Vincent Redondo

From: PUBCOMMENT-OCC
Sent: Friday, May 10, 2024 3:18 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ
Subject: FW: Public comment on Permit Number WQ0000447000

Jesús Bárcena
Office of the Chief Clerk
Texas Commission on Environmental Quality
Office Phone: 512-239-3319

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From: marty.kelly@tpwd.texas.gov <marty.kelly@tpwd.texas.gov>
Sent: Friday, May 10, 2024 9:03 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0000447000

REGULATED ENTY NAME UCC SEADRIFT OPERATIONS

RN NUMBER: RN102181526

PERMIT NUMBER: WQ0000447000

DOCKET NUMBER:

COUNTY: CALHOUN

PRINCIPAL NAME: UNION CARBIDE CORPORATION

CN NUMBER: CN601688781

NAME: MR Marty Kelly

EMAIL: marty.kelly@tpwd.texas.gov

COMPANY: Texas Parks and Wildlife Department

ADDRESS: 4200 SMITH SCHOOL RD
AUSTIN TX 78744-3218

PHONE: 5123898214

FAX:

COMMENTS: Please see attached letter.

Vincent Redondo

From: PUBCOMMENT-OCC
Sent: Friday, May 10, 2024 3:21 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ
Subject: FW: Public comment on Permit Number WQ0000447000
Attachments: TPWD_WQ0000447000_Comments_May_10_20241.pdf

Jesús Bárcena
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From: marty.kelly@tpwd.texas.gov <marty.kelly@tpwd.texas.gov>
Sent: Friday, May 10, 2024 9:04 AM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0000447000

REGULATED ENTY NAME UCC SEADRIFT OPERATIONS

RN NUMBER: RN102181526

PERMIT NUMBER: WQ0000447000

DOCKET NUMBER:

COUNTY: CALHOUN

PRINCIPAL NAME: UNION CARBIDE CORPORATION

CN NUMBER: CN601688781

NAME: MR Marty Kelly

EMAIL: marty.kelly@tpwd.texas.gov

COMPANY: Texas Parks and Wildlife Department

ADDRESS: 4200 SMITH SCHOOL RD
AUSTIN TX 78744-3218

PHONE: 7134124377

FAX:

COMMENTS: Please see attached letter.

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Executive Director

May 10, 2024

Ms. Laurie Gharis, Chief Clerk
Office of the Chief Clerk (MC 105)
Texas Commission on Environmental Quality
PO Box 13087
Austin, Texas 78711-3087

Re: TCEQ Industrial Wastewater Discharge Notice of Application and Preliminary Decision for Permit Number WQ0000447000

Dear Ms. Gharis:

The Texas Parks and Wildlife Department (TPWD) appreciates the opportunity to provide comments to the Texas Commission on Environmental Quality (TCEQ) on proposed major amendments to the industrial wastewater discharge permit for Union Carbide Corporation (UCC) Seadrift Operations Plant (Permit No. WQ0000447000), a chemical facility that manufactures plastics (polyethylene and polypropylene), glycols, and oxide derivatives. TPWD is the agency with primary responsibility for protecting the state's fish and wildlife resources (Parks and Wildlife Code (PWC) §12.0011(a)). Furthermore, TPWD is charged with providing information on fish and wildlife resources to any local, state, or federal agency or private organization that make decisions affecting those resources (PWC §12.0011(b)(3)). Please be aware that a written response to this comment letter is required by PWC §12.0011(c)–(d).

TPWD has reviewed the proposed amendments to the Texas Pollutant Discharge Elimination System (TPDES) wastewater discharge permit Notice of Application and Preliminary Decision (NAPD). The UCC facility has ten outfalls that discharge to several waterbodies. Outfalls 001, 002, 005, 006, and 012 discharge directly to the Victoria Barge Canal Tidal in Segment No. 1701 of the Lavaca-Guadalupe Coastal Basin. Outfalls 003, 014, 015, and 016 discharge to West Coloma Creek, then Coloma Creek, then to Matagorda Bay/Powderhorn Lake in Segment No. 2451. Outfall 004 discharges to an unnamed ditch then into San Antonio Bay/Hynes Bay/Guadalupe Bay/Mission Lake in Segment No. 2462.

A summary of the proposed amendments to the permit includes identifying flow at Outfall 001 as "dry weather" flows which are defined in the draft permit in "Other Requirements" No. 1 as "days when the total flow at Outfall 001 are from process wastewater, remediated groundwater, domestic groundwater, utility wastewater, hydrostatic test water, and stormwater runoff resulting from rainwater less than 0.1 inches in a 24-hour period". Additionally, the permittee requested to use mass loading and concentration effluent limits for 5-day biological oxygen demand (BOD_5) and total suspended solids (TSS); to change the monitoring frequency from

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"once per day" to "three per week"; and to change the sample type from "Grab" to "Composite" for the same parameters. For Outfall 002, the permittee requested for the final phase of the permit to increase daily average flow to 17 million gallons per day (MGD) with a maximum daily flow not to exceed 43 MGD. The permittee also requested to remove the term "dry weather" from the language related to Outfall 002; increase the effluent limit for total residual chlorine from 0.2 milligrams per liter (mg/L) to 2.0 mg/L. The permittee requested to move the compliance point for floating solids, visible foam, and visible oils for Outfalls 001, 002, 006, and 012. The permittee requested to add a provision in "Other Requirements" for alternate monitoring for flow, pH, and temperature; to increase the minimum analytical level for oil and grease from 1.5 mg/L to 5 mg/L; and, to remove Outfalls 007, 008, 009, and 010.

