

ENTERED

June 27, 2019

David J. Bradley, Clerk

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
VICTORIA DIVISION

SAN ANTONIO BAY ESTUARINE	§	
WATERKEEPER, <i>et al</i> ,	§	
	§	
Plaintiffs,	§	
VS.	§	CIVIL ACTION NO. 6:17-CV-0047
	§	
FORMOSA PLASTICS CORP, TEXAS, <i>et al</i> ,	§	
	§	
Defendants.	§	

MEMORANDUM AND ORDER

I. INTRODUCTION

This case is brought pursuant to State of Texas laws and the Water Pollution Control Act (“Act”), 33 U.S.C. § 1251 et. seq. Before the Court are the parties: (a)¹ proposed findings of fact and conclusions of law; (b) the testimonial evidence; (c) the arguments of counsel; and, (d) the documentary evidence presented by both the plaintiff, San Antonio Bay Estaurine Waterkeeper and S. Diane Wilson (“Waterkeeper”) and the defendants, Formosa Plastics Corp., Texas and Formosa Plastics Corp, U.S.A. (“Formosa”)².

After a several day, non-jury trial, the case was taken under advisement by the Court to consider only the question of liability, if any, on the part of Formosa for alleged violations of State and federal law. After a careful review of the evidence, pleadings, arguments of counsel and the applicable law, the Court determines that: (a) it has jurisdiction over Waterkeeper’s suit;

¹ The Court has drawn upon the findings of facts and conclusions of law filed by the plaintiffs and defendants in formulating this Memorandum.

² After a review of the evidence, the Court is of the opinion and concludes that Formosa Texas and Formosa Plastics Corp U.S.A. jointly direct, manage and control Formosa Texas as it relates to matters concerning Formosa Permit and Compliance with state and federal law. *See* [Section X(c)].

and (b) Formosa has historically and continues to violate its Texas Pollutant Discharge Elimination System permit (“TPDES”) and consequently the cwa.

II. THE ACT AND AUTHORITY OF STATES

The Clean Water Act (“CWA”) makes unlawful the discharge of any pollutant by any person that is not discharged pursuant to a permit [33 U.S.C.A. § 1311(a)]. Therefore, discharges of pollutants are lawful if the discharging person holds a National Pollutant Discharge Elimination System (“NPDES”) Permit that meets the requirements of the CWA. [33 U.S.C.A. § 1342]. Specifically, Section 1342 of the Act provides that upon the approval of the Environmental Protection Agency (“EPA”), states may create and administer a State Pollutant Discharge Elimination System (“SPDES”) permit program. *Id.* Texas has an SPDES Permit Program administered by the Texas Commission on Environmental Quality (“TCEQ”) with which the authority to issue permits for the discharge of pollutants into the State waters. *See* [Tex. Water Code § 26.027]. Therefore, Texas law prohibits the “discharge [of] sewage, municipal waste, recreational waste, agricultural waste, or industrial waste into or adjacent to any water in the state” except as authorized by TCEQ. *Id.* at § 26.121. Formosa is a permittee.

The CWA requires that program administrators establish reporting mechanisms necessary for determining when permittees are in violation of federal effluent standards. [33 U.S.C.A. § 1318(a)]. These reports are publicly available [33 U.S.C.A. § 1318(b)]. Also, Texas law requires as a condition of all permits, that permittees report any non-compliance that endangers human health or safety, or the environment. [30 Tex. Admin. Code §305.125(9)]. Initial reports of non-compliances may be made orally within the first 24 hours; however, a written report is required within five days. *Id.* at §305.125(9)(A).

III. WATERKEEPER'S MISSION AND THE RELIEF SOUGHT

Waterkeeper is a 501(c)(3), non-profit organization that has as its mission the preservation of local wetlands and waterways in Lavaca and Matagorda Bays and Cox Creek. In keeping with this mission, Waterkeeper enlisted volunteers, marine biologists and environmental advocates to monitor the water ways and collect evidence that it contends supports its claim that Formosa has and continues to violate the Act has failed to report its conduct to state or federal agencies pursuant to its Permit.

Waterkeeper seeks a declaratory judgment that Formosa has violated, and on an ongoing basis, continues to violate its TPDES Permit under the Act, pursuant to 28 U.S.C. §§ 1311, 1342 and 40 C.F.R. § 122.41(a). Waterkeeper also seeks monetary damages, attorney's fees and injunctive relief. Jurisdiction over such disputes is conferred on this Court by 28 U.S.C. § 1311 and 33 U.S.C. § 1365(a) of the Act.

