



June 26, 2019

Submitted via [online comment form](#)

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Re: Center for Biological Diversity’s Comments on Washington Department of Ecology Draft Industrial Stormwater General Permit

I. Introduction and Background

The Center for Biological Diversity (“Center”) is a non-profit conservation group dedicated to the protection of endangered species and their habitat. The Center has 1.4 million members and online supporters, over 36,000 of whom live in Washington state. Much of the Center’s work in Washington concerns the endangered Southern Resident Killer Whale (“SRKW” or “orca”) and the endangered Chinook salmon on which the orcas rely. The Center has worked to increase prey availability, protect critical habitat, reduce vessel disturbance and noise, and establish additional protected areas for the SRKW. The National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities (ISGP) issued by the Washington State Department of Ecology (“Ecology” or “Department”) has an important role to play in protecting water quality for SRKW and other species that live in Washington’s inland and coastal waters, and it must be consistent with state and federal laws and policies designed to protect water quality and the environment.

The Governor’s Orca Task Force was formed by Governor Jay Inslee in March 2018, bringing together experts in the field to determine next steps to ensure orca recovery and survival in the Salish Sea. The task force identified exposure to toxic contaminants as one of the five main factors affecting the health of both SRKW and their prey and made it both a legislative and budget priority to reduce exposure to toxic pollutants for the orcas and the food they depend on to survive. With the same executive order that created the task force, the Governor directed state agencies to take immediate action to help the struggling orca population.¹

The federal Clean Water Act² was enacted in 1972 with the stated goal of ending the discharge of pollutants into the nation’s waterways. The Act created the National Pollutant Discharge Elimination System (NPDES), which establishes effluent limitation guidelines and standards.³ The Act requires that NPDES permits be reissued every five years to include more stringent requirements as technology advances and to reach the end goal of ceasing pollutant discharge to

¹ Exec. Order No. 18-02.

² 33 USC §1251, *et seq.*

³ 33 USC §1311

the nation's waters. Pursuant to the Act, the EPA has delegated authority to Washington state to administer the NPDES program, which can include general permits like the one at issue here. Ecology determined it would seek to reissue the ISGP and published the draft for review and comment on April 17, 2019 as required by the Clean Water Act.

With the reissuance of the ISGP, Ecology has the opportunity to make changes that reflect the best available technology and will not only benefit the health of the Salish Sea, but can help guarantee the SRKW population is around for generations to come. The Governor has identified the health of the Salish Sea as it pertains to the SRKW as a priority, and Ecology should use this permit reissuance to consider the urgency of this matter and act accordingly. A strong ISGP is one step in helping reduce the discharge of conventional, nonconventional, and toxic pollutants to Puget Sound. Ecology is tasked with protecting the health of our waters and should use this opportunity to do so.

One of the areas the Center believes Ecology has overlooked in the drafting of the new ISGP is the issue of plastic manufacturing and the related limits that could be put in place for these facilities. Plastic manufacturing is a stormwater and wastewater issue nationwide and has grave consequences for the health of our ecosystems and wildlife. Implementing a zero-discharge limit for plastic pellets and other materials within the reissuance of the ISGP could help to reduce the spread of plastic pollution and the dangerous chemicals associated with it, which could be a vital step in saving the orca population. Below we have outlined the plastic pollution issue and have suggested some amendments to the April 2019 draft ISGP that Ecology should include in the final permit to combat this serious pollution problem.

II. The Plastic Pollution Problem

While mass production of plastic products only began in the 1950s, today plastic production and waste have created a global pollution and health crisis. All along its lifecycle, from fossil fuel extraction, transport, refining, and polymerization to consumer use, waste disposal, and degradation in the environment, plastic is harming the health of people and the planet. (CIEL 2019). Plastic contaminates species, communities, ecosystems, and food chains at a staggering scale.

Despite these harms, according to the American Chemistry Council, the plastics and chemical industry is investing over \$202 billion in the U.S. for an estimated 333 projects (including new facilities and expansions) designed in large part to convert “plentiful and affordable natural gas” from shale into petrochemical and plastic products. (American Chemistry Council 2018). The industry's plan is to increase North American plastics production by at least 35 percent by 2025. (CIEL 2017). These new plastics will be used to manufacture a variety of products, including water bottles, straws, utensils, food wrappers, packaging, shopping bags, and other single-use items that account for approximately 40 percent of plastic use. (Geyer *et al.* 2017).

Of the approximately 6,300 million metric tons of plastic waste already produced globally as of 2015, only 9 percent has been recycled, with 12 percent incinerated and the remaining 79 percent accumulating in landfills and the natural environment. (Geyer *et al.* 2017).

An additional eight million tons of plastic pollution enters the water each year. Thousands of seabirds and sea turtles, seals, and other marine mammals are killed after ingesting plastic or becoming entangled in it. Plastic has been found in the farthest reaches of the oceans and in our

seafood. And more plastic is on the way. If current trends continue, plastics in the ocean could outweigh fish pound for pound by 2050. (World Economic Forum 2016).

Aside from the legacy of pollution these products create, new and expanded “petro-plastics” facilities emit and discharge a variety of harmful air and water pollutants in the local communities and ecosystems where they are sited. This includes the discharge of plastic resin pellets, flakes, powders, and granules as well as harmful pollutants including acrylonitrile, dioxin, and benzene. Many of these pollutants are carcinogens and known to harm human health and the environment.

