WATERKEEPER® ALLIANCE MEMBER
San Antonio Bay Estuarine Waterkeeper
600 Ramona Rd.
Seadrift, Texas 77983
361-218-2353

Amy R. Johnson
Attorney-at-Law
5836 SE Madison St.
Portland, OR 97215
503-939-2996
amy@savagejohnson.com

FREDERICK, PERALES, ALLMON & ROCKWELL*, P.C.
ATTORNEYS AT LAW
1206 San Antonio Street
Austin, Texas 78701
(512) 469-6000 / (512) 482-9346 (facsimile)
Info@LF-LawFirm.com

August 7, 2020

Texas Commission on Environmental Quality
12100 Park 35 Cir,
Austin, TX 78753
Submitted electronically to IPCOMMNT@tceq.texas.gov

Re: Comments on proposal to regulate the discharge of plastics

Dear TCEQ:

Please consider these comments on behalf of Diane Wilson and San Antonio Bay Estuarine Waterkeeper (hereinafter Waterkeeper), Waterkeeper Alliance and the Center for Biodiversity (collectively Commenters) regarding the Texas Commission on Environmental Quality's (TCEQ's) proposal to prohibit the discharge of visible plastics into the waters of the state of Texas.

Waterkeeper strongly supports TCEQ's decision to establish a standard of zero discharge of microplastics into Texas waters.

Diane Wilson is a former shrimper who lives in Seadrift, Texas, and has been actively involved in trying to remove plastics from Texas waters for many years. San Antonio Bay Estuarine Waterkeeper was started in 2012 as a project of the Calhoun County Research Watch. The mission of Waterkeeper is to monitor and pro-actively protect Lavaca, Matagorda and San Antonio Bays and to educate the public, while reporting relevant findings to the appropriate authorities. Waterkeeper is committed to engaging volunteers, marine biologists, environmental advocates from both Calhoun County Resource Watch and Texas Injured Workers, commercial fishermen, and other members of the community to identify violations of the CWA and promote cleanup and recovery efforts. Waterkeeper also promotes the preservation of local wetlands and waterways for proper commercial and sport fishing and other recreational uses, such as swimming and other watersports to further the appreciation of these beautiful natural resources. Ms. Wilson and Waterkeeper brought a Clean Water Act lawsuit against Formosa Texas regarding the illegal discharge of plastics from its Point Comfort facility. The 2019 settlement of the suit included the largest citizen suit mitigation payment of $50 million and a commitment to zero-discharge of plastics.

Waterkeeper Alliance is a global movement uniting more than 350 Waterkeeper Organizations and Affiliates around the world, focusing citizen action on issues that affect our waterways, from pollution to climate change. The Waterkeeper movement patrols and protects over 2.5 million square miles of rivers, lakes, and coastlines in the Americas, Europe, Australia, Asia, and Africa. For more information, please visit waterkeeper.org.

The Center for Biological Diversity is a national, nonprofit conservation organization with more than 1.7 million members and online activists dedicated to the protection of endangered species and wild places. In pursuit of its mission, the Center has worked extensively to protect ecosystems nationwide from the threat of plastic pollution

Background

Waterkeeper has long worked to stop the discharge of microplastics into Texas waters. After years of filing complaints regarding discharged plastics, on July 31, 2017, Waterkeeper filed a Clean Water Act citizen suit against Formosa Plastics Texas, alleging the discharge of plastics from its Point Comfort facility violated its Texas Pollutant and Discharge Elimination System (TPDES) permit. Formosa's TPDES permit prohibited a discharge of more than a "trace amount" of floating solids. Whether the plastics discharged constituted more than a "trace amount" was heavily litigated. After a 4-day trial, the judge determined, among other things, "[T]he term trace 'means' a very small amount; a barely discernible quantity of a constituent, especially when not quantitatively determined, because of minuteness."[1]

[1] *Waterkeeper v. Formosa Plastics Corp., Texas*, 2019 WL 2716544, at 3 (S.D. Tex. 2019)