TPWD has several interests closely tied to this discharge of treated industrial process water and stormwater. Outfalls 001 and 002 flow into the Victoria Barge Tidal Canal (Segment No. 1701) which is directly adjacent to the Guadalupe Delta Wildlife Management Area (WMA) - Misson Lake Unit that covers 4,447 acres in the Guadalupe River delta. The Guadalupe Delta WMA was one of the areas identified by the United States Fish and Wildlife Service (USFWS) and TPWD as an area that is needed to be preserved to protect wildlife habitat. In the following sections, TPWD will emphasize the significance of these habitats and identify the natural resources present on the WMA. Compromised water quality can have a detrimental effect on both estuarine and terrestrial wildlife through disruption of food web interactions (Bilotta & Brazier, 2008; Dewson *et al.*, 2007). The decreased availability of invertebrate prey due to water quality contaminants can impact species at higher trophic levels, including several protected species found in the vicinity of the Union Carbide facility (Cross *et al.*, 2013).

The Guadalupe Delta WMA - Mission Lake Unit, which is adjacent to Outfalls 001 and 002, has identified Species of Greatest Conservation Need (SGCN), including federal and state-listed threatened and endangered species (TPWD, 2023). These SGCN include:

- Texas diamondback terrapin *Malaclemys terrapin* ssp. *littoralis*
- Saltmarsh snake *Nerodia clarkii*
- Eastern black rail *Laterallus jamaicensis* ssp. *jamaicensis* (federal and state-listed threatened)
- Brown pelican *Pelecanus occidentalis*
- Reddish egret *Egretta rufescens* (state-listed threatened)
- White-faced ibis *Plegadis chihi* (state-listed threatened)
- Wood stork *Mycteria americana* (state-listed threatened)
- Bald eagle *Haliaeetus leucocephalus*
- White-tailed hawk *Geranoaetus albicaudatus* (state-listed threatened)

- Peregrine falcon *Falco peregrinus*
- Whooping crane *Grus americana* (federal and state-listed endangered)

South of the Guadalupe Delta WMA, the San Antonio Bay/Guadalupe Estuary supports high biodiversity that is dependent on a healthy, functioning ecosystem (Armstrong, 1987). This large (531 km^2) estuarine complex is located between Matagorda and Aransas Bay and at the terminus of the San Antonio/Guadalupe River watersheds and consists of multiple rookery islands. Focal avian guilds representative of the San Antonio Bay system include nesting colonial waterbirds, migratory wintering waterfowl, and shorebirds, many of which are also threatened, endangered, and/or otherwise protected (Texas Waterbird Society, 2023; TPWD, 2023). Avian species are protected by the Migratory Bird Treaty Act (16 U.S.C. sections 703–712), as well as Chapter 64 of the PWC sections 64.002 and 64.003. Bald eagles are further protected under the Bald and Golden Eagle Protection Act (16 U.S.C. sections 668-668d). All state listed species are protected under PWC section 68.015.

Wetlands associated with large portions of the surrounding shoreline of the San Antonio Bay are particularly unique in that they provide critical wintering habitat for the last remaining, self-sustaining wild flock of endangered whooping crane, named the Aransas-Wood Buffalo population. Following an all-time low of only 16 birds in 1941, the whooping crane was listed as threatened in 1967 and endangered in 1970 by the USFWS under the Endangered Species Preservation Act of 1966 where it remains listed today (USFWS, 2012). Ongoing decades-long collaborative efforts have returned the flock to over 500 birds (Vartanian & Conkin, 2023; McAbee & Conkin, 2024) which continue to migrate between Wood Buffalo National Park in Canada and the Aransas National Wildlife Refuge along San Antonio Bay in Texas.

The TCEQ noted within the preliminary decision that Calhoun County in Segment No. 2462 of the Bays and Estuaries is not a watershed of critical concern for the whooping crane, despite occurrence of the species within this segment. This determination was "*based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (September 14, 1998; October 21, 1998 update)*" and only considered "*watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion.*"

While TPWD acknowledges this note, current literature suggests the whooping crane's principal wintering habitat consists of about 22,500 acres of marshes and salt flats throughout the Aransas National Wildlife Refuge. This habitat, along with the 371,927 acres of USFWS-designated critical habitat (Montagna *et al.*, 2014), is approximately 11 miles downstream of the Union Carbide facility's associated wastewater outfalls. This is concerning considering the Aransas-Wood Buffalo population of whooping cranes remain particularly vulnerable to extirpation from

their limited wintering distribution along the Texas gulf coast (Canadian Wildlife Service and USFWS, 2007). As conservation efforts continue in Texas, whooping cranes may continue to expand their wintering areas along the coast.

Additionally, important commercial (oysters and shrimp) and recreational fisheries are supported within the San Antonio Bay, which depend on surrounding wetlands for maintaining water quality and providing nursery grounds for fish and shellfish. Oysters are an indicator species of good estuarine ecosystem health due to their ability to remove particulates from the water column, serve as the basis of the food web, and provide shoreline stabilization through erosion control (Jeong *et al.*, 2020). As filter feeders, oysters are more sensitive to changes in water quality. TPWD closed San Antonio Bay to commercial and recreational oyster harvest in 2022, due to a low abundance of legal-sized oysters (3 inches or greater). San Antonio Bay was also classified as "impaired" and placed on the 1996 Texas Water Quality Inventory and Clean Water Act 303(d) list of impaired waters for not meeting oyster water use criteria, and it has remained on this list since then (TCEQ, 2022).

The remaining Outfalls 003, 004, 006, 012, 014, 015, and 016 ultimately discharge to West Coloma and Coloma creeks which flow through Powderhorn Lake, located along the northern border of Powderhorn WMA. Beginning in 2014, the Texas Parks and Wildlife Foundation (TPWF) began acquisition of the Powderhorn Ranch. This property was purchased through a collaboration of the TPWF with The Nature Conservancy, the Conservation Fund, the National Fish and Wildlife Foundation, private donations, and mitigation dollars from the BP Horizon oil spill. The property was donated to our agency for continued stewardship by the TPWF in 2018. This WMA consists of 15,069 acres of scattered prairie uplands, freshwater and brackish wetlands and covers several miles of bayfront on Powderhorn Lake and Matagorda Bay. The function of the Powderhorn WMA is to implement and showcase restoration of native grassland and savannah, improve existing hydrology to enhance freshwater wetlands habitat for wildlife, particularly whooping cranes, and to provide a demonstration area for landowners in mid-coastal counties. A portion of acreage at Powderhorn WMA is earmarked as the future site of a state park. Efforts are currently underway to complete additional infrastructure and habitat improvement projects. The state park will provide beach access and water recreation activities to visitors, in addition to other low-impact activities such as wildlife viewing.

TPWD understands that the permittee submitted a thermal plume study, referenced in the "Other Requirements" section No. 14 on page 20 of the draft permit and that the executive director of TCEQ will be initiating changes to evaluate the procedures and/or rulemaking that may affect thermal requirements for this facility.

Recommendation: TPWD recommends making the referenced thermal plume study available for review. TPWD requests to be included in any correspondence related to the thermal requirements of this facility.

TPWD is particularly concerned about the potential risks associated with increased chlorine levels into the receiving waterways around the San Antonio Bay system. Many estuarine and marine species depend on these areas for reproduction and nursery habitat. The impact of chlorine on marine fishes is influenced by various environmental factors, including temperature, duration of exposure, and the specific form of chlorine or other halogen compounds present (USEPA 1984, 1986, and 1991). Literature has established that the main consequence of chlorine toxicity in fishes is the deterioration of gill health, resulting in heightened production of mucous and hindered respiratory exchange at the gill membrane (Ellis, 1937; Dandy, 1972; Bass & Heath, 1975). Field studies conducted in the United States provide evidence that both acute and sublethal effects occur at total residual chlorine (TRC) levels of less than 100 micrograms per liter (µg/L) (Stewart *et al.*, 1990; Szal *et al.*, 1991; Grizzle *et al.*, 1988). Laboratory studies have shown acute and chronic effects at TRC concentrations of less than 10 µg/L (Taylor, 1993; Szal *et al.*, 1991).

For instance, inland silverside *Menidia beryllina* is a small neotropical silverside endemic to estuaries and freshwater environments, including much of the Texas coastline. Studies suggest that *Menidia* are particularly sensitive to chlorine levels within their environment. The effects of chemical exposure to wildlife are measured as a lethal concentration 50 (LC_{50}) value, which is the concentration of a substance that kills 50% of test animals during a toxicity test. Acute toxicity of chlorine in *Menidia* (96-h LC_{50}) occurs at values less than 0.15 mg/L when exposed continuously to chlorine [Fisher *et al.*, 1994 (0.128mg/L 96-h LC_{50}); Fisher *et al.*, 1999 (0.143 mg/L (96-h LC_{50})], as well as a 7-day continuous exposure of 0.04 mg/L resulting in depressed growth, fecundity, and sexual maturity (Fisher *et al.*, 1994).

The permittee requested that the TRC limit for Outfall 002 be increased from 0.2 mg/L to 2.0 mg/L. The TRC limit for Outfall 001 was set at 0.1 mg/L in the draft permit, and the permittee is required to sample the discharge after the flows from Outfall 001 and Outfall 002 have been combined. However, due to the increase in daily average flow at Outfall 002 and the significance of estuaries as critical nursery habitats for various species, TPWD is concerned about potential impacts on freshwater, estuarine, and marine life resulting from the presence of chlorinated water. The SGCN fishes potentially impacted include:

- Alligator gar *Atractosteus spatula*
- American eel *Anguilla rostrata*
- Southern flounder *Paralichthys lethostigma*

Recommendation: TPWD recommends fully dechlorinating discharges to minimize impacts to freshwater and estuarine organisms.