The plastic problem has not sidestepped our state. Washington is home to plastic manufacturers as well as establishments that engage in plastics processing and many other steps in the plastic lifecycle. Of note is the proposal for a massive methanol refinery facility in Kalama, WA. Methanol is used in the production of plastics, and this facility would help to assure our dependence on plastic products for generations to come. This facility as well as existing facilities and other potential proposed facilities that are connected to plastic manufacturing not only increase the amount of plastic going into the system but also have dire consequences for water quality.

III. California’s ISGP Plastic Materials Requirements

California has taken the lead on implementing best management practices (BMPs) to eliminate the discharge of plastics from industrial facilities covered by their ISGP. “Plastic materials” are defined in California’s permit as “virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust and other similar types of preproduction plastics with the potential to discharge or migrate off-site.”⁴ Any facility that “transports, stores, or consumes” the listed materials is considered a “Plastic Facility” under the California ISGP and must comply with the following language of the permit;

1. At a minimum, Plastics Facilities shall implement and include in the Stormwater Pollution Prevention Plan (SWPPP):
 - a. Containment systems at each on-site storm drain discharge location down gradient of areas containing plastic material. The containment system shall be designed to trap all particles retained by a 1mm mesh screen, with a treatment capacity of no less than the peak flow rate from a one-year, one-hour storm.
 - b. When a containment system is infeasible, or poses the potential to cause an illicit discharge, the facility may propose a technically feasible alternative BMP or suite of BMPs. The alternative BMPs shall be designed to achieve the same or better performance standard as a 1mm mesh screen with a treatment capacity of the peak flow rate from a one-year, one-hour storm. Alternative BMPs shall be submitted to the Regional Water Board for approval.
 - c. Plastics Facilities shall use durable sealed containers designed not to rupture under typical loading and unloading activities at all points of plastic transfer and storage.

⁴ California Industrial Stormwater General Permit, NPDES No. CAS000001 at 64 (2014).

- d. Plastics Facilities shall use capture devices as a form of secondary containment during transfers, loading, or unloading Plastic Materials. Examples of capture devices for secondary containment include, but are not limited to catch pans, tarps, berms or any other device that collects errant material.
- e. Plastics Facilities shall have a vacuum or vacuum-type system for quick cleanup of fugitive plastic material available for employees.
- f. Pursuant to Water Code section 13367(e)(1), Plastics Facilities that handle Plastic Materials smaller than 1mm in size shall develop a containment system designed to trap the smallest plastic material handled at the facility with a treatment capacity of at least the peak flow rate from a one-year, one-hour storm, or develop a feasible alternative BMP or suite of BMPs that are designed to achieve a similar or better performance standard that shall be submitted to the Regional Water Board for approval.⁵

IV. Requested Revisions to Washington's ISGP for Plastic Facilities

The current draft of the Washington State ISGP does not distinguish between facilities that generate plastic pollution in their stormwater or wastewater and those that do not. As touched on above, the plastic pollution problem is an enormous one, and progressive states such as Washington should be leaders in the movement to incorporate innovative solutions in to existing frameworks to combat plastic pollution.

The ISGP should prohibit the discharge of plastic pellets and other particles in stormwater and wastewater. Alternatively, at a minimum, we request the Department of Ecology to include BMPs in the ISGP that mirror those of California's permit. Within the permit, Ecology should identify and define those facilities that handle or process plastic materials on site. The permit should include BMPs for these facilities that area at least as protective as the BMPs included in the California permit.

These BMPs will help to assure that plastic pellets and other pre-production plastic materials are not escaping in to our waterways and making their way into the food system or causing other public health and environmental harm. This is a manageable and necessary first step in continuing Salish Sea protections and fortifying our salmon and orca populations.

The Department should also review the other limits it includes in the ISGP and ensure that they reflect the best available technology for limiting conventional, nonconventional and toxic pollutants, particularly those known to harm aquatic life and human health.

V. Conclusion

The world has a severe plastic pollution problem, and Washington state is a producer and contributor to this problem. Ecology has been tasked with keeping the state's waters clean. Further, under various treaties with tribal governments, Ecology must help ensure that tribes can continue to catch fish in their usual and accustomed fishing grounds for generations to come. , Ecology must ensure the ISGP is designed to achieve these goals and will ultimately ensure there is no longer pollution being discharged into Washington waters. Best available technology and

⁵ Id. at 64-65.

BMPs to address plastic pollution must be added to the ISGP to make sure plastic pollution is stopped at its source and not permitted to reach the Salish Sea where it can harm the salmon, the orcas and the public.

Sincerely,

A handwritten signature in blue ink that reads "Sophia Ressler". The signature is written in a cursive, flowing style.

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Literature Cited

American Chemistry Council, U.S. Chemical Investment Linked to Shale Gas: \$202 Billion and Counting (September 2018), available at <https://www.americanchemistry.com/Policy/Energy/Shale-Gas/Fact-Sheet-US-Chemical-Investment-Linked-to-Shale-Gas.pdf>.

CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW, *ET AL.*, How Fracked Gas, Cheap Oil, and Unburnable Coal are Driving the Plastics Boom, (2017), <https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-How-Fracked-Gas-Cheap-Oil-and-Unburnable-Coal-are-Driving-the-Plastics-Boom.pdf>.

CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW, Plastic & Health: The Hidden Costs of a Plastic Planet, (February 2019), available at <http://www.ciel.org/plasticandhealth>.

Geyer, R., J.R. Jambeck, K.L. Law, Production, use, and fate of all plastics ever made, *Sci. Adv.* 2017;3: e1700782 (July 19, 2017).

World Economic Forum, Ellen MacArthur Foundation, The New Plastics Community: Rethinking the future of plastics (January 2016), available at http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf.