To: Dr. Erika Paterson

From: Jenny Zhang

Date: October 9, 2019

Subject: Proposal for the reduction of single-use plastics in a small food stall

**Introduction**

Currently every minute there are one million plastic drinking bottles sold. Just in 2018 alone, 1.1 billion single-use plastic items were thrown out by residents in Metro Vancouver. It comes to no surprise that the use of single-use plastic is a big concern in our environment. As someone who frequently buys lunch, it is hard to be environmentally conscious because many food stalls are still using single-use plastic. For every order, plastic containers, straws, cups and cutlery are used and then dumped to be sent into landfills. This system is not environmentally feasible and we must take initiative to reduce the amount of single-use plastic used.

**Statement of Problem**

Single-use plastic is used once but it can remain on our earth forever, wreaking havoc on ecosystems. We produce over 300 million tons of plastic every year and about 50% of that is for single-use purpose. More than 8 million tons of plastic is dumped into our oceans every year. Studies have shown that by 2050, the ocean will contain more plastic than fish. The use of single-use plastic is a problem that affects everyone. Plastic bags alone make up 3 percent of shoreline litter nad 2 percent of litter in Vancouver streets, parks and public spaces. Plastic fragments can release toxic chemicals into the environment and cause serious health risk for humans and animals. Therefore, the use of single-use plastic is unsustainable, environmentally unfriendly and leads to dangerous health issues in the future. So everyone should do a part and strive to reduce the use of as much single-use plastic as possible.

**Proposed Solution**

The best solution for our environment is to eliminate all plastic waste, not just single-use plastic, but this solution is not viable. As a society largely dependent on plastic, we cannot just cut it out. A better solution to help reduce the use of single-use plastic is to making environmentally friendly single use items that are more cost effective. If using more environmentally friendly single use items are more cost effective, then it would make the owner more accepting to make the change. The first step would be to find the options available that are environmentally friendly single use products. These products would include things we typically see used, cups, straws, takeout boxes, cutlery, napkins and plastic bags. We would need to find the lowest cost of these products from suppliers if they are bought in bulk. Then by replacing the products that have a lower cost than the single-use plastic version, it allows the food stall to reduce at least a portion of their single-use plastic. This solution would benefit both the environment and business because the business would be able to spend less money on a product while also producing less plastic waste.

Solutions other than offering environmentally friendly single-use alternatives is to offer reusable materials. I notice a lot of the customers eat at the food court thus a solution to help reduce the use of single-use plastic is to serve the food in real dishes instead of plastic takeout containers. As the mall has a system where you return the tray and is then the waste is sorted out by workers, food stalls can have a distinct plate or bowl that can be returned back to the food stall. If the majority of the customers are in fact eating there and not bringing the food somewhere else, the use of real dishes will help reduce the amount of single-use plastic significantly.

**Scope**

To assess the feasibility of this project I plan to research the following areas:

1. What single use plastic products are being used in the food stall?
2. Is the owners willing to change suppliers if more cost-friendly alternatives are presented?
3. Are there any modern technologies that can provide truly zero impact single-use food items?
4. Approximately what volumes of single-use plastic do these vendors see yearly?
5. What single-use plastic product is used the most and what single-use plastic are least used?
6. Would consumers be willing to use reusable dishes? Are there any concerns if so?

**Intended Readers**

My intended reader is to the owner of the food stall I frequent at Richmond Public Market. They can act on my recommendations because they have the power to make these decisions and they are the ones that are ultimately purchasing these single-use plastic items.

**Methods**

The study will be conducted by investigating what types of single use plastic are being used at the food stall. To explore the issues and look for solutions, I will conduct a survey from customers about their views on single-use plastic and to understand customer behaviour in response to possible alternatives. I will interview the workers to collect some information while additional data will also be collected via internet sources for estimated cost of substitute solutions.

**My Qualifications**

I have worked for a food stall for a short time while I was in highschool. From my working experience, I experienced first-hand on seeing so many single-use plastics being used in a day. As I handed people there orders that was contained in plastic containers and put into plastic bags. I have been working as a receptionist at a doctors office at Richmond Public Market and so I frequented the food stall very often for lunch. This allowed me to get to know the owners and workers while observing their use of single-use plastic. As a fourth year student, I believe that my academic background provides me with the proper tools to research and present a proposal in a clear and professional manner.

**Conclusion**

Reducing the waste produced from the use of single-use plastic will help contribute to reducing our carbon footprint and C02 emissions, thus ensuring a greener future for generations. We must take action to reduce our use of plastic. To reach this goal, I suggest finding alternative products that will replace single-use plastic that will also be more cost efficient. With your approval, I will research at once.