

# [Hazardous waste essay](https://assignbuster.com/hazardous-waste-essay/)

The Problem Household hazardous waste along with E-waste is not only becoming an enormous problem locally in developed nations but also a major issue on a global scale. “ A hazardous waste is a waste that exhibits a hazardous characteristic or is a listed waste. There are four criteria that define a characteristic hazardous waste. They are: 1.

Ignitability, 2. Corrosivity, 3. Reactivity, 4. Toxicity.

” These materials can be flammable, reactive, or unstable enough to release toxic fumes into the atmosphere. They are capable of corroding metal containers such as tanks, barrels, and drums. Currently, the Environmental Protection Agency has over 500 items designated as hazardous waste. Examples of household hazardous waste include, but are not limited to, solvents, pesticides, paint, gasoline, ammonia, antifreeze, batteries, and pool chemicals. These materials are consumed by millions of people around the world on a daily basis.

However, these materials can pose immediate or long-term risks to humans, animals, and plants in our environment when not disposed of properly. E-waste can be defined as electronic consumer items as LCD displays, cell phones, computers, fax machines, stereo equipment, and cameras to name a few. Also included in E-waste are the thousands of miles of cabling required to run the electronic devices. These devices do not disappear when they break, or become obsolete. Some end up in the basement or garage, and some end up in landfills. They pose a threat to our environment when not disposed of properly.

We are throwing household hazardous waste and E-waste away for numerous reasons. For example, if you paint a room in your house you will probably end up with some left over paint. When you are finished consuming the paint, you can either discard it, or store it in your garage. We reason we discard electronic devices is that they become obsolete. We are not going to be able to use the same computer for more than a few years. The processor and operating system will not be able to run the latest applications that are available.

The electronics industry is still in its infancy; therefore, many changes and advances in technology will be developed for many years to come. Again, you can throw out the old computer, or it can collect dust in your basement or garage. Eventually our homes fill up with this “ stuff” and we need to dispose of the waste. The question is, “ What should we do with this stuff? ” How much is it going to cost me? Can I throw it away with my normal trash? Do I have to go out of my way to properly dispose of it? The citizens of the world can answer these questions in many different ways; some will be harmful to the environment. What will you decide for yourself, your family, your community, and your world? The Local Level’s Current Approach to the Problem Until recently, very few of us understood the Household Hazardous Waste disposal procedure in our county of residence. The facility is located at 1716 Morgan Road, Modesto, Ca.

The phone number is 209-525-4123. Residents of the County of Stanislaus can drop off up to 125 lbs. of household hazardous waste per visit. This includes batteries of all kinds, paint, pool chemicals, liquid chemicals (in 5 gallon containers), oil, and antifreeze. This service is currently free of charge. There are no curbside pickups of this type of waste.

The drop off hours are Friday and Saturdays from 9 am until 1 pm. The County does make it slightly more convenient for residents by offering a mobile unit service approximately 3 times per year. These pick-up areas are not curbside, but are dispersed through the county. The mobile pick-up station truck will likely be located near a county facility. These locations can change from year to year.

You are responsible for calling and asking about the service or watching for their announcements in the local paper. One major problem with this system is that it does not force or make it easy for people to dispose of their household hazardous waste properly. All of us at one time or another has been guilty of improperly disposing of some form of household hazardous waste. The waste is ending up in landfills or is burned for energy across the state. This is most certainly damaging our environment and our future.

E-Waste “ E-waste is a growing problem in our country and the rest of the world. Approximately 20 million computers were obsolete in 1998 and less than 15 percent of the computers are recycled. Policies regarding e-waste may differ at the federal and state level, but e-waste policies should create, and hopefully, ensure safety and prevent calamity. ” Local E-waste disposal information can be found at:

ceres. ca. us/40651-OldElectronicEquipmentRecycling. pdf> . E-waste can also be disposed of at the Household Hazardous Waste Collection and Electronic Facility located at the previous mentioned telephone number and address on 1716 Morgan Road.

This facility accepts cell phones, televisions, computer monitors, laptops, computers, printers, fax machines, and copiers. Global Implications and Impact The electronic waste we dispose of locally, even when we dispose of it properly has a major global effect in other countries like China, India and Pakistan. Even when E-waste is properly disposed of here in the United States it still ends up in our landfills and incinerators. According to the EOA, in 1997 more than 3. 2 million tons of E-waste ended up in U.

S. landfills. Recycling methods of electronics include, dismantling, shredding, burning, exporting, etc. Unfortunately most of these practices are unregulated and create additional hazards.

Some of the toxins that are found in E-waste are Barium, lead, lithium, Mercury, Nickel, Palladium, Rhodium, Cadmium and Silver. When E-waste ends up in our landfills, these toxins can leach into ground water and cause serious health issues such as, birth defects, brain damage, and kidney damage, among many other serious health problems. 6 Computers are just one of the many items that after being scavenged here for the most lucrative parts are then sent to developing countries where the remaining parts are scavenged by workers there who earn less than 17 cents per day. The major cause of computers being discarded is they become obsolete. Every year an estimated 400 million electronic units are being scrapped, and by the year 2010 that figure will rise to three billion units.

