

Tischler/Kocurek Environmental Engineers

August 4, 2020

Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

Attn: Standards Implementation Team (MC-150)

Re: Proposed Plastics Standard

Tischler/Kocurek (T/K) is pleased to offer these comments on the Texas Commission on Environmental Quality's (TCEQ) proposed prohibition of discharge of pre-consumer plastic resin pellets and fines (flakes, powder) that was introduced at the June 30, 2020 Standards Implementation Stakeholder meeting. T/K's comments are based on the verbal discussion and slides presented at the meeting and TCEQ's request for comments posted on the Commission's web site.

Our comments are organized into two sections: (1) regulatory basis and scientific support for a prohibition and (2) responses to TCEQ's comment request list.

REGULATORY BASIS AND SCIENTIFIC SUPPORT

Based on TCEQ's presentation it will propose the plastics prohibition in the Texas Surface Water Quality Standards (SWQS) rule at 30 Texas Administrative Code (TAC) Chapter 307. T/K presumes this prohibition will be added to the rule at 30 TAC \S 307.4(b)(2) or (3), which address discharges of floatable and settleable materials in more than trace amounts.

As T/K has previously stated in comments on draft plastics provisions that have been included in proposed TPDES industrial permits, we oppose any zero discharge standard for plastic pellets and fines without a formal rulemaking justifying such a standard. Although now worded as a "prohibition" rather than a zero discharge limit, the regulatory change TCEQ is proposing has fundamental problems with respect to its scientific and technical justification.

T/K believes that inclusion in the SWQS of a provision to prevent the discharge of pre-consumer plastic pellets and fines in more than trace amounts is appropriate. However, we strongly object to any standard that is a zero discharge requirement. TCEQ must acknowledge that the SWQS for even the most toxic chemicals, e.g., mercury and dioxins, are numeric criteria and do not limit such constituents to zero discharge. T/K believes that it is incumbent on TCEQ to set an objective numeric criterion, other than zero or a prohibition, on the amounts of plastic pellets and fines that represent an adverse impact on the aquatic environment and the recreational use of Water in the State.

An absolute prohibition on discharge of plastic pellets and fines would cause enormous enforcement difficulties for TPDES permittees and the Commission. If a single plastic pellet or flake is found in a Water of the State downstream of a permitted discharge, regardless of the distance from the outfall, there will be the potential for enforcement action by TCEQ or, if TCEQ does not take action, a citizen suit. Demonstrating that pellets originated in the permitted industrial discharge or may have been contributed from, for example, railroad right-of-way or transportation on roads not owned by the discharger may be difficult or impossible. Once rail cars and trucks leave a plastic manufacturer's facility the company has no control over any minor losses of plastic fines that will occur. The plastics can be blown into receiving waters and it may be impossible to determine if it was discharged through the permitted outfall. There is

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also the potential that an individual could throw a handful of pellets into a surface water downstream of a permitted outfall to falsely claim it was discharged by a permittee.

The final rule should provide that proximity of the plastic pellets and fines to the manufacturer's outfall discharge locations be taken into account in determining if the water quality standard is being achieved. T/K believes that a zero discharge standard or prohibition will be difficult to enforce unless it is narrowly focused on the proximity of a permitted outfall and defines the quantity of plastics and fines that constitute non-compliance with the permit conditions.

T/K believes that there is probably sufficient reliable scientific data to support numeric limits on the amounts of plastic pellets and fines discharged to surface waters that will protect aquatic life from adverse effects due to ingestion, blockage of gills, and other effects. However, it is incumbent on the TCEQ to develop the scientific basis to support adoption of a water quality standard for plastic pellets and fines.

The rulemaking on pre-consumer plastic pellets and fines must also be very clear that it is not applicable to micro- and nano-plastic particulates that are generally understood to originate from post-consumer releases to the environment.

TCEQ COMMENT REQUEST

T/K's responses to the specific TCEQ requests for comments are as follows:

1. Please provide input on the following proposed definition of plastic (taking into consideration the focus on pre-production plastic): Plastic means all forms of visible plastic produced, received, or handled at the permittee's facility, including but not limited to: pellets, powder, and flakes.

T/K agrees with the concept of this definition, but believes the term pre-production is inappropriate and subject to misinterpretation because manufacture of plastics in their preconsumer form is production. The definition should state more clearly that the rule applies to plastic materials in pellet, flake, or powder form before they are used to produce a consumer product.

2. TCEQ's intent is to regulate plastics visible to the naked eye, but please provide input on class sizes for our review. Additionally, please provide input on the use of the word "visible" in the definition above.

