The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts amendments to §§307.2, 307.3, 307.6, 307.7, and 307.10.

Amended §§307.2, 307.3, 307.6, and 307.10 are adopted *with changes* to the proposed text as published in the March 25, 2022, issue of the *Texas Register* (47 TexReg 1588) and, therefore, will be republished. Amended §307.7 is adopted *without changes* to the proposed text and will not be republished. Amendments to §307.4 have been withdrawn.

Background and Summary of the Factual Basis for the Adopted Rules

The Federal Water Pollution Control Act, or federal Clean Water Act (CWA), §303 (33 United States Code (USC), §1313) requires all states to adopt water quality standards for surface water. A water quality standard consists of the designated beneficial uses of a water body or a segment of a water body and the water quality criteria that are necessary to protect those uses. Water quality standards are the basis for establishing effluent limits in wastewater permits, setting instream water quality goals for total maximum daily loads (TMDLs), and providing water quality targets used to assess surface water quality monitoring data.

The states are required under the CWA to review their water quality standards at least once every three years and revise them, if appropriate. States review the standards because new scientific and technical data may be available that have a bearing on the review. Environmental changes over time may also warrant the need for a review. Where the standards do not meet established uses, they must be periodically reviewed to see if uses can be attained. Additionally, water quality standards may have been previously established for the protection and propagation of aquatic life and recreation in and on the water without sufficient data to determine whether the uses were attainable. Finally, changes in the Texas Water Code (TWC), CWA, or regulations issued by the United States Environmental Protection Agency (EPA) may necessitate reviewing and revising standards to ensure compliance with current statutes and regulations.

Following the adoption of revised Texas Surface Water Quality Standards (TSWQS) by the commission, the Governor or their designee must submit the officially adopted standards to the EPA Region 6 Administrator for review. The Regional Administrator reviews the TSWQS to determine compliance with the CWA and implementing regulations. The TSWQS are not applicable to regulatory actions under the CWA until approved by EPA.

The TSWQS were last amended in March 2018. EPA began approving portions of the state's revised standards in November 2018.

Reviews and revisions of the TSWQS address many provisions that apply statewide, such as criteria for toxic pollutants. They also address the water quality uses and criteria that are applicable to individual water bodies. An extensive review of water quality standards for individual water bodies is often initiated when the existing standards appear to be inappropriate for water bodies that are listed as impaired

under the CWA, §303(d) or potentially affected by permitted wastewater discharges or other permitting actions.

States may modify existing designated uses or criteria when it can be demonstrated through a use-attainability analysis (UAA) that attaining the current designated uses or criteria is not appropriate. Most changes in designated uses or criteria are based on a demonstration that natural characteristics of a water body cannot attain the currently designated uses or criteria. Natural characteristics include temperature, pH, dissolved oxygen, diversity of aquatic organisms, amount of streamflow, physical conditions such as depth, and natural background pollutant levels. Conversely, a UAA might demonstrate that the currently designated uses and criteria are appropriate, or even that they should be more stringent.

A UAA can require several years of additional sampling studies, or it may focus on a long-term evaluation of existing historical data. For UAAs on water bodies that are potentially impacted by pollutant loadings above natural background levels, sampling and evaluation are often conducted on similar but relatively unimpacted water bodies to determine reference conditions that can be applied to the water body of concern.

The focus of UAAs depends on the uses and criteria that need to be reevaluated. The applicable aquatic life use is determined by repeatedly sampling fish or invertebrates in relatively unimpacted areas and applying quantitative indices, such as indices of biotic integrity, to the sampling data of the biological communities. UAAs to assign aquatic recreational uses include assessing physical and hydrological conditions, observing existing recreation, and collecting information on current and historical recreational activities. Dissolved oxygen criteria are evaluated by monitoring dissolved oxygen over numerous (usually ten) 24-hour periods in relatively unimpacted areas. Site-specific criteria for toxic pollutants are evaluated by placing selected small aquatic organisms in water samples from the site and exposing them to different doses of the toxic pollutant of concern.

The commission is adopting editorial revisions as well as substantive changes. Editorial revisions are adopted to improve clarity, make grammatical corrections, and renumber or reletter subdivisions as appropriate.

Numerous revisions of toxic criteria are adopted to incorporate new data on toxicity effects. Another adopted change provides clarity regarding the use of temporary standards. Numerous revisions are also adopted for the uses and criteria of individual water bodies to incorporate new data and the results of recent UAAs.

Section by Section Discussion

§307.2, Description of Standards

The commission adopts amended §307.2 to include language regarding temporary standards to improve consistency with federal rules listed in 40 Code of Federal Regulations (CFR) §131.14. These revisions allow the expression of the temporary standard as an interim effluent condition when adopted for permittees or water bodies. Revisions also clarify that a temporary standard must preclude degradation of

existing water quality as opposed to impairing an existing use. Other revisions are editorial and adopted to improve overall clarity.

In response to comments regarding §307.2(g), language was modified in §307.2(g)(1) to specify that the options listed therein are the only options for expressing a temporary standard, the interim effluent condition that reflects the greatest pollutant reduction achievable with pollutant control technologies can be used if no additional feasible pollutant control technology can be identified, and a temporary standard can be expressed as the highest attainable interim criterion. Additional §307.2(g) edits were adopted to improve overall clarity.

§307.3, Definitions and Abbreviations

The commission adopts amended §307.3 to include a definition and acronym for "bioaccumulation factor," and the addition of an acronym for "municipal utility district." The definition for "method detection limit" has also been amended to match the current federal definition in 40 CFR Part 136. Other revisions are editorial and adopted to improve overall clarity. The proposed definition for "pre-production plastics" has been removed from this rulemaking for further consideration and, therefore, is not part of adopted §307.3.

§307.4, General Criteria

The proposed addition of subsection (b)(8) explicitly prohibiting the discharge of visible pre-production plastic and providing a compliance mechanism has been removed from this rulemaking for further consideration; therefore, the commission does not adopt amendments to §307.4.

§307.6, Toxic Materials

The commission adopts amended §307.6(c)(1), Table 1, which lists numeric criteria for the protection of aquatic life, to include revisions to the existing cadmium acute and chronic criteria for both freshwater and saltwater based on EPA's issuance of an updated national criteria document.

In response to comments regarding §307.6(c)(1), Table 1, the freshwater chronic criterion for cadmium was corrected, and the analytical method for free cyanide analysis has been incorporated into footnote 2.

Adopted changes to the human health criteria in §307.6(d)(1), Table 2, include the revision of oral slope factors that led to revised criteria for the following five carcinogens: benzo(*a*)anthracene, benzo(*a*)pyrene, chrysene, 1,2-dichloropropane, and 1,3-dichloropropene. Reference dose updates also led to revisions of criteria for the following two carcinogens: dichloromethane and tetrachloroethylene. Criteria revisions to one carcinogen, dicofol, were based on a revision to the animal body weight used to calculate the cancer potency factor from the oral slope factor. No criteria changes are adopted for noncarcinogens. Other revisions are editorial and adopted to improve overall clarity.

In response to comments regarding §307.6(d)(1), Table 2, human health criteria for chrysene and 1,2-dichloropropane were corrected, and the analytical method for free cyanide analysis has been incorporated into footnote 3.

§307.7, Site-Specific Uses and Criteria.

The commission adopts amended §307.7 to include the addition of a geometric mean criterion for Enterococci of 54 colonies per 100 milliliters (mL) for high saline inland waters with primary contact recreation 2. Other revisions are editorial and adopted to improve overall clarity.

§307.10, Appendices A – E and G

The commission adopts amendments to \$307.10 to revise Appendices A – E and G. The adopted amendments to \$307.10(1), Appendix A, include the addition of a footnote to Brushy Creek (Segment 1244) restricting the public water supply designation to within the Edwards Aquifer zones based on a lack of public water supply intakes. A footnote addition for Upper North Bosque River (Segment 1255) is also adopted to clarify that the portion of the segment from the confluence with Dry Branch upstream to the confluence with the North/South Forks North Bosque River in Erath County is intermittent with perennial pools based on a 1991 UAA. The UAA resulted in the creation of classified Segment 1255, which was adopted as part of the 1992 revisions to the TSWQS and approved by EPA in an action letter dated June 16, 1993. Adopted changes also include the deletion of a footnote that describes Mid Cibolo Creek (Segment 1913) as being an intermittent stream with perennial pools. This footnote, added in the 2018 revision to the TSWOS, had not been approved by EPA and was removed because further data evaluation is necessary. Additional adopted changes include revising the designated use of primary contact recreation 1 with a corresponding bacteria criterion of 126 colonies per 100 mL to a secondary contact recreation 1 use with a corresponding bacteria criterion of 630 colonies per 100 mL for San Miguel Creek (Segment 2108). This adopted change is based on the results from a recreational UAA. Other revisions are editorial and adopted to improve overall clarity.