TPWD is also concerned about the potential for increased polyethylene (plastic) pellets (also known as "nurdles") into the San Antonio Bay system and the Gulf of Mexico from the discharges at Victoria Barge Canal. Nurdles are a type of microplastic melted down in the plastic manufacturing process to create larger plastic-based products such as bottles, grocery bags, sunglasses, etc. Since the 1970's, nurdles have been discovered washed up on beaches through various industrial waste mechanisms. Studies have found numerous turtle, fish, and bird species have ingested nurdles, which can lead to adverse effects on behavior, reproduction, and metabolism (Tunnel *et al.*, 2020). Established in 2018, "Nurdle Patrol," a citizen science project established by The Mission-Aransas National Estuarine Research Reserve at the University of Texas Marine Science Institute (UTMSI), have found nurdles throughout the Texas coastline. In a ten-month period (November 2018 to August 2019) alone, an average of 156 nurdles per 10-minute survey were collected with a grand total of 181,216 individual nurdles found along the Texas coast (Tunnel *et al.*2020).

Recommendation: TPWD recommends implementing additional stormwater discharge best management practices (BMPs) and technologies to reduce plastic pollution.

TPWD requests that these comments be considered with respect to this draft permit. We appreciate the opportunity to offer comment and will continue to work with TCEQ, the applicant, and other stakeholders on this matter.

If you have questions or need more information, please contact me by email at marty.kelly@tpwd.texas.gov or by phone at (512) 389-8214. Thank you again for the opportunity to comment and to work collaboratively with you and your colleagues to conserve and protect valued freshwater, estuarine, and marine resources along the Texas coastline.

Sincerely,

Marty Kelly

Marty Kelly
Water Resources Program Coordinator

MK:dh

cc: David Yoskowitz, Ph.D.
Mr. Craig Bonds
Mr. Robin Riechers

References:

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Marielle Bascon

From: PUBCOMMENT-OCC
Sent: Wednesday, July 24, 2024 4:51 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ
Subject: FW: Public comment on Permit Number WQ0000447000
Attachments: Dow UCC Seadrift Comments.pdf

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From: lkier@environmentalintegrity.org <lkier@environmentalintegrity.org>
Sent: Monday, July 22, 2024 2:34 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0000447000

REGULATED ENTY NAME UCC SEADRIFT OPERATIONS

RN NUMBER: RN102181526

PERMIT NUMBER: WQ0000447000

DOCKET NUMBER: 2023-1097-IWD-E

COUNTY: CALHOUN

PRINCIPAL NAME: UNION CARBIDE CORPORATION

CN NUMBER: CN601688781

NAME: Lori Kier

EMAIL: lkier@environmentalintegrity.org

COMPANY: Environmental Integrity Project

ADDRESS: 888 17TH ST NW
WASHINGTON DC 20006-3939

PHONE: 2022634452

FAX:

COMMENTS: Please see attached letter (Dow UCC Seadrift Comments).

ENVIRONMENTAL INTEGRITY PROJECT

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July 22, 2024

Via Electronic Delivery Only
https://www14.tceq.texas.gov/epic/eComment/

Texas Commission on Environmental Quality
Office of the Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Re: Comments on Application for Major Amendment with Renewal
TCEQ Permit No. WQ0000447000/EPA I.D. No. TX0002844
Dow Hydrocarbons and Resources LLC and
Union Carbide Corporation
P.O. Box 186
Port Lavaca, Texas 77979

To Whom it May Concern:

The Environmental Integrity Project (EIP) and Clean Water Action (CWA) (collectively, Commenters) respectfully submit the following comments to the Texas Commission on Environmental Quality (TCEQ) on the application of Dow Hydrocarbons and Resources LLC and Union Carbide Corporation (collectively, Permittees) and preliminary decision of TCEQ for the major amendment with renewal of the NPDES permit for the UCC Seadrift Operations facility located at 7501 State Highway 185 North, near the City of Seadrift in Calhoun County, Texas 77983 (the Facility).[1]

EIP is a national nonprofit organization headquartered at 888 17th Street NW, Suite 810, Washington, D.C. 20006 and with an office located at 1206 San Antonio Street in Austin, Texas 78701. EIP is dedicated to advocating for more effective environmental laws and better enforcement. EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce or implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and (3) to help local communities obtain the protection of environmental laws.

Clean Water Action is a national non-profit membership organization headquartered in Washington, DC. Clean Water Action operates programs nationally, regionally and locally, from a network of offices around the country and has members and supporters in all 50 states. Clean Water Action's campaigns focus on getting health-harming toxics out of everyday products; protecting our water from dirty energy threats - drilling and fracking for oil and gas, and power plant pollution; building a future of clean water and clean energy; and keeping our clean water laws strong and effective to protect water and health.

I. Background

Pursuant to TCEQ Permit No. WQ0000447000 (EPA I.D. No. TX0002844) (the Permit), Permittees discharge through Outfalls 001, 002, 005, 006 and 012 directly to the Victoria Barge Canal Tidal in Segment No. 1701 of the Lavaca-Guadalupe Coastal Basin; via Outfall 003 to a ditch, thence to West Coloma Creek, thence to Coloma Creek; via

[1] The Facility is referred to in EPA's ECHO database as "Seadrift Infrastructure." *See* https://echo.epa.gov/detailed-facility-report?fid=110064609954 (last visited July 17, 2024).

