



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: June 25, 2014

From: Tom Stewart, ASCT.
Director, Public Works

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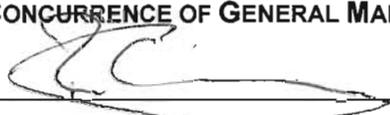
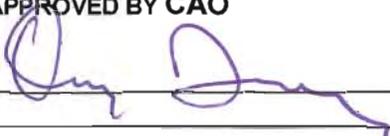
Re: **Cigarette Butt Recycling Program**

Staff Recommendation

1. That the report titled "Cigarette Butt Recycling Program", from the Director, Public Works, dated June 25, 2014, be received for information.
2. That staff work with Vancouver Coastal Health Authority on strategies to reduce cigarette butt litter at the locations identified in this report.

Tom Stewart, ASCT.
Director, Public Works
(604-233-3301)

Att. 2

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 
APPROVED BY CAO	
	

Staff Report

Origin

At their November 20, 2013 meeting, the Public Works and Transportation Committee referred the issue of cigarette butt recycling to staff, as follows:

That Cigarette Butt Recycling Program be referred to staff to examine:

- i) Whether the City has a cigarette butt problem,*
- ii) The details of the City of Vancouver's program, and*
- iii) If there are cigarette butt recycling programs other than that launched by the City of Vancouver.*

This report responds to this referral and recommends engaging with Vancouver Coastal Health on strategies to reduce cigarette butt litter.

Analysis

Cigarette butts are generally considered the single highest item of discarded litter. According to the Great Canadian Shoreline Cleanup website, over 217,000 cigarette butts were removed through their 2012 clean up programs in British Columbia. Food wrappers and containers were the next highest at over 41,000 items.

In Richmond, there are isolated locations where larger quantities of butts may accumulate; however, the problem is not substantive on a large scale. Locations where larger quantities of cigarette butts will accumulate include:

- the Skytrain stations (Brighthouse, Lansdowne, Aberdeen)
- the Richmond Centre bus stop
- the Chatham Street bus stop (south side, between 2nd Avenue and 3rd Avenue)
- northeast corner of No. 1 Road and Bayview Street

These are typical locations where larger groups of people congregate for somewhat longer periods of time. Currently, the City has installed cigarette butt disposal containers at the Skytrain stations (four at Brighthouse, two at Lansdowne and one at Aberdeen). Staff are currently working to identify more durable containers as replacements due to vandalism issues. It is estimated that 25% of smokers will use these designated butt disposal containers.

Staff's current approach to address cigarette butt litter is on a site-specific basis, however, in a measured manner as part of discouraging the practice of smoking overall. In addition, identifying suitable locations for containers can be challenging given the need to balance City bylaw requirements with those locations where people will typically smoke and how far they will reasonably walk to dispose of their cigarette butts. City Public Health Protection Bylaw 6989 regulates where individuals may smoke, which includes restrictions within 6 metres of building openings or public transit, and 25 meters of any outdoor sport facility or playground (Attachment

1). Operational considerations include selecting a style of cigarette butt disposal container that will minimize vandalism (those attempting to gain access to the butts in the containers), and ensuring containers will minimize rainwater entry to make servicing containers easier.

Vancouver Program for Cigarette Butt Recycling

In November 2013, the City of Vancouver launched a pilot cigarette butt recycling program with TerraCycle. Through this program, TerraCycle provided 110 aluminum canisters and contracted Embers (a charity organization, which helps people living on low incomes to become economically self-sufficient) to assemble and install the canisters. TerraCycle owns the containers and is responsible for their maintenance, although there appear to be some challenges with how the maintenance aspect is being addressed due to a number of broken canisters, etc. The container design also permits some rainwater entry, which makes emptying the containers more difficult. Maintenance challenges are further compounded by vandalism from those who are trying to break into the bins to obtain the butts. These types of issues can present cost and resource implications.

In Vancouver, canisters are emptied by United We Can, a not-for-profit Vancouver-based agency which hires individuals from the downtown east side exclusively. United We Can is responsible for servicing the containers, and attempt to use plunger-type equipment to get all ashes out, use a strainer to drain water, and pick out any garbage, which has been placed in the canisters. This requires dedicated resource effort to service, empty and wipe down containers every two weeks (takes 1-2 employees between 5-9 hours to empty all 110 canisters). Butts must then be packaged and shipped to TerraCycle who pay United We Can an amount per pound (traditionally \$1/lb of cigarette butts), plus \$5/lb is donated to their organization by TerraCycle. As with container maintenance, the cost and resource implications of servicing canisters would need to be evaluated.