The adopted amendments to §307.10(2), Appendix B, include the addition of the San Marcos River (Segment 1808) and Choke Canyon Reservoir (Segment 2116) because they qualify as sole-source drinking water supplies in accordance with TWC, §26.0286. Other adopted changes include the removal of Greenbelt Lake (Segment 0223) and Lake Brownwood (Segment 1418) because they no longer qualify as sole-source drinking water supplies.

In response to comments regarding §307.10(2), Granger Lake (Segment 1247) is no longer being deleted from Appendix B, and Caldwell and Guadalupe counties were added to the "County" column for the new entry, San Marcos River, to better describe the general location of the water body. Other revisions are editorial and adopted to improve overall clarity.

The adopted amendments to §307.10(3), Appendix C, include reverting the segment descriptions for Lower Cibolo Creek (Segment 1902), Upper Cibolo Creek (Segment

1908), and Mid Cibolo Creek (Segment 1913) back to the most recent EPA-approved descriptions due to further data evaluation being necessary.

The adopted amendments to §307.10(4), Appendix D, include the addition of two water bodies along with their designated aquatic life uses and dissolved oxygen criteria. These additions are due to the results of extensive investigations via UAAs. All the water bodies are tributaries within the listed segment numbers as follows: Piney Creek (Segment 0604) and Little Pine Island Bayou (Segment 0607). A UAA also led to the replacement of an existing Appendix D entry for Buckners Creek (Segment 1402), which was replaced with two new entries for this water body to account for intermittent with pools and perennial flow regimes and to designate aquatic life uses and dissolved oxygen criteria for the two stream reaches based on the UAA. The segment number for the existing entry for County Relief Ditch was changed from Segment 0502 to Segment 0501 due to recent EPA approval of the revised boundaries for both segments in the 2018 TSWQS. Other revisions are editorial and adopted to improve overall clarity.

The adopted amendments to §307.10(5), Appendix E, include the addition of eight new site-specific copper water-effect ratios in the watersheds of Segments 0601, 0604, 0702, 1009, 2429, 2432, and 2441. The results from two site-specific copper biotic ligand models (BLMs) are also adopted for Segments 0202 and 0827. One existing entry for Segment 1001 has been reordered to arrange all table entries in numeric order by segment and permit numbers.

In response to comments for §307.10(5), Appendix E, the phrase "site-specific criteria" has been added to the second and fifth sentences of the introductory paragraph of the appendix for clarification purposes. Footnotes in the "Parameter" column were also revised for two existing entries in the watershed of Segment 0901 for Enterprise Products Operating, LLC (Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002940000) to clarify that the site-specific criteria are applicable to the area near the outfall as opposed to the entire water body. Other revisions are editorial and adopted to improve overall clarity.

The adopted amendments to §307.10(7), Appendix G, include changing the presumed use of primary contact recreation 1 with a corresponding bacteria criterion of 126 colonies per 100 mL to a secondary contact recreation 1 use with a corresponding bacteria criterion of 630 colonies per 100 mL for South Lilly Creek in the Cypress Creek Basin (Segment 0409). This adopted change is based on the result of a recreational UAA. Due to construction activities that filled in much of Bullhead Bayou in the Brazos River Basin and rerouted the water body into a different watershed, adopted changes to Bullhead Bayou include delineations of the East and West reaches and updates to segment numbers (from Segment 1245 to Segment 1202) in order to reflect current conditions for both Bullhead Bayou and Unnamed tributary of Bullhead Bayou. Adopted changes also include a revised description of the unnamed tributary of Bullhead Bayou to reflect the delineation of Bullhead Bayou East. Other revisions are editorial and adopted to improve overall clarity.

In response to comments regarding §307.10(7), Appendix G, editorial changes were made to the description of Bullhead Bayou East.

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code (TGC), §2001.0225, and determined the rulemaking is not subject to §2001.0225 because it does not meet any of the four applicability criteria listed in TGC, §2001.0225(a). According to subsection (a), §2001.0225 only applies to a major environmental rule, the result of which is to exceed a standard set by federal law, unless the rule is specifically required by state law; exceed an express requirement of state law, unless the rule is specifically required by federal law; exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking does not meet any of these four applicability criteria because it does not exceed a standard set by federal law; does not exceed an express requirement of state law; does not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; and is not adopted solely under the general powers of the agency but, rather, specifically under 33 USC, §1313(c), which requires states to adopt water quality standards and review them at least once every three years; and TWC, §26.023, which requires the commission to set water quality standards and allows the commission to amend them. Therefore, this adopted rulemaking does not fall under any of the applicability criteria in TGC, §2001.0225.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. Comments were received, and they are addressed in the Response to Comments section.

Takings Impact Assessment

The commission evaluated this adopted rulemaking and performed an analysis of whether it constitutes a taking under TGC, Chapter 2007. The specific purpose of this rulemaking is to incorporate changes to the TSWQS deemed necessary based on the commission's triennial review of the standards, which mainly consist of incorporating new data on toxicity effects and from recent UAAs and clarifying the use of temporary standards. The adopted rulemaking will substantially advance this stated purpose by revising toxic criteria, individual water bodies' uses and criteria, and the temporary standards requirements in Chapter 307 of the commission's rules.

The commission's analysis indicates that TGC, Chapter 2007 will not apply to this adopted rulemaking because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under TGC, §2007.003(b)(4). CWA, §303 requires the State of Texas to adopt water quality standards, review those standards at least once every three years, and revise the standards as necessary based on the review. TWC, §26.023 delegates the responsibility of adopting and revising the standards to the commission.

Nevertheless, the commission further evaluated this adopted rulemaking and performed an assessment of whether it constitutes a taking under TGC, Chapter 2007. Promulgation and enforcement of this adopted rulemaking will be neither a statutory nor constitutional taking of private real property. Specifically, the adopted regulations do not affect a landowner's rights in private real property because this rulemaking does not burden, restrict, or limit an owner's right to property and reduce its value by 25% or more beyond that which will otherwise exist in the absence of the regulations. In other words, this rulemaking makes necessary revisions to the TSWQS without burdening, restricting, or limiting an owner's right to property and reducing its value by 25% or more. Therefore, the adopted rulemaking does not constitute a taking under TGC, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found that the adoption is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the adopted rules in accordance with Coastal Coordination Act implementation rules, 31 Texas Administrative Code (TAC) §505.22, and found the adopted rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the adopted rules include protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resources by establishing standards and criteria for instream water quality for Texas streams, rivers, lakes, estuaries, wetlands, and other water bodies. These adopted water quality standards will provide parameters for permitted discharges that will protect, preserve, restore, and enhance the quality, functions, and values of coastal natural resources.

CMP policies applicable to the adopted rules include 31 TAC §501.21. The adopted rulemaking will require wastewater discharge permit applicants to provide information and monitoring data to the commission so the commission may make an informed decision in authorizing a discharge permit, ensuring that the authorized activities in a wastewater discharge permit comply with all applicable requirements, thus making the rulemaking consistent with the administrative policies of the CMP.

The adopted rulemaking considers information gathered through the biennial assessments of water quality in the commission's Integrated Report of Surface Water Quality to prioritize coastal waters for studies and analysis when reviewing and revising the TSWQS. The TSWQS are established to protect designated uses of coastal waters, including protecting uses for recreational purposes and propagating and protecting terrestrial and aquatic life. The adopted rulemaking is consistent with the CMP's policies for discharges of municipal and industrial wastewater to coastal waters and how they relate to specific activities and coastal natural resource areas.

Promulgation and enforcement of these adopted rules will not violate or exceed any standards identified in the applicable CMP goals and policies because the adopted rules are consistent with these CMP goals and policies, and these adopted rules do not create or have a direct or significant adverse effect on any coastal natural resource areas.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the CMP.

Public Comment

The commission held a public hearing on May 2, 2022. The comment period closed on May 2, 2022. The commission received timely public comments from American Chemistry Council (ACC), Bayou City Waterkeeper (BCW), Carrizo/Comecrudo Tribe of Texas (C/C Tribe), Cibolo Creek Municipal Authority (CCMA), City of Round Rock (Round Rock), Coastal Alliance to Protect Our Environment (CAPE), Coastal Bend Council of Governments (CBCG), Coastal Bend Sierra Club Group (CBSCG), Coastal Conservation Association (CCA), Dow Chemical Company (Dow), Environment Texas (ET), Environmental Integrity Project (EIP), EPA, Environmental Stewardship (ES). Friends of the Brazos River (FBR). Friends of Padre (FP). Greater Edwards Aquifer Alliance (GEAA), Gulf Coast Bird Observatory (GCBO), Indivisible TX Lege (ITL), Ingleside on the Bay Coastal Watch Association (IBCWA), Inland Ocean Coalition (IOC), Jacob & Terese Hershey Foundation (JTHF), Lower Brazos Riverwatch (LBR), MesoAM SDG17 Coalition (MesoAM), National Wildlife Federation (NWF), Nurdle Patrol (NP), San Antonio Bay Estuarine Waterkeeper (SABEW), Save Buffalo Bayou (SBB), SPLASh/American Bird Conservancy (SABC), Sierra Club Lone Star Chapter (Sierra Club), Surfrider Foundation Texas Coastal Bend Chapter (Surfrider), Texas Campaign for the Environment (TCE), Texas A&M University—Corpus Christi (TAMUCC), Texans for Clean Water (TCW), Texas Chemical Council (TCC), Texas Industry Project (TIP), Texas Parks and Wildlife Department (TPWD), Turtle Island Restoration Network (TIRN), and 516 individuals.

Comments were also received from Tischler/Kocurek Environmental Engineers (T/K).

Response to Comments

General Comments Unrelated to TSWQS Changes Comment

Twelve individuals provided general comments related to a variety of topics, including whether a business owner is allowed to pump out their own business septic tank as opposed to being required to use an approved service; ozone reduction, stronger enforcement on air pollution, and alternative fuels development to combat climate change; the need to better regulate a surface radioactive waste dump in West Texas; the ability to make it illegal to not recycle single-use plastic; the need for the world to stop using plastic; concerns that the state is turning into a desert; the need for infrastructure repairs to remove lead pipes; concerns regarding toxic sunscreen lotions contaminating rivers; the need for more information regarding recycling, along with more places to recycle; the burden placed on homeowners to purchase expensive water filters because municipal water suppliers cannot be trusted; the need to audit the City of Laredo Utilities Department because subdivisions stay without service for weeks; and how a robust plan to recycle plastics would go far to control microplastic pollution in waterways.

Response

The commission responds that these topics are outside the scope of this rulemaking.

General Comments Related to TSWQS Changes Comment

Two hundred thirty-eight individuals encouraged the protection of waters in the state by providing general comments related to a variety of topics, including eliminating and cleaning up pollution; leading the way as a state; protecting humans, animals, and the environment; enacting stricter requirements and penalties; planning for the future; enforcing requirements; restoring animal habitat; protecting uses; encouraging wastewater reuse; preventing disease; adhering to federal requirements; protecting the economy; documenting pollution; finding wastewater disposal alternatives; providing environmental protection education; and enacting effective requirements.

Response

The commission acknowledges these comments and notes that, through this rulemaking, it is the commission's intention to strengthen the TSWQS's effectiveness when it comes to protecting human health and the environment.

Comment

ACC noted its deep commitment to creating a circular economy for plastics.

Response

The commission acknowledges this comment.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR commented that the commission needed to extend the comment period for this rulemaking to May 15, 2022, because a correction to the initial publication of the proposed rulemaking was published in the *Texas Register* on April 15, 2022. According to the commenters, the extension was especially needed because the correction included underlining the new pre-production plastics language in §307.4(b)(8).

Response

The commission responds that an extension of the comment period was not necessary for several reasons. First, there is no legal requirement that a state agency extend its rulemaking comment period if it corrects the original *Texas Register* version of the proposed rulemaking. Second, there is no legal requirement that the commission's rulemaking comment period be a certain length. The statute cited by the commenters, TGC, §2001.023, requires thirty days' notice of an agency's intention to adopt a rule before it adopts the rule, not thirty days between the beginning and end of a comment period. The public comment statute, TGC,

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§2001.029(a), just requires that "a reasonable opportunity" be provided for the public to comment on a proposed rulemaking. And finally, the underlining required by TGC, §2001.024(b)(3) is not a substantive part of a rulemaking; it is a tool used to make it easier for someone to identify new language. Even without the underlining, the public still received notice of the proposed language in §307.4(b)(8) through the preamble, which stated that an explicit prohibition on the discharge of pre-production plastics had been added to §307.4 and referred to facilities subject to the prohibition under §307.4(b)(8). As paragraph (8) was entirely new, there was no question as to what language was new versus old. Also, the underlining in the proposed rule language maintained on TCEQ's website was always correct, so anyone who accessed that version of the rulemaking through the link provided in the preamble and rulemaking notice was able to see the underlining. Therefore, even before the *Texas Register* correction was published, the public received sufficient notice of the proposed language in §307.4(b)(8).

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, FBR, and 504 individuals noted the recently denied petition for rulemaking regarding pristine streams and recommended the commission take action on numeric nutrient criteria during this triennial review. All 504 individuals noted the importance of monitoring nutrient pollution and commented that monitoring alone is insufficient to protect pristine streams from harmful algal blooms and losses of economic development due to decreases in tourism.

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR asserted that the TSWQS do not adequately protect the state's waters from nutrient pollution, and the existing Nutrient Criteria Development Advisory Work Group has not been successful in implementing numeric criteria for nutrient pollution. The commenters recommended the adoption of a new designated use focused on pristine streams and prohibiting wastewater discharges into waters with that designated use. They provided additional recommendations for approaches towards developing criteria, including an example of how the Florida Department of Environmental Protection used the latest EPA guidance and stakeholder input to adopt numeric nutrient criteria for Florida.

Response

The commission responds that, as stated in the April 8, 2022, TCEQ commissioners' order with regard to the denial of the petition for rulemaking, TCEQ already addresses the concerns raised in the petition with a legally adequate program for assessing and protecting stream segments under the TSWQS and the agency's TPDES permitting program. No changes were made in response to these comments.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, FBR, and 504 individuals commented that past recreational use category changes were not supported by the Clean Water Act, and the *E. coli* criteria are not sufficient to protect human health and the environment. They requested that the contact categories be

consolidated using the more stringent bacteria criteria. Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR also commented that by adding recreational use categories in previous revisions to the TSWQS, TCEQ has allowed additional bacterial contamination, prevented segments from being listed as impaired, and therefore not moved forward with the subsequently required TMDL action.

Response

The commission responds that it expanded the categories for recreational uses in previous TSWQS revisions to better characterize the different levels of water recreation activities that can occur in Texas. In the late 1980s and 1990s, a contact recreation use was broadly presumed for all surface waters in Texas, with the exception of eight site-specific classified segments, such as ship channels. As a result of these presumptions, there may be numerous water bodies with inappropriate recreational uses. These additional uses provide the commission the ability to better assign appropriate recreational uses to water bodies.

Federal regulations in 40 CFR §131.10(c) allow States to "adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses." The sub-categories of recreational uses and associated criteria in the TSWQS, which are protective of the recreational use categories and based on acceptable illness rates, were approved by EPA for Clean Water Act purposes and are based on EPA's 1986 *Ambient Water Quality Criteria for Bacteria*.

The commission evaluates water bodies on a site-specific basis to establish the appropriate recreation use following established recreational UAA processes. Some site-specific recreational standards in §307.10(7), Appendix G, of the TSWQS have been approved by EPA and others are pending EPA's review. For the biennial assessments of water quality in the commission's Integrated Report of Surface Water Quality, a water body's presumed, designated, or site-specific recreational use is used in the assessment. The commission continues to develop TMDLs as a management tool to address bacteria impairments in Texas.

No changes were made in response to these comments.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR commented that it is not clear that marine bacterial standards are sufficiently protecting human health and requested that the commission evaluate the utility and sufficiency of using Enterococci as an indicator to measure fecal pollution in saline environments and move to adopt standards that are clearly related to protecting human health and the environment.

Response

The commission responds that Enterococci is the EPA-recommended fecal bacteria indicator for marine water. Enterococci was first recommended as the fecal indicator for bacteria in marine water in EPA's 1986 *Ambient Water Quality Criteria*

for Bacteria. EPA later conducted the National Epidemiological and Environmental Assessment of Recreational Water (NEEAR) study. Based on the NEEAR study and past studies utilized in developing EPA's 1986 *Ambient Water Quality Criteria for Bacteria*, EPA developed the 2012 Recreational Water Quality Criteria (RWQC) recommendations. In the 2012 recommendations, Enterococci continued to be EPA's recommended fecal indicator bacteria for marine water. EPA also provided a geometric mean of 35 colony forming units per 100 milliliters (cfu/100 mL) for Enterococci as one recommended criterion in the 2012 RWQC, which is considered protective of primary contact recreation in marine waters. The commission's geometric mean criterion for primary contact recreation 1 for saltwater is consistent with this EPA-recommended geometric mean.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR urged TCEQ to rapidly adopt numerical salinity gradient criteria. The commenters stated that establishing a baseline for salinity gradients along the Texas coast is critical because climate change-induced sea level rise and coastal erosion will likely increase the salinity content in the Texas Gulf Coast. They noted that the Texas Gulf Coast has a high biodiversity of species, including the endangered smalltooth sawfish, which may be affected by changes in salinity. The commenters acknowledged the existing provision in §307.4(g)(3) regarding activities completed towards establishing salinity criteria in estuaries, but the commenters expressed concern on the rate of progress for criteria development.