Outfalls 014 and 015 to West Coloma Creek, thence to Coloma Creek; via Outfall 016 to West Coloma Creek Lateral No. 17, thence to West Coloma Creek, thence to Coloma Creek, thence to Matagorda Bay/Powderhorn Lake in Segment No. 2451 of the Bays and Estuaries; and via Outfall 004 to an unnamed ditch, thence to San Antonio Bay/Hynes Bay/Guadalupe Bay/Mission Lake in Segment No. 2462 of the Bays and Estuaries. The designated uses for Segment No. 1701 are non-contact recreation and high aquatic life use.[2] The Permit was issued on July 8, 2021, and is currently scheduled to expire on July 8, 2026. TCEQ received a Notice of Application and Intent to Obtain a Water Quality Permit (NORI) from Permittees on December 27, 2022. A revised combined notice was issued to correct errors from the original NORI published in March 2023, and a Combined notice was published in March 2024. The currently pending NORI was issued on June 20, 2024.

The loadings discharged from the Facility are extremely large: according to EPA's Enforcement and Compliance History Online database ("ECHO"), it discharged 134,934 lbs of pollutants during 2023, with 49.07 lbs over its limit.[3] Its toxic-weighted loadings during that year included 303,379 lb-eq/year of Hexachlorobenzene (156 maximum allowable load in lbs/year) and 24,130 lb-eq/year of Benzo[a]pyrene (240 maximum load in lbs/year), among others.[4] Restricting loading estimates to Outfalls 001 and 002 (and excluding the 13 outfalls with intermittent discharge), and to a limited universe of parameters (TOC, TSS, NH3, chloride, COD, Nitrate+Nitrite as N, organic N, sulfate, sulfide, TDS, TP, and TN), EIP has calculated the following draft totals in Table 1 for the Facility's discharges during 2022-2023. These estimates are largely based on concentration data from the 2021 application and reported 2022-2023 flow (except for TSS and TOC from Outfall 001 and TOC from Outfall 002, which are based on Discharge Monitoring Report data).

Table 1: 2022-2023 Loadings from Outfalls 001 and 002 for Seadrift Facility

Parameter	Outfall 001	Outfall 002	TOTAL (lbs)
Ammonia as N	15,249.84	2,199.59	17,449.43
Chloride	4,008,528.38	22,729,130.85	26,737,659.23
COD	1,808,194.87	2,175,153.38	3,983,348.25
Nitrite + Nitrate as N	-	4,399.19	4,399.19
Organic N	17,428.38	52,790.24	70,218.62
Sulfate	3,659,960.70	11,706,724.38	15,366,685.08
Sulfide	5,032.45	-	5,032.45
Total Dissolved Solids	25,663,295.84	59,022,420.42	84,685,716.26
Total Nitrogen	32,678.22	59,389.02	92,067.24
Total Organic Carbon	462,512.39	243,546.60	706,059.00
Total Phosphorus	5,228.52	2,199.59	7,428.11
Total Suspended Solids	479,192.00		479,192.00

Regardless of how pollutant loadings are calculated, it is clear that the Facility is responsible for significant pollution in its receiving waters.

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[2] *See* TCEQ, 2022 Texas Integrated Report – Index of Water Quality Impairments (July 7, 2022); TCEQ, Draft 2024 Texas Integrated Report – Waterbodies Evaluated (June 26, 2024).

[3] https://echo.epa.gov/detailed-facility-report?fid=110064609954#pollutants (last visited July 19, 2024).

[4] https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2024&permit_id=TX0002844 (last visited July 19, 2024). ECHO's Loading Tool includes pollutant loadings data calculated using discharge monitoring report and permit data from ICIS-NPDES. https://echo.epa.gov/trends/loading-tool/resources/faq.

II. Commenters Oppose Specific Requested Permit Amendments with Renewal

Permittees have requested several changes in their application for major amendment with renewal, including among many others: (1) at Outfall 001, change in the Permit's flow limits from a "dry weather" to an "all weather limit," and a corresponding increase that would more than double the flow limits; and (2) relocation of certain monitoring and compliance points and reducing monitoring frequency. For the reasons discussed below, we oppose the Draft Permit/Fact Sheet with regard to both of these requests.

A. Outfall 001: Increased Flow Limit Should Be Denied

Regarding the proposed flow increase through Outfall 001, Permittees have requested that the daily average flow limit be changed from a "dry weather" limit to a "simple flow limit (i.e., all weather limit) and that the limit be increased to reflect higher wet weather flows." Commenters understand Permittees' concern that the term "dry weather" is not defined in the Permit, but submit that the solution to that concern is to add a definition of "dry weather" to the Permit, rather than to simply increase flow limits in all instances. Other states have included definitions of "dry weather" in their NPDES permits, and TCEQ could do likewise.[5] Also, the Fact Sheet does not contain a record that the requested new "all weather" limits would sufficiently protect the water quality of the receiving streams.

Permittees' request for an "all weather" limit is accompanied by a related request to increase the value of the limits at Outfall 001: the existing permit authorizes the discharge of process wastewater, remediated ground water, sanitary wastewater, utility wastewaters and storm water at a daily average dry-weather flow not to exceed 5.80 MGD via Outfall 001. In their Amendment Application, Permittees request that, "[b]ased on a review of the Outfall 001 flow data, UCC requests that the daily average flow limit for Outfall 001 be increased to 15.9 MGD" (and that the mass limits for biochemical oxygen demand and total suspended solids be retained as applicable only when the flow is 5.8 MGD or less) – well over double the existing limit of 5.80 MGD.