Collected cigarette butts are shipped to TerraCycle's head office in Toronto. TerraCycle has indicated that they aggregate and then ship the butts to processors in Pennsylvania or New Jersey for recycling. TerraCycle advises that the cigarette butts are mechanically shredded and separated into paper, tobacco and plastics. The tobacco, paper and ash are composted, and plastics are blended and recycled into plastic items such as plastic pallets, plastic decking and plastic lumber. They gamma radiate the plastics to kill contaminants before being recycled. This recycling process is as described by TerraCycle and has not been verified by staff through cross-party checks, etc.

Some challenges with the program include:

- The need to ensure canisters are in locations which comply with smoking bylaw requirements;
- The marginal effects the canisters have had on cigarette butt litter as noted in media reports;
- Vancouver Coastal Health concerns regarding potential negative public health consequences (e.g. increased second hand smoke exposure, etc.). Vancouver Coastal

Health has advised that the City of Vancouver is scaling down deployment of cigarette butt canisters.

- Staff have been unable to identify any other available recycling processes for cigarette butts. While the recycling process used by TerraCycle has not yet been verified, it is suggested practice to ensure broader access to alternative recycling markets before embarking on any recycling initiative to ensure a fallback approach is available in the event the intended market ceases to exist.

In consultations with Vancouver Coastal Health, they have indicated potential concerns that the presence of recycling containers may create de-facto smoking areas which could increase exposure to second-hand smoke, and could make smoking more socially acceptable. They also have concerns that a partnership with TerraCycle could lend unintended positive exposure and support to the tobacco industry overall, given they are the funding partner for TerraCycle's cigarette butt recycling program. While supportive of initiatives to remove cigarette butts from the environment, Vancouver Coastal Health wants to ensure the focus remains at actions designed to discourage smoking. They have provided the attached letter, Attachment 2, which includes their comments and recommendations on this issue.

Summary Comments

Staff do not recommend implementing a cigarette butt recycling program. It is not clear how effective this program has been overall in reducing cigarette butt litter, and there are important considerations relating to Vancouver Coastal Health concerns respecting unintended consequences such a program could potentially cause, i.e. potential back-peddling on the gains made to reduce smoking and exposure to second-hand smoke.

A collaborative approach with Vancouver Coastal Health which helps to formulate strategies to reduce cigarette butt litter, while at the same time ensuring continued focus on efforts designed to reduce smoking rates overall, may result in greater overall benefit and longer term gains.

Financial Impact

None.

If a similar initiative were implemented in Richmond, estimated cost impacts would include the provision of durable/vandalism-resistant containers, program coordination, and for maintenance and servicing (depending on the scale of the program/number of containers installed).

Conclusion

There are some isolated areas in Richmond where larger quantities of cigarette butts will accumulate; however, the problem is not significant on a broader city-wide scale. The current strategy is to evaluate the level of cigarette butt litter and install designated disposal containers, where required, on a selective basis. This approach helps to reduce cigarette butt litter yet maintain balance with environmental health considerations.

While Vancouver has initiated a cigarette butt recycling program, it is not clear the program has been successful in addressing the issue of cigarette butt litter. In addition, Vancouver Coastal Health has concerns that these types of programs could have unintended consequences in creating greater social acceptance of smoking and negatively impact the significant gains made in the region on smoking reduction programs.

Staff suggest working with Vancouver Coastal Health on strategies to address the cigarette butt litter concerns at the locations noted in this report, and in a manner which continues to support reduced smoking rates and second-hand smoke exposure.



Suzanne Bycraft
Manager, Fleet & Environmental Programs
(604-233-3338)

- Att. 1: Bylaw 6989, Part 6.1 – Areas of Smoking Prohibition
- 2: Letter from Vancouver Coastal Health Authority dated June 10, 2014

Bylaw No. 6989

9.

- 5.1.3.2 In the event the order given under the authority of subsection 5.1.3.1 is not complied with, the **Medical Health Officer** is further authorized to enter the property in order to carry out terms of the order to control **rodents** or **mosquitoes**, and in the event the costs are not paid within 30 days after being invoiced, the amount outstanding may be added to and form part of the taxes payable on the property as taxes in arrears."

SUBDIVISION SIX: SMOKING CONTROL AND REGULATION

PART 6.1: AREAS OF SMOKING PROHIBITION

6.1.1 A person must not **smoke**:

- (a) in a **building**, other than:
 - (i) a **dwelling unit**;
 - (ii) a hotel or motel room or suite designated for **smoking** by an **operator**; or
 - (iii) enclosed **premises**:
 - A. that are not open to the public; and
 - B. where the only occupants of the **building** are the owner or owners of the **business** carried on in the **building**;
- (b) in a **vehicle for hire**, other than in Class J (rental vehicles) and Class M (tow trucks);
- (c) in a **vehicle** when any other occupant of the **vehicle** is under the age of nineteen (19) years of age;
- (d) in, or within three (3) metres of, an enclosed or partially enclosed shelter where persons wait to board a **vehicle for hire** or public transit;
- (e) within six (6) metres of a sign post or sign indicating where persons wait to board a **vehicle for hire** or public transit;
- (f) within six (6) metres measured on the ground from a point directly below any point of any opening into any **building** including any door or window that opens or any air intake;
- (g) in a **customer service area**; or
- (h) within six (6) metres of the perimeter of a **customer service area**.