Response

The commission responds that long-term salinity monitoring is still ongoing in accordance with §307.4(g)(3). The commission also notes that impacts to state and federally listed endangered species are considered in the commission's water quality management programs.

§307.2, Description of Standards

Comment

TPWD expressed support for the efforts to change language regarding temporary standards to improve consistency with the federal rules listed in 40 CFR §131.14. However, TPWD recommended that the proposed language distinguish how temporary standards are expressed for permittees versus water bodies and provided suggested edits to that effect.

Response

The commission considers the current organizational structure of §307.2(g)(1) to be sufficient. No changes were made in response to this comment.

Comment

EPA recommended revising §307.2(g)(1) from "When a temporary standard is adopted for permittees or water bodies, the temporary standard *may* be expressed as one of the following" to "When a temporary standard is adopted for permittees or water bodies, the temporary standard *must* be expressed as one of the following." This

change would clarify that there are no other allowable options under the federal water quality standard regulation for expressing the highest attainable condition.

EPA and TPWD also recommended the addition of language to §307.2(g)(1) to specify that a temporary standard may be expressed as "the highest attainable interim criterion." EPA stated that although language in the 2018 TSWQS can be interpreted to include this approach, presenting all three options under paragraph (1) would provide clarity for stakeholders.

Response

The commission agrees with these comments, and the recommended changes to the language in §307.2(g)(1) are adopted.

Comment

EPA recommended revising "pollution" in §307.2(g)(1)(A) to "pollutant," which is already included in subparagraph (B).

Response

The commission agrees with the comment, and the recommended change to the language is adopted.

Comment

EPA recommended prefacing §307.2(g)(1)(B) with "If no additional feasible pollutant control technology can be identified," for consistency with the federal water quality standard regulation.

Response

The commission agrees with the comment, and the recommended change to the language is adopted.

Comment

EPA recommended adding clarification in $\S307.2(g)(1)(B)$ that the remediation plan would need to be adopted and implemented, noting that the remediation plan would need to meet the requirements of a pollution minimization program under 40 CFR $\S131.3$.

Response

The commission responds that requirements regarding implementation of a remediation plan are specified in the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194). No changes were made in response to this comment.

Comment

EPA recommended revising the proposed language in §307.2(g)(4) to read "within 30 days of completion, the underlying designated use or criterion will become applicable and must be used when implementing subsequent federal CWA activities." The

proposed language could be misinterpreted as the "existing water quality standards" being the temporary standard.

Response

The commission agrees that additional clarity would be helpful in the rule language. To that end, the word "underlying" has been added before the phrase "water quality standards" in the last sentence of §307.2(g)(4).

Comment

EPA recommended including a reference to the federal regulation at 40 CFR §131.14 to cover any requirements that are not specifically identified in §307.2(g).

Response

The commission responds that inclusion of the federal regulation reference was discussed in a Surface Water Quality Standards Advisory Work Group (SWQSAWG) meeting with stakeholders in preparation for this revision, and the decision was made to not incorporate §131.14 by reference into the rule. No changes were made in response to this comment.

§307.3, Definitions and Abbreviations

Comment

TPWD recommended that the term "effluent condition" be defined in §307.3(a).

Response

The commission responds that the term "effluent condition" is not defined in federal regulations. However, for clarity and consistency with federal regulations, the commission revised the provision at §307.2(g)(1)(A) as part of this rulemaking to specify "the interim effluent condition that reflects the greatest pollutant reduction achievable."

Comment

An individual commented that the proposed definition of "bioaccumulation factor" in $\S307.3(a)(9)$ is essentially the same as the existing definition for "bioconcentration factor" in $\S307.3(a)(10)$ and may misrepresent actual processes in the aquatic ecosystem by discounting the importance of biomagnification.

Response

The commission responds that unlike the definition for bioconcentration factor, which only accounts for exposure directly from water, the definition for bioaccumulation factor accounts for all routes of exposure, including food sources. No changes were made in response to this comment.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, TPWD, T/K, and four individuals expressed general support for the definition of "pre-production plastic" in §307.3(a)(50).

Response

The commission acknowledges these comments and notes the proposed definition has been removed from this rulemaking.

Comment

SABEW and one individual recommended revising the definition of pre-production plastic in §307.3(a)(50) to include fragments or broken pieces of a pellet (nurdle).

Response

The commission acknowledges these comments and notes the proposed definition has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and four individuals recommended revising the proposed definition of pre-production plastic in §307.3(a)(50) by replacing "organic polymers" with "petroleum and biologically derived polymers" since EPA has documented that bioplastics can be designed to be structurally identical to petroleum-based plastics and can last in the environment for the same period of time as petroleum-based plastics.

Response

The commission acknowledges these comments and notes the proposed definition has been removed from this rulemaking.

§307.4, General Criteria

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, FBR, Surfrider, SABEW, LBR, SBB, FP, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, EPA, TPWD, CCA, and ten individuals expressed general support for the prohibition on discharging pre-production plastic, which was proposed in §307.4(b)(8). SABEW and one individual asserted that the fact that the rule applies to both stormwater and wastewater discharges is important.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

CCA noted the presence of pollution from pre-production plastics as a global and local concern, including impacts to marine life and human health. An individual noted the presence of pollution from pre-production plastics as a concern in Texas and nationally, including impacts to aesthetics and bioaccumulative toxins (including mercury, DDT, and polycyclic aromatic hydrocarbons [PAHs]) adsorbing to plastic pollution. TPWD noted the importance of keeping plastics out of the environment. An individual also noted the prevalence of nurdles collected by the citizen science project Nurdle Patrol from Texas beaches in areas of manufacturing and transportation, such as railroads, nurdle distribution sites, and molding factories. Sierra Club, TCE, ET, ITL,

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TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR described the risks associated with pre-production plastic pollution, including that pellets can act as vessels for toxic pollutants and cause issues up and down the food chain through bioaccumulation. SABEW and one individual noted that other contaminants in the water column may sorb onto plastics, and plastics may contain additives that have an additional negative effect on the environment.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, ACC, TIP, Dow, and T/K opposed the proposed provision in §307.4(b)(8) or urged the commission not to adopt the prohibition on discharges of pre-production plastic detailed in §307.4(b)(8) since there is no federal or state requirement and/or statutory authority to do so. TIP noted it has significant concerns regarding the proposed prohibition and recommended either rewording the proposed language to constitute a clarification of the existing narrative standard or withdrawing the prohibition from the proposal.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

ACC and Dow noted their support of the industry stewardship program Operation Clean Sweep. ACC recommended Operation Clean Sweep as an alternative to the prohibition proposed in §307.4(b)(8), which was summarized by ACC as an alternative to zero-discharge regulations. ACC also urged the commission to promote best practices programs, such as Operation Clean Sweep, to help improve water quality.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, FBR, and 504 individuals recommended that the prohibition on the discharge of preproduction plastic, as proposed in §307.4(b)(8), should address all plastic pollution, including other microplastics that may not be visible to the naked eye. Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and eight individuals expressed concern that inclusion of the term "visible" will allow regulated facilities to ignore micro- and nano-plastics, which they note have been proven to be harmful to the environment and human health, including DNA damage, endocrine disruption, cancer, and diabetes when ingested or inhaled. SABEW and one individual also noted that microplastics are harmful to the environment and that plastics can be small enough to be transported by wind and rain into stormwater.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and eight individuals recommended the term "visible" in §307.4(b)(8) to be further defined as "able to see with the naked eye without special equipment, from a distance of three (3) feet. If a person requires prescription eyeglasses or contact lenses to achieve normal vision, those must be worn while monitoring for potential discharges." The commenters also provided recommendations for locating discharged plastics.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Regarding the proposed revision in §307.4(b)(8), one individual commented that additional language is needed so that "feasible" does not become "easily done" and suggested a reference to practices for other particulates or practices at other plants around the country. Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, FBR, and 504 individuals noted "where determined feasible" should be removed from the prohibition. Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, C/C Tribe, GEAA, IBCWA, EIP, and FBR asserted removal is necessary because determining feasibility, economic practicability, and what is achievable in light of best industry practices are contrary to the public interest.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

One individual noted the need for assurances that an offending company will not be able to evade responsibility for discharging pre-production plastic just because it sends a note from the plant engineer that complains compliance with the proposed prohibition in §307.4(b)(8) would be hard.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

