

PROPOSED AMENDMENTS TO BYLAW 15309 - FIRE RESCUE SERVICES BYLAW (FIREWORKS)

Barrier Reduction Strategies and Regulatory Requirements

RECOMMENDATION

That Administration return to Committee with amendments to Bylaw 15309 - Fire Rescue Services Bylaw, as outlined in the May 30, 2022, Office of the City Manager report OCM01281.

Purpose

Council decision required.

Council is being informed on barrier reduction measures for fireworks permits. Council is being asked to approve the intended bylaw amendments related to fireworks.

Executive Summary

- Changes to the Alberta Fire Code introduced the need to regulate the use of fireworks within municipal jurisdictions.
- Since 2019, Edmonton has been issuing two types of Fireworks Permits for untrained private use (Tier I) and certified professional use (Tier II).
- Fire and life safety risks associated with fireworks use/display are most effectively mitigated through professional involvement, specifically those holding Firework Operator Certificates issued by the Department of Natural Resources.
- Administration is proposing amendments to fireworks permitting, which would align Edmonton with major municipalities across Canada and reduce liability and risk to the City.
- Barrier-reduction measures are proposed, or have been put in place, for professionally delivered fireworks displays.

REPORT

Background

Prior to 2019, the sale and discharge of fireworks was governed in part by the Alberta Fire Code 2014 (AFC) and firework use was generally prohibited in Alberta unless specific requirements were met by the vendor and the purchaser/user. In 2019, the updated National Fire Code, Alberta

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Edition (NFC(AE)) removed requirements for storage and use of fireworks, leaving sale and discharge requirements to municipalities to regulate and administer.

Fireworks are classified as explosives by the Government of Canada, as per the *Explosives Act* and its regulations. This includes three categories/types of firework devices including Consumer Fireworks, Special Effect Pyrotechnics and Display Fireworks. The three types of fireworks vary by the type and size of devices, and the certifications and licenses required to purchase, store, sell and use them. Regulations about the sale, storage and use of fireworks are governed by federal legislation, however additional regulations specifically with respect to the use of fireworks can be created by local authorities. This report serves to outline the regulatory and process improvements to ensure the use of Fireworks within Edmonton is safe and inclusive.

Current Firework Regulations in Edmonton

Firework use in Edmonton is currently regulated by:

- The Public Places Bylaw 14614, section 9.1, which states that the discharge of fireworks requires a permit; and
- Fire Rescue Services Bylaw 15309, Schedule B - Permits, which contains the schedule of fees for fireworks permits and safety inspections.

In response to the changes to the NFC(AE), Administration facilitated a stakeholder workshop to gather input around firework regulation.

In November 2019, City Council approved an amendment to Bylaw 14614 - Public Places Bylaw, allowing Administration to implement a permitting process for two types of fireworks permits:

- **Tier I Fireworks Permit**
 - No operator certification required
 - No permit fee
 - Permit limits only Consumer Fireworks devices
 - Permits for private land only
 - Not included in Fire Rescue Services Bylaw 15309, Schedule B - Permits
- **Tier II Fireworks Permits**
 - Applicant must be certified by the Explosives Regulatory Division, Department of Natural Resources
 - Permit allows for Consumer and Display, and Fireworks
 - Intended for community leagues, faith, or festival-type shows
 - Permit fee required
 - Mandatory notification of show to nearby institutions
 - Permits required for displays on private and/or public land
 - Listed in Fire Rescue Services Bylaw 15309, Schedule B - Permits

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Public Safety Considerations

Compliance

Compliance with the current permitting process varies. Enforcement of Tier I permits, although regulated in the Public Spaces Bylaw, is difficult to enforce due to the transient nature of non-professional fireworks displays.

Compliance with Tier II permits is relatively high because Administration works closely with groups like the Edmonton Federation of Community Leagues to support these shows by guiding them through the permit process. Professionals are required to apply for a Tier II permit on behalf of the event organizer, and are accountable to the certification they receive from federal authorities, such as Firework Operator Certificates. A pre-approval process is available to all potential applicants, including Edmonton's community leagues, identifying shooting site, fallout zone and appropriate product size to facilitate a smooth approval process. An online checklist has been developed and published on edmonton.ca to increase the accessibility of the fireworks permitting process.

In 2021, 83 per cent of Tier I applications were denied for failing to meet application requirements, such as required safety zones. Over the same period, only 27 per cent of Tier II applications were unsuccessful, of which only 15 per cent were denied for failing to meet safety zone requirements.

Safety

Fireworks pose a direct risk to the safety of both those discharging them and those nearby who may be impacted. The following safety factors were considered in developing regulations for fireworks discharge in Edmonton:

- physical injuries
- anxiety or fear for people with sensitivity issues, such as autism and post traumatic stress disorder (PTSD)
- distress to pets and local wildlife (Attachment 1 - Ecological Impact of Fireworks)
- unintended fires (Attachment 2 - Ignition Potential of Consumer Fireworks)

Between 2010 and 2021, Alberta Health Services (AHS) recorded 44 fireworks-related emergency room visits, including eight visits in 2021. This number does not include non-reported injuries. Since 2018, Edmonton Fire Rescue Services (EFRS) recorded 15 fires directly attributed to fireworks. This number does not include post-fire scene investigations where fireworks were suspected, but could not be unequivocally proven in a court of law as the cause of the fire.

To increase the accessibility of permits, EFRS created fire mitigation alternatives for permits issued to certified operators. In cases when the safety zone contains combustibles and/or any

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uninhabited buildings or public areas, Administration works with the applicant to review mitigation strategies that would allow the show to occur while maintaining fire safety.