In November 2019, Waterkeeper and Formosa Plastics Texas and Formosa USA settled the litigation. The consent decree was approved by the federal court in December 2019 and became effective in January 2020.[2] Many settlement terms are relevant to the regulation of plastics discharges. The settlement includes an agreement for there to be zero discharge of plastics from the Formosa's facility. Formosa committed to hiring an engineering firm to improve source control methods (stopping plastics from spilling or hitting the ground) and to re-engineer the stormwater and wastewater systems such that plastics will not be discharged in the future. The consent decree also allows Waterkeeper's expert engineer, Dr. Aiza Jose-Sanchez, to design a wastewater sampling mechanism, to continuously monitor and detect microplastics in Formosa's wastewater discharge.

Commenters believes Dr. Jose-Sanchez' wastewater sampling mechanism, the to-be proposed source control methods, and the to-be proposed mechanisms for plastic removal from stormwater and wastewater could set new standards for best management practices. Waterkeeper has the right to review and comment on the new proposals for the Formosa facility and will share information about the mechanisms and methods recommended with TCEQ.

Harm from plastics

Waterkeeper has reviewed TCEQ's June 30, 2020 PowerPoint about microplastics. The Power Point provides an important base for discussing plastics but omits a few relevant issues about potential harm to the environment.

First, it is important to note that plastics can last for decades in the environment. They do not disintegrate over any time frame that is meaningful to humans. During their long life, they can further fragment. Many floating plastics will become weighted down by biota or other chemicals and sink to the bottom of a water body.

As explained by Dr. Jeremy Conkle, an environmental scientist from Texas A&M-Corpus Christi, who worked as an expert in Waterkeeper's lawsuit, other contaminants in the water column can "sorb" onto plastics.[3] Arsenic, cadmium, chromium, copper, lead, mercury, oil and grease, zinc, benzene, hexavalent chromium, and 2-, 3-, 7-, 8- dioxin, and zinc will all sorb onto plastics. In fact, Dr. Conkle sampled discharged pellets on the shoreline of Lavaca Bay and found that mercury had sorbed onto them (Lavaca Bay had a mercury superfund site in the bay, due to historic releases by Alcoa). Given that many of the 155 pre-production plastics plants referenced in the June 30th presentation are in areas with industrial manufacturing or refining plants, this sorption characteristic of pre-production plastics presents an extra basis for concern about the discharge of plastics.

[2] A copy of the consent decree is filed with these comments.

[3] Two of Dr. Conkle's expert reports from the litigation accompany these comments.

Finally, plastics also may contain additives including antioxidants, foaming agents, colorants, plasticizers, lubricants, anti-stats, anti-microbials and flame retardants, all of which can have a negative effect on the environment.

Definition of plastics

Clearly, no plastics should be discharged into Texas waters, but this regulation appears aimed at microplastics. TCEQ should ensure that any regulations cover at least all visible microplastics, not simply those that float.

As explained by Dr. Conkle, plastics are normally divided into two categories: macroplastics and microplastics. Microplastics are less than 5 millimeters in size. Microplastics are further divided into two categories: primary microplastics and secondary microplastics. Primary microplastics are manufactured at a size of less than 5 millimeters, while secondary microplastics are plastics that are smaller than 5 millimeters due to fragmentation of larger plastics.

Visible plastics includes pellets, flakes, fibers and powder. Waterkeeper can attest that microplastics, including plastic powder, are all visible. Waterkeeper has thousands of photos and videos of microplastics showing how they are visible to the naked eye and is happy to provide samples to TCEQ if requested.

Currently TCEQ regulations for the discharge of "floating solids" govern the discharge of microplastics. Including "floating" as part of any adopted regulation of discharged plastics may inadvertently exclude some plastics from regulation. For instance, PVC powder normally will not float, but it can float for a short period. While heavier plastics may not float as easily and thus be less likely to be discharged, this does not mean they should be excluded from regulation. For instance, in a high wind and rain event, those plastics might be carried to Texas waters, just as sediment can be carried through a water system. Such discharges should be prohibited.