SABEW and one individual recommended that proposed §307.4(b)(8) should make it clear that the use of BMPs does not in any way absolve the permittee of the prohibition on discharging pre-production plastic. The commenters also suggested the commission provide specific suggestions for the BMPs to be used by facilities and in permit requirements.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and eight individuals recommended revisions in §307.4(b)(8) to clarify that sweeping or washing plastics into stormwater or wastewater is not a BMP. SABEW and one individual recommended revisions to §307.4(b)(8) to further clarify that BMPs should prohibit permittees from sweeping spilled plastics into stormwater drainage areas unless the structures have mechanisms to remove preproduction plastic prior to discharge. SABEW and one individual also recommended a separate stormwater system from the normal stormwater system and BMPs such as retention ponds.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, ACC, TIP, Dow, and T/K expressed concern that feasible technologies do not currently exist to comply with the proposed pre-production plastic prohibition located in §307.4(b)(8). ACC noted that the proposal would impose significant costs on stakeholders. T/K asserted that the prohibition is a technology-based effluent standard, and if TCEQ is proposing it as such, TCEQ would have to provide technical supporting analyses demonstrating the standard is achievable and estimating the cost for compliance. TCC noted that the costs provided in the rule preamble's fiscal note associated with changes to 30 TAC §307.4 were conservative cost estimates that will likely increase significantly during design and implementation, and there would be ongoing operational and maintenance costs. TCC noted it is not currently aware of any current technology that can assure absolute compliance with this proposed prohibition, and each facility has a unique footprint that will require control technologies tailored to the individual facility. TCC recommended that if TCEO considers adopting the prohibition, the language should be revised to focus on the implementation of feasible BMPs as defined in 30 TAC §307.3(a)(7), similar to the guidelines in Operation Clean Sweep practices, instead of a strict no-discharge prohibition of visible pre-production plastic.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and nine individuals recommended that spilled or discharged pre-production plastic must be regulated as a Class 2 industrial solid waste.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and eight individuals provided specific recommendations for requirements derived from House Bill 3814 by Representative Hunter, which was filed during the regular 87th Legislative Session, to be included in conjunction with the language proposed in §307.4(b)(8). These included requirements for reporting spills to the commission within two days after detection of a discharge or release and ensuring cleanups are completed without harm to the ecosystem; containment systems to be designed and maintained to capture floating and sinking plastics that have a capacity to handle precipitation from 100-year, 24-hour storm events as determined by the National Oceanic and Atmospheric Administration; and, for facilities that discharge stormwater associated with industrial activity, inspecting a facility for eligibility before granting an applicant's Conditional No Exposure Exclusion for TCEQ's MSGP.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TPWD supported the prohibition on discharging visible pre-production plastic in §307.4(b)(8), the inclusion of questions in TPDES permit applications to identify facilities that handle plastic, and including prohibitions in final industrial TPDES permits regarding the release of plastic particulates of any size into the environment.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, and Dow asserted the prohibition on discharging pre-production plastic in §307.4(b)(8) is a new, more stringent regulation than what currently exists for floating debris that is pre-production plastic, and the commenters requested that the commission grant compliance schedules for facilities as authorized by §307.2(f). TCC requested that TCEQ not only allow for the full three-year compliance period specified in §307.2(f) but also provide allowances for site-specific schedules for more complex control technologies, which could require a lengthy period of time to implement. Dow asserted that facilities would require significant time to implement control

technologies and recommended that, at a minimum, TCEQ allow a multiyear implementation plan and provide a mechanism for evaluating longer-term implementation projects on a case-by-case basis. TCC recommended that TCEQ provide sufficient time to allow for research and development of new control technologies that do not currently exist and for the implementation of these technologies. TIP recommended that if TCEQ proceeds with the prohibition, the agency should adopt an express statement that compliance periods would be available for water quality-based effluent limitations based on the new standard.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, and Dow recommended the commission further clarify the proposed prohibition on discharging pre-production plastic in §307.4(b)(8) by specifying the point of compliance as the final permitted outfall. Dow recommended the commission specify the prohibition only applies to water bodies outside the fence line of affected facilities and provide guidance to ensure consistent application throughout industry. SABEW and one individual commented that plastics should be considered discharged if they leave the final discharge point or outfall gate, even if on the property of the permittee.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

Surfrider, SABEW, CAPE, LBR, SBB, FP, ET, NP, GCBO, IOC, TAMUCC, SABC, MesoAM, TCW, CBCG, CBSCG, JTHF, and ten individuals expressed concern that §307.4(b)(8) contains no obligations to conduct monitoring or reporting of discharges of preproduction plastic or specifications of punishment for failure to do so. The commenters stated that enforcement penalties issued for violations must be large enough to deter future violations and recommended that TCEQ consider the wealth and size of a violator when calculating the penalty. An individual recommended a strict enforcement policy, including BMPs and meaningful fines appropriate for the size of the company having the violation. An individual also recommended that permittees should be required to report and clean up any spills inside and outside their fence line within 24 hours after plastics are recorded and make all reporting of plastic pellet, flake, and powder violations, spills, and cleanups open to the public. An individual also noted the utility of auto-sampling devices to monitor wastewater discharges for plastics. SABEW and one individual expressed concern that the proposed rule does not contain sufficient accountability mechanisms to ensure compliance and recommended that permittees that produce, handle, transport, or use microplastics should be required to obtain a permit and monitor outside all their discharge points, including outside their outfalls and at least 50 feet in all directions from the discharge location. SABEW and one individual also recommended that

monitoring should be required the day after every 1-year, 1-hour storm event, for a 1year/24-hour storm event or more, and at least once a month within 24 hours of a discharge, with additional monitoring requirements if plastics are detected. SABEW and one individual also recommended that monthly reports contain specific requirements and be made available to the public within a week of completion and that permittees impounding stormwater behind structural barriers obtain certification twice annually.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

SABEW and two individuals recommended the commission encourage citizen scientists to monitor around plastic facilities and facilitate the reporting of incidents by citizens using tools such as phone applications or a reporting form. SABEW and one individual recommended articulating standards for accepting citizen monitoring information and compensation for citizen scientists who document unauthorized discharges that result in violations or cleanups and suggested a process to allow the citizen scientists to direct compensation funds toward a local environmental project or the commission.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

SABEW and one individual expressed concern that the prohibition on discharging preproduction plastic in §307.4(b)(8) does not specify requirements for reporting a discharge, cleaning up the discharge, and providing details about the cleanup. The commenters requested that the prohibition be revised to require documented reporting of discharge events, including the location of the discharge and volume of discharged plastics. The commenters also stated that cleanup reports should be made publicly available and recommended that the use of high-pressure hydraulic flushing of pellets from vegetation should not be allowed without TCEQ approval. The commenters also recommended that §307.4(b)(8) include a requirement that a person conducting monitoring must exercise reasonable efforts to locate discharged plastics along shorelines and under vegetation that may obscure the person's view of the ground.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, and Dow expressed concern that the prohibition on discharging preproduction plastic proposed in §307.4(b)(8) could be used to penalize existing facilities for historical plastic discharges that may not have been released by the existing facility. TCC suggested the commission adopt, through guidance, a specification that the discharge prohibition is applicable only to new discharges with a direct and traceable link to the facility. T/K asserted the discharge prohibition is unenforceable because finding pellets near a permitted outfall is no guarantee they are present due to a discharge from that outfall.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, and Dow requested that the commission revise the proposal located in §307.4(b)(8) to clarify that a regulated entity will have the opportunity to remediate the release of any visible plastic by cleaning them up before the commission classifies any release as a violation. TCC also recommended that the commission include reasonable and appropriate remediation timelines that take into consideration elements such as property access, waterway access, waterway traffic, and permitting requirements.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, and Dow requested that the commission include in guidance the conditions under which the proposed prohibition on discharging pre-production plastic in §307.4(b)(8) will apply, such as those specified at §§307.4(a) and 307.9(b). Dow requested that the commission include a mechanism for excluding extreme weather conditions from these requirements.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

SABEW and one individual expressed concern with the commission's enforcement process as it related to historical experiences with the Formosa facility. The commenters recommended that the commission consider the wealth of the violator and costs forgone by violators when assessing fines. The commenters also asserted that fines for violators are grossly underestimated.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC and Dow expressed concern that the prohibition on discharging pre-production plastic in §307.4(b)(8) would cause confusion rather than clarification, is not a criterion at all, and would be more appropriate as an implementation mechanism. TCC, TIP, and