8 A recent example of this is the release of Microsoft Vista. A study by Softchoice Corp. states that fifty percent of the business PC’s do not meet the minimum requirements for Vista, and ninety-four percent do not meet system requirements for Vista Premium. Even though this can be resolved by upgrading the RAM in the computer, most businesses will choose to simply discard the computers. 9 Another problem we are having globally with hazardous waste is Shipbreaking.

Shipbreaking is the process of dismantling obsolete vessel structures for scrapping or disposal. 10 This is primarily done in developing nations such and India and Bangladesh because their laws on the handling of lead paint and asbestos as well as the general working conditions fall short of those in Europe and the United States. 1 This is not only causing an environmental disaster with all the harmful chemicals seeping into the ground and the ocean, but it is causing major health problems with those who are working directly with the dismantling and those who live there. Some of the hazardous chemicals that are involved are, Asbestos, Polychlorinated Biphenyls (PCB’s), lead, among many others that are created by the open burning of these materials.

Every year the total number of ships being taken out of service increases. In the 1990’s the aggregate tonnage was around fifteen million dwt per year, in 2001 that figure rose to twenty eight million dwt per year. This marks a growth of nearly twenty five percent per year. 12 Possible Solutions It is our duty and responsibility to assist with identifying and implementing solutions to the issues of household hazardous waste and e-waste. One way is to raise awareness of the problem.

Neighbors need to be involved. Go to the local schools and discuss the ramifications if something is not done to reduce the problem. Make sure to invite the county waste disposal manager to give a presentation to all the schools, churches, service clubs, etc. in your area. Waste Disposal companies have programs they are willing to present when asked.

The government also needs to help raise the awareness by providing information pamphlets to the public. They need to make it easier and more convenient for us to dispose of our hazardous waste properly; we have curbside service for waste, recyclable items (plastic, aluminum, newspapers, etc), and garden waste. However, the hazardous waste we create in our homes requires individual knowledge, initiative, and the will to dispose of it properly. Perhaps the county could increase the number of drop off locations. It would also be helpful if one location accepted both household hazardous waste and E-waste.

It can be nearly impossible for the elderly and disabled to participate with the current programs; and no environmentally responsible programs exist for those living in apartment complexes. Forming volunteer teams to make household pickups in your area for those needing assistance would be beneficial. Contacting your City Council members and your Board of Supervisors members would be helpful in developing a program for hazardous waste and E-waste disposal for apartments and businesses; now all of the waste from businesses and apartments is not sorted – they just go into one large dumpster and are burned without sorting the recyclables. The county has a paint program where they offer the paint they collect, free of charge, to whoever wants it. This occurs in our county every third Friday of the month.

This is a great opportunity if you are painting a room in your house. There are very few people who are aware of this program. The county also used this paint to cover graffiti in our neighborhoods. Buy Back Programs are laws requiring the store who sold the commodity to the consumer to ‘ buy back’ the items when their useful life is over.

The company will then be responsible for proper disposal. An expansion of this type of program and the moral commitment of the business community could have a positive effect on the hazardous waste program. The Buy Back program should be responsible legally to use environmentally safe and morally conscious methods of disposal. They can not be allowed to ship the hazardous materials to a developing nation and use them as our ‘ dumping grounds.

” Much of our e-waste can be recycled and companies are now recycling cell phones at no cost to the buyer. Staples, and other companies, have implemented a buy back program for ink cartridges for use in printers. Another possible solution to the problem would be to reduce our insatiable consumption of household waste and e-waste. To reduce consumption we can use energy saving light bulbs, buy windup radios and flashlights, turn off the lights when we are not in the room, purchase energy savings appliances, etc.

We can update our computers and cell phones only when absolutely necessary, instead of when a new style is marketed. Conclusion In conclusion, the global community, which includes us, has a huge problem on its hands. Household hazardous waste, and growing E-waste are problems that are present all over the world; and as other nations develop, the problem will only magnify. Without immediate action by the global community, we will reduce the probability that future generations will have a clean and safe environment in which to live. The governments need to recognize this, some do; however, they need to do more to help reduce the waste. Global treaties, national, state, and local laws, all need to address this issue.

Corporations need to be held accountable for their role in the issue and held accountable to act responsibly and ethically. All of us have a moral obligation to leave this planet better than we found it; we only have one planet to share with all living things. Dept. of Environmental Protection Annenberg Media Learner telephone interviews with Stanislaus Waste Management County representatives ProposalsE-waste: Procedures, Policies, and Proposals 5 Exporting Harm: the High-Tech Trashing of Asia 6 Improper Computer and Electronic Recycling: Harmful Effects 7 Improper Computer and Electronic Recycling: Global Dumping 8 Improper Computer and Electronic Recycling: E-Waste Crisis 9 Microsoft’s Vista Could Harm Health in Developing countries 10 Osha Fact Sheet 11 Shipbreaking 12 What is Shipbreaking?