Used Tires: The Problem and the Solution

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OUTLINE

I. Introduction

A. Pollution of the environment exists in three major categories: air, water, and land. The cleansing of the environment and a conscious decision not to further pollute are essential for our survival and the survival of our offspring.

B. The invention of the automobile came with the problem of what to do with the tires when they wore out. For decades, they were either dumped in landfills, thrown in lakes or rivers, or simply burned, each of which is detrimental to the land, air, and water.

C. Thesis: Developing ideas to recycle used tires gives us to opportunity to cleanse the air, water, and land. Recycling greatly reduces the possibility of further pollution and gives us a chance to reverse the damage that we have caused. The possibility of strengthening the economy could very well be a by-product from recycling used tires. For every job created to produce a new tire, there should be an equally important job created to recycle that tire.

II. Body

A. The problem

1. Land pollution

2. Air pollution

3. Water pollution

B. The solution

1. Recycling options

2. The use of used tires as an alternative source of natural resources to fuel power plants.

III. Conclusion

A. Review of all main points

B. Final restatement of the thesis

The planet Earth is the only known planet able to sustain life. Although the planet is billions of years old, it is not indestructible. With knowledge of these facts, preserving the planet should be number one priority for those who occupy it. The Earth's environment consists primarily of three elements: land, air, and water. Since the invention of the automobile, the human race has greatly jeopardized the integrity of these three elements with the reckless disposal of used automobile tires. Burning and dumping have become a common method of disposal, both becoming large contributors to air, land, and water pollution. Developing ideas to recycle used tires gives us the opportunity to cleanse the air, land, and water. Recycling greatly reduces the possibility of further pollution and gives us a chance to reverse the damage that we have done. The possibility of strengthening the economy could very well be a by-product from recycling used tires. For every job created to produce a new tire, there should be an equally important job created to recycle that tire.

The biggest problem with tires is that they are not biodegradable. They will not naturally degenerate, but will remain on the plant with only negative side effects. The International Organization of Motor Vehicle Manufactures estimated that there were over 11 million vehicles produced by the United States in 2014 ("2014 Production Statistics," 2015). These numbers equate to over 44 million tires that will soon have to be disposed of. Simply dumping them unto the land will only generate ideal breeding grounds for infectious insects and rodents, landfill contributors, and just plain ol' eyesores in the community.

People often result to the burning of tires to rid the land of the waste product. If land pollution is important, air pollution should be equally important. The burning of tires releases harmful contaminants into the air. These contaminants include, but are not limited to, carbon

monoxide, sulfur oxides, oxides of nitrogen, and volatile organic compounds ("Health Impacts of Open Burning of Used Tires and Potential Solutions," 2012), all of which can be detrimental to our health if inhaled on a regular basis. Burning tires in an uncontrolled environment also leaves the risk of further land pollution. Ash left behind from burned tires has the ability to absorb into the ground. The ground affected by the ash no longer has the ability to produce healthy fruits and vegetables. Rain can push the ash farther into the ground where it could be contaminate ground water that could have been utilized for drinking water (Stuller, 1994).

Water pollution from dumping old tires into lakes, ponds, and rivers is not uncommon. Although the tires are out of sight, the fact remains that these bodies of water are still contaminated with waste that won't degenerate. The possibility of contaminating animals from the water that we consume as food exists. The integrity of bodies of water that are naturally potable is compromised. The risk of swimming children being trap under water by becoming tangled in underwater tire dumps is a concern of many parents. Damage to expensive boat propellers is a financial burden for boaters and could very well leave them stranded. There are many bad effects of failing to recycle.

Having acknowledged, analyzed, and formed a better understanding of burning and dumping used tires, we can begin to make strides to correct the problem. Multiple recycling options are necessary in the community. Tire manufactures are playing a large role in the reduction of used tire accumulation. In an interview with Betsy Morgenroth, Manager of human resource at a Bridgestone Tire Manufacturing Plant, Mary Ford is informed that the plant is offering residents a chance to recycle old tires for free (Ford, 2014). "The plant will accept a maximum of four tires per vehicle from 8 a.m. to noon on Saturdays," says

Morgenroth (qtd. in Ford, 2014). "The recycled tires are used to make ballistic material, tire-derived fuels, and for the subsurface layer on tracks used in track and field sports," Morgenroth said (qtd. in Ford, 2014). This company is stepping up and taking responsibility to recycle.

Controlled tire burning is another option for tire disposal and recycling. Solid fuel power plants burn fuels "in a furnace to generate heat. The heat is used to generate steam in a power boiler, which in turn drives a power turbine to generate electricity" (Murphy, 2004). Old tires have become the fuel for many power plants. In an interview, former director of Detroit's power supply, James French says, "We burn about 300 tons of fuel per day in this boiler. It generates less waste, lower emissions and more efficient combustion than burning coal" (qtd. in Satyanarayana, 2013)." In this statement, Mr. French is alluding to the fact that tire burning in a controlled environment is no more harmful to the natural environment than that of traditional power plants that use coal as a fuel source. It is an excellent opportunity to actually use the tires again in a new way, as long as it's controlled.

Used tires pose both a disposal problem and a resource opportunity. The act of burning and dumping must be gradually phased out until those practices are completely eliminated. The more recycling options we have, the less likely it is that a person will burn or dump. Pollution of our planet is very much controllable. We all must dispose of our old tires responsibly. Earth is the only place for us and our offspring to live. The air, land, and water are essential for the survival of mankind, so let's enjoy, learn from, and most importantly preserve it. Recycle!

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