T/K asserted the prohibition is more than a clarification because the no-discharge prohibition is a zero-discharge standard. TIP considered the prohibition to be a new numeric criterion. TCC asserted additional confusion regarding the implementation and applicability of mixing zones and zones of initial dilution due to the prohibition. TIP expressed concern that the prohibition on discharging visible pre-production plastic conflicts with existing narrative criteria in §307.4(b)(2), which do not currently include a zero-discharge standard.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, ACC, TIP, Dow, and T/K expressed concern that the zero-discharge standard in §307.4(b)(8) for a non-toxic material has not been scientifically justified, and TCEQ has not followed requirements in TWC, §26.023 regarding the use of quality assured data to develop standards. The commenters requested that TCEQ share the scientific rationale utilized to justify the proposed revision. TCC recommended that TCEQ could have developed a proposal based on the results of a scientific study and taken into account what can be accomplished through enforcement of the existing requirements for floating debris. TIP asserted that TCEQ did not and cannot articulate a sound scientific rationale for the plastics provision to impose a zero-discharge standard. Dow urged TCEQ to reconsider the proposed revisions to ensure that an appropriate administrative record is developed.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

ACC expressed concern that the prohibition on discharging visible pre-production plastic located in §307.4(b)(8) requires a robust stakeholder process to ensure the commission gains a deeper understanding of the needs, interests, concerns, and experiences of all stakeholders. ACC urged the commission to initiate a robust stakeholder process to ensure all views and knowledge are taken into account. ACC also noted that the decision-making process should be fully transparent and informed through public engagement and review.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TCC, TIP, Dow, and ACC asserted that the discharge prohibition for visible preproduction plastic in §307.4(b)(8) is more than a clarification and requested that the commission explain the rationale for considering the changes as only a clarification. TIP asserted that the existing standard applicable to visible pre-production plastic has been in place for decades; reimagining its meaning by purporting to make a clarification is inconsistent with its plain language and not a sound precedent for how water quality standards have been, or should be, adopted. T/K asserted that the prohibition is not a clarification and that existing §307.4(b)(2) is not a zero-discharge standard. T/K also asserted that if the clarification was applied to existing §307.4(b)(2), it would affect every municipal and industrial discharger in the state, and the "essentially free" specification in the existing regulation provides TCEQ sufficient authority to enforce this rule on plastics. T/K also recommended adding a single sentence to §307.4(b) stating that the provision applies to pre-production plastic as floating and suspended materials would be a clarification and would not constitute a major environmental rule change.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TIP, Dow, and T/K expressed concern that the proposed prohibition in §307.4(b)(8) on discharging pre-production plastic is being promulgated by the commission in response to a specific court ruling and settlement agreement, *San Antonio Bay Estuarine Waterkeeper v. Formosa.* TIP asserted that the court did not purport to remake law, interpret existing permit conditions, or otherwise prescribe the proposed rulemaking. T/K asserted that the existing regulations in §307.4(b)(2) are sufficient for TCEQ to control wastewater discharges of pre-production plastic and need to be adequately enforced.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TIP and Dow provided alternative language to further clarify the prohibition language in §307.4(b)(8) by specifying there shall be essentially no discharges of pre-production plastic that are conducive to producing adverse responses in aquatic organisms or putrescible sludge deposits or sediment layers that adversely affect benthic biota or any lawful uses. TIP recommended that the BMP language in proposed §307.4(b)(8) be removed because it may be more appropriate to implement it as a permit condition.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

EPA recommended amending the prohibition on discharging pre-production plastic in §307.4(b)(8) by including an expression of the desired condition of waters in the state, should the commission intend for the prohibition to be used for all CWA purposes, including assessment under CWA, §303(d).

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TIP expressed concern that the plastic provisions in §307.4(b)(8) had not been properly noticed under the Texas Administrative Procedure Act, TGC, §2001.024.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

T/K expressed concern that the prohibition proposed in §307.4(b)(8) is substantially more restrictive than the existing rule and is a major new environmental rule subject to the regulatory analysis requirements of TGC, §2001.0025. TIP asserted that the plastics provision would "exceed a standard set by federal law" and constituted a major environmental rule.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

Comment

TIP asserted that the first sentence of the newly proposed language in §307.4(b)(8) is unqualified.

Response

The commission acknowledges these comments and notes that proposed subsection (b)(8) has been removed from this rulemaking.

§307.5, Antidegradation

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR commented that provisions regarding Tier 2 in §307.5(b)(2) are inconsistent with federal regulations, and current language undermines the purpose of the Tier 2 review. The commenters recommended that the commission remove or define "de minimis" in §307.5(b)(2) and require a meaningful alternatives analysis in TPDES permitting.

Response

The commission responds that the existing antidegradation policy in §307.5 has been approved by EPA and meets federal requirements at 40 CFR §131.12. The *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) provide guidance on how the antidegradation policy is implemented in TPDES permits. No changes were made in response to this comment.

§307.6, Toxic Materials

Comment

T/K commented on two footnotes in §307.6(c)(1), Table 1. Footnote 2 specifies that compliance with the standard for free cyanide will be determined with the analytical method for available cyanide. T/K noted that there is also an analytical method for free cyanide approved at 40 CFR Part 136. T/K recommended that footnote 2 include that the method for free cyanide analysis is also acceptable for determining compliance. T/K noted that without this change to footnote 2, the result would be that a method specific for free cyanide would not be authorized to demonstrate compliance.

Regarding footnote 3, T/K questioned whether the current numeric criteria for PCBs, which is based on EPA's Integrated Risk Information System (IRIS) database, justifies the standard being set based on the sum of all congeners, isomers, homologs, or Aroclors. T/K noted that review of the data in IRIS suggests that almost all toxicology data are based on the Aroclors, not on the much longer list of congeners, isomers, and homologs that is now identifiable using EPA's proposed analytical method. Furthermore, T/K noted that EPA's proposed analytical method that would measure dozens or more congeners has never been approved at 40 CFR Part 136. Therefore, T/K recommended that TCEQ reevaluate footnote 3 to determine if it is scientifically justified at this time.

Response

The commission responds that the inclusion of the analytical method for free cyanide analysis has been incorporated into footnote 2 of §307.6(c)(1), Table 1 as well as footnote 3 of §307.6(d)(1), Table 2 for consistency. The commission may consider alterations to footnote 3 of §307.6(c)(1), Table 1, which regards analytical methods for PCBs, in a future revision of the TSWQS.

Comment

EPA expressed support for the adoption of the updated cadmium aquatic life criteria in §307.6(c)(1), Table 1, but noted a typographical error in the formula for the proposed chronic freshwater criterion. EPA commented that for consistency with the current nationally recommended criterion, the slope of the chronic freshwater criterion should be 0.7977 rather than 0.7997 as included in the proposed TSWQS.

Response

The commission agrees with this comment, and the recommendation to correct the typographical error has been incorporated into the adopted aquatic life criteria in §307.6(c)(1), Table 1.

Comment

T/K commented that the language in §307.6(c)(6) includes the following sentence: "There must be no lethality to aquatic organisms that move through a ZID, and the sizes of ZIDs are limited in accordance with §307.8 of this title." T/K noted that in a recent administrative hearing before the State Office of Administrative Hearings (SOAH), the contention was made by protestants to a draft permit that this sentence must be interpreted as zero lethality, which in fact is scientifically impossible to prove. T/K asserted that the quoted sentence directly conflicts with §307.6(e)(1), which states, "Acute total toxicity levels may be exceeded in a ZID, but there must be no significant lethality to aquatic organisms that move through a ZID." T/K noted that when the commissioners acted on SOAH's proposal for decision, they concluded the meaning of the no lethality provision in §307.6(c)(6) should be interpreted as no significant lethality as specified at §307.6(e)(1). T/K requested that TCEQ revise the no lethality provision in §307.6(c)(6) by adding the word "significant" to make it consistent with §307.6(e)(1) and the commissioners' decision.

Response

The commission responds that the issue decided by the commissioners at their May 19, 2021, agenda with regard to lethality was that the correct standard to apply in the case in question was §307.6(e)(1) rather than §307.6(c)(6) or 307.8(b)(2), not how to interpret §307.6(c)(6). The commissioners actually referred to §307.6(e)(1) as the less stringent standard of the three. The commission also notes that the language in §307.6(c)(6) relates to specific numerical acute criteria for toxic substances, while the language in §307.6(e)(1) addresses total toxicity of permitted dischargers. As such, these two paragraphs of the rule are not discussing the same issue in relation to lethality. No changes were made in response to this comment.

Comment

EPA expressed support for the use of updated toxicity values and bioaccumulation factors (BAFs) for calculating human health criteria in §307.6(d)(1), Table 2.

Response

The commission acknowledges this comment.