A. Waterkeeper's Notice Timely

Pursuant to 40 C.F.R. § 505(b)(1)(A), Waterkeeper notified Formosa of its allegations and gave notice of its intent to file suit. Notice was also provided to the EPA and the TCEQ. The record shows that more than 60 days expired between the notice given and the filing of this suit, which notice satisfied the requirement of the Act. *See* 33 U.S.C.A § 1365(b)(1). At the time that Waterkeeper commenced this suit, neither the EPA nor TCEQ had commenced a civil or criminal action against Formosa to enforce compliance with its TPDES Permit. The Court determines that the citizen's notice requirement(s) are met.

B. Waterkeeper's Challenge to Permit Renewal

In July of 2013, Waterkeeper challenged Formosa's application for a renewal and amendment to its TPDES Permit due to alleged past violations of its Permit and the CWA. After

hearings and some delay, Formosa's Permit was renewed on June 10, 2016, as Permit # WQ0002436000. This Permit is the subject of Waterkeeper's suit and allegations that Formosa continues to violate its Permit, State and federal law.

IV. FORMOSA'S WASTEWATER AND STORMWATER DISCHARGES

Formosa was issued its original water discharge Permit in 1993. On June 10, 2016, Formosa's TPDES Permit was renewed to expire on January 1, 2020. The Permit allows Formosa to treat and discharge wastewater and stormwater and discharge it into Lavaca Bay and into Cox Creek, both waterways are "navigable waters" of the United States.

Formosa has 13 permitted wastewater or stormwater Outfalls from the plant (Outfalls 001-013). Outfall 001 discharges treated wastewater and process (or contact) stormwater. Outfalls 002-013 discharges non-process (or non-contact) stormwater. Two of these Outfalls (numbered 001 and 011) discharge to conveyances that lead to Lavaca Bay. Six Outfalls (numbered 002, 003, 004, 005, 010 and 013) discharge to conveyances that lead to Cox Creek, south of State Highway 35. The remaining five wastewater Outfalls (numbered 006, 007, 008, 009, and 012) discharge to conveyances that lead to Cox Creek north of State Highway 35.

The primary function of the wastewater system that discharges from Outfall 001 into Lavaca Bay is to remove or dissolve organic waste. While it has some functions capable of removing plastic pellets and PVC powder from the wastewater prior to discharge, Formosa is aware that these functions have proven inadequate based on the quantity of plastic pellets and PVC powder that move through the system. Remedial measures taken at the outfall recently have also proved to be inadequate.

A. Permit Restrictions

Formosa's 2016 Permit prohibits the "discharge of floating solids or visible foam in other than trace amounts" from Outfall 001. *See* (Ex 2 at 71403-000224). This prohibition is not new but is the exact same Permit terms found in Formosa's original TPDES Permit issued in 1993. *See* (Ex 88 at FPC048636). The Permit also prohibits the "discharge of floating solids or visible foam in other than "trace amounts" from Outfalls 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012. *See* (Ex 2 at 71403-000235-000236). Moreover, TCEQ rules prohibit the discharge of "floating debris and suspended solids" into surface waters. *See* [30 Texas Admin. Code 307.4(b)(2); *see also* (Ex 2 at 71403-000242)].

The Permit also requires Formosa to report, in writing, within 24 hours, any floating solids violations. In determining whether the Permit has been violated, the TCEQ conducts inspections from time-to-time utilizing a "visual sightings" method to determine compliance. The discharge of any floating solids constitutes a violation of the Permit. *See* 30 Tex. Admin. Code § 307.4(b)(2-4). Formosa has not disputed the visual sightings method for determining compliance or interpretation of its Permit by which compliance is determined.

B. What Constitutes A "Trace Amounts"

The term trace "means "a very small amount; a barely discernible quantity of a constituent, especially when not quantitatively determined, because of minuteness. *See* [Webster's New International Dictionary, 2nd Ed. (unabridged)(1957). This definition is consistent with the definition found in Black's Law Dictionary, science and scientific understanding and use in laboratories. The Court's understanding is confirmed by the testimony of Dr. Jeremy Conkle, an expert in the field. He testified that "trace organic contaminants are not easily identifiable in the environment." He testified further that it is "very difficult to detect"

these contaminants and often takes advanced instrumentation to concentrate them for analysis. (Trial Tr. Vol. 2, 36:10-16).

