



Technical Standards and Safety Authority's Action Plan for Propane Safety Review Recommendations

The Technical Standards and Safety Authority (TSSA) is committed to continuing to work with the government, the public and industry to continue to enhance safety in Ontario with respect to all the sectors it regulates. As such, TSSA is appreciative of the propane safety review and the resulting recommendations. TSSA is pleased that the panel has reaffirmed propane safety in Ontario; however, in the spirit of continuous improvement, the report provides 40 recommendations for further enhancement of Ontario's safety system. The following plan provides the proposed actions and associated time lines for the recommendations that are currently under TSSA's control to implement in white rows. Gray shaded rows are recommendations which will be led by or the responsibility of others. TSSA looks forward to working in partnership with the provincial government, municipal governments, industry and other impacted stakeholders to further improve propane safety in Ontario.

Item	Panel's Recommendations	Status/Action	Timing
1. Risk-based enforcement model	TSSA should continue to build on its existing risk-based enforcement model by introducing a more rigorous, statistical approach for propane safety.	Annual audits will be undertaken until such time as a risk-based inspection frequency model is in place. With the completion of audits of all propane filling facilities in Ontario between September and December 31, 2008 as part of TSSA's re-audit action plan, the next annual audits will commence in September 2009.	Immediate with next cycle of annual audits to commence September 2009
2. Annual inspections	TSSA should inspect facilities annually until it has gathered the required data, and has developed and is applying a comprehensive risk-based approach to regulation	<p>TSSA is currently verifying/gathering enhanced data as part of the re-audit action plan that will result in all propane filling facilities in Ontario having been re-audited by December 31, 2008.</p> <p>This re-audit process would result in the next annual audits of these facilities commencing in September 2009; however, TSSA plans to have in place by that time its risk-based approach to audits.</p>	
3. Licence depends on total capacity of propane at facility	For purposes of licensing a facility, the total capacity should include both fixed and transient storage, with the second element defined as the combined capacity of the maximum number of stored cylinders and tanks, and of tanker trucks and/or rail tank cars that might stay at the facility at any given time for longer than it takes them to complete a transfer.	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
4. Transient storage	A limit should be set on maximum transient storage at a facility.		
5. Designated parking	The facility operator should be required to designate the parking spaces for transient tanker truck storage at a facility.		
6. Risk and safety management plan	Every facility at which transfer of propane takes place should have a risk and safety management plan as a condition of licensing.		



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7. Certification of risk and safety management plans by professional engineers	Certification by a professional engineer should be required for all risk and safety management plans for facilities of more than 30,000 USWG in total capacity.		
8. Verifying risk and safety management plan	When reviewing an operator's risk and safety management plan, TSSA should verify that it includes all relevant requirements.		
9. TSSA upgrade technology	TSSA should continue to invest in the technology needed to improve the quality and value of data on the location of propane facilities and those handling other volatile fuels, with a specific goal of allowing these facilities and related defined hazard distances to be mapped using geographical information system (GIS) technology.	<p>TSSA is in the third and final year of implementation of its new information system.</p> <p>TSSA is also in the third year of its data validity and verification process; verification of incident data has been completed; verification of customer data is currently underway; an accelerated work plan is being developed for technical data verification.</p> <p>TSSA will make data available for GIS enabled municipalities.</p>	<p>May 2009</p> <p>Ongoing</p> <p>Ongoing</p>
10. Locations of facilities	TSSA should make available to municipalities and planning boards the locations of facilities and the defined hazard distance around each, either as maps or, if the community prefers, GIS data.	<p>Release of information is currently in place under TSSA's freedom of information policy.</p> <p>TSSA will make data available for GIS enabled municipalities.</p>	Concurrent with implementation of risk and safety management regulation
11. Emergency response plans publicly available	TSSA should make publicly available sections of the risk and safety management plan dealing with emergency response for facilities of more than 30,000 USWG in total capacity.	Release of information is currently in place under TSSA's freedom of information policy.	Concurrent with implementation of risk and safety management regulation
12. Review cycle of risk and safety management plan	As a condition of licensing, the operator should be required to review the risk and safety management plan on the same cycle as TSSA's inspection cycle. This review should assess whether development within the defined hazard distance has increased the risks relating to the facility and the plan should be upgraded as required.	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
13. Operate update plan if urban growth	When a licence is first issued for a facility, the licence approval should state specifically that if development around the facility changes so as to increase risk, it is the responsibility of the operator to reassess and, if necessary, upgrade special mitigation measures.		