Comment

Sierra Club. TCE. ET. ITL. TIRN. ES. CAPE. BCW. NWF. C/C Tribe. GEAA. IBCWA. EIP. and FBR commented that TCEQ should provide sufficient justification for weakening human health numeric criteria for carcinogens in §307.6(d)(1), Table 2, especially if TCEQ can already protect human health with the current numeric standards. The commenters stated that TCEQ explained that proposed changes to the human health criteria for carcinogens are based on a revision of oral slope factors for benzo(a)anthracene, benzo(a)pyrene, chrysene, 1,2-dichloropropane, and 1,3dichloropropene, but despite these explanations, the concentrations are alarming without adequate justification. The commenters also commented that it remains unclear from both the background and the proposed standards how these changes in method were ascertained, including whether they came from EPA, TCEQ, or elsewhere. The commenters also stated that any change to the oral slope factor in measuring the amount of permissible carcinogenic pollution is intended to be used as a minimum basis, and if TCEQ can regulate such carcinogens at a lower and safer amount (such as at present), the justification to permit more carcinogenic pollution that risks human health should be better reasoned than simply because it is allowable.

Response

nial revisions of the TSWOS are performed in

The commission responds that triennial revisions of the TSWQS are performed in part to include new scientific data on the effects of chemicals and pollutants, and updates to the human health criteria found in §307.6(d)(1), Table 2, are based on new information and studies on the potential toxic effects of chemicals of concern on human health. Revisions to Table 2 were presented to the SWQSAWG on March 9, 2020. To prepare stakeholders for the March 2020 SWQSAWG meeting, a handout explaining the basis for the changes to Table 2 and a spreadsheet showing all the inputs, equations, and changes to numeric criteria were posted on the agency's SWQSAWG webpage

(www.tceq.texas.gov/waterquality/standards/stakeholders/swqsawg.html) before the meeting occurred. Both the handout and the spreadsheet remain available on the SWQSAWG webpage. Updates to the factors used for toxic numeric criteria were conducted in accordance with the sources cited in §307.6(d)(3)(A), and it is not unusual for criteria values to be updated based on new data. No changes were made in response to this comment.

Comment

EPA commented that the proposed fish consumption criteria for dichloromethane (75-(09-2) and tetrachloroethylene (127-18-4) included in revisions to §307.6(d)(1), Table 2, are based on updated reference doses for non-carcinogenic effects. EPA noted these criteria were calculated using reference doses available in EPA's IRIS and the state's assumptions for childhood exposure factors. EPA published updated procedures for calculating human health criteria in Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health in 2000. Under CWA, §304(a), EPA published updated human health criteria recommendations in June 2015 based on the 2000 methodology and other information. EPA commented that these updated recommendations include revised cancer slope factors and reference doses (RfDs); use of relative source contributions (RSCs) in criteria for non-carcinogens to account for other sources of exposure (e.g., food or air): use of BAFs instead of bioconcentration factors; and derivation of BAFs using aquatic trophic levels. EPA noted that several components of the revised human health methodology, such as BAFs and use of a scaling factor of 3/4 to adjust doses in toxicity studies from animal weight to human weight, have been incorporated during previous revisions of the TSWQS. EPA recommended using exposure factors based on updated information located in the 2011 *Exposure Factors Handbook* (with updated chapters available online) to calculate human health criteria. When deriving human health criteria for noncarcinogens and nonlinear carcinogens, EPA recommended including an RSC factor to account for sources of exposure other than drinking water and consumption of fish and shellfish from inland and nearshore waters. EPA noted that using an RSC ensures the level of a chemical allowed by a water quality criterion, when combined with other exposure sources, will not result in exposures that exceed the RfD and helps prevent adverse health effects from exposure to a given chemical over a person's lifetime. EPA noted that chapter four of EPA's 2000 human health methodology includes an approach for determining an appropriate RSC for a given pollutant ranging in value from 0.2 to 0.8 to ensure drinking water and fish consumption alone are not apportioned the entirety of the RfD.

Response

The commission responds that when updating the cancer slope factor and RfD inputs for this revision, the commission used the latest information found in EPA's IRIS assessment in accordance with §307.6(d)(3)(A). The commission supports using information located in IRIS to have a consistent, peer-reviewed source for toxicity factors that can be used throughout the agency and to create consistency among all program areas.

The commission began using childhood consumption factors for noncarcinogen criteria calculations and BAFs, where available, for all human health criteria calculations during the 2010 revision of the TSWQS, in accordance with EPA's *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* (2000). EPA's recommended RSC factors have not been utilized in the human health calculations, and this deviation from federal guidance has been consistently employed by the commission as documented in the EPA-approved 2010, 2014, and 2018 revisions to human health criteria. No changes were made in response to these comments.

Comment

EPA commented that the calculations for chrysene (218-01-9) in TCEQ's 2020 spreadsheet, which was used to derive the revised human health criteria for this substance in §307.6(d)(1), Table 2, included a conversion of the 2/3 scaling factor to the 3/4 scaling factor to adjust doses in toxicity studies from animal weight to human weight. EPA noted this conversion was appropriate for the cancer slope factor previously used for benzo(*a*)pyrene. However, EPA stated that the updated slope factor for benzo(*a*)pyrene uses the 3/4 scaling. With this change, EPA calculated a water and fish criterion of 9.96 µg/L and fish consumption criterion of 10.26 µg/L.

EPA also commented that a similar error with the scaling factor appears to have occurred in the calculation of human health criteria for 1,2-dichloropropane (78-87-5). With removal of the conversion of the scaling factor for criteria calculations, EPA obtained a water and fish criterion of 9.17 μ g/L and a fish consumption criterion of 301.98 μ g/L (for carcinogens). However, EPA noted that EPA's maximum criterion level for 1,2-dichloropropane in the current TSWQS is more stringent than EPA's recalculated water and fish criterion of 9.17 μ g/L.

Response

The commission agrees with these comments. The scaling factor corrections for chrysene and 1,2-dichloropropane have been made in the calculations, and the revised human health criteria for both chrysene (water and fish criterion and fish consumption criterion) and 1,2-dichloropropane (fish consumption criterion) have been incorporated into §307.6(d)(1), Table 2.

§307.7, Site-Specific Uses and Criteria

Comment

EPA commented that in §307.7(b)(1)(A)(vi), an Enterococci criterion of 54 cfu/100 mL (geometric mean) is proposed for application to the primary contact recreation 2 use in

inland high saline waters. EPA recommended that the proposed geometric mean Enterococci criterion for primary contact recreation 2 in inland high saline waters be revised to 30 or 35 cfu/100 mL. EPA also recommended the adoption of a statistical value threshold of either 110 or 130 cfu/100 mL Enterococci for primary contact recreational uses.

Response

The commission responds that the illness rate associated with the geometric mean criterion of 54 cfu/100 mL for primary contact recreation 2 for high saline inland water bodies is consistent with the illness rate associated with the commission's primary contact recreation 2 geometric mean criterion in freshwater, which was approved by EPA. The proposed geometric mean Enterococci criterion of 54 cfu/100 mL was derived using EPA's 1986 guidance, *Ambient Water Quality Criteria for Bacteria*, which is based on an accepted risk of illness of 10/1000, or 1%.

The commission has previously adopted single sample criteria for primary contact recreation 1 in freshwater, high saline inland water bodies, and saltwater, including the specified criterion of 130 cfu/100 mL Enterococci for primary contact recreation 1 in saltwater. Under 30 TAC §309.3(h), the commission applies the most stringent criterion, i.e., for primary contact recreation 1, for permitting purposes.

No changes were made in response to these comments.

§307.10, Appendices A - G

Appendix A, Site-specific Uses and Criteria for Classified Segments Comment

EPA recommended that aquatic life uses be adopted for Segments 1006 and 1007 of the Houston Ship Channel. EPA noted that data have been collected that demonstrate an aquatic life use is justified. In accordance with this recommendation, EPA stated that the dissolved oxygen standards should be reevaluated. Increasing the dissolved oxygen standards from 1.0 mg/L to 2.0 mg/L for Segment 1007 and from 2.0 mg/L to 3.0 mg/L for Segment 1006 are recommended by EPA to protect the actual aquatic life uses. EPA commented that the adoption of uses and revised standards would allow a transition to a dissolved oxygen standard of 4.0 mg/L and aquatic life use of high for Segment 1005. EPA noted there are very few exceedances in Segments 1006 and 1007 in the 2020 Integrated Report and previous reports.

Response

The commission responds that at this time, no recent evaluation of these segments in the form of a UAA has been performed. The comment requesting the reevaluation of both segments is noted and may be considered by the commission for future triennial revisions of the TSWQS. No changes were made in response to this comment.

Comment

Round Rock expressed support of the addition of a footnote to Brushy Creek (Segment 1244) restricting the public water supply use designation to the portions of Brushy Creek within the contributing, recharge, and transition zones of the Edwards Aquifer. Round Rock noted certain water body characteristics, inadequate flows, no known public water supply uses, and lack of proximity to existing public water supply intakes and wells as support for the change.