V. TCEQ'S COMPLIANCE ROLE AND COMPLAINT INVESTIGATED

In determining whether floating solids have been discharged in “other than trace amounts,” TCEQ inspectors conduct visual inspections of the water bodies that receive Formosa’s discharges. If upon visual inspection, floating solids are readily apparent, the inspectors document their finding, any may photograph any evidence of floating solids as a record of a violation. TCEQ has recently done just that – visually determined and photographed amount of plastic pellets discharged that it holds constitute more than trace amounts.

On March 10 and 14, 2016; September 7, 8 and 13, 2016; April 2018; June 2018; and January 2019, TCEQ determined that Formosa had violated its Permit. The March 2016 and April 2018 photographs show plastics in Cox Creek show plastics in Lavaca Bay. (Ex 74 at FPC002716-002718 and Ex 75 at 71403-008239). Likewise, in January 2019, photos show plastics in Cox Creek and Lavaca Bay. (Ex 145).

Formosa’s Permit requires it to report prohibited discharges within 24 hours to TCEQ, *i.e.*, any floating solids violations. The Permit also requires Formosa to report any permit non-compliance, that may endanger human health, safety, or the environment as required by the State Administrative Code. The TCEQ confirms that reportable discharges, that endanger the human health, safety, or the environment, include the discharge of plastic pellets and PVC powder.

Formosa agreed, during the 2016 permitting process, that it was required to report any unlawful discharge of plastic pellets and PVC powder to TCEQ. It also affirmed that it understood the meaning of the effluent limitations contained in its Permit and further confirmed

that its understanding was the same as that defined by TCEQ. *See* [Ex 11 at 71403-001828 - 001829); and Ex 5 at 71403-000165].

On April 11, June 12 and June 26, 2018, TCEQ conducted on-site investigations of the Formosa plant that included examination of Outfall 001. (Ex 12) The April 11, 2018, TCEQ investigation was based on citizen complaints of Formosa's plastic pellet discharges at Lavaca Bay and Cox's Creek from one or more of the stormwater Outfalls and observed floating white debris [PVC powder] and plastic pellets in the Bay near Outfall 001.

TCEQ also observed floating white debris that appeared similar to the debris seen near Outfall 001 in the plant at the sump that precedes the in-plant inlet to the pipe leading to Outfall 001. Formosa employees acknowledge to the investigators at the time that Formosa had observed plastic pellets at the Outfall 001 during weekly cleaning of its cone filter in the outflow path.

Citizens also filed complaints that plastic pellets were being discharged from Outfall 001 and were observed on June 21 and again on June 26, 2018. At the time, TCEQ investigated those complaints and again found floating pellets and white debris near the discharge from Outfall 001. It collected water samples from the sump and from the sampling spigot down-flow from the sump. It also collected water samples near the outflow of Outfall 001 and from the north shoreline of Lavaca Bay. Laboratory analyses of the white debris [PVC powder] in each sample were consistent with one another, "indicating that it is likely the same material" found on Formosa's facility.

TCEQ received further complaints on October 8, 2018, of PVC powder and plastic pellets in Lavaca Bay. The agency investigator on October 9, 2018, documented PVC powder and plastic pellets at several places along the shoreline of Lavaca Bay and informed Formosa of

its findings. Another TCEQ on-site investigation occurred on January 17, 2019. The investigation results documented numerous instances of discharged plastic pellets or floating solids at Outfalls 001, 006, 008 and 009.

VI. WATERKEEPER AND WILSON'S COLLECTIONS

Plaintiffs offered testimony of plaintiff Diane Wilson and members David Sumpter, Bobby Lindsey, Ronnie Hamrick, Dale Jurasek, and Cheyenee Jurasek. These witnesses provided detailed, credible testimony regarding plastics discharged by Formosa, as well as photographs, videos, and 30 containers containing 2,428 samples of plastics in gallon zip lock bags and plastic bottles of plastic pellets.

