# Waste Management Analytical Essays

Waste management is a process through which we store, collect, sort, treat and dispose or recycle our waste. There are different types of wastes according to the way we generate them. Even though the goal of waste management is the same, Industrial waste are managed differently from the household. By managing waste, we prevent hazardous releases of toxic and flammable materials and reduce the environmental effects and harm on the human. As a waste management consultant at Ritz-Carlton Company, I advise on the waste management as contained in this report.

The Ritz-Carlton Hotel is a company that was founded in 1983 in America. The company operates a chain of luxury hotels known as “The Ritz-Carlton”. The company is composed of 98 luxury hotels and resorts spread all over 30 countries. Being a huge company, it is necessary to have a proper waste management strategy. Through its efforts of ensuring that the environment remains green, the company works tirelessly to reducing energy use, reprocess dangerous waste such as batteries, paint and fluorescent lights. In recent times, the company has made extra efforts to provide their customer with items, many of which they use in their guest rooms and even around the whole facilities, in recyclable materials.

I want to bring to your attention one of the recent implementations that Ritz-Carlton has made an effort to maintain the objective of reducing the environmental effects in all areas of operation. This move is the launching of bottled water in a biodegradable corn-based bottle. These corn-based bottles are made of fermented plant starch which is polylactic acid (PLA), a substitute of polyethylene terephthalate (PET) plastic. This PET substitute is playing a big role as a practicable biodegradable replacement. However, this corn-based bottle has a lot of disadvantages than its advantages that the Ritz-Carlton endeavors to achieve (Elizabeth, 2007). PLA has turned out to be the first problem The Ritz-Carlton, is facing as a company.

To begin with, PLA is made largely by Minnesota-based NatureWorks, which does not compost at compost pits or bins in backyards but only on a controlled high-temperature commercial compost bin or systems only. The question is how many have access to these facilities that can make that do that. It has been identified that only 113 such facilities are there in the whole country but only a quarter of them or less accept municipality collected residential food scraps. If the PLA is dumped in the compost pit and it does not receive enough moisture and temperature required for it to compost, it will remain like that for decades. Actually, analysts approximate that a PLA bottle can take between 100 to 1,000 years to decompose when in a landfill. This means that it is very difficult to distinguish it from other ordinary plastics PET in the recycling mixture because of the similarity in nature. The disadvantage that this PLA bring is that many confuse it and may think that it can decompose at any compost pit and may go on to dispose of it in their pits expecting it to decompose (Das & Karumbaiah, 2015).

Additionally, the confusion between PLA and PET bottles is also felt by the recyclers of PET plastic. Many industries admit that they do not sort out the biodegradable when recycling, and in case they do so, they separate them from the organic waste and send them to landfills. They confess that they do not sort out biodegradable bottles because it is expensive to do that. The founder of Belu bottles confirmed that the reason why their biodegradable bottles are not collected is that the waste industry is not doing so. The compost companies consider the PLA bottles as contamination and do not accept them for recycling. There are high possibilities of PLA finding their way to the recycling process of conventional plastic. Recycling advocates indicate that PLA water bottles are likely to contaminate the PET plastics that are recyclable. A plastics technical manager at the Waste and Resources Action Programme, Paul Davidson, once said that "You don't need too much PLA to mess PET up, especially if you want to recycle it back into a bottle. It will only take a few percent of PLA to make PET non-viable and that is just another concern for plastic reprocessors to deal with" (Srithep, 2012).

Moreover, PLA also contaminates composts as confessed by composting experts. According to them, the collection of PLA by the large truckload may possibly put to risk the efforts of large-scale composters. This is because huge quantities of PLA can hinder the conventional composting since the polymer degenerates into lactic acid which wets the compost and make it more acidic. Composters say that there is additional oxygen problem that is required by the Microbes in order to continue consuming the lactic acid. However, this is maybe dealt with if new technology is used to invent anaerobic digesters which are in a position to break down organic material including PLA even with inadequate oxygen and capture the resultant methane for fuel. This is still expensive because of the technology involved (Elizabeth, 2007).

