

Report to Council

Report Number: ENV-04-2023 Subject: Call for tender for (CFC/FREON) & mattress removal Prepared by: Daniel R. Desforges, Environmental Infrastructure Manager Revised by: Marc Legault, Public Works Director Revised by: Josée Brizard, CAO-Clerk Revised by: Nadia Lockhart-Knebel, Treasurer Date of the meeting: Octobre 30th, 2023

Context

Attention to environmental preservation and sustainable practices has grown considerably worldwide. Recycling, a central element of these efforts, has become essential to managing waste and preserving our planet for future generations. This report explores the importance offering the CFC/Freon gas removal on appliance and mattress recycling at our landfill site, highlighting the benefits to the environment, but more importantly saving space and extending the life of our landfills.

Report

MATTRESSES

In recent years, we have improved our waste management by further separating certain products to extend the life of our landfills. By adding hazardous waste depot, tire and electronics recycling, and metal collection, we've been able to save space and do our bit for the environment. To continue in this path, we should envisage to divert more product, and mattress is an option that we need to consider.

Mattresses, when not recycled, contribute significantly to landfill waste. By recycling them, we reduce the burden on landfills, allowing for more efficient use of the limited space available. Mattresses often contain harmful chemicals, when left in landfills, these chemicals can leach into the soil and groundwater, posing serious environmental hazards. Recycling mattresses ensures proper disposal of these chemicals, safeguarding our natural resources. Last year, we have estimated that we have received over 150 mattresses in both landfill for a total of 300.

CFC/FREON GAS

Freon is a refrigerant gas widely used between the 1930s and 1990s. It is part of the family of hydro chlorofluorocarbons - HCFC for short - and chlorofluorocarbons - or CFCs. Freon is not toxic by minor leakage or inhalation. However, when the dispersion is abundant, it takes the place of breathable air and causes asphyxiation and contributes to global warming. Therefore, any device containing this gas must be emptied before being disposed of. We have kept statistics for the last few years at our locations. The number of units received is approximately 157 per year, without any advertising.

Financial Considerations

Research has also been conducted at various locations that offer these services, and the cost per mattress or appliance varies depending on the size and amount of gas. The average cost to recycle a mattress is approximately \$34.00 to \$44.00 per mattress each and \$25.00 to \$35.00 per appliance. Given the high cost of recycling these products, we need to find an option that users will be willing to pay for, and that won't be a major cost to the municipality. We also need to consider that shortening the life of a landfill will cost more later, and that we need to take steps now to minimize future costs. Options could be to have the user pay the full cost, or to establish a price scale based on size for all types of mattresses and appliances, with the municipality paying the difference.

These costs could be covered by the garbage fee in the reserve for future services. Removal of Freon gas and recycling mattresses at our landfills sites is not only the responsible choice; it's an

essential step toward a sustainable future and, most importantly, toward extending the life of our landfills.

Recommendation

The Environment Department recommends that Council accept this report and seek proposals from companies to provide those services. We also recommend waiting for the results of the proposal before deciding which rate option to charge users.

Attachments

None