

MEMO

To: Dan Horan, CAO

From: Matt Furlot, Fire Chief

Date: August 19, 2024

Subject: Risk Analysis of the Community Bonfire Event

Introduction: The purpose of this memo is to provide a comprehensive risk analysis of the Community Bonfire event that has historically taken place in the Township of Esquimalt. In recent years, this event has been substituted with the Halloween Spooktacular hosted by the Esquimalt Fire Department in collaboration with Parks & Recreation. The analysis will focus on the health, environmental, and liability risks associated with the Community Bonfire, as well as public perception.

Health Risk:

1. Chemical Exposure:

- The bonfires were often fueled by wood pallets and various debris contributed by the community.
- Prior to 2005, many wood pallets were treated with Methyl Bromide, a neurotoxic chemical that poses significant health risks, including convulsions, coma, and long-term neuromuscular and cognitive deficits. When burned, Methyl Bromide releases toxic gases and vapors such as hydrogen bromide.
- Pallets treated with other chemicals (insecticides, fire retardants, fungicides) or contaminated with substances like black mold, black rubber, and chemical residues further increase the health hazards when burned.

2. Toxic Vapors:

- Painted pallets and those constructed using laminated materials release carcinogenic vapors when burned.
 - The varied nature of debris brought by the community complicates the assessment of health risks, as it is nearly impossible to fully understand the chemical composition of these materials.
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Environmental Risk:

1. Air Pollution:

- Burning treated pallets and debris releases toxic air pollutants, contributing to environmental degradation and health hazards in the community.



2. **Water Contamination:**

- Extinguishing the bonfire could lead to runoff containing toxic chemicals, potentially contaminating local creeks and ocean waterways.

3. **Hazardous Waste:**

- The charred debris left after the bonfire is classified as hazardous material and would require specialized cleanup to prevent environmental damage.
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WorkSafeBC Compliance:

- Due to the toxic nature of the fire, firefighters would need to wear full Self-Contained Breathing Apparatus (SCBA) and full turnout gear to safely manage the bonfire. This would necessitate a rigorous decontamination process afterward, including cleaning of the SCBA and gear to remove hazardous residues.
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Liability:

- While the Community Bonfire event may have been approved under Bylaw 2783 (Fire Protection and Control Bylaw), which allows the Fire Chief to issue permits for special events, the inherent risks associated with the bonfire increase the Township's liability.
 - Potential risks include injury to the public, property damage, or issues related to WorkSafeBC compliance, all of which could result in legal and financial consequences for the Township.
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Public Perception:

- Supporting the Community Bonfire event poses a challenge, as it conflicts with the core mission of the fire service: the preservation of life, property, and the environment through safe practices.
 - The Halloween Spooktacular, by contrast, offers a safe, controlled, and festive community event that promotes positive public engagement and aligns with the values of the fire department.
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Recommendation:

Given the significant health, environmental, and liability risks associated with the Community Bonfire event, I strongly recommend that the Township of Esquimalt does not restore this event in its traditional format. Instead, I suggest continuing to pursue alternative events such as the Halloween Spooktacular, which supports community safety and well-being.



Conclusion:

The risks posed by the Community Bonfire event are substantial and difficult to mitigate effectively. By continuing with the Halloween Spooktacular and other similar events, the Township can ensure that community gatherings are both safe and enjoyable for all participants.

A handwritten signature in black ink, appearing to read "M. [unclear]".

Fire Chief
Esquimalt Fire Department