February 27, 2012

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6.1.2 Except as permitted in section 6.1.1, a **responsible person** for any of the following:

- (a) a **business** which occupies a **building** or **premises**;
 - (b) a hospital or health clinic;
 - (c) a **place of public assembly**;
 - (d) a **customer service area**;
 - (e) the **common area** of a **building**;
 - (f) a **building, premises** or facility that is owned or leased by the **City**, other than a rented one-family dwelling or **dwelling unit**; or
 - (g) a **vehicle for hire**, other than Class J (rental vehicles) and Class M (tow trucks)
- must not permit, suffer or allow a person to **smoke** while the person is:
- (h) within any such **building, premises, place, common area, customer service area** or **vehicle for hire**; or
 - (i) within any area described in subsections 6.1.1 (e) and 6.1.1 (g), except to the extent that all or part of such area is not part of the parcel on which the **building** or **customer service area** is situated and is not an area over which the **responsible person** has possession or control; and

in accordance with Part 6.2, must post and maintain a sign indicating that **smoking** is prohibited within that **building, premises, place, common area, customer service area** or **vehicle for hire**.

PART 6.2: SIGN REQUIREMENTS

6.2.1 A person who is required to post and maintain a sign under this Subdivision must ensure that each required sign:

- (a) is **prominently** displayed and maintained at the **location** where the sign is required;
- (b) carries the text "No Smoking", in either capital or lower case letters or a combination of both;
- (c) consists of two contrasting colours, or if the lettering is to be applied directly to a surface or to be mounted on a clear panel, the lettering must contrast with the background colour;

Attachment 2



Office of the Medical Health Officer
Vancouver Coastal Health – Richmond
9th Floor - 8100 Granville Ave.
Richmond, BC V6Y 3T6

June 11, 2014

Ms. Suzanne Bycraft
Manager, Fleet and Environmental Programs
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

Dear Ms. Bycraft,

Re: Cigarette Butt Recycling

Thank you very much for contacting VCH Public Health regarding cigarette waste. We understand that the City is exploring options to reduce cigarette butt litter in public spaces. We also understand that one of the options the City is considering is a project similar to TerraCycle's Cigarette Waste Brigadeⁱ. We offer the following comments as the City's public health agency.

While we do recognize the need to reduce cigarette litter, Vancouver Coastal Health does not support the TerraCycle Cigarette Waste Brigade program or anything similar. Cigarette butt receptacles often become unofficial designated smoking areas and create a higher concentration of secondhand smoke wherever they are placedⁱⁱ. Moreover, TerraCycle's Cigarette Waste Brigade is funded by Imperial Tobacco^{iii iv}, the largest tobacco company in Canada, a company whose product will kill up to 50% of long-term users^v.

With less than 8% of the residents currently smoke (Healthy Richmond Survey 2012), the City of Richmond has one of the lowest smoking rates in BC, an achievement that I am sure the City would like to see sustained. However, installing cigarette waste receptacles throughout the City is an unproven method^{vi} with potential unintended negative public health consequences^{vii}.

In communities where they have been installed, these receptacles are often placed within designated no-smoking zones in front of doors, windows and air intakes. This kind of a placement has the potential to undermine the City of Richmond's Public Health Protection bylaw, skirt efforts to de-normalize public smoking, and contribute to an increased concentration of toxic secondhand smoke in the area when tobacco users congregate around the waste receptacle^{viii}. As the City Staff Report indicates, 75% of the smokers simply choose to ignore the receptacle; therefore installation of receptacles is inadequate in addressing the cigarette butt litter issue.

The Cigarette Waste Brigade, while seeming well intentioned, is a tobacco industry funded initiative. A review of the tobacco industry documents released through court order demonstrated that "the tobacco industry's cigarette butt litter programs had three goals: (1) to 'prevent' cigarette litter from

Attachment 2 (Cont'd)

impacting the social acceptability of smoking ; (2) to 'remove' cigarette litter as an issue leading to bans/restrictions and (3) to ensure that the tobacco industry was not held practically or financially responsible for cigarette litter (the industry argues that 'the responsibility for proper disposal lies with the user of the product).'^{ix} The World Health Organization considers such programs as tobacco industry interference with tobacco control activities^x. Cigarette butts currently being made in Canada are non-biodegradable and are the number one littered item in our country^{xi} and the world^{xii}. Programs such as TerraCycle's Cigarette Waste Brigade gives the false impression to environmentally conscious consumers and members of the public that the solution to cigarette litter is cigarette butt recycling rather decreasing tobacco consumption^{xiii}.

