# **ENGLISH 312 AUDIENCE STATEMENT AND ENTHYMEME COVER SHEET**

### **Audience Statement**

My audience is PRO recycling.

# Who is your audience? Why do they find your claim initially unacceptable?

Citizens and especially policy-makers that support recycling. Most of them are probably politically liberal. Read articles and seen evidence that recycling materials is useful. They believe that recycling decreases your net carbon footprint. They think that we are stewards of the earth and should take care of it. They also believe that it cuts out the cost of initial collection of materials. Recycling is seen as being cheaper than using virgin materials. Recycling cultivates an attitude of respect towards the environment.

## What does your audience value the most?

Getting value from materials: reuse. They want to minimize negative impact on the earth; recycling is part of that. Using things until they are absolutely done. Recycling teaches principles of sustainable living and reinforces the idea that you should take care of things, especially the environment. We should leave the world better for our children. They value the good of the community. They value efficiency and low-costs, but not at the expense of the environment.

## What does your audience fear the most?

Neglect for the world and disrespect to it. Human ego about "owning" the world. Neglect for world could spill over to our relationships with people and countries. Loss of wilderness and natural land e.g. paper cuts down trees. Ruining the earth for generations to come. They fear causing any kind of damage to the environment.

#### **Audience Counterarguments:**

But . . .the ramifications can spread further than the act itself. Recycling has a social impact on the community and individual.

But.... Recycling cuts down costs to produce useable items.

But . . .there is empirical data that shows recycling leads to fewer total emissions.

But... Recycling is better than wasting the materials that could be used.

#### Enthymeme

What are the consequences of recycling on the environment?

Claim: Recycling damages the environment.

Because focusing on repurposing our trash distracts us from more effective environmental solutions.

**Implicit Assumption:** Whatever distracts us from more effective environmental solutions also damages the environment.

**Contract Question:** What is the overall effect of recycling on natural resources and the environment?

Student Name Instructor Name English 312 18 April 2017

#### Recycling Salves the World

Every year, the United States buries its environmental conscience alongside roughly 50 billion "disposable" plastic water bottles. The amount of energy used to process and package these bottles would be enough to power 190,000 homes for a year ("Bottled"). Most of these bottles are used once, then tossed into the trash or, if we're lucky, into the recycling bin. The amount of space required to deal with these bottles once they've been taken from the sight and mind of a home is immense. According to Waste Management, the single largest recycler and garbage collector in the US, enough plastic bottles are thrown away each year to circle the earth four times ("Recycling"). *Four times*. And what about everything else that we heedlessly throw out? Have we ever considered the impact of plastic bags, aluminum cans, cardboard boxes, glass jars, newspapers, unfinished pizzas, grass clippings, Starburst wrappers and all the other contents of our trash bins? The amount of trash we produce is enormous: it's estimated that the average American will throw away 600 times his or her adult weight over the course of a lifetime ("Recycling"). So, what can we do to stop this cycle of environmental misuse? Well, the first answer that comes to mind is to recycle.

Since the 1970s, Americans have been encouraged to recycle as a way of ameliorating our massive trash dilemma. What began as a small-scale endeavor has grown to be a national project, with participation across all demographics. It makes sense. Why completely scrap something after just one use when it could be part of something useful, saving landfill space in the process? While most laud recycling as a cost-effective and environmentally friendly way of saving natural resources, others express doubts about its success. They suggest that the environmental costs of running an entirely separate collection and processing system outweigh the environmental savings generated by the recycled materials. The issue is worth considering: what is the overall effect of recycling on natural resources and the environment?

Our general recycling paradigm is that everything that can be recycled should be recycled. This mindset has been reflected in the actions of many local governments. Major cities like New York, San Francisco and Los Angeles have all begun the process of creating "zero waste cities," which means that they will send nothing to landfills, a fantastic goal. A major component of all these zero waste plans is to dramatically increase the recycling rate, often enforceable by law (Bodamer). This focus on bettering the cities' impact on the environment is praiseworthy, but it may be the wrong approach. In a study of optimal recycling rates in Japan, a group of researchers led by Thomas Kinnaman analyzed how the recycling rates in various Japanese cities affected economic and environmental well-being. They accounted for many factors including cost to families, the benefits of using the recyclable goods, municipal expenses in collecting the recyclables, the amount of material saved by recycling, emissions effects and others. After an extensive breakdown, they found that the optimal recycling rate—the rate that gave greatest benefit and lowest total cost, including environmental cost—was about ten percent (Kinnaman et al). This rate of ten percent is much lower than the current US recycling rate of thirty-five percent, suggesting that perhaps we recycle more than we really ought to.