Dale Jurasek testified about conditions at Formosa and also supplied notes recording that he informed Formosa in 2000 that plastics being discharged into Lavaca Bay and Cox Creek. Waterkeeper also offered testimony of interested citizens Michael Mang, Myron Spree and Van Rozner. Mr. Mang and Mr. Spree testified that plastics were being discharged by Formosa. As well, the produced photographs and videos documenting the discharges. Rozner, a former Formosa employee, testified and his testimony confirmed problems at Formosa's facility that were leading to the discharges. The reports and the testimony of three independent experts, Dr. Aiza Jose-Sanchez (Exs. 35, 36, 37, 38 and 238), Dr. Jeremy Conkle (Exs. 33, 34 and 39) and Ms. Donna Phillips (Exs. 39 and 189) were offered by Waterkeeper. Although Formosa made *Daubert* objections to the testimony of Dr. Jose-Sanchez and Dr. Jeremy Conkle, those objections are overruled. The Court accepts their testimony as reasonable and credible. Drs. Conkle and Jose-Sanchez used reliable principles and methods to analyze factually relevant scientific and technical information.

The expert opinion of Dr. Conkle provided compelling and reliable first-hand practical and scientific information about the discharges. He is a Texas A&M scientist and provided thoroughly researched information about the Cox Creek and Lavaca Bay systems, describing why plastic pellets found on the Lavaca Bay shores came from Outfall 001. Dr. Conkle described how Hurricane Harvey flushed Cox Creek. He physically viewed discharges at the Bays, took scientific samples of the discharges, observed Waterkeeper's sampling, and tested plastic pellets in his laboratory. The Court finds that the methodology Dr. Conkle used in this case is reliable and similar to what he uses in his professional capacity [Ex. 33].

Dr. Jose-Sanchez, an environmental engineer with a Ph.D., in civil engineering from the University of Texas, has 24 years of experience consulting for the public and private sector in stormwater and wastewater engineering. She conducted a site visit to Formosa's facility and reviewed extensive information to form her opinions, including but not limited to: the facility's stormwater and wastewater systems, audits and forms completed by Formosa, internal emails and plans for improvements by Formosa, bids from third parties to Formosa for improvements, cleanup amounts and dates from Formosa's third party contractor from Cox Creek and Lavaca Bay, TCEQ investigation reports, and evidence from Waterkeeper and other local resident witnesses about discharges of plastics and powder. *Id.* at 180:25-182:3. The Court finds that the methodology she used in this case is reliable and similar to what she uses in her professional capacity.

Donna Phillips has 28 years of investigation and management experience regulating industrial discharges at TCEQ. (Ex. 39) This experience informed her opinions about the definition and enforcement of applicable permit terms. She traversed Cox Creek and confirmed visually illegal discharges by Formosa. Her testimony was relevant and based on regulatory and

technical information used for analyzing evidence presented in similar cases. The Court accepted her testimony as relevant and reliable.

In rebuttal, Formosa offered the testimony of three plant employees and two independent experts. None of whom testified as stormwater or wastewater engineer concerning the condition of Formosa's current discharge system. None rebutted the evidence that Formosa was and had discharged substantial quantities of plastic pellets and PVC powder into Cox Creek and into Lavaca Bay in violation of its Permit.

Finally, Waterkeeper has collected 1,626 samples on 582 distinct days on Lavaca Bay between January 31, 2016 and March 12, 2019. *See* [Ex 63, Ex 254, *see also* Ex 468; 133], and, at least 110 videos and 44 photos taken by Waterkeepers from Lavaca Bay from January 2016 through February 2019. *See* [Exs. 263-295].

VII. FORMOSA'S RESPONSE

On June 10, 2016, Formosa's plant manager, Rick Crabtree, officially responded to the March 2016 investigative finding of illegal discharges of plastic pellets. Formosa characterized the violation as: "a fail[ure] to prevent the unauthorized discharge of floating solids or visible foam in other than trace amounts." Formosa did not dispute that the discharge had occurred nor did it question what was meant by the permit term "trace amounts". Instead, Formosa offered a theory concerning how it could discharge plastic pellets from various Outfalls and be within the "trace amount" restriction.

After agreeing to the "trace amount permit limitation, Formosa since has attempted to quantify "trace amounts" based on its permitted mercury discharge limit using its permitted daily average limit of mercury, 0.03 pounds per day, as a basis. (Ex. 137). It then converts 0.03 lbs/per day and concludes that equals 0.0003 pounds of discharge per minute. This formula permits

Formosa to convert a daily rate to a per minute rate. Under Formosa's theory each day Formosa could discharge 9,626 plastic pellets from the Outfall 006; 7,512 plastic pellets from Outfall 008; and 10,922 plastic pellets from Outfall 009 (Ex. 137). However, no expert evidence supports using these numbers as constituting a "trace amount" for purposes of compliance. Moreover, Formosa admitted that TCEQ does not agree with Formosa's method.