There are solutions for addressing cigarette butt litter that align with positive public health outcomes. A comprehensive solution developed in partnership with Vancouver Coastal Health could include social marketing strategies to shift public attitudes on littering, litter clean up strategies including a deposit return program, fines for littering, strengthen existing city bylaws to further reduce smoking in public places, and implementation of a waste tax to fund these efforts. An example of a successful program is the City of Edmonton's Capital Cleanup Program which could serve as a model^{xiv}. Another example is a cigarette waste tax that has been implemented in municipal jurisdictions such as San Francisco to fund cigarette litter clean-up programs.

In finding a solution to cigarette waste, we encourage the City to be wary of being unwittingly co-opted into being part of the tobacco industry's marketing strategy. The City of Vancouver unfortunately made the decision to engage TerraCycle Cigarette Waste Brigade last year without Vancouver Coastal Health's prior knowledge. Vancouver is currently scaling down the deployment of the TerraCycle receptacles. The City of North Vancouver recently decided not to engage the TerraCycle Cigarette Waste Brigade after being made aware of the link to the tobacco industry. Vancouver Coastal Health would be more than happy to work with the City to develop a comprehensive approach to decreasing cigarette butt litter in Richmond.

Yours truly,



Dr. James Lu MD, MHSc
Medical Health Officer, Richmond
Vancouver Coastal Health

CC Claudia Kurzac, Manager Health Protection Richmond, VCH
Dalton Cross, Senior Environmental Health Officer, VCH

Attachment 2 (Cont'd)



Office of the Medical Health Officer
 Vancouver Coastal Health – Richmond
 9th Floor - 8100 Granville Ave.
 Richmond, BC V6Y 3T6

ⁱ Canadian Press. (2013, December 11). *TerraCycle's Vancouver cigarette recycling project is world's first*. Retrieved from http://www.huffingtonpost.ca/2013/11/12/terracycle-cigarette-waste-brigade-vancouver_n_4262352.html

ⁱⁱ Wilson, N., Edwards, R., & Parry, R. (2011). A persisting secondhand smoke hazard in urban public places: results from fine particulate (PM_{2.5}) air sampling. *Journal of the New Zealand Medical Association*, 124 (1330).

ⁱⁱⁱ Imperial Tobacco Canada. (2013, June 19). Press release: leaving no butts behind. Retrieved from http://www.imperialtobaccocanada.com/groupcpc/sites/IMP_TVSH6J.nsf/vwPagesWebLive/DO992SPB?opendocument&SKN=1

^{iv} Environmental Science and Engineering. 25(3) p. 79. 2012. <http://ese.dgtipub.com/2012/2012-06-30/home.php>

^v World Health Organization. (2013, July). Tobacco fact sheet n°339. Retrieved from <http://www.who.int/mediacentre/factsheets/fs339/en/>

^{vi} Patel, V., Thomson, G. W., & Wilson, N. (2013). Cigarette butt littering in city streets: a new methodology for studying and results. *Tobacco control*, 22(1), 59-62.

^{vii} Hwang, J., & Lee, K. (2013). Determination of outdoor tobacco smoke exposure by distance from a smoking source. *Nicotine & Tobacco Research*, ntt178.

^{viii} Smith, E.A., & Novotni, T.E. "Whose butt is it? Tobacco industry research about smokers and cigarette butt waste." *Tobacco control* 20.Suppl 1 (2011): i2-i9.

^{ix} Smith, E. A., & McDaniel, P. A. (2011). Covering their butts: responses to the cigarette litter problem. *Tobacco control*, 20(2), 100-106. <http://tobaccocontrol.bmj.com/content/20/2/100.full.pdf+html>

^x World Health Organization "Tobacco industry interference with tobacco control." Jan 17, 2014. Retrieved from http://www.who.int/tobacco/resources/publications/tob_ind_int_cover_150/en/

^{xi} Great Canadian Shoreline Cleanup. (2012). Facts and figures. Retrieved from <http://www.shorelinecleanup.ca/en/content/facts-figures>

^{xii} Micevska, T., Warne, M. S. J., Pablo, F., & Patra, R. (2006). Variation in, and causes of, toxicity of cigarette butts to a cladoceran and microtox. *Archives of environmental contamination and toxicology*, 50(2), 205-212.

^{xiii} Forsythe, J. (2010). *Smoke-Free Outdoor Public Spaces: A Community Advocacy Toolkit*. Physicians for a Smoke-Free Canada, Ottawa, Ontario.

^{xiv} City of Edmonton "Environmental." Cigarette Litter Reduction. Jan 17, 2014. Retrieved from http://www.edmonton.ca/environmental/capital_city_cleanup/cigarette-litter-reduction.aspx