

Fire Service Commentary

For

Small Facility Level 1 RSMP

Review and Comment

Review for Propane Facilities with a Total Capacity of
5,000 USWG or Less
(Small Facilities)

**This Fire Service Commentary has been
created in partnership with the following
stakeholders;**

Ontario Association of Fire Chiefs

Ontario Municipal Fire Prevention Officers
Association

Fire Fighters Association of Ontario

City of Toronto

Office of the Fire Marshal

Emergency Management Ontario

Background

In December 2010, the Government of Ontario approved changes to Regulation 211/01 pertaining to Risk and Safety Management Plans (RSMPs) and its application to certain propane transfer facilities.

As of January 1, 2011, small facilities with a total propane storage capacity of 5,000 U.S. water gallons (USWG) or less, and facilities with fixed propane storage of exactly 5,000 USWG and no more than 500 USWG in additional portable propane storage, will complete a Level 1 RSMP. A Level 1 RSMP must be completed by all small propane facilities using the Level 1 RSMP form.

The Level 1 RSMP has two primary components. The RSMP collects key information about the facility, including location, type of operation, activity and facility contact details, as well as an updated site plan and map of the surrounding area. This information is collected in Sections A and C, and are the responsibility of the operator to complete.

The RSMP also sets out an emergency response and preparedness plan in Section B. Although it is the responsibility of the operator to complete, operators and their local fire services are encouraged to work together to complete Section B. Fire services must be provided with the opportunity to review and comment on the Emergency Response and Preparedness Plan (Section B) of a Level 1 RSMP.

Propane facility operators, or licence applicants, are strongly encouraged to identify the appropriate fire service and start the consultation process as soon as possible. Fire services are encouraged to communicate the expected time it will take to provide a review and comment. It is estimated that the fire service may require approximately 60 days to provide a review and comment; however both parties are encouraged to complete the review at their earliest convenience.

All facilities must submit a RSMP to the TSSA within 120 days of their licence renewal date. Licensing details can be found in the Technical Standards and Safety Authority (TSSA) Advisory FS 183–10 and a Level 1 RSMP form can be found at the following web link: <http://www.tssa.org/viewNews.asp?ID=607>.

Questions regarding licence renewal requirements or how to complete the RSMP form should be directed to the TSSA's Fuels Safety Division at (416) 734-3587, 1 (855) 734-3587 Email: propanelicensing@tssa.org.

Fire Service Commentary

The Fire Service Commentary is provided as a resource to guide the fire service in the review and comment process for a Level 1 RSMP. This commentary will provide details about how the Level 1 RSMP will be completed and identifies information that the fire service can expect to see in each section. Each section references the page number found in the Level 1 RSMP.

The fire service should **avoid the use of the word “approve”** when providing comments for a Level 1 RSMP. The regulation requires the operator to submit the plan to the fire service for review and comment.

Fire services may provide comments on the Level 1 RSMP form or they may choose to provide comments electronically by completing the optional Fire Service Information Form. Comments are to be provided to the operator as part of the fire services review and comment, and operators are to include a response to the comments as part of completing the RSMP.

The fire service is encouraged to create a system to track the receipt of all RSMPs. The tracking system can be used to track the dates when RSMPs are received, any interim steps taken, and when they are returned to the propane operator. Fire services may also choose to use the Fire Service Information Form to track communication with the operators.

Once the fire service has been provided with the opportunity to review and comment, the operator will then submit the RSMP to the TSSA for approval. The TSSA will verify that the RSMP meets the requirements of the template. The person who operates the facility will provide a copy of the TSSA-approved Level 1 RSMP to the fire service that provided the review and comment.

Section A – General Information - Pages 1 - 3

Fire service review and comment is not required for Section A in a Level 1 RSMP.

Section A is completed by the propane operator. Pages 1, 2 and 3 are completed prior to fire service review. Fire services are not expected to verify the information provided in this section. Fire services are encouraged to familiarize themselves with this information. Note: This section of the RSMP contains confidential trade information that may be protected by legislation and should be treated accordingly.

Page 1

The propane operator completes this section and provides address and operator details. The propane operator identifies the person responsible for the site, the type of business operations that occur at that site, and the hours of business operation.

The fire service should review that the address shown as the facility location matches the municipal 911 emergency information.

Page 2

The propane operator provides key details regarding the types of propane storage at the facility. Questions regarding total capacity should be directed to the TSSA.

The propane operator provides specific propane throughput details. This is sensitive competitive information and is protected by legislation. The fire service should note the throughput and understand when increased risk is posed to the community. Increased risk occurs when propane transfers occur at the propane facility.

