be established and initiated.</p> <p>A minimum of 7 personnel to be on scene prior to entry.</p>				



Type of Occupancy	1 st Response Apparatus	1 st Response Staff	2 nd Response Apparatus	2 nd Response Staff
Multi-family row housing complex 0600-02 Response to Row Housing	District Pumper	3 (min. staffing) Captain and 2 FF	As directed by the PC with remaining response apparatus	Minimum 4 FF pump crew called back
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional FF as determined by PC
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional dispatcher as determined by PC
Difference: No slow response for this unit.	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		
	Command Unit	Platoon Chief		Additional PC as determined by initial on duty PC
	Initial Response 3 pumps 1 command unit	10 staff		When possible the Platoon Chief shall notify appropriate Senior Fire Management
Total available	4 pumps or 3 pumps and 1 tanker as determined by PC	12 Firefighters 1 Incident Commander		
<p>On scene operations and staff: If offensive/interior attack is initiated by the Incident Commander entry shall not occur until second arriving pumper company and Platoon Chief has arrived. Entry Control and RIT must be established and initiated A minimum of 7 personnel to be on scene prior to entry</p>				



Type of Occupancy	1 st Response Apparatus	1 st Response Staff	2 nd Response Apparatus	2 nd Response Staff
Incidents involving multi-level/high occupancy and high-rise buildings. 0600-03 Response to High Rise Building	District Pumper	3 (min. staffing) Captain and 2 FF	As directed by the PC with remaining response apparatus	Minimum 4 FF pump crew called back
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional FFers as determined by PC
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		Additional dispatcher as determined by PC
	Back up pumper from alternate station determined through response protocols	3 (min. staffing) Captain and 2 FF		
	Aerial Apparatus Staffing permitted and as determined by PC			
	Command Unit	Platoon Chief		Additional PC as determined by initial on duty PC
	Initial Response 3 pumps 1 command unit	10 staff		When possible the Platoon Chief shall notify appropriate Senior Fire Management
Total available	4 pumps and 1 aerial as determined by PC and staffing permits or 3 pumps and 1 aerial (using staff complement from a pump crew) depending on staff complement and decision by the PC	12 Firefighters 1 Incident Commander		
On scene operations and staff: to enter "investigation mode" for high-rise buildings, two pumper companies and the Platoon Chief must be on scene. This will provide a minimum of 7 personnel on scene. (1) Incident Commander, (1) Vehicle Operator and (5) Firefighters.				
Fire conditions encountered (smoke/heat/flame) they will withdraw At this point a Rapid Intervention Team (RIT) will be established. Entry control will be set up on the staging floor				
If flames or heavy smoke is showing upon arrival a <u>Second Alarm</u> will be called without delay.				



5.3 OG 600-13 Fire Vehicle Deployment Strategy

The following is included in the OG:

"It is the responsibility of all Fire Services personnel, under the direction of the Platoon Chief to follow this guideline when responding to fire related emergencies. Platoon Chiefs shall ensure that the deployment of apparatus and the assignment of personnel are consistent with the intent of this guideline".

Vehicle/Apparatus	17 Personnel On Duty	16 Personnel On Duty	15 Personnel On duty	14 Personnel On Duty
PC1 Platoon Chief	1	1	1	1
Pump #1	4	4	4	3
Rescue Pump #2	3	3	3	3
Rescue Pump #3	3	3	3	3
Aerial #4	4	4	3	3
Rescue #1	1	1		
Aerial #1				
Tanker #1				
Dispatch	1	1	1	1