Also with regard to flow, Permittees should not be allowed to increase the volume of their discharge when they have a history of not complying with current flow limits, including the following exceedances: 59% (May 2021), 153% (June 2021); 121% (July 2021); 31% (May 2023).[6] So, the Facility should not receive increased limits for a parameter that it is regularly violating. Also, EIP and CWA request that TCEQ analyze whether the Permittees' proposed increase to flow would violate the prohibition against backsliding,[7] or request that the Permittees do so.

Similarly, Commenters urge TCEQ to consider a facility's full history of noncompliance in connection with all permit amendments, modifications, or renewals. In addition to flow exceedances, the Facility also has a track record of a wide variety of other violations, including – most recently – Total Residual Chlorine ("TRC") exceedances of 290% in May 2024 and 305% in June 2024. For the same reason, Permittees' request to increase the daily maximum effluent limitation for TRC from 0.2mg/L to 2.0 mg/L should be denied.

So, instead of curtailing limits as part of the Permit renewal/amendment, Commenters request that TCEQ tighten limits given the Seadrift Facility's history of noncompliance.

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[5] For example, Pennsylvania has defined "dry weather" as "a condition in which there are no precipitation, snowmelt, drainage or other events producing a stormwater discharge for more than 48 consecutive hours" in its Phase II MS4 General Permit.

[6] The ECHO entry for this particular violation indicates that it has been "resolved," but contains no further explanation.

[7] Prohibitions against backsliding in NPDES permits are contained in both federal and state law and regulation, e.g., 33 U.S.C. § 1342(o); 40 C.F.R. § 122.44(*l*); 30 T.A.C. § 307.5(b)(1)-(2).

B. Relocation of Monitoring and Compliance Points and Reducing Monitoring Frequency Should be Supported By Record

As to Permittees' request to reduce monitoring and to relocate certain monitoring and compliance points, the Application seeks approval for the following: at Outfall 001, reduce the monitoring frequency for biochemical oxygen demand, 5-day (BOD_5) and total suspended solids (TSS) from "once per day" to "three per week"; also at Outfall 001, modify the monitoring point for Enterococci; at Outfall 002, change the monitoring point (as well as increase the flow, as discussed above); and at Outfalls 001, 002, 006, and 012, move the compliance point for floating solids and visible foam/oil. Neither the Application nor the Draft Fact Sheet indicate that reducing monitoring or moving the monitoring and compliance points as requested would make data more representative of the discharge, *compare* 40 C.F.R. 122. § 122.21(g) (7)(ix), or more closely connect them to process wastewater—both of which are essential in a sufficiently protective permit. We recommend that TCEQ revise the Draft Permit and Fact Sheet to ensure that monitoring and compliance points at all outfalls and for all parameters result in representative information that is closely connected to process wastewater.

III. Permit Must Contain Sufficiently Protective Technology-Based Effluent Limits ("TBELs")

A. TCEQ Should Include Limits that Represent BAT for the OCPSF Sector

The Clean Water Act and its implementing regulations require that NPDES permits, including those issued by TCEQ, include increasingly more stringent technology-based limits that reflect the best available economically achievable treatment technologies ("BAT"). 33 U.S.C. §§ 1251(a)(1), 1311(b)(2), 1317(a)(2); *see also Southwestern Elec. Power Co. v. EPA*, 920 F.3d 999, 1005 (5th Cir. 2019) (BAT requirements); 40 C.F.R. §§ 125.3(a)(2)(iii)-(v) (non-POTW permits must contain BAT limits). There are two kinds of technology-based permit limits applicable to the Seadrift Facility: (1) national effluent limitations, effluent limitation guidelines, and standards of performance for new sources (collectively, "ELGs"); and (2) case-by-case limits to fill applicable ELGs' gaps.

First, the U.S. Environmental Protection Agency ("EPA") has set ELGs through regulations for specific industrial categories like Organic Chemicals, Plastics, and Synthetic Fibers ("OCPSF"), 40 C.F.R. Part 414. When applicable, these ELGs must be incorporated into NPDES permits. 40 C.F.R. § 125.3(a). According to the Application for the Seadrift Operations Plant, the Facility is subject to the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) categorical effluent guidelines, 40 C.F.R. Part 414 (specifically Subpart D (Thermoplastic Resins), Subpart F (Commodity Organic Chemicals), Subpart G (Bulk Organic Chemicals), and Subpart I (End-of-Pipe Biological Treatment)).The existing Permit, issued in 2021, contains effluent limits that correspond to the BAT table at 40 C.F.R. § 414.91. Those limits were established in 1987, and last revised over 30 years ago – in 1993. *See* 52 Fed. Reg. 42568 (Nov. 5, 1987); 58 Fed. Reg. 36892 (July 9, 1993), respectively.

As noted, ELGs are intended to be technology-forcing, reflecting what can be achieved by the best available economically achievable treatment technologies, and tightening as those technologies improve. 33 U.S.C. §§ 1251(a)(1), 1311(b)(2), 1317(a)(2); *Sw. Elec. Power Co.*, 920 F.3d at 1005. But the 31-year old OCPSF ELGs are unlikely to reflect the best available technology anymore. For instance, membrane filtration technology can generally treat metals like total suspended solids discharged from OCPSF facilities, and, per an EPA 2021 study, is already being used at other facilities in the sector.[8] But when these ELGs were last revised, EPA considered membrane filtration to be experimental and infeasible. So, the ELGs for pollutants covered by them are much more lenient. In fact, there is litigation in the Ninth Circuit currently challenging EPA's decision not to revise the OCPSF ELGs in part because those limits no longer reflect the best available economically achievable treatment technologies.[9]

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[8] EPA-HQ-OW-2021-0547-0172 (available for download at: Preliminary Technology Review: Membrane Wastewater Treatment Systems) (Sept. 2021).