The reason for this is that not all recyclables are created equal. EPA official J. Winston Porter advised that no more than 35% of the nation's trash was worth recycling. He said, "It makes sense to recycle commercial cardboard and some paper, as well as selected metals and

plastics. But other materials rarely make sense, including food waste and other compostables. The zero-waste goal makes no sense at all—it's very expensive with almost no real environmental benefit" (Tierney). This quote highlights a concerning aspect of recycling: things that shouldn't be recycled often are. Because recycling is effective for some specific products, we tend to believe that everything should be recycled, but that is simply not the case. The rise of single-stream recycling, which did away with the need to sort recyclables before collection, has contributed to the general carelessness about what we put into our bins. Instead of collecting only the most sensible items, most recycling companies take it all and sort it later, meaning that around 40% of what they pick up isn't fit for reprocessing and ends up in the landfill anyway.

An example of this is glass. In most of the US, glass recycling is less efficient and uses more natural resources than throwing the glass away and making new glass from scratch. In an article examining the issue, Michael Munger details what happened to the glass recycling program in his hometown in North Carolina. Because recycling glass was costing them so much, the city opted to shut-down their glass recycling program. However, the citizens voted to continue the glass collection, even when the recycling factory had decided it would not recycle the glass. This meant that the city was still required to collect the glass in recycling bins. The glass was then taken to the factory, separated from the recyclable items, and put in another truck to be taken to the landfill (Munger). In the case of recycling glass, "when you add on the fuel costs and pollution impact of collecting small quantities of the stuff from neighborhoods, [it] actually uses more energy and wastes more resources than using virgin materials" (Munger). This is just one example of recycling gone wrong, but it happens more often than we would like to admit. The number of things that we can recycle that create real benefit to the environment are relatively few. Earth911, an organization dedicated to spreading the adoption of environmentally

sound practices, has a whole page on their website listing items that should not be recycled. The list includes pizza boxes, paper plates, colored paper, bottle caps, juice boxes, plastic bags, "the wrong plastic resin," the wrong plastic shapes and more (McNatt). Few of us are educated about what is and is not acceptable, meaning that recycling companies deal with enormous amounts of erroneously recycled garbage. Items like these create extra hassle at the recycling plant and, like the glass in North Carolina, usually end up in the landfill after a brief field-trip to the factory. Because the benefit of recycling specific materials—and the recyclability itself—varies widely, we shouldn't be too hasty to throw everything into our blue bin.

Yet, are the alternatives to recycling any better? Even if it's not always the most efficient process, recycling seems much cleaner than putting all our garbage in a truck and hauling it off to be dumped in some filthy pit of refuse to molder for the rest of eternity or carting it over to the incinerator to be burned. Given the general unpopularity that surrounds these two methods, recycling even less apt materials seems like a much better substitute. However, landfills and incinerators are not the filthy, polluting nature-destroyers that they are often made out to be. As opposed to recycling plants, which require energy production to run (probably from burning coal or natural gas), landfills and incinerators are both able to produce usable energy. Hamid R. Amini and Debra R. Reinhart, both professors at the University of Central Florida, studied the environmental impact of a large landfill in Florida. They focused their research on the amount of energy produced by the landfill, and, since the landfill requires no additional resources, the amount of energy that could be saved by utilizing the natural gas given off by the landfill rather than other sources like oil or coal. In publishing their findings, they stated, "Using US EPA conversion factors, this energy production would be equivalent to removing some 70 million vehicles from Florida highways or eliminating the need to import over 800 million barrels of

foreign oil. With approximately half of the Florida landfill energy potential used at present, there is great untapped capacity" (Amini, Reinhart). As they found, rather than being an environmental burden on the surrounding area, landfills can be an environmental boon. With the energy capacity to replace 800 million barrels of oil, they can decrease our dependency on nonrenewable energy sources and provide clean, cheap (the only fuel is garbage) energy to entire towns.

