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CIVIL BEAT

Plastic Debris Could Make Remote Pacific Island a Superfund Site

By Sophie Cocke November 19, 2013

Tiny Tern Island, a 25-acre strip of land in the middle of the Pacific Ocean that has been inundated with marine debris, could become a Superfund cleanup site if the Center for Biological Diversity gets its way.

The environmental group filed a petition with the U.S. Environmental Protection Agency last December asking it to designate the entire Northwestern Hawaiian Islands and parts of the Great Pacific Garbage Patch - a giant, floating repository of tiny plastics in the middle of the Pacific - as Superfund sites.

The EPA hasn't agreed to consider the entire area - the island chain is one of the largest marine conservation areas in the world. But it will be conducting an environmental study on Tern Island, a World War II military landing site and one of the chain's 10 islands.

It's the first step in what could be a years-long process to determine whether the island qualifies for Superfund status - a federal designation used to prioritize cleanup efforts of hazardous waste sites that could be harming people or local ecosystems.

Every year, the island chain 550 miles off the coast of the main Hawaiian Islands, is inundated with marine debris - including plastic bottles, fishing gear, discarded home appliances and

tiny shards of plastic that travel thousands of miles across the ocean and wash up on the islands' shores.

The debris has proven deadly to the area's marine life and other island creatures. Seabirds ingest shards of plastic, mistaking it for food, and die of starvation. Photos of dead birds show their stomaches filled with plastic. Meanwhile, endangered monk seals and threatened green sea turtles get entangled in fishing nets, where they too can starve to death or become prey for sharks.

But what has distinguished Tern Island from the other islands, and piqued the EPA's interest, is that the island's monk seals are showing elevated levels of PCB's. The toxic, cancer-causing chemicals may be entering the marine food chain through tiny plastics, said Dean Higuchi, a spokesman for the EPA.

In August 2012, a storm damaged a seawall around the island, exposing a landfill that contains buried electrical equipment. The EPA, which will be conducting the study with the help of the U.S. Fish and Wildlife Service, is worried that the electrical equipment may contain PCBs and other contaminants. The agencies are also worried that other landfill sites on the island may be releasing hazardous substances.

The environmental study will focus on whether toxic substances are entering the marine food chain through micro-plastics and potentially accumulating at increasing levels, as well as the general effects of micro-plastics on marine creatures and wildlife.

"It's kind of killing two birds with one stone," said Emily Jeffers, an attorney for the Center for Biological Diversity.

The EPA plans to complete the study in June 2014. If the area gets a high enough hazardous ranking score, the EPA will move forward on additional studies.

Jeffers said the goal right now is to get a better understanding of the science related to microplastics, which she hopes will lead to more stringent controls on stormwater runoff and other sources of marine pollution.