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Trash

Scarfing down that sweet and scrumptious mouthful of goodness, I'm completely lost in a moment of delight. But as my feast gradually comes to an end and the last bite goes down, I'm sent back to reality to find a sticky, slimy wrapper in my possession to deal with. My immediate response is to chuck this piece of trash, but my arm is halted mid-toss. Years of being bombarded with anti-littering campaigns has taught me well. After all it is common sense that littering is bad. I go to put the wrapper in my pocket until I can find a trash can, but am suddenly halted again. Once I place this trash into the garbage can, it is then destined for one of our nation's already overfull and problematic landfills. The heavy concentration of garbage in landfills is leaching toxic gases and chemicals into our air and groundwater...so to keep garbage out of our overburdened landfills, I begin to wonder if maybe littering isn't so bad. Before I jump to any conclusions just yet, how about we take a look at some of the problems with our overflowing amount of garbage and some possible solutions.

So what is so wrong with burying our trash somewhere out in the boonies? It seems to be a harmless act. Smelly, no doubt, but none the less harmless, right? After a little look into the dangers of landfills, however, I found plenty of information and cases demonstrating the dangers associated with concentrated garbage. Being a Utah resident, I decided to make the most of my research and check if there were any landfill-dangers in our immediate surroundings. I found an article regarding a problematic buried landfill that occurred in Spanish Fork, Utah (Wiley, 2001). Some years ago, a landfill had been buried over and was shortly afterwards developed into a

subdivision. It was not long after - around 2001 - that the local health board ordered that all residents must move or relocate their houses by June. The decision was made after the board had received constant complaints of strange odors, complaints which eventually worsened to complaints of nausea, headaches, hair loss, and skin problems...ailments apparently caused by exposure to rotting garbage.

When garbage rots away in a landfill, it releases the dangerous gas methane, known to be 20 times more noxious than it's fellow globe-warmer carbon dioxide (Palmer, slate.com). Inhalation of which was likely to be linked to those poor garbage-dwelling Utahan's ailments...But aside from environmental abuse, this gas does have economical use, capable of being extracted from landfills and burned for energy. However America as a whole utilizes only 7% of it's trash to burn for energy according to a 2008 survey done by BioCycle - a group that conducts national statistical surveys and releases their findings in a yearly journal titled "The State of Garbage in America" (BioCycle Magazine, 2010). The Trans-Jordan landfill in South Jordan, Utah, currently utilizes a methane system and uses it's energy to power 3,000 homes (transjordan.org). Even if a landfill is not utilizing this methane-energy, they are still required by a special law to ventilate and burn off this harmful gas into the less harmful gas carbon dioxide. This milestone law, the 1976 Resource Conservation and Recovery Act, was a turning point that changed the way America stored it's trash. The law required landfills to be lined with clay or a plastic lining to catch toxic garbage sludge and run-off - known as "leachate" - from seeping into the soil and groundwater. This is usually paired with a piping system that could pump the leachate to be properly treated and disposed of. Once this law was enacted, however, the high costs for the new garbage-storage systems caused the shift from thousands of little local dump sites to a small array of much larger mega-landfills. An EPA fact sheet released in 2009 showed a

75% decrease of landfills over the past 25 years from 7,683 dumps in 1986 - to 1,908 landfills by 2009 (Palmer).

A popular idea is to stop sweating this excess garbage problem we earthlings are facing and simply launch the stuff into outer space. We'd have no more issues with finding locations to put our endless stream of waste, and we could go on enjoying our throwa-way of life for as long as our resources could last us. The only problem with this proposal (which is actually quite a large one) is that launching even an empty rocket into space isn't cheap. Pile on a few tons of trash and it ends up averaging out at around $10,000 per pound to get our garbage into space (Cain). So with the average person accumulating around 4 pounds of garbage per day, that's about $18 million to send only one person's year's worth of trash to the stars. Until engineers can figure out a way to make space launches more cost efficient...our waste is going to have to be gravity-bound.