However, another worry is that the buried trash in landfills causes chemicals to leak into the surrounding environment, destroying nearby ecosystems. This is an important concern and has been considered by independent researchers and landfill operators themselves. In 2012, a group of environmentalists from the Czech Republic studied the impact of a landfill on the nearby environment. As an indicator, they measured the amount of contamination in local wildflowers. After about four years of testing, their studies "did not confirm significant negative impact of landfill on the nearby area" (Vaverkov et al.). They reported that the landfill did not contribute to increased dust or noise, did not pose any danger of leakage into the region's groundwater or soil, and was subject to regular inspection by an unaffiliated agency. While environmental destruction from landfills may have been a major concern in previous decades, modern landfills are carefully constructed to prevent environmental degradation from the trash contained or the gas emitted. All developed nations have strict regulations governing the construction and maintenance of landfills. As an added bonus, they are usually turned into parks, residential areas, or even airports after they are used. One such example is Flushing Meadows-Corona Park in Queens, New York. For nearly 30 years in the early 1900s, the area where the park now sits was used as a dumping ground for ash and "street sweepings" from the nearby city. After it ceased operations, the area was turned into the hosting ground for the 1939 World's Fair.

Today it is home to 900 acres of park space, the New York Mets' stadium, a science museum, an art museum, a zoo, and the venue for the US Open ("Flushing Meadows-Corona Park"). Interestingly, this was all done over a landfill that by today's standards would never have been allowed to operate.

Like landfills, incinerators have a reputation for causing heavy environmental damage, but many of the most environmentally-friendly nations disagree. Sweden is the third-ranked most environmentally-friendly country in the world, and its government imports around 800,000 tons of garbage a year specifically to generate heat and electricity in their incinerators (Braw). The Swedish government effectively uses their incinerators to replace the need for fossil-fuel based energy production plants. This tactic has replaced millions of barrels of oil with trash, which is quite remarkable. By expanding their use of incinerators, the Swedes have not only found a way eliminate almost all their garbage, plus close to a million tons of trash from other countries, but have also developed a clean source of heat for nearly one million homes. They are not alone in this initiative. Denmark and Finland, both ranked in the top five most environmentally-friendly countries in the world, have similar incineration systems in place (Braw). It is a genius way of dealing with the huge trash issue that our world faces. Rather than downcycling, the goods are turned into heat and electricity, which replaces some of the need for fossil-fuels. Because their incinerators are so well engineered, the only byproducts of the process are nontoxic water and carbon dioxide—and these in much smaller amounts than in an equivalent coal-burning facility. With the modern technology available, incinerators release very few greenhouse gases and are viable sources of low-emission energy.

Another point to consider is the more psychological impact of a recycle-everything mindset. Many advocates of recycling say it goes beyond the simple act of sorting trash. They

say that it increases our awareness of and concern for the environment. They consider it part of a more general education regarding our stewardship for the earth and our duty to take care of it. While recycling does help us think about the environment and our effect on it, the way of thinking it encourages does as much harm as good. Let's go back to where we began: bottled water. The environmental cost of 50 billion plastic water bottles is enormous. One solution is to recycle, which many people do and which helps some in the case of plastic bottles, but it is far from the best answer. We've all heard the refrain "Reduce, Reuse, Recycle." The phrase itself gives us the order of importance, though it appears we are prone to reverse it. Recycling is the last and the least of these, but the emphasis that has been placed on it in the last few decades has taken away our focus on the first two. Our grandparents surely knew how to reduce and reuse, and probably many of our parents, but do we? Recycling, whether we are aware of it or not, makes disposable plastics and other non-biodegradable trash more acceptable; it gives us the idea that recycled trash doesn't hurt the environment and is even "good" for it. It's not. Recycled trash is still trash, and the energy and resources required to deal with it are still energy and resources taken from the earth. The real solution is to eliminate waste, not repurpose it. Since the introduction of mainstream recycling, per capita waste in America has nearly doubled (Storm). Of course, recycling isn't entirely responsible, but it contributes. We can see this in the plastic packaging enveloping an organic spring mix at Smith's or in the families that feel okay about buying huge crates of water bottles that they religiously recycle every week.

And, plastic packaging isn't the only issue. So much of what we buy could be reusable, but instead is merely recyclable. Bea Johnson is a leader of the Zero Waste movement. Since 2008, she and her family have been producing one jar—yes, *one jar*—of waste per year. In a Ted Talk titled "Zero Waste Is Not Recycling More, But Less," she shared her thoughts on recycling

and her goal to eliminate it from her life. She said, "Recycling is not the solution to our waste problem.... Recycling depends on way too many variables to make it a dependable solution. She went on to say that a zero-waste lifestyle is not achieved by recycling, but by "refusing trash in the first place" and reusing (Johnson). These are the first two steps to eliminating waste, which Johnson and her family have mastered. To "refuse trash in the first place," or reduce, they replace everything disposable with reusable items. Instead of paper towels, they use rags. Instead of disposable razors, they use electric ones. The change that she says makes the biggest difference, is their resolution to shop only in bulk, in places that allow them to bring refillable containers, rather than purchase items wrapped in future trash (Johnson). Some of the changes they made were large, but most of them were small.