Jurisdictional Scan

The safe use of fireworks requires significant planning, attention and diligence for each and every event — this complexity has led many large municipalities to limit fireworks displays to certified professionals, with some exceptions for specific days of celebrations like Diwali and Canada Day. Other municipalities have specific regulations such as strict size limits for non-professional fireworks displays to reduce the risk of fires and injuries.

As outlined in Attachment 3 - Jurisdictional Scan and Statistics, most Alberta municipalities have banned the non-professional display of fireworks allowing only permitted, professionally-run public shows. Of all the Canadian municipalities that were surveyed, Edmonton's regulations are the most accommodating to the non-professional use and access to fireworks. Of the eight largest municipalities in Alberta, only Edmonton allows non-professional display of fireworks through the Tier I permitting process. Non-professional firework displays are banned in Calgary, Red Deer, St. Albert, Strathcona County, Spruce Grove and Beaumont.

Public Safety Actions

To preserve public safety and mitigate the risks associated with non-professional use of fireworks Administration recommends that permits for the display of fireworks be limited to those holding valid Fireworks Operator Certificates and licenses as per the Federal Explosive Regulations, for the following reasons:

- Most private lots in Edmonton are not large enough to meet the safe discharge requirements for fireworks, and would not be eligible to obtain permits under the current Tier I process
- The limited capacity and ability to enforce the conditions of Tier I permits creates additional liability for the City
- Fireworks are directly linked to fire and injury risk which can be mitigated through professional, certified discharge

Administration will continue to support safe and vibrant communities through the continued use of fireworks to be enjoyed as part of large celebrations and events that meet the requirements of the Tier II permit.

Next Steps

If the recommendations are approved, Administration will commence stakeholder consultation to implement a phase-out of Tier I permits, facilitating a transition for current vendors and potential applicants.

Administration will prepare amendments to the following Bylaw for Council Approval:

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Fire Rescue Services Bylaw 15309:

- Clarify only a single Fireworks Display permit for all discharge of fireworks by having a bylaw amendment specifically setting out minimum requirements for permit holders which would include holding a Fireworks Operator Certificate
- Under Schedule B-Permits, reduce Fireworks Display permit fees from \$147 to \$100

Communications to support the removal of Tier I permits will be completed following Council approval of the Bylaw amendments. Additionally, Administration will continue to improve operational communications regarding fireworks by releasing Public Service Announcements ahead of key celebrations and festivals where fireworks are usually discharged.

Budget/Financial Implications

Administration forecasts a decrease in permit revenue of less than \$1,500 annually if permit fees are reduced. The removal of Tier I permits would result in an efficiency of reallocating 0.5 of a Full Time Equivalent position to other priority public safety initiatives such as the Fire Rescue Services Community Property Safety Team, and the Vulnerable Persons Fire Safety initiative addressing encampments and fire issues in marginalized populations.

Legal Implications

Eliminating Tier I Permits would likely decrease the potential for liability to the City of Edmonton. Bylaw Officers and Edmonton Police Service would enforce illegal firework use. Lack of enforcement of Tier I Permits does not prevent fireworks from being discharged on residential properties with insufficient safe zones. Under Tier I permits, the person discharging does not require any safety training or certification. Both of these factors present added risks for damage and injury, and in turn place the potential for increased liability on the City of Edmonton as the regulatory authority granting permission for this activity.

COMMUNITY INSIGHT

Community insights were gathered via multiple channels, including:

- An Insight survey
- Survey of Edmonton community leagues
- Phone conversations with the Edmonton Federation of Community Leagues
- Email consultation with local stakeholders
- Workshops with all local firework show providers
- Jurisdictional survey of Fire Marshals in Alberta and jurisdictional review of major Canadian cities.

The Insight survey in 2019 indicated that although 43 per cent of survey respondents did not have concerns with fireworks, 55 per cent did, or did have concerns depending on the situation. While

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there was very little concern with professional displays, respondents voiced concerns regarding non-professional fireworks used without a permit. 50 per cent of the respondents indicated that fireworks should not be allowed on residential property and 40 per cent thought they should. The full list of community input gathering is included as Attachment 4 - Community Insights.

Fireworks vendors have been informed of the proposed recommendations to introduce a single fireworks permit which requires Fireworks Operator Certificates.

GBA+

Fireworks hold cultural value for some Edmonton residents. Introducing regulation creates additional steps for those specific cultural groups, however the fee reduction for Fireworks Display permits is intended to make community and cultural events more accessible.

Administration approached cultural associations and religious organizations to determine the best way to provide information about firework regulations; as a result public service announcements and social media messaging will be broadcast ahead of key festivals and events. Administration is evaluating the ability to translate public tip sheets to inform Edmontonians about firework requirements.

People who have sensory issues such as autism or post-traumatic stress disorder, as well as reactive animals, can be triggered by hearing loud explosions caused by fireworks, especially if they are not prepared for them. Professional shows are typically advertised in advance by the show organizers and can be communicated by Administration through an approved-permit registry.

The non-professional use of fireworks can be exclusionary toward those without land ownership or private property large enough to allow for safe use. The elimination of non-professional permits could encourage community residents to work together to host professional shows in areas that would be inclusive and accessible to all residents. This will also provide a mechanism for community members to have a voice at the community league level to support fireworks, or to direct community resources to other forms of entertainment.

ATTACHMENTS

1. Ecological Impact of Fireworks
2. Ignition Potential of Consumer Fireworks
3. Jurisdiction Scan, Permit Applications Statistics and Emergency Room Statistics
4. Community Insights
5. Glossary of Terms