Response

The commission acknowledges this comment.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR commented that the removal of the public water supply use designation for a large portion of Brushy Creek (Segment 1244) is inappropriate because the removal of this use could make it easier for current or future permitted dischargers to degrade water quality.

Response

The commission responds that there are currently no public water supply intakes or wells under the influence of surface water in this section of Brushy Creek, as described in the footnote. The removal of the public water supply use designation for this section of Brushy Creek does not preclude the possible future use of this section as a public water supply. At such a time that a public water supply use was identified, the public water supply use designation would be placed on the applicable portion of Brushy Creek. No changes were made in response to this comment.

Comment

EPA recommended the adoption of an aquatic life use and corresponding dissolved oxygen criteria for Mid Pecan Bayou (Segment 1431) based on a completed UAA.

Response

The commission responds that it will review the UAA for possible inclusion in a future revision of the TSWQS.

Comment

CCMA expressed support for the removal of the footnote on Mid Cibolo Creek (Segment 1913) in Appendix A and requested that any future study of the watershed be performed with the effects of the Odo J. Riedel Regional Water Reclamation Plant discharge properly considered.

Response

The commission acknowledges this comment and notes it will evaluate site-specific information during any future studies of the watershed.

Comment

EPA commented that it has reviewed the Recreational UAA for San Miguel Creek (Segment 2108) and expressed support for the proposed revision to secondary contact recreation 1 for this water body pending review of any comments submitted during this public comment period and from earlier comment periods.

Response

The commission acknowledges this comment.

Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR expressed opposition to the recreational use change for San Miguel Creek (Segment 2108) from primary contact recreation 1 to secondary contact recreation 1.

Response

The commission relied on information collected during the recreational UAA for San Miguel Creek to develop the site-specific secondary contact recreation 1 use. This reclassification is appropriate due to the presence of natural, ephemeral, intermittent, or low flow conditions or water levels that prevent attainment of the existing use in accordance with 40 CFR §131.10(g)(2). The average thalweg depth was 18 inches, and there were no substantial pools. Access to the creek was moderate to difficult and limited by private property fencing adjacent to public bridge crossings. No changes were made in response to this comment.

Appendix B, Sole-source Surface Drinking Water Supplies Comment

EPA commented that it generally defers to TCEQ regarding the specific segments that should be included in Appendix B. However, EPA questioned the deletion of Granger Lake (Segment 1247) based on information from TCEQ's Drinking Water Watch database, which appears to indicate that Granger Lake may still be a sole-source drinking water supply. EPA also recommended the addition of Caldwell and Guadalupe counties to the new entry for San Marcos River (Segment 1808).

Response

The commission agrees that Granger Lake should not have been removed from the sole-source list. The commission also agrees that Caldwell and Guadalupe counties should be included in the San Marcos River entry. The §307.10(2), Appendix B entries for Granger Lake and the San Marcos River have been modified as recommended.

Appendix C, Segment Descriptions

Comment

CCMA expressed support of the reversion of the segment descriptions for Upper Cibolo Creek (Segment 1908), Mid Cibolo Creek (Segment 1913), and Lower Cibolo Creek (Segment 1902) back to the most recent EPA-approved descriptions included in the 2014 TSWQS. CCMA referred to its review of historic and current aerial photography and water quality data as the basis for its support of this change.

Response

The commission acknowledges this comment.

Appendix D, Site-specific Uses and Criteria for Unclassified Water Bodies Comment

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR expressed opposition to the aquatic life use change on the portion of Buckners Creek (unclassified stream within the watershed of Segment 1402) that has an intermittent with pools flow regime. The commenters noted that TCEQ's downgrade from a high to intermediate aquatic life use is based on evidence that this portion of the stream is not flowing much of the year. Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR commented that intermittence should not dictate the level of aquatic life use since intermittent parts of a stream do not perform a less important role in aquatic life development.

Response

The commission responds that a two-year UAA was used to reevaluate standards for Buckners Creek. Biological data collected during the UAA indicated that an intermediate aquatic life use is attainable in the intermittent with pools portion of Buckners Creek and is the appropriate aquatic life use. Federal regulations at 40 CFR §131.10(g) list several reasons for a change of use in a water body, which includes natural, ephemeral, intermittent, or low flow conditions or water levels that prevent the attainment of the existing use. Subcategories of aquatic life use do not indicate the relative importance of the aquatic life or stream reach, but rather the natural variability of aquatic communities. No changes were made in response to this comment.

Appendix E, Site-specific Toxic Criteria

Comment

EPA noted that during the 2018 TSWQS revision cycle, revisions were adopted in §307.6(c) to clarify that BLM results can be used in the development of site-specific numeric criteria, rather than a multiplier to be used with the statewide freshwater copper criteria. EPA commented that it may be useful to add similar clarification in the second and fifth sentences in the introductory paragraph of Appendix E. EPA recommended inserting the phrase "or site-specific criteria" near the references to "site-specific adjustment factor(s)" in both sentences.

Response

The commission agrees with this comment, and the phrase "site-specific criteria" has been added to the second and fifth sentences of the introductory paragraph of Appendix E.

Comment

EPA recommended revising footnote "3" to footnote "4" for both existing entries for Segment 0901. EPA noted that these two water-effect ratio (WER) studies were conducted by Enterprise Products Operating, LLC (TPDES Permit No. WQ0002940000), and the WER results are applicable to the area near the outfall as opposed to the entire water body.

Response

The commission agrees with this comment, and the footnotes have been changed from "3" to "4" as recommended in Appendix E.

Comment

EPA commented that, in accordance with §307.6(c)(9)-(10), EPA has previously approved site-specific criteria based on WER studies or BLM results for the following water bodies: unnamed tributary to Smith Creek (within the watershed of Segment 0202), Entergy Canal and tidal marshes (within the watershed of Segment 0601), Taylor Bayou Tidal (within the watershed of Segment 0702), Seals Gully (within the watershed of Segment 1009), Scott Bay (Segment 2429), Mustang Bayou (two studies within the watershed of Segment 2432), and Little Boggy Creek (within the watershed of Segment 2441).

Response

The commission acknowledges this comment and notes that those site-specific criteria were included in the revisions to Appendix E.

Comment

EPA commented that the technical review of the following two studies is complete, and EPA will take action under CWA, §303(c) on the site-specific criteria pending completion of the 2022 revision of the TSWQS: Hurricane Creek (within the watershed of Segment 0604) and Floyd Branch (within the watershed of Segment 0827).

Response

The commission acknowledges this comment and notes that those site-specific criteria were included in the revisions to Appendix E.

Comment

EPA commented that the technical review of several additional studies for site-specific copper criteria have been completed, and if TCEQ's public comment period and EPA's approval under CWA, §303(c) are completed through the TPDES permitting process prior to the adoption of the 2022 TSWQS, it may be appropriate to include one or more of the following site-specific criteria in Appendix E of the adopted 2022 TSWQS: Spring Gully (within the watershed of Segment 1006), tributary to Houston Ship Channel (within the watershed of Segment 1007), and tributary to Chocolate Bayou above Tidal (within the watershed of Segment 1108).

Response

The commission acknowledges this comment, and the above referenced studies will be added to Appendix E during the next revision of the TSWQS after receiving final EPA approval through the TPDES permitting process.

Appendix G, Site-specific Recreational Uses and Criteria for Unclassified Water Bodies

Comment

EPA commented that it has reviewed the recreational UAA for South Lilly Creek, which is an unclassified stream within the watershed of Segment 0409. EPA expressed support for the proposed revision to secondary contact recreation 1 for this water body pending review of any comments submitted during this public comment period and from earlier informal comment periods.

Sierra Club, TCE, ET, ITL, TIRN, ES, CAPE, BCW, NWF, C/C Tribe, GEAA, IBCWA, EIP, and FBR expressed opposition to the recreational use change for South Lilly Creek from primary contact recreation 1 to secondary contact recreation 1.

Response

The commission relied on information collected during the recreational UAA for South Lilly Creek to develop the site-specific contact recreation use for this revision. This reclassification is appropriate due to natural, ephemeral, intermittent, or low flow conditions or water levels that prevent the attainment of the existing recreational use in accordance with 40 CFR §131.10(g)(2). The average thalweg depth was 19 inches, and there were no substantial pools. Access to the creek was difficult and limited due to private property. Therefore, the designation of secondary contact recreation 1 is appropriate. No changes were made in response to these comments.

Comment

EPA expressed support for the proposed revision to split Bullhead Bayou into two separate reaches as tributaries of Segment 1202. However, EPA recommended clarification of the eastern boundary of Bullhead Bayou East by revising the description to read "to the Sweetwater Golf Course near Commonwealth Blvd in Fort Bend County."

Response

The commission agrees with this comment, and the description has been revised to the suggested edit for clarification.