We can follow their example by making similar small changes, and maybe some big ones, that eliminate trash for good. Rather than use plastic bags from the grocery store, we can bring our own reusable bags to carry our groceries out to the car. Instead of having a paper copy of the newspaper delivered every day, we can read the online version that nearly all newspapers have. Instead of using disposable water bottles, we can buy one reusable bottle that will last for years. We can take ourselves off mailing lists that we don't want. We can donate old clothes to charity, not to the trashcan. These ideas are just a start. There are countless ways that we can reduce trash and make a difference in our homes and communities.

Recycling is not inherently evil: those that recycle show their concern for the environment, and for certain materials it does help. Nevertheless, as the CEO of Waste Management said, "If you believe recycling is good for the planet and that we need to do more of it, then there's a crisis to confront" (Tierney). Recycling won't solve our waste problem. It eases the guilt of our irresponsible consumption and distracts us from more effective environmental solutions. If we really want to save our planet from the barrage of garbage that is constantly produced, we need to stop focusing on recycling, and focus more on eliminating trash for good. Let's take some of the ideas we've seen, or think of others that will work better for us, and start reducing trash in our own homes today. It may require some lifestyle changes, but, as we do, we will see that prevention really is the best remedy.

#### Works Cited

- Amini, Hamid R., and Debra R. Reinhart. "Regional Prediction of Long-Term Landfill Gas to Energy Potential." *Waste Management*, vol. 31, no. 9–10, 2011, pp. 2020-2026.
- Bodamer, David. "10 Major US Cities with Zero Waste Goals." Waste 360, 27 July 2015. http://www.waste360.com/waste-reduction/10-major-us-cities-zero-waste-goals, Accessed 14 March 2017.
- "Bottled Water Facts." *Ban the Bottle*. https://www.banthebottle.net/bottled-water-facts, Accessed 15 March 2017.
- Braw, Elisabeth. "Dirty Power: Sweden wants your garbage for energy." Al Jazeera America. N.p., 27 Mar. 2015. Web. http://america.aljazeera.com/articles/2015/3/27/sweden-wantsyour-garbage-for-energy.html Accessed 12 April 2017.
- "Flushing Meadows–Corona Park." Wikipedia, The Free Encyclopedia. Wikipedia, The Free Encyclopedia, 18 Apr. 2017. https://en.wikipedia.org/wiki/Flushing\_Meadows %E2%80%93Corona\_Park, Accessed 18 Apr. 2017.
- Johnson, Bea. "TEDx Talk: Zero Waste Is Not Recycling More, But Less." Zero Waste Home. TEDx Talks, 20 December 2016. Accessed 20 March 2017.
- Kinnaman, Thomas C., Takayoshi Shinkuma, and Masashi Yamamoto. "The Socially Optimal Recycling Rate: Evidence from Japan." *Journal of Environmental Economics and Management*, vol. 68, no. 1, 2014, pp. 54-70.
- McNatt, Marisa. "What NOT to Put in the Bin." *Earth911.Com*, 14 Sept. 2016, earth911.com/home-garden/what-not-to-put-in-the-bin/. Accessed 13 Apr. 2017.

- Munger, Michael C. "Recycling: Can It Be Wrong, When It Feels So Right?" *Cato Unbound*, 3 June 2013, www.cato-unbound.org/2013/06/03/michael-c-munger/recycling-can-it-bewrong-when-it-feels-so-right. Accessed 13 Apr. 2017.
- "Recycling Facts & Tips." *Wm.com.* Waste Management, Inc. https://www.wm.com/location/ california/ventura-county/west-hills/recycle/facts.jsp, Accessed 15 March 2017.
- Tierney, John. "The Reign of Recycling." *NYTimes.com*, The New York Times, 3 October 2015. https://www.nytimes.com/2015/10/04/opinion/sunday/the-reign-of-recycling.html?\_r=1, Accessed 16 March 2017.
- Storm, Shen. "5 Reasons Recycling Needs to Be the Last Thing You Do." https://www.exposingtruth.com/5-reasons-recycling-needs-to-be-the-last-thing-you-do/, Accessed 14 March 2017.
- Vaverkov, Magdalena, et al. "Verifying Research of Waste Landfill Environmental Impact using Bioindicators." *Polish Journal of Environmental Studies*, vol. 22, no. 2, 2013, pp. 313-317.