A. TCEQ Notice of Enforcement

After TCEQ gave a notice of violation, it directed Formosa to comply with the Permit by June 13, 2016. That compliance date was not met and the documentation submitted to TCEQ was determined to be "inadequate to resolve the outstanding violation." TCEQ investigated Formosa's facility and sites along Cox Creek and Lavaca Bay again on September 7, 8 and 13, 2016, and found that plastic pellets [were] still being discharged through the stormwater outfalls 006, 008, and 009 and [that the] clean up activities at Cox Creek have not been completed. Additional documentation concerning corrective actions was requested by TCEQ.

On May 1, 2017, TCEQ issued a notice of enforcement to Formosa, informing Formosa that the compliance documentation submitted to TCEQ "did not appear to resolve the outstanding violations because "the clean-up of Cox Creek as well as planned facility upgrades were not completed within the compliance time frame." (Ex 4 at 71403- 000017, 000022)

B. Formosa's Contentions

Formosa contends that its Permit does not define the term "trace amounts", therefore, what constitutes trace amounts is ambiguous. However, this position is inconsistent with a previous position taken by Formosa during administrative and/or court proceedings. Hence, Formosa has judicially admitted that the terms "trace amount[s]" does not render its Permit unenforceable.

Formosa also asserts that the permitted stormwater Outfalls are designed and operate to prevent the discharge of plastic pellets and other floating solids in quantities greater than trace amounts. It is undisputed that plastic pellets and other floating solids as well as PVC powder pass through or escape Formosa's "prevent" system and are discharged into the waterways. In light of this revelation, Formosa argues that because the Permit does not establish an absolute measurement of weight or a relative measurement of concentration levels, Formosa is in compliance when it complies with the prevent requirements of its own system.

Formosa's reliance on its designed and operated procedures to prevent discharge of plastic pellets and others floating solids was unacceptable to TCEQ. Therefore, to argue that it is in compliance because it has received annual reports from its independent environmental consultant(s) is to ignore the strictures of the Permit, TCEQ findings, the CWA, and the long-term impacts on the waterways observed and documented by Waterkeeper and private citizens. A review of Formosa's facility operations is appropriate to understand Formosa's challenge.

C. Wastewater Treatment Plant

Formosa's wastewater treatment plant is a Combined Wastewater Treatment Plant. It treats industrial process wastewater and contact stormwater from the physical areas of the plant called "inside battery limits." According to Formosa, wastewater and "contact" stormwater are subject to a three part treatment process, *i.e.*, receiving, pre-treatment, and biological. Stormwater at the facility includes precipitation that falls on pervious and impervious areas and is not absorbed into the subsurface. The excess stormwater on the surface flows through a series of internal concrete and earthen drainage structures ditches. Some are equipped with internal gates, but all eventually discharge through 12 stormwater Outfalls, numbered 002-0013.

Water from the surface of the facility that does not come into contact with any chemical process is called “non-contact stormwater.” Non-contact stormwater is captured within 12 drainage areas, with each area draining to an external Outfall.

Formosa’s Permit does not specify any controls or treatment for stormwater. Nevertheless, non-contact stormwater falls near manufacturing areas flows through a collection system where Formosa is required to conduct a visual inspection and cleanout any plastic pellets or PVC powder observed prior to releasing the water into the stormwater Outfalls. Non-contact stormwater away from manufacturing areas is not routed through internal gates but, instead, flows straight through to one of the 12 external Outfalls.

Contact stormwater is first pre-treated to remove oil, grease and floating solids, and adjust the pH. It is then sent to the Stormwater Holding Tank for equalization. Following equalization, both contact stormwater and process wastewater go through a solids, oil, grease, emulsion, and foam removal process. The waters then go through a biological treatment that clarifies and separates the wastewater from any solids. However, plastic pellets and PVC powder are not reduced or treated at the biological treatment stage.

