

Water conservation and the dangers of dumping of waste in the ocean

[Business](#), [Manufacturing](#)



The ocean is the single most vast and mysterious being on our planet, home to millions of species and trade routes. Our oceans contain the most complex ecosystems, like coral reefs, the deep sea, mangroves, and estuaries.

Although we know a lot about our waters, we only actually know what's in about five percent of the ocean. This means that ninety five percent of the oceans on our planet are unexplored, uncharted territory. There could be many things out there that could be beneficial to our society, and we may be ruining it. Towns and cities began around oceans and waterways because of the need for ports for trade. Along with trade and industrialization came pollution, and one of the easiest places for companies and people to dump it is in the ocean. The dumping of waste in our waters by companies should be stopped, regardless of how many jobs it creates.

Ocean dumping, termed by industrial companies as "submarine tailings disposal", is the dumping of waste below the ocean's surface using pipes that carry tailings from a mine into the sea. The tailings are usually carried deep to the ocean floor, but sometimes are dumped in shallow waters. Over half of the pipes carrying the tailings for the twelve ocean dumping operations have been known to have incidents. One mine in Indonesia spilled over 5,000 cubic meters of tailings after only operating for a little over a year. In the dumped tailings there is cyanide, mercury, metal remnants, and over thirty other harmful chemicals. Although the mining companies try to predict where and how far the waste will disperse, these predictions most times have been wrong. Two mines in Canada, the waste traveled about 35 kilometers. Over 180 million tons of toxic waste is dumped into our oceans annually, just from four mines dumping the leftover waste from their mining

processes. (Earthworks) There are currently ten companies continuously dumping mining waste into the ocean, and there are twenty seven more companies considering to do so. For how important our oceans are, this form of disposal should be out of question. (Sampat)

Mining companies don't just dump their waste into the ocean, they have also been known to get rid of their waste by dumping it into rivers. When they dump it in rivers, they dump it either with or without a dam. When it goes uncontained without a dam, it causes more trouble for the rivers ecosystem, and it is more dangerous because it is impossible to control and monitor.

(Earthworks) Each year the Mississippi River carries 1.5 million metric tons of nitrogen waste into the gulf of Mexico, which creates a "dead zone" in the gulf. (DoSomething) Tailings have clogged rivers, destroyed vegetation, and caused floods.

Companies have also dumped their waste into lakes. This form of dumping is worse than river and ocean dumping, because in river and ocean dumping, the waste has somewhere to go because the water is flowing. The waste in the lake has nowhere to go, and just sits there in the same place. Another reason we need to stop dumping our wastes into our waterways and oceans, is that our waters will never be able to be restored to their original state.

Attempts at cleaning up dirty water that has been exposed to years of toxic waste has proven very costly and extremely difficult. In one case in Tasmania, a company started to dump its mining tailings in the King and Queen rivers, eight years and 97 million tons of tailings later, the estimated damage was 99 million dollars. (Sampat)

We also need to stop polluting our waters because what we put into the ocean slowly works its way back and bounces back onto us. Chelsea Rochman, a researcher at the University of California, Davis said, "The ocean is basically a toilet bowl for all of our chemical pollutants and waste in general. Eventually, we start to see those contaminants high up in the food chain, in seafood and wildlife." Analysts have found traces of mercury from tailings inside the two fattiest fishes, tuna and swordfish. Considering canned tuna is one of the largest sold fish products on the market, this isn't good for our health. We dump the waste in the ocean, the fish live in the ocean, and we eat the fish. (Barclay)

A couple other non mining companies, like Tyson Foods and Perdue Farms also send all of their waste into the ocean. Tyson Foods alone accounts for 9% of the nationwide total. The meat industry puts more waste in the ocean than both Exxonmobil and Down Chemical. (Geiling)The waste Tyson dumps in the ocean is different then tailings. They dump massive amounts of animal waste into our waters. (Sarich)

Another large contributor to ocean pollution in the form of plastic is us. One study says that China alone throws 1.3 million to 3.5 million metric tons of trash into the ocean annually. There is about 5.25 trillion pieces of plastic debris in our oceans, about 46,000 pieces per square mile. In general, the amount of plastic on our planet is unnecessary. If you joined single use plastic bags that are given out at grocery stores end to end, they would circumnavigate earth 4,200 times. When we throw plastic into the ocean, the plastic breaks down into tiny plastic particles. When fish eat plankton,

they're digesting tiny plastic particles. (Jakuboski) Plastic pollution has gotten so bad in the ocean that over two thirds of our fish stocks suffer from plastic indigestion. Oceanographer Kara Lavender said, " Our low-end estimate is equivalent to the amount of tuna fished from the ocean in a single year, we are taking out tuna and putting in plastic." Other studies have shown that plastic and garbage can clog a fish's intestines and kill them.(Mohan) We throw so much of our garbage into the ocean, that the garbage literally forms floating islands. Just one of these islands, known as the Great Pacific Garbage Patch, is estimated to be twice as large as Texas. Other than the Great Pacific Ocean Patch, there are four other large garbage patches in our oceans. (Jakuboski)

Although small, dumping our waste in the ocean has some small benefits. Some large items of trash, like large pieces of metal and old tires, can be strategically placed to make reefs for fish to live in. Even though it's bad for the environment, dumping waste in the ocean is extremely convenient and cheap. A big reason for why we even pollute our waterways in the first place is because it is much cheaper to pollute water then it is to clean it up, and before our oceans became so polluted, we believed that they were so big and vast that our substances wouldn't harm the ocean or the wildlife. Another small pro of ocean pollution is that when we pollute the water, it creates jobs because a company has to clean it up. (Willson)

The dumping of waste in any of our waterways is worse for the environment than we think, and the toxins we put in the water eventually come back to us. Regardless of how many jobs the dumping of waste create, it needs to be

stopped. The dumped waste and plastic contaminate the fish and have negative effects on us, and if we keep dumping at this rate, our waters will be far too polluted for the wildlife. Even though it's much cheaper to keep polluting the ocean, we aren't able to clean polluted water efficiently and our future generations need the ocean. The ocean needs help, and we need the ocean.