Page 3

The propane operator provides specific information regarding their suppliers. This is sensitive competitive information and is protected by legislation.

Empty, purged or full propane cylinders may be stored at an off-site location where there are no propane filling or transfer operations. These types of off-site storage locations are not subject to licensing. The TSSA is the propane regulator and enforces propane regulations that govern these locations.

Off-site locations are being identified for provincial information collection purposes and this is also useful information for local fire services to receive. This information is not part of the fire service review and comment process. Separately from the RSMP process, the fire service is encouraged to note the location and storage quantities, and develop a risk management approach to plan for any fire department operations that may be required for this identified location. The fire service may also choose to share this information with other municipal departments to ensure the site is compliant with other municipal by-laws.

While not part of the fire services' review and comment, if the fire service has concerns about the information provided in Section A, the fire service may make note in the comments.

Section B – Emergency Response and Preparedness Plan

The fire service must be provided the opportunity to review and comment on Section B. The Emergency Response and Preparedness Section starts on page 4 of the Level 1 RSMP form. The fire service should support the license operator by providing fire safety, fire protection and emergency preparedness information where possible. The propane operator is responsible to complete the Level 1 RSMP. This commentary will guide the fire service through the review of and comment on the Level 1 RSMP form.

Section B – Page 4 Fire Safety

Page 4 is completed by the propane operator. The following information is intended to assist the fire service in its review of this section. If the fire service believes information is missing, the fire service should work with the operator to address this concern or make note in the RSMP comments section.

1. Ontario health and safety regulations indicate that an employer shall ensure that a hazardous material is not used, handled or stored at a workplace unless the prescribed requirements concerning identification, material safety data sheets, worker instruction and training are met. Workplace Hazardous Materials Information System (WHMIS) documentation is a useful reference point for this part of the RSMP template, and should be available to the fire service. The types of hazardous materials that would be identified on the RSMP template include compressed gases, flammable gases, flammable liquids, or other explosive or corrosive materials that could pose safety concerns to first responders. The site map may show the location where Material Safety Data Sheets Information is kept for all of the hazardous materials found on the propane site; but not every hazardous material may be listed on the Level 1 RSMP. .
2. The second item requires a description of the fire and emergency equipment that will be indicated on the facility site map as shown in Section C, page 12 of the Level 1 RSMP. The fire service should review that all equipment such as fire extinguishers, emergency shut downs and key box location (if applicable) that are shown on the updated site map are described in this section.
3. The third item requires a list of fire protection controls at the facility. These controls include fire detection systems, fire notification systems, fire alarm systems, automatic shut off devices, and fusible links. The function and use portion could be shown in a table for all of these devices and could where possible include pictures. The description should be detailed so that the fire service understands the conditions that activate the controls and how the

controls are reset. Equipment in this table may appear on the site plan that is referenced on page 12 of the Level 1 RSMP. Note that if any fire protection devices are manually operated, they should also be referenced in Section B1 on page 5 in the Roles and Responsibilities section. Each device should relate to the people / position responsible to ensure the device is activated.

4. Ideally, a detailed list of equipment from items 2 and 3 above would be represented in a table format, with the maintenance and testing for each item also included. The maintenance and testing records shall be made available to the fire service and are subject to Ontario Fire Code (OFC) requirements. The following references from Division B of the OFC, may apply but are not limited to the following;
 - Notification, Check, Inspect and test: 1.1.1.1. and 1.1.1.2.
 - Smoking prohibited: 2.4.3.1.
 - Smoking Signs: 2.4.3.2.
 - Fire extinguisher maintenance: 6.2.1.2 & 6.2.7.5.
 - Alarm systems maintenance: 6.3.1.2.
 - Standpipe and Hose Systems maintenance: 6.4.1.2.
 - Sprinkler maintenance: 6.5.1.2.
 - Permanent Records: 6.2.7.5

Fire services should note that all records for required Testing and Maintenance are to be available upon request.

The fire service may choose to conduct inspections at the facility referenced in this document. Further inspections may be necessary if this section is not completed to the satisfaction of the fire service. Each fire service should follow their procedures and guidelines for conducting fire safety inspections and Fire Code enforcement activities.

Section B1 – Page 5 Contacts for Emergencies

Headings numbered 1, 2, 5, 6 and 7 are completed by the propane operator prior to fire service review.

This section will be completed in two steps. The first step identifies the key contacts and the roles and responsibilities provided by the propane operator. The second step identifies information the fire service should provide to the propane operator. The fire service completes heading numbers 3, 4, and 8.

Note: The fire service and propane operators should note that the Level 1 RSMP may not provide enough space to provide the necessary information. Attachments to the

Level 1 RSMP are permitted but the following information should be available for review.