The wastewater is then sent to a clarifier for further biological treatment. The presence of plastic pellets and PVC powder cannot be remediated by the biological process at this stage, but may potentially be removed through flocculation. Afterward, treated storm and wastewater are discharged directly into Lavaca Bay through a pipe that extends westward from the plant at Outfall 001.

Failing to control or treat effectively the plastic pellets and PVC powder at the source, (producing/management areas) and permitting stormwater to be discharged through the same Outfalls means that the stormwater generated at the facility will be impacted with plastic pellets

and PVC powder thereby entering Formosa's conveyance system and emptying into the Bays and Creek.

VIII. FORMOSA'S SOURCE CONTROLS INADEQUATE

In spite of Formosa's source controls, plastic pellets and PVC powder regularly and routinely leave the production areas, and get into the stormwater and wastewater system. Formosa's audits of its facility in 2016 and 2017 document these releases. The source controls implemented by Formosa to date, therefore, fail to sufficiently or effectively prevent the release of plastic pellets and powders to the stormwater system.

Formosa has adopted various techniques and installed devices to remedy its failings. Remediation includes floating booms, gabions, mesh screens, wedge screens, manual removals and external gates all of which have proved inadequate and fail to prevent the discharge of floating solids.

Reliance on manual removal of plastics has also prove to be ineffective and impractical to control the discharge plastic pellets and PVC powder. As described in Formosa, removal relies on visual observation and requires the manual operation of the internal gate system and the gates at the Outfalls.

Formosa's reliance on nets and vacuum trucks, as a removal method, have also proved ineffective, and impractical. Removal of plastic pellets and PVC powder from channels and ditches by fish netting is equally impractical. PVC Powder particles are too small to be captured by the fish netting and often attach to the banks of the channels where it is subject to migration during future runoff.

Formosa's documents demonstrate that its reliance on contractors to clean up plastic pellets and powder is inefficient and ineffective. In its February 2019 "new" pellet recovery

project, Formosa states “[E]ven though PP1 continue efforts of plastic pellet source reduction and plastic pellet recovery, plastic pellets continue to collect in the ditches. In sum, Formosa has installed screens all around the production units to prevent plastic pellets from entering the ditches, has hired two full time professionals to help manually clean up plastic pellets, and has used vacuum trucks to vacuum Formosa’s internal and designated permitted Outfalls on a routine basis, yet Formosa continues to violate its Permit.

IX. WATERKEEPER’S EXPERT WITNESS DOCUMENTATION

Waterkeeper’s samples, photographs, and videos of plastics in both Cox Creek and Lavaca Bay document plastics of more than trace amounts, in similar or more quantities than TCEQ’s documentation included in investigation reports. They establish that Formosa’s discharges at its outfalls have consistently exceeded trace amounts starting, December 12, 2017, including the most recent visit on February 12, 2019. Waterkeeper’s documentation is confirmed by the quantities of plastic pellets and PVC powder collected by Horizon Environmental Services, the cleanup crew hired by Formosa that establishes that more than trace amounts of plastics are being discharged.

Expert opinions offered by Waterkeeper are persuasive and establish that Formosa’s design and operation of its stormwater management system allows the discharge of stormwater contaminated with plastic pellets and PVC powder above trace amounts to be released and that these releases are extensive, historical and repetitive. Dr. Jose-Sanchez concluded that powders discharges are likely to continue despite Formosa’s controls even though Formosa’s proposed controls will likely decrease discharges but not below trace amounts.

Dr. Jose-Sanchez also concludes that Formosa’s treated wastewater system is still overwhelmed and that plastic pellets and/or plastic materials are being discharged above trace

amounts through Outfall 001. The Court's conclusions that Dr. Jose-Sanchez's opinions are based on reliable evidence and credible, and, therefore, adopts them.

X. FORMOSA'S RESPONSE TO DR. JOSE-SAHCHEZ

Formosa challenged Dr. Jose-Sanchez's evidence with evidence of its own. Peter Moleux, Formosa's engineering expert testified. However, he is not qualified to give opinions about Formosa's stormwater system. Therefore, his opinion that Formosa is using "being management practices" for stormwater treatment is no opinion. Nevertheless, he testified that Formosa is in compliance with its Permit requirement as it relates to the discharge of floating solids. He based his opinion on the operations and the changes made to [Formosa's] operations. His conclusion is illogical. Formosa cannot be in compliance simply by saying so. The Court rejects Moleux's opinion concerning compliance.