Likewise, there are more problems of PLA that Environmentalists see. When companies continue providing the market for these corn-based bottles, then more corn will be processed into packaging materials. The question which many people ask is where the morals are in turning what is mean to be served as food to many people around the world who are hungry for nonfood products. In addition, there are more problems that are experienced when most corn used by NatureWorks to make PLA resin is genetically modified. Environmentalists oppose the use of genetically modified crops because they disrupt local ecosystems as well as contaminate conventional crops. Other critics point towards the effect of industrially grown corn on the environmental. According to their argument, the cultivation of corn requires more nitrogen fertilizer, more insecticides, and more herbicides than any crop in the US which contribute to water pollution and soil erosion (Elizabeth, 2007).

According to the limitations above, it is clear that corn-based bottles are doing more harm than good to the environment contrary to the understanding by Ritz-Carlton. Corn-based bottles are very difficult to compost as viewed by many because it requires a special composting machine. These machines are not common even with recycling companies. PET recycling and composting companies consider PLA a contamination because it destroys the composition in the recycling mix and also produces lactic acid in the composting mix which is hard to deal with. Environmentalist also considers the large-scale production of genetically modified corn required to sustain production of PLA disrupting local ecosystems and contaminate conventional crops. It also lacks morals to use food product to produce nonfood product while many people are hungry in many parts of the world.

The second challenge that The Ritz-Carlton is facing is uncontrolled pollution within their hotel settings. For instance, one of the luxurious hotels by the name “The Ritz Carlton Jumeirah,” which is located in Dubai has been facing this problem over the years. The location of this hotel sits in the middle of an area full of multiple construction works. The resort has been marketed for a relaxing beach holiday which is contrary to customers’ complaints. In as much as Dubai is a vibrant and dynamic city, most customers complain of noise pollution, especially next to their pools, which disrupt both their peace and general view of the ocean. The huge construction machines also block access to ocean breeze especially for the customers who have gone to the place to relax and read. There is also an airport just next to the resort. Most customers complain of excessive noises at the time of landing and departure of airplanes especially in the evenings and early mornings. Generally, a resort should be a place where someone is comfortable and have peace of mind, to be able to relax and even meditate. All this is not possible at this resort due to the above reasons.

Water pollution has also become an issue especially to the private beach of The Ritz Carlton hotel in Dubai. As observed by most customers, during low tides, there are rubber pipes which emerge from the ocean, expelling construction waste waters directly into the ocean. This results into scary foams and muddy sand preventing clear visibility of aquatic life such as jelly fish. The construction waste water, during the low tides makes the beach unpleasant for swimming, since one may not be quite sure of what might be lying underneath the water. Most customers have actually avoided the resort at this time of the year due to these reasons.

There is need to come up with certain solutions to these problems that are experienced through the use of these biodegradable bottles. According to my understanding, I recommend the following in order to help manage the waste effectively.

To begin with, in my view, I suggest putting a stop to the use of corn-based bottles which would be a better contribution to reduce environmental effect than the use the corn-based bottles. Stopping the use of the corn-based bottles means that we go back to the use of the ordinary non-biodegradable bottles which are very easy to collect and resort. One of the very reasons why most of the wastes find their way into the landfills is because of the difficulties experienced in sorting and collection. When the majority of the companies that recycle PET plastic realize that we use corn-based bottles, they will avoid the collection of our waste because they will contaminate their recyclable PET. That will mean that the collection of our waste will be more expensive to collect because very few companies collect corn-based bottles (Elizabeth, 2007).

Another recommendation is that in case we continue using the corn-based bottles, we must find a way of sorting out our waste especially the corn-based bottles away from the organic waste. This will help in improving the collection of our waste because the recycling and compost companies will not fear to collect our waste because of contamination effect. However, sorting of our waste has got a cost implication. It will be an additional cost to sort our waste than just the collection charges. For waste to be sorted, it needs a manual sorting or rather machines that sort the corn-based bottles out of the organic waste that also forms the large chunk of our waste. Being a hotel service provider and not a recycling company, we do not need a sorting machine and manual sorting will be cost effective.

Reference

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