1. Roles and Responsibilities – Propane Operator

Heading numbers 1, 2, 5, 6 and 7 require the propane operator to define roles and responsibilities during an emergency.

Note: Any person identified in these sections should:

- Be instructed in the fire emergency procedures as described in this Emergency and Preparedness Response Plan before they are given any responsibility for fire safety.
- Be available on notification of a fire emergency to fulfil their obligation as described in the roles and responsibilities section of this plan.
- Be trained in the use of portable extinguishers.

Information in the roles and responsibilities section should include:

- Identify the person(s) authorized to set emergency procedures in motion and include persons authorized to take charge of the premises
- Provide a description of the actions that should be taken to control a transfer hose leak, propane piping leak, or a fire under the propane tank, and include the steps to limit their consequences
- Identify the person responsible to initiate a system that will account for all staff and visitors; and provide details for a safe meeting place outside the hazard distance
- Include manual device activations for equipment identified on Page 4 of the Level 1 RSMP

Information in the roles and responsibilities section may include:

- Include a list of the duties staff will be expected to perform and where necessary, coordinating this with off-site emergency services
- Include a copy of the propane operators Emergency Response Plan (ERP), if available

During fire service review, any information felt to be missing from the Level 1 RSMP can be provided to the propane operator as a comment.

2. Roles and Responsibilities – Fire Service Capabilities

Heading numbers 3 and 4 require the fire service to define roles and responsibilities during an emergency.

Information in the roles and responsibilities section may include the following examples:

- Coordination of municipal fire services and it's resources during emergency

- Liaison with property owner
- Administrator of fire services and advisor to municipal council
- The “Alternate Contact” roles and responsibility will have the same or similar duties

Municipalities are responsible for the funding and delivery of fire protection services in accordance with Section 2 of the FPPA. It is the expectation of the OFM that all municipalities have conducted a risk assessment to determine their own level of fire protection services. Communicating the level of fire protection services to municipal citizens is a recommended practice by the OFM.

Separately from the RSMP process, the fire service should make the municipal council aware of any gaps in fire protection delivery services as it relates to this facility.

Fire Service capabilities can be communicated by completing by using the optional electronic Fire Service Information Form. Communicating this information to the propane operator will demonstrate what fire service capabilities are available for their specific location. Separately from the RSMP process, the propane operator may choose to assess situations where fire protection services are required, beyond those of the local fire service, and plan for them.

Section B2 – Page 6 Additional Safety Measures

This section is completed by the propane operator. The propane operator identifies any measures in place that exceed the minimum Codes and Standards that fall under the current Ontario Propane Regulations. This section contains any modifications or safety features beyond minimum propane code compliance. This section is provided to the fire service for information purposes only.

Fire services should note any reference to safety devices listed on this page. Typical examples could include the addition of Emergency Stop / Shutdown stations or include other mechanical devices that improve safety for the propane facility. These devices may not be included in current regulations but have been added as mitigation features for the facility.

Section B3 – Page 7 Record of Emergency Training

Ontario's propane regulations require that emergency training be conducted. Operators and their employees must be trained in the facility's emergency management procedures and shall ensure that they are trained at least annually in emergency management procedures. Site-specific training for certificate holders and persons with a Record of Training (ROT) must be provided and the operator must keep a record of the persons who were trained. The propane operator completes this section of the RSMP by providing the dates and names of training providers and trainers. The TSSA is responsible for enforcement of the regulatory training requirements.

For greater awareness, the fire service may inquire about the nature of the training using the following questions.

Emergency Response Training

Did the training address the following topics:

- Response based training program that includes situations such as a transfer hose leak, propane piping leak, or a fire under the propane tank
- Operating procedures for the facility for all filling, storage, and transfers.
- Section B1, Roles and Responsibilities, of the Level 1 RSMP including what actions are taken when a particular emergency situation is identified. Such situations should include possible causes for a propane leak or fire
- Details for the use of portable fire extinguishers

Emergency Management Procedures

Did the training address the following topics:

- Procedures for emergency notification for staff
- The process for initiating the Warning and Actions and Communications in Section B5

Certificate Holder Training

Every person who is licensed to operate a facility under the propane regulation must ensure that certificate holders or persons with a ROT, who perform functions at the facility, are provided with site-specific training and keep a record of the persons who were trained and the dates on which they were trained and the name of the trainer on each date. Questions regarding certificate and ROT programs can be directed to the TSSA.

Any concerns regarding training or emergency management procedures can be noted in the comments section.

Section B4 – Page 8 Emergency Training Plan for Coming Year

The propane operator completes this section and identifies all scheduled training that will be provided for the next year. This schedule should be similar to Section B3 but will include future training completion dates.