Formosa's corporate representative Matt Brogger testified that Formosa's definition of trace amounts uses mercury concentration levels in Formosa's TPDES permit to extrapolate to the definition of trace. Under his theory, each day Formosa could discharge 9,626 plastic pellets from Outfall 006; 7,512 plastic pellets from Outfall 008; 10,922 plastic pellets from Outfall 009. Based on Brogger's calculations, Formosa's, position that no more than trace amounts of plastic pellets have been discharged from its stormwater Outfalls. He relies in part on the status sheets kept by Formosa employees at the Outfalls where they report that more than trace amounts of plastic pellets were observed at the Outfall gates.

The Court rejects Brogger's calculation method for determining "trace amounts" and also rejects the notion that Formosa's best efforts to contain the plastic pellets and powder means that any discharges of plastic pellets, powder or solids beyond Formosa's best efforts and discharge, constitute trace amounts. Both Moleux and Bragger's positions have been rejected by Formosa's

retained engineer and the head of its water department and the Court, likewise, rejects their conclusions.

XI. CONCLUSIONS

A. Formosa's Challenges of Mootness Fails

The evidence demonstrates that Formosa has been in violation of its Permit concerning the discharge of floating solids at its various Outfall since January 31, 2016 and that the violations are enormous. In addition to documents, Waterkeeper has produced a chart compiling its evidence by date [Exhibit 472], which evidence is undisputed. The Court concludes that the evidence shows violations for each of the 736 days of discharges into Lavaca Bay from Outfall 001. *See* [Ex. 63, 254, 263-295 and 472].

In addition, the Court concludes that Formosa is a serial offender, violating its Permit concerning discharge of floating solids, in other than trace amounts, from other Outfalls from January 31, 2016, to at least March 24, 2019. Some 1,149 days of violations are recorded through Outfalls 003, 004, 005, 006, 007, 008, 009, 012.

Formosa has also failed to report violations of the CWA to State and/or federal authorities at least since January 2016. The failure to report a noncompliant discharge is a separate violation. During the permitting process, Formosa acknowledged that it had a duty to report events where plastic pellets and PVC dust becomes entrenched in storm water runoff and is discharged into Lavaca Bay via one of the Outfalls. Further, Formosa admitted that failing to do so is a Permit violation. The evidence shows that Formosa has never reported a single discharge of floating solids to TCEQ.

On January 17, 2019, Formosa and TCEQ signed an Agreed Order adjudicating certain violations of Formosa's Permit. The Order concludes that Formosa "failed to prevent the

discharge of solids in other than trace amounts” at three of its stormwater Outfalls. The Agreed Order also stated that plastic pellets were discharged from outfall 006, 008 and 009 and “were observed floating in Cox Creek and embedded in the Cox Creek sediment.” As a result, the TCEQ assessed a penalty of \$121,875 against Formosa.

Formosa takes the position that the Agreed Order resolved Waterkeeper’s case rendering it moot. Not so. The violations adjudicated in the Agreed Order, represented six violation events between April 4, 2017 to May 17, 2017. These violations are comprised of two events at each of three outfalls – 006, 008, and 009. Based on the overwhelming evidence, the TCEQ’s findings and assessment merely shows the difficulty or inability of the TCEQ to bring Formosa into compliance with its Permit restrictions.

B. *Formosa Challenges Waterkeeper’s Injury Claim*

Formosa challenges Waterkeeper and S. Diane Wilson’s standing to bring this suit. An individual has standing to sue when they have (1) “suffered an injury in fact” that is concrete and particularized, and actual or imminent; (2) the injury is fairly traceable to the defendant; and it is likely the injury can be redressed by a favorable decision. *Friends of the Earth, Inc. v. Laidlaw Env’tl. Servs. (TOC), Inc.*, 528 U.S. 167, 180–81 (2000), (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–561 (1992)). In such a case, a plaintiff’s injuries are “fairly traceable” to a defendant’s discharge where the “defendant has (1) discharged some pollutant in concentrations greater than allowed by its permit (2) into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that (3) the pollutant causes or contributes to the kinds of injuries alleged by plaintiffs”. *Sierra Club, Lone Star Chapter v. Cedar Point Oil*, 73 F.3d 546, 557 (5th Cir. 1996) (quoting *Public Interest Research Group of New Jersey v. Powell Duffryn Terminals, Inc.*, 913 F.2d 64, 72 (3rd Cir. 1990)).