Any regulation of plastic discharges should regulate all plastics less than 5 millimeters in size, including pellets, flakes and powder regardless of whether they float.

Importance of frequent monitoring and publicly available information

At a minimum, entities that produce, handle, transport or use microplastics should be required to obtain a permit and to monitor outside all their discharge points, including outside their outfalls and at least 50' in all directions from the discharge location, the day after every 1-year, 1-hour storm event or more and after a 1-year, 24-hour storm event, and at least once a month within 24 hours of a discharge. Permittees should be required to attest that they have taken no unusual steps to clean up plastics in their culverts or outfalls in the week before any monthly monitoring or after a rainfall event. If plastics are found in either instance – after a major rainfall or in the monthly monitoring -- then monitoring should increase to twice a month, for at least six months. These monthly reports should be made available publicly within a week of their completion.

Additionally, in the monthly reports, the permittee should be required to attest that any outfall gates have not leaked, and that water has not circumnavigated the outfall gates. Permittees that impound stormwater behind structural barriers, e.g., gates, near their outfall discharge points should certify twice annually that the barriers do not leak and that stormwaters are not able to bypass the barriers.

In the Waterkeeper case, Formosa was able to "finger print" plastics found on the shores Lavaca and Cox Creek and, thereby, to conclude that some deposits of plastics were in whole or in part attributable to sources other than Formosa. Were the agency able to devise a feasible regulatory requirement that producers of pre-production plastics include in them distinctive trace elements, that would elevate this finger printing tool to a more reliable level and level the playing field for the careful producers.

Local individuals can play an important role in monitoring for plastics. Commenters propose that TCEQ develop a reporting form for the public to use to report plastics discharges. A copy of a form developed by parties and the Remediation Consultant pursuant to the Formosa consent decree accompanies these comments. While reliance on volunteers is important, it is also just and appropriate that volunteers who do the work the permittee should undertake should be compensated when their efforts lead to documentation of a permit violation or the cleanup of plastics. Commenters propose that if a violation is found when a private individual reports the discharge of plastics, TCEQ should fine the violator and compensate the volunteer for the efforts from part of the fine. The process should allow the volunteer to ask that any monetary reimbursement be paid to TCEQ or a local environmental project.

Reporting of discharges, location of discharge

Commenters agree that once the plastics leave the final discharge point or outfall gate, even if those plastics are on the property of the permittee, those plastics have been discharged. At that point, the plastics are in a drainage area destined to enter waters of the state of Texas, which is why the permit is required, and no mechanism exists to stop that discharge.

Plastic discharges should be required to be reported as soon as possible and no more than within 24 hours of detection. Further, permitees should immediately be required to clean up discharged plastics and report to TCEQ regarding the details of the cleanup (unless such a cleanup would cause environmental harm), including the quantity of plastics cleaned up, the location of those plastics, the type of plastics, and the amount of plastics that are estimated to have not been collected. Again, a standard reporting form will assist in ensure all details are properly reported. Photos should accompany all cleanup reports. Cleanup reports should be publicly available. Hydraulic flushing of pellets from vegetation in which they have become enmeshed should not be allowed, without prior specific TCEQ approval.

BMPs

Any regulation should make it clear that the use of best management practices (BMPs) does not in any way absolve the permittee of the duty not to discharge plastics in any circumstances. In other words, BMPs are simply methods designed to prevent the discharge of plastics. BMPs should be included as a condition to any permit, and the permittee should be required to notify the agency when any BMPs are modified. If BMPs are not functioning or installed as represented in a permit application, this could be cited during an inspection by the agency.

To prevent plastics discharges, the best method is source control, i.e., preventing the plastics from entering the stormwater control system. This includes use of mechanisms to restrict spillage in bagging and production areas, frequent vacuuming or areas where plastics are handled, a sealed area for the loading of plastics, and use of a vacuum mechanism on railroad cars that transport plastics. Additionally, BMPs should prohibit permittees from sweeping spilled plastics into stormwater drainage areas.