Section B5 – Page 9 Emergency Response Communications Plan

Section B5 is to be completed by the propane operator and may require the support of the local fire service.

O. Reg. 211/01, as amended, does not provide details regarding evacuation planning but does state that the TSSA Statutory Director will make available to the public, in print or electronic form, the emergency response procedures set out in the Level 1 RSMP. The operator and the fire service should work together to determine the appropriate approach to evacuation on-site, and whether off-site notice and evacuation is appropriate and/or feasible.

Warnings and Actions

The propane operator should work with the fire service and identify appropriate warnings and actions. The warnings and actions should address the immediate site and may consider the area within the hazard distance identified in the Level 1 RSMP.

Appropriate warning and actions in this section may include:

- A procedure on how the system will be operated
- Reference positions within the Roles and Responsibilities section on page 5 of the Level 1 RSMP
- Reference a safe location outside the area defined on page 13 of the Level 1 RSMP for anyone who is evacuated from the facility
- An evacuation procedure for people on site at the facility
- Details of the how alerts or warnings are to be given within the distance defined on page 13 of the Level 1 RSMP
- Reference maintenance and testing details on page 4 of the Level 1 RSMP for any warning devices or systems
- Reference the Emergency Response Assistance Plan (ERAP), where available.

During fire service review, any item felt to be missing from this section of the Level 1 RSMP can be provided to the propane operator as a comment. Where an external

evacuation plan is warranted and not provided, a note to this effect should be included in the comments. Separately from the RSMP process the fire service may choose to share this information with other municipal department.

Communication with Emergency Response Authorities

The propane operator should work with the fire service and provide the following details:

- Details of how the propane operator will give early warning to emergency response authorities
- Details for fire department entry for situations where facilities are protected by fences or other obstacles.
- Identify how the emergency contact person on page 5 of the Level 1 RSMP interacts with the fire service to provide propane control details that may be required to control an event. Detailed site information and the Level 1 RSMP maps may be required during the event and should be available for review.
- An approximate response time for the emergency contact to arrive at the facilities site

During fire service review, any item felt to be missing from this part of the Level 1 RSMP can be provided to the propane operator as a comment.

Section B6 – Page 10 Building Physical Security and Procedures

The propane operator should complete this section by completing the Yes and No answers. All No answers should be carefully reviewed and the fire service may include comments if they have concerns with the answers.

The fire service may request documentation to support the answers shown on this page but documents are not to be included with the Level 1 RSMP.

The following is intended to provide greater clarification of the questions in section B6;

1. The purpose of this question is to assess if the public has access or can easily tamper with dispensing systems outside normal operating hours. The propane operator should ensure that the lockout / shutdown ensure the main tank valves are closed and cabinets are locked to prevent unwanted access.
2. This question determines if night lighting is available to aid with site security and emergency response during the night.
3. Detailed procedures should be available to ensure maintained access routes and the area will be free of unwanted clutter to ensure fire fighting efforts may occur when required.

4. Previous OFM investigations have determined that the daily inspection of propane dispensing equipment and hoses is an important step in maintaining public safety.
5. Previous OFM investigations have determined that procedures to isolate and purge any overfilled containers are important for maintaining public safety..
6. Previous OFM investigations have determined that maintaining accurate weighing systems is important to prevent overfilling and the weigh scales should be certified.
7. Responder safety is increased if all propane vessels are clearly marked with the vessels capacity status. Storage inventories should be segregated and signage should be visible to responders in areas where propane is stored.
8. Previous OFM investigations have determined that procedures to validate that all propane cylinders have closed valves after vessel filling operations are complete are important for maintaining public safety..
9. Maintenance and test records kept by the licensed operator verify that the inspections requirements in this section are completed and logged for future reference. The fire service may request these documents for further examination.

Section B6 – Page 10
Water Supply

The fire service should support the propane operator with the completion of this section. All details regarding the water supply should be available from the fire service.

This section is to be used for data collection purposes only. There is no expectation that fire services provide a minimum of 375 GPM at a small propane facility in Ontario. This assessment will capture the current fire service capabilities versus the propane facility locations for future analysis. Answering “NO” to this question in this section may be an acceptable answer for small propane facilities in Ontario. Fire services should check the appropriate box on the Level 1 RSMP.

Note: When the fire service determines that water is required for suppression, the fire service should ensure that they can maintain a continuous water supply until the event concludes. The incident commander should set priorities and tactics that match their level of service, training, and authority. Developing a fire pre-plan for this site will ensure fire fighting operations are conducted within any limitations that are identified. Fire pre-plans are not part of the licensing process.