[9] *Waterkeeper Alliance v. EPA*, No. 23-636 (9th Cir., filed Apr.11, 2023).

Second, EPA regulations direct that permits must include case-by-case technology-based limits when "EPA-promulgated effluent limitations are inapplicable," or "[w]here promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants." 40 C.F.R. §§ 125.3(a)(2), (3). Here, TCEQ should include such case-by-case limits to fill these ELGs' gaps, which are numerous. Even if the existing pollution limits in the OCPSF ELGs were low enough to reflect the best available current technologies, these ELGs remain incomplete. Technology-based limits based on BAT should be established for all nonconventional and toxic pollutants discharged by a point source category, as well as all "classes of point sources," which includes industrial stormwater. 33 U.S.C. §§ 1311(b)(2)(A), 1317(a)(1), 1317(a)(2), 1342(p)(2)(B); see also *NRDC v. Train*, 396 F. Supp. 1393 (D.D.C. 1975*), aff'd sub nom. NRDC v. Costle*, 568 F.2d 1369, 1381 (D.C. Cir. 1977) (holding that EPA could not exempt industrial stormwater from permitting because the CWA required permits for point sources like industrial stormwater). Here, based on a review of recent discharge monitoring reports, we are aware that Permittees are discharging numerous pollutants like chloride, sulfate, phosphorus, and nitrogen, and that chemical oxygen demand is likely affected by the Seadrift discharges but not addressed by the OCPSF ELGs. So at a minimum, those parameters should be included in the amended Permit.

B. TCEQ Should Add PFAS Limits to the Amended Permit

EPA has announced the beginning of a rulemaking to revise limitations for the OCPSF category to address the discharge of per- and polyfluoroalkyl substances ("PFAS") from facilities that manufacture PFAS. "The Agency has identified several industries with facilities that are likely to be discharging PFAS in their wastewater, including OCPSF manufacturers and formulators."[10] As TCEQ is no doubt aware, PFAS threaten human health even at extremely low concentrations. EPA has recognized these demonstrated harms by finalizing national drinking water standards for six PFAS chemicals in April 2024. The drinking water standards establish enforceable limits, called maximum contaminant levels (MCLs), for PFOA and PFOS at 4 ppt for each chemical, with maximum contaminant level goals (MCLGs) of 0 ppt.[11] The MCLs and MCLGs for PFHxS, PFNA, and HFPO-DA (commonly known as GenX chemicals) are 10 ppt each.[12] EPA also finalized a Hazard Index MCL to account for dose-additive health effects of mixtures that include any combination of PFHxS, HFPO-DA, PFNA, and PFBS.[13] Thus, TCEQ should evaluate whether the Seadrift Facility – especially given the fact that it is within the OCPSF point source category -- could discharge PFAS such that limits for those substances should be added to the amended and reissued Permit, and reflect the outcome of that evaluation in a revised draft Fact Sheet and Permit.

C. TCEQ Should Require Increased Controls and Accountability for Floating Solids in the Amended Permit

The Seadrift Facility has a history of discharging plastic pellets, or nurdles, into the Victoria Barge Canal,[14] and the draft Fact Sheet acknowledges their ongoing presence at the Facility.[15] Both the existing and draft Permits prohibit the "discharge of floating solids . . . in other than trace amounts." In addition, the draft Permit anticipates "the development of any new requirements concerning plastic" in which case TCEQ would "determine if the limitations and conditions contained herein are consistent with any new requirements. As a result of this review, the permit may be amended, pursuant to 30 TAC Section 305.62, to include additional requirements as necessary to protect human health and the environment." Draft Permit at p. 21.

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[10] *See* EPA, Advance notice of proposed rulemaking, "Clean Water Act Effluent Limitations Guidelines and Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category," 86 FR 14560 (March 17, 2021).

[11] EPA, *Per- and Polyfluoroalkyl Substances (PFAS) – Final PFAS National Primary Drinking Water Regulation* (Apr. 10, 2024), https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas.

[12] *Id.*

[13] *Id.*

[14] *See, e.g.*, "State finds evidence of UCC Seadrift discharging plastics into Victoria Barge Canal" (Jan. 25, 2020, updated Mar. 1, 2021).

[15] Application, Facility Description at pp. 8 (Outfall 004), 10 (Outfall 014), 11 (Outfall 015),

Commenters submit that the significant current and ongoing presence of nurdles in the Facility's discharges indicates that those pollutants in the discharge should be addressed *now* with the issuance of the amended/renewal Permit – rather than at some indeterminate time in the future. TCEQ may have already identified a monitoring location for nurdles, and Permittees have installed some basic controls for them:

> Waters discharged through Outfall 002 are not treated. However, there is a floating underflow baffle and diversion pond to stop any floating material from entering the Victoria Barge Canal. At the gated outfall structure to the Victoria Barge Canal, a screen mesh protects the outfall pipes and serves as an additional barrier to prevent the release of solid material. Floating material is periodically removed and landfilled on-site.