Plaintiffs are not required to “show to a scientific certainty that defendant’s effluent, and defendant’s effluent alone, caused the precise harm suffered by the plaintiffs”. *Cedar Point Oil*, 73 F.3d at 558 (citations omitted). Plaintiffs must only show that a defendant’s discharge “contributes to the pollution that impairs” the plaintiff’s use of the water body. *Id.* See also *Texans United for a Safe Economy Education Fund v. Crown Central Petroleum Corp.*, 207 F.3d 789, 793 (5th Cir. 2000).

The undisputed evidence shows that plastic pellets and PVC powder discharged by Formosa caused or contributed to the damages suffered by the recreational, aesthetic, and economic value of Lava Bay and Cox’s Creek. Evidence also establishes that the recreational and aesthetic value of Lavaca Bay, Cox Creek, and their shores have been diminished for members of Waterkeeper, their families and the public in general for use as recreation and aesthetic pleasure. Hence, the presence of PVC powder and plastic pellets distressed the area and lessened the enjoyment of the local environment.

Wilson, in particular, testified that the recreational and aesthetic value of Lavaca Bay, Cox Creek, and their shores has diminished. She, as well as other individuals, have established that they have also suffered an, injury in fact, because their livelihoods have been damaged due to impacts of discharges on local aquatic life. *San Francisco Herring Association v. Pacific Gas and Electric Co.*, 81 F.Supp.3d 847, 858 (N.D. Ca. 2015). Specifically, the evidence establishes that the shrimp population in the Bay System has been negatively impacted, which condition has negatively impacted Wilson’s livelihood.

Waterkeeper and Wilson, among others, have also suffered injury, in fact, because they were unable to obtain information that Formosa was obligated to publicly disclose in a timely fashion in their efforts to combat their injuries. *Center for Biological Diversity, Inc. v. BP*

America Production Co., 704 F.3d 413, 429 (5th Cir. 2015)(citing *FEC v. Atkins*, 524 U.S. 11, 21 (1998); *Sierra Club, Inc. v. Tyson Foods, Inc.*, 299 F.Supp.2d 693, 703-706 (W.D. Ky. 2003)). Both federal and state statutes require reports of permit violations by the permittee to be publicly available. *See* [33 USC. §1318(b); Tex. Water Code §26.0151]. In this regard, Formosa totally failed and refused to comply with a known duty.

C. *Formosa USA and Formosa Texas Are Persons*

“A corporation is responsible for the wrongs committed by its agents in the course of its business”. *United Mine Workers of America v. Coronado Coal Co.*, 259 U.S. 344, 395 (1922). A parent corporations that direct, manage, or control facilities that cause NPDES or SPDES permit non-compliance are not absolved of liability simply because it is the subsidiary that owns the permitted facility.³ *See U.S. v. Bestfoods*, 524 U.S. 51, 66 (1998)(discussing parent corporation liability under CERCLA). On the contrary, a “person violates” an effluent limitation or condition in an NPDES or SPDES permit when it “directs the workings of, manages, or conducts the affairs of a facility” regarding pollution and the discharge or disposal of waste in such a way as to cause permit non-compliance. *See Bestfoods*, 524 U.S. at 66 (1998)(defining the term “operator” for CERCLA liability).

The evidence shows that Formosa Plastics Corporation, Texas managed, directed, conducted, and took such actions, or failed to take actions that caused non-compliance with Formosa’s TPDES Permit. Formosa Plastics Corporation, Texas is, therefore, a “person who violate[d]” the effluent limitations and conditions of Formosa’s TPDES Permit, within the meaning of the law. Therefore, Formosa Plastics Corporation USA and Formosa Texas have violated Formosa’s TPDES Permit.

³ *See* Footnote No. 2.

Having presented discussion and analysis as to Formosa's discharge conduct, the Court determines that: a declaratory judgment shall issue, pursuant to Waterkeeper claim for relief in the form of monetary and injunction relief against Formosa focusing primarily on future violations of its TPDES Permit and the CWA. An attorney's fee should be awarded; and appropriate sanctions for past violations and to enforce future compliance are appropriate.

It is so Ordered.

SIGNED on this 27th day of June, 2019.

A handwritten signature in black ink, appearing to read "Kenneth M. Hoyt", written over a horizontal line.

Kenneth M. Hoyt
United States District Judge