The following is intended to provide greater clarification of the questions in section B6;

1. This question establishes whether or not a pressurized water supply is available for fire suppression at the propane facility (i.e. a municipal water-main system).

2. The water flow question is used for assessment purposes only. This question will determine how many propane facilities are located where fire department capabilities may not be enough to provide operations that require propane tank cooling. Question may receive a “NO” answer. There is no minimum time frame stipulated.
3. Assumes a pressurized water supply is available.
4. Assumes a non-pressurized water supply is required (i.e. a water supply that the fire department can use year round with current apparatus and equipment)

Fire service may use the optional Fire Service Information Form to record comments regarding water supply.

Section B8 - Page 11

Propane Operator and local Fire Service Review

Fire services completes section B8 of the Level 1 RSMP

1. The fire service should check the box that they have reviewed the Emergency Response and Preparedness Plan in the TSSA Level 1 RSMP. Note that some areas in Ontario may not have a fire department. The propane operator may check “No” if the propane facility is in an area without Municipal Organization and has no fire service. OFM Communiqué 2010-08 under section “Fire Service Defined” provides further clarification for the defined term Fire Services.
2. The fire service should complete the Level 1 RSMP and provide comments where appropriate. The fire service may choose to complete the optional Fire Service Information Form and provide comments electronically to the propane operator. The fire service should provide the name and signature of the person who has provided the review and comments for the Level 1 RSMP.
3. Once the fire service has provided comments to the propane operator, the fire service will not be required to review the Level 1 RSMP again. In the completed RSMP that is submitted to the TSSA the operator is required to respond to the fire service comments. The fire service will receive an approved copy of the Level 1 RSMP from the propane operator after the TSSA has approved the RSMP.
4. The fire service should sign in the local fire services section after their review of the Level 1 RSMP, even when there are outstanding comments. The legislation requires the fire service to review and comment. The fire service will not be required to review the Level 1 RSMP until the next license renewal date.

Notes:

- Fire Service comments should reference and be specific to the information within the Emergency and Preparedness Response Plan (Section B) of the Level 1 RSMP.

- When a fire service does not provide feedback to the propane operator, the applicant may attest that they have made several documented attempts to contact the fire service and no comments were received. **The TSSA may proceed with RSMP approvals and assume that there are no fire service comments.**

Section C – Page 12

Facility Site Plan and Map of Surrounding Area

Section C of the TSSA Level 1 RSMP is the responsibility of the propane operator to complete. The fire service should review the maps and familiarize itself with the facility site.

Fire service review and comments are not required for Section C in a Level 1 RSMP.

Facility Site Map

The updated facility site map must include;

- All of the items featured on page 12 of the TSSA Level 1 RSMP
- The previous and continued facility site map requirements of the propane regulation (see O. Reg 211/01 subsection 27.(3)(d) (i-vii))

The Facility Site Map may also include:

- A scale so items can be verified with reasonable accuracy
- Buildings, storage areas and fire department access routes
- Safety features such as bollards and barriers.

Map of Surrounding Area

The area map must include:

- All of the items featured on page 12 of the TSSA Level 1 RSMP
- All of the items as required by subsection 27(3) (d) of O. Reg 211/01

Section C – Page 13 and 14

Facility Site Plan and Map of Surrounding Area

Buildings and Features

The buildings and features chart is to be completed by the propane operator.

The Buildings and Features chart is used to identify the types of occupancies and land use within the circle on the aerial map of the surrounding area. On the chart, the operator will identify the closest type of each building or feature by address and provide the actual distance, in metres, from the propane vessel. The remainder of similar types of buildings and features will be shown by quantities in the space provided on the chart.

Fire services should note the numbers, types and locations of buildings and features shown in this table, and review the aerial map. These buildings are within the distance of a 1 psi overpressure resulting from a vapour cloud explosion involving the contents of the single largest vessel on the site (or multiple vessels piped together). All of the people and buildings that are within this distance are likely to be effected should an event occur.

Separately from the RSMP process, the fire service should ensure that facilities located within the hazard distance have approved fire safety plans when they are required by the *Ontario Fire Code*. This is not part of the fire service review and comment process for the Level 1 template review.

Section C – Page 15

Facility Site Plan and Map of Surrounding Area

Page 15 is completed by the propane operator. This section provides a more detailed account of the maximum number and types of portable storage tanks at the propane facility, as well as tanks that are not currently in operation. It does not provide a full account of total capacity. (Refer to Section A for total capacity and throughput information.)

While not part of the fire services' review and comment, if the fire service has concerns about the information provided in Section C, the fire service may make note in the comments.