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14. Amend planning rules	The Province should amend planning rules to require municipalities and local appeal bodies to notify facility operators of applications for official plan amendments, plans of subdivision, rezoning and minor variances where the facility's defined hazard distance extends into the area under consideration for change.	By Others	
15. Fire Service approval new or expanded facility	An application to TSSA for a new or expanded facility should not be considered complete until the fire service has received and approved all components of the risk and safety management plan that address fire safety, protection and emergency considerations.	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
16. Contact local fire service for review of premises	Before commissioning a new or expanded facility, the proponent should be required to contact the local fire service for a walk-through with the aim of familiarization.		
17. Receive local planning authority Comments	An application to TSSA for a new facility or an expansion should not be considered complete until the proponent receives and includes the comments of the relevant local planning authority.		
18. Training for officer, directors and partners	Training requirements should be extended to include at least one officer, director or partner of every propane operator and licence holder.		
19. Proof Training	Certificate holders should have to produce proof of their training on demand.		
20. Site-specific training	Certificate holders should receive site-specific training when starting work and after changing employers or facilities and should be re-certified after being away from the job for a significant period of time.		
21. Employees trained in facility's emergency procedures	Every person who works at a facility should be trained in the facility's emergency procedures		
22. Training curriculum	The training curriculum for certificate holders should cover the consequences of incorrect handling, storage or transport of propane, including the impact of major fires and explosions. It should also cover emergency procedures.	TSSA will notify the accredited training providers regarding this enhancement and review the training material for acceptance.	September 2009
23. 3-year review schedule for training	TSSA should set a three-year review schedule for training providers and as part this process the training provider should review the curriculum, update it if necessary and submit it to TSSA.	TSSA will notify the accredited trainers regarding the audit schedule. Systems and procedures are in place to support this recommendation.	Immediate



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24. Practical and theoretical knowledge for trainers	Trainers should be required to have hands-on, practical experience as well as theoretical knowledge of the subject areas they teach.	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
25. Enhance training for fire department personnel	The Office of the Fire Marshall should enhance its training for fire department personnel in the areas of prevention, mitigation and suppression of propane explosions and fires.	By others.	
26. TSSA inspector training	Propane facility inspectors should be trained in all aspects of propane safety, including how to recognize and respond to imminent hazards.	Currently in place and being done.	Ongoing
27. Public safety and awareness program	TSSA, Office of the Fire Marshal, industry and others with an interest in the industry's safety should work together on a public safety and awareness program.	Currently in place and being done.	Ongoing
28. Consult on code adoption process	As part of the code adoption process or if considering changes to other regulatory instruments, TSSA should consult with the Office of the Fire Marshal and Ontario municipalities.	Currently in place with the Office of the Fire Marshal. TSSA will expand to include Ontario municipalities and other potential impacted parties.	Ongoing
29. Findings/information sharing	There should be formal agreements in place so that such authorities as the Province's Office of the Fire Marshal, Office of the Chief Coroner for Ontario, MOL, and TSSA share findings and any recommendations with all parties with an interest in propane safety.	TSSA will fully support and participate in any initiatives in this regard.	
30. TSSA cross-jurisdictional incident database	TSSA and provincial, municipal and other investigative authorities should create a cross-jurisdictional incident database, aggregating information on causes of incidents, lessons learned, and recommended preventative steps.	TSSA will fully support and participate in any initiatives in this regard.	
31. Insurance	Propane operators should be required to carry insurance as a condition of licensing	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
32. Imminent hazard	Where there is an imminent hazard to safety, and the facility operator will not, or cannot act to correct it, TSSA inspectors should have the full and clear authority to ensure that the installation is made safe and to charge back the costs to the operator.	TSSA inspectors currently have authority to make safe, including shut down of site/device and issuance of orders to undertake necessary repairs/remedial work.	Ongoing
33. Record keeping	Operators should be required to keep records to demonstrate on-going maintenance and operational testing of fire safety equipment and systems.	TSSA will support the Ministry in the development of the regulation and will act to expediently implement and enforce the new regulation once passed.	
34. Fire services authority to enter licensed propane facilities	Fire services should have clear authority to enter licensed propane facilities for familiarization purposes and/or verify proper maintenance of fire protection equipment.	By others.	



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35. TSSA review its current code adoption	In light of these recommendations, TSSA should review its current code adoption document, directors' orders and branch standards, with a view to updating these as necessary	Currently in place as part of TSSA's continuous improvement.	Concurrent with implementation of risk and safety management regulation
36. Consider similar approaches recommended for other liquid and gaseous fuels	The Ministry should consider approaches similar to those recommended here for propane for all liquid and gaseous fuels in use in the province to ensure that they also are covered by a best-practices regulatory framework	Currently in place as part of the Ministry's and TSSA's continuous improvement program.	
37. Report back - 18 month	The Ministry should review the progress of adoption and implementation of these recommendations within 18 months and report to the public, including the members of the Propane Safety Review.	TSSA will support the Ministry in providing status reports.	
38. Periodic review of recommendations impact	Once recommendations have been implemented, the Ministry and TSSA should review their impacts on a periodic basis with a view to making any further changes, if necessary, to improve propane safety and should inform the public, including members of the Propane Safety Review	Currently in place as part of the Ministry's and TSSA's continuous improvement program.	
39. TC review of transport trucks	The Minister should ask Transport Canada to examine the potential benefits to public safety of thermal protection requirements for highway tank trucks similar to those for railway tank cars and regulations for safe parking of trucks, including such factors as setback and security.	By others.	
40. Canadian Standards Association to review and update the relevant sections of the Propane Installation Code	The Minister should ask the Canadian Standards Association to review and update the relevant sections of the Propane Installation Code (B149.2 and B149.5) with a focus on setback distances, categories of installations, emergency response plans, maintenance, special fire protection and to ensure the Code aligns with international best practices	By others. TSSA will fully support and participate in any initiatives in this regard.	