This whole garbage situation has me finding myself at a stalemate. If I play the "responsible citizen", and put my trash into the garbage can, then it's surely destined for the landfill and my seemingly good deed actually just contributes to the potential pollution of the soil, air, and groundwater (unless those garbage-pit liners are really as good as they say). Or I can litter, and become a menace to society. Perhaps I could justify my littering by saying that my sticky, crinkled wrapper might be the vital addition to that road-side ugliness that will disgust some passer-by just enough to their limits, upon which they might vow from that moment on to protect the earth. Imagine the many environmental activists who have been born out of litter's inspirational qualities. Activists like Chad Pregracke, founder and director of Living Lands and Waters, or the founders of the Keep America Beautiful organization that has done clean ups since 1953 - to name just a couple. Everyday average people, inspired to save the earth from just a

brief and simple moment of aesthetic torment. The styrofoam-clogged storm drain...the wind-pressed trash along some highway fence line...litter plays such a vital role of inspiration and motivation...

Wait a minute though.

The wind will eventually carry this litter to pollute our local waterways, and as for our coastal neighbors, it will eventually end up in the ocean. Plus I'm guessing that there's probably enough litter out there already to inspire plenty more future earth-warriors...I don't think I can justify myself littering...Especially with news of the curiously debated "Great Pacific Garbage Patch", a mass oceanic clump of trash floating somewhere between California and Hawaii. Eighty percent of it's garbage content is said to have originated inland and the patch is also responsible for the endangerment of 267 known marine species that suffer from eating or becoming entangled in the trash (Berton, 2007). There is debate about it's size (some sources say it's twice the size of Texas) and even of it's existence, which I would reckon is due to it being mislabeled as a garbage "patch". In reality, this long-decaying garbage-cluster should be properly called a "gyre", which in this case would be defined as a broken down swirling mass of disintegrating plastic sludge; spiraling and frothing above and below the surface of the ocean. I'd imagine it having more of an oatmeal-like consistency and demeanor than it would the floating patch-like buoyancy of say Lucky Charms or Cheerios - if breakfast cereal hydrodynamics can offer sufficient metaphoric value.

Put plain and simple: we've got to cut down on the trash! "Waste reduction" has been a common term amongst waste managers, such as burning and shipping away excess waste. However the more efficient idea of "source reduction" has proved to be a more effective approach to halting the flow of trash by stopping the garbage from originating in the first place. Implemented in 1981, Seattle kicked off it's "pay-as-you-throw" waste management system,

charging the public for each bag thrown away, an approach that eventually led to a household average decrease from 3 garbage cans dumped per week - to only one. One Pennsylvania city on this system watched their waste stream amounts drop by 60% once they began charging the public 4 cents per pound for trash disposal. Minnesota, who has earned the lowest landfill rates in the nation, also implements the pay-as-you-throw system (Lewis, 1993). To take source reduction a step further, some are considering a "Product Policy" which would hold companies responsible for the proper disposal of the waste accrued by their products, an approach with much potential seeing that a third of America's trash comes from product packaging.

Once again I find myself at the end of a research project with more questions regarding the issue at hand. Hopefully we've taken a deep enough look into our garbage to better understand our situation and some possible solutions. If anything, awareness of this issue is a feat in itself since our trash problem is far too often swept under the rug just shy from public awareness. So next time you find yourself trash-in-hand, I hope that you can make an informed decision of what it will go on to effect; be it the landfill, the ocean, or perhaps a different route to the lawmakers who are waiting for the public to voice an opinion on enacting a new waste management system.

Works Cited

Wiley, Walt. "Utah officials order owners of homes to move by June." Waste News 6.34 (2001): 13. Business Source Premier. EBSCO. Web. 22 Apr. 2011.

BioCycle October 2010, Vol. 51, No. 10, p. 16

www.transjordan.org

Lewis, Thomas A., and Scott Pollack. "Waste not, want not." National Wildlife 31.4 (1993): 20. Academic Search Premier. EBSCO. Web. 3 Apr. 2011.

Palmer, Brian, article found at: http://www.slate.com/id/2284361/

Cain, Fraser, article found at: http://www.universetoday.com/25431/why-cant-we-launch-garbage-into-space/

Justin, Berton. "'Garbage Patch,' a continent-size swirling stew of plastic trash, fouls Pacific Ocean." San Francisco Chronicle (10/1/2007 to present) 19 Oct. 2007: W8. Newspaper Source. EBSCO. Web. 2 Apr. 2011.

http://www.dgmna.com/Downloads/Cast%20&%20Cure%20Sustainability.pdf