Areas that handle plastics should drain to a wastewater system with plastic removal mechanisms or a stormwater system separate from the normal stormwater system. The "plastics" stormwater system should then separate out plastics. One method to allow proper separation of plastics is a retention pond, and a retention pond should be included among BMPs. This bifurcation of stormwater will allow concentration of plastics and subsequent easier removal.

Microplastics should also not be discharged in wastewater

In a facility that produces or handles plastics, those plastics can also make their way to the industrial wastewater system. Just as plastics should not be discharged to Texas waters through stormwater, likewise, plastics should also be prohibited from being discharged in industrial wastewater. Any regulation should also make it clear that the zero-plastics discharge standard applies to industrial wastewater discharges.

Compliance period

Waterkeeper is familiar with the time required to retrofit a facility to stop the discharge of plastics and acknowledges that facilities may not be able to comply with zero discharge immediately. Currently, permitted facilities should be using BMPs at a minimum.

While commenters recognize that immediate compliance with zero-discharge may take time, interim measures can go into effect more quickly. For all permitted facilities, the "trace amounts" standard should apply within one year. For all permitted facilities, monitoring after major rainfall events and monthly, with additional reporting and cleanup, as described above, should be required.

Finally, extensions on compliance with the zero-discharge rule should only be allowed if facilities have complied with new monitoring and reporting requirements.

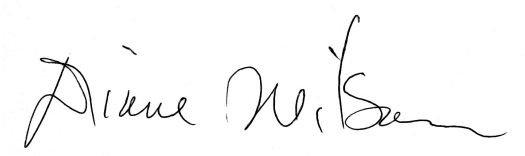
Enforcement

Waterkeeper's experience with the agency's enforcement process during the Formosa litigation was disheartening. Waterkeeper's understanding from both its and Formosa's regulatory expert and from reviewing numerous Penalty Calculation Worksheets is that the agency does not consider the wealth of the violator in arriving at an administrative penalty for a violation. Presumably, not all the pre-production plastics permittees in Texas are wealthy at the level of Formosa, which reported after-tax net profit in excess of $900 million/year during the time of Waterkeeper's litigation. However, many or all of the pre-production plastics permittees will be very substantial entities, entities with real resources and for whom a $100,000-$200,000 fine will be inconsequential. Also, in Waterkeeper's experience, the agency grossly underestimates the costs forgone by violators, when violators decide to not timely implement environmental controls that would prevent violations. These two deficiencies in the agency's enforcement practices mean that the administrative penalties it imposes have no deterrent effect, at all; they are just normal expenses of doing business. These practices need to be corrected.

Conclusion

Waterkeeper is proud to be part of the elimination of plastics in Texas waters. Waterkeeper volunteers through Ms. Wilson and her attorneys to answer any questions and participate in any discussions regarding these policies.

Yours truly,



Diane Wilson
Individually and on behalf of San Antonio Bay Estuarine Waterkeeper

Emily Jeffers
Staff Attorney, Center for Biodiversity
ejeffers@biologicaldiversity.org

Julia Widmann
Organizer, Gulf and South Atlantic Regions at Waterkeeper Alliance
jwidmann@waterkeeper.org

Amy Johnson
Attorney for Diane Wilson and San Antonio Bay Estuarine Waterkeeper

David Frederick
Attorney for San Antonio Bay Estuarine Waterkeeper

Erin Gaines
Attorney for Diane Wilson
egaines@trla.org

Attachments:
Waterkeeper v. Formosa Plastics Corp., Texas, 2019 WL 2716544, consent decree.
Expert report Dr. Jeremy Conkle, Dec. 7, 2018
Expert report Dr. Jeremy Conkle, July 9, 2018
Plastics reporting form developed as part of *Waterkeeper v. Formosa Plastics Corp.* settlement