The regulation should state that "visible" means visible to the naked eye, without any artificial magnification, in the receiving water and on the bed and/or banks of a Water in the State. Determining a "class size" for application of a plastic particle standard may be practical for pellets, but likely impractical for powder or flakes. T/K suggests that an alternative numeric criterion would be to establish an area coverage standard that would apply to both surface water and the bed and banks. This standard could be cumulative, i.e., the area of pellets floating on the water surface and deposited on the bed/banks would be added. For example, the standard could state that if there is more than a certain amount of total water surface and land surface coverage with visible plastic pellets and/or fines, then the prohibition is violated. This area coverage standard could be readily applied by inspectors and the public by taking photographs of the receiving water downstream of an outfall.

3. In addition to the prohibition, permittees with stormwater outfalls under the Multi-Sector General Permit or an individual permit will be required to develop a comprehensive set of Best Management Practices to include within their Stormwater Pollution Prevention Plan. Please

Tischler/Kocurek 107 South Mays Round Rock, Texas 78664 512.244.9058 512.388.3409 FAX provide input to assist with the identification of effective BMPs and potential sources of information such as "Operation Clean Sweep."

The plastics industry would be a key source of practical and effective best management practices (BMPs) for management of releases of plastic pellets and fines because they deal with these practices both in the design and operation of their facilities. Practices that we have seen at our client's plants that are effective include: (1) daily inspections to identify losses of pellets and fines to the ground and immediate responses consisting of vacuum collection or other forms of surface cleaning; (2) pellet separators located in-plant for areas where there are potential losses of plastics to the ground (typically storage silos, outside storage of product containers); and (3) pellet and fines treatment for storm water in various treatment units, e.g., screens, pellet separators, ponds and/or ditches with floating booms, screens, and over/under weirs.

4. Please provide input on additional requirements such as: outfall and receiving water inspections, notification of spills and unauthorized discharges to Regional Office, recovery of released materials from receiving waters, and clarification that the point of compliance for the prohibition on the discharge of plastic is at the final outfall.

T/K believes that the most effective way to reduce discharges of plastic pellets and fines from manufacturing plants is have the permittee responsible for routine outfall inspections and requiring notification of TCEQ of releases to Waters in the State and removal of the plastic materials from the receiving water including the bed and banks. In 2018, TCEQ and one of our clients agreed upon a TPDES permit provision that implements this approach. The provision (edited to be more generally applicable) is as follows:

Plastic pellets and fines must not be discharged in amounts prohibited by 30 TAC \$307.4(b)(2) or (3). The permittee must conduct weekly inspections of each outfall to ensure that no plastic pellets or fines have been or are about to be discharged. If any plastic pellets or fines have been discharged through any outfall in amounts prohibited by 30 TAC \$307.4(b)(2) or (3), the permittee shall notify the TCEQ Region XX Office and immediately take steps to remove the pellets or fines.

T/K believes that this inspection, reporting, and clean-up provision would be more effective and easier to implement than a regulatory prohibition or zero discharge limit because it places the burden on the permittee to not only self-report a non-compliance, but requires specific action to remedy the discharge. T/K also believes that this is a provision that could be added to the Industrial Multi-sector General Permit (MSGP) and would not be unduly burdensome to MSGP permittees. The implementation of the above monitoring, reporting, and response provision in permits would not require any regulatory change and could be implemented immediately because it relies on the existing authority of TCEQ to enforce the SWQS provisions at 30 TAC § 307.4(b)(2) and (3).

5. TCEQ is requesting stakeholder input regarding additional time to comply with the prohibition on the discharge of plastic. The Texas Surface Water Quality Standards allow up to a three-year compliance period. TCEQ is proposing that requests for a compliance period must justify the need for additional time including a construction schedule to install new control structures or retrofitting existing systems to achieve compliance. If approved, the compliance period will include submission of quarterly progress reports.

T/K believes that if a proposed plastic pellets and fines rule would be added to the SWQS at 30 TAC 307, the compliance schedule provisions should apply to any discharger that cannot

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immediately comply with the new provision. T/K's experience with this industry indicates that there will be some sites that will have to install significant treatment facilities that will require time to evaluate, design/construct, and start up. The TCEQ currently requires justification of compliance schedules and construction schedules and the plastics rule should be no different from any other water quality standard.

T/K appreciates the opportunity to provide these comments on the proposed regulation for plastic pellets and fines. If you have any questions regarding these comments, please let us know. Our email addresses are <u>dianna@tkee.com</u> and <u>lial@tkee.com</u>.

Sincerely,

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