Application at p. 7 (March 2019; included with 2021 draft Fact Sheet). It is unclear from the Application whether the Facility's current practices include collection of nurdles in particular, and this should be clarified in the final Permit.

When renewing/amending the Permit, we recommend that if TCEQ intends to treat the nurdles discharged by the Facility as "floating solids" within the context of the Permit, it should include provisions for controlling them and also regularly enforce against such discharges. Alternatively, if the nurdles are not contemplated by the current Permit, TCEQ should include an *express* prohibition excluding them in particular.

In fact, control of such nurdles is expected to occur at the federal level soon so that it would make sense for TCEQ to begin identifying strategies for controlling them: in 2023, Senator Durbin (D-IL) introduced the Plastic Pellet Free Waters Act in the Senate, and it was referred to the Senate Environment & Public Works Committee.[16] The purpose of the bill is to require EPA to promulgate a rule prohibiting the discharge of nurdles into the nation's waters. In March 2024, Rep. Levin (D-CA) introduced a similar bill in the House (signed by a large number of co-sponsors), and it has been referred to the House Subcommittee on Water Resources &

Environment.[17] So, including specific nurdle-related prohibitions and/or controls in the amended Permit is timely and TCEQ should not wait for some future date to do so.

IV. Compliance Data for Facility Should be Reflected in Amended/Renewed Permit

During the past three years, the Facility has been in violation eight of the last 13 quarters, and in significant noncompliance during one of those quarters.[18] Exceedances include the following, among others:

- Flow – 59% (May 2021), 153% (June 2021); 121% (July 2021); 31% (May 2023)[19]
- Enterococci – 2,227% (July 2021); 37% (February 2022)[20]; 2,227% (September 2022)
- Chlorine, total residual – 200% (December 2022); 50% (February 2023)
- pH – no value provided (April 2022)
- Oil & Grease – 60% (July 2023)
- TRC -- 290% (May 2024); 305% (June 2024)

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[16] *See* https://www.congress.gov/bill/118th-congress/senate-bill/2337.

[17] *See,* https://www.congress.gov/bill/118th-congress/house-bill/7634/cosponsors?s=6&r=1; Reps. Levin and Peltola Introduce Bill to Protect Waters from Plastic Pollution (March 13, 2024).

[18] Data taken from EPA's ECHO database, https://echo.epa.gov/detailed-facility-report?fid=110064609954#enforcement (last visited July 15, 2024).

[19] The ECHO entry for this violation indicates that it has been "resolved," but without further explanation.

[20] *Id.*

As indicated above in connection with Permittees' specific amendment requests, Commenters recommend that TCEQ reflect the full history of noncompliance by these Permittees, as well as prior operators of the Facility. Instead of curtailing limits and monitoring requirements in the Permit amendment, we request that TCEQ consider imposition of additional limits and reporting requirements given the history of noncompliance.

EIP and CWA strongly urge TCEQ to issue a final permit for the Facility that reflects the changes recommended in the above Comments, and we invite discussion as to how the Permit's requirements can be carried out in a way that is environmentally protective, cost-effective, and implementable by industry while, most importantly, achieving the objectives of the Clean Water Act to restore and maintain the health of our nation's waters.

Thank you for your consideration of these comments. Please feel free to reach out with questions.

Sincerely,

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/s/ Julie MacNamara
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cc: Mr. Troy Hill, Water Division Director
EPA Region 6

Jennifer Cox

From: PUBCOMMENT-OCC
Sent: Monday, May 13, 2024 3:59 PM
To: PUBCOMMENT-OCC2; PUBCOMMENT-OPIC; PUBCOMMENT-ELD; PUBCOMMENT-WQ
Subject: FW: Public comment on Permit Number WQ0000447000

PM

Jesús Bárcena
Office of the Chief Clerk
Texas Commission on Environmental Quality
Office Phone: 512-239-3319

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From: linhtranquocanh@gmail.com <linhtranquocanh@gmail.com>
Sent: Friday, May 10, 2024 4:58 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number WQ0000447000

REGULATED ENTY NAME UCC SEADRIFT OPERATIONS

RN NUMBER: RN102181526

PERMIT NUMBER: WQ0000447000

DOCKET NUMBER:

COUNTY: CALHOUN

PRINCIPAL NAME: UNION CARBIDE CORPORATION

CN NUMBER: CN601688781

NAME: Anh Quoc Tran

EMAIL: linhtranquocanh@gmail.com

COMPANY: Vietnamese American Community of USA INC

ADDRESS: 4003 PORTOFINO CT
MISSOURI CITY TX 77459-6987

PHONE: 8327210836

FAX:

COMMENTS: The Vietnamese American Community of The USA INC.(VACUSA)opposes the proposed major amendments to the industrial wastewater discharge permit of Union Carbide Corp Seadrift Operation Plant, Permit No. WQ0000447000. We would like to ask for a public meeting. VACUSA concurs the Texas Parks and Wildlife Department that this permit would damage the commercial oysters and shrimpers. The majority of Vietnamese living in the Bay area depend on oysters and shrimps for a living. Their livelihoods depend on it. The majority of them are elderly, moved to the USA after 1975 and have no other skill. VACUSA is here to advocate for them. VACUSA represents 30 Vietnamese American communities around the USA. One of our mission is support Vietnamese American. Sincerely, Anh Tran President The Vietnamese American Community of The USA INC,