

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendment to §§328.301, 328.302, and 328.304.

Amended §§328.301, 328.302, and 328.304 are adopted without change to the proposed text as published in the January 2, 2026, issue of the *Texas Register* (51 TexReg 33) and, therefore, will not be republished.

Background and Summary of the Factual Basis for the Adopted Rules

The commission adopts this rulemaking to implement House Bill (HB) 4413, 89th Texas Legislature, 2025. HB 4413 amended Texas Health and Safety Code (THSC), §361.421 (Definitions) by adding definitions for “renewable biomass” and “renewable chemical,” and §361.4215 (Mass Balance Attribution) by requiring TCEQ to adopt rules to identify third-party mass balance attribution certification systems for the purpose of identifying a renewable chemical.

Although renewable biomass feedstocks may be used to produce a renewable chemical, HB 4413 does not exempt renewable biomass from regulation as a solid waste or any other applicable statutes or rules.

Section by Section Discussion

§328.301, Purpose and Applicability

The commission adopts amended §328.301(a)(3) by including recycled plastics and a renewable chemical as recycled material in subparagraph (A) and replacing subparagraph (B) with the content of subparagraph (C). This amendment will expand the purpose of the subchapter to include the identification of a renewable chemical and clarify that the term recycled material

includes both recycled plastics and a renewable chemical.

§328.302, Definitions

The commission adopts amended §328.302(1), the definition of "mass balance attribution," by applying the term to a renewable chemical.

The commission adopts amended §328.302(2), to expand the definition of "recycled material," to include a renewable chemical.

The commission adopts new §328.302(5) to add the definition of "renewable biomass or renewable biomass feedstocks."

The commission adopts new §328.302(6) to add the definition of "renewable chemical."

The commission adopts amended renumbered §328.302(7), the definition of "third-party certification system", by including recycled plastics and a renewable chemical as recycled material for the purpose of third-party certification.

§328.304, Recycled Products

The commission adopts amended §328.304(b) by adding a renewable chemical to the materials that may be included when determining the minimum content of a recycled product using mass balance attribution certified by a third-party certification system.

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking considering the regulatory analysis

requirements of Texas Government Code (TGC), §2001.0225 and determined that the rulemaking is not subject to TGC, §2001.0225. TGC, §2001.0225 applies to a “Major environmental rule,” which is defined in TGC, §2001.0225(g)(3) as a rule with a specific intent “to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.”

The rulemaking does not meet the statutory definition of a “Major environmental rule” because its specific intent is not to protect the environment or reduce risks to human health from environmental exposure. The specific intent of the adopted rulemaking is to promulgate rules that: (1) establish a renewable chemical as eligible to be considered part of a recycled product in accordance with THSC, §361.4215 and §361.427; and (2) identify third-party certification systems for mass balance attribution in THSC, §361.421.

Additionally, the rulemaking does not meet the statutory definition of a “Major environmental rule” because the adopted rules will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The cost of complying with the adopted rules is not anticipated to be significant with respect to the economy as a whole or with respect to a sector of the economy, and therefore the rulemaking will not adversely affect the economy in a material way.

Finally, the rulemaking adoption does not meet any of the four applicability requirements for a “Major environmental rule” listed in TGC, §2001.0225(a). TGC, §2001.0225 only applies to a

major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) 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 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking adoption does not meet any of the four preceding applicability requirements.

This rulemaking adoption does not meet the statutory definition of a "Major environmental rule," nor does it meet any of the four applicability requirements for a "Major environmental rule." Therefore, this rulemaking is not subject to TGC, §2001.0225.

The commission invited public comment regarding the Draft Regulatory Impact Analysis Determination during the public comment period. No comments were received regarding the regulatory impact analysis determination.

Takings Impact Assessment

The commission has prepared a takings impact assessment for these adopted rules in accordance with TGC, §2007.043. The commission's preliminary assessment is that implementation of these adopted rules would not constitute a taking of real property. The commission adopts this rulemaking for the purpose of promulgating rules that: (1) establish a renewable chemical as eligible to be considered part of a recycled product in accordance with THSC, §361.4215 and §361.427; and (2) identify third-party certification systems for mass balance attribution in THSC, §361.421.

The commission's analysis indicates that TGC, Chapter 2007, does not apply to these adopted rules because this is an action that is reasonably taken to fulfill an obligation mandated by state law, which is exempt under TGC, §2007.003(b)(4). HB 4413 amended THSC, §361.421 (Definitions) and §361.4215 (Mass Balance Attribution). These statutory enactments require the commission to promulgate rules to: (1) establish a renewable chemical as eligible to be considered part of a recycled product in accordance with THSC, §361.4215 and §361.427; and (2) identify third-party certification systems for mass balance attribution in THSC, §361.421, which provides a unilateral expectation that does not rise to the level of a recognized interest in private real property. Therefore, TGC, Chapter 2007 does not apply to these adopted rule changes because the adopted rulemaking falls within the exception under TGC, §2007.003(b)(4).

Consistency with the Coastal Management Program

The commission reviewed the adopted rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §29.11(b)(2) or (4), nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §29.11(a)(6). Therefore, the adopted rules are not subject to the Texas Coastal Management Program.

The commission invited public comment regarding the consistency with the coastal management program (CMP) during the public comment period. No comments were received regarding the CMP.

Public Comment

The commission held a public hearing on January 27, 2026. The comment period closed on February 3, 2026. The commission received comments from Air Alliance Houston (AAH),

Environment Texas (ET), and one individual.

Response to Comments

Comment

AAH commented that the adoption of the specific third-party mass balance systems proposed in the rulemaking would result in less public transparency, less effective recycling, and more wasteful emissions.

Response

The commission has not selected or proposed specific third-party mass balance systems as part of this rulemaking. Per legislation, the rulemaking identifies third-party certification systems for mass balance capable of identifying renewable chemical content without advocating for any specific mass balance attribution methodology. No changes were made in response to this comment.

Comment

AAH encouraged TCEQ to research mass balance attribution certification systems to choose transparent and accurate systems known to accurately account for the amount of post-consumer waste in recycled products. AAH gave examples of preferred supply chain management systems, including segregation and controlled blending. AAH and ET recommended the rolling average allocation method.

Response

The commission is not selecting or advocating for specific mass balance attribution certification systems as part of this rulemaking. No changes were made in response to this

comment.

Comment

AAH and ET commented in opposition to chemical recycling.

Response

This comment is outside the scope of this rulemaking. No changes were made in response to this comment.

Comment

AAH commented in opposition to credit-based mass balance systems such as free allocation, fuel-exempt free allocation, polymer only, and non-fuel exempt proportional allocation. ET also expressed opposition to a free credit allocation mass balance system.

Response

The commission is not selecting or advocating for specific third-party mass balance certification systems as part of this rulemaking. No changes were made in response to this comment.

Comment

AAH discouraged the commission from selecting mass balance systems that allow materials converted to fuel to count toward the total percentage of recycled plastic content.

Response

The commission is not selecting or advocating for specific third-party mass balance

certification systems as part of this rulemaking. No changes were made in response to this comment.

Comment

AAH commented in opposition to any mass balance systems that allow chemicals, plastics, products, or chemical substances produced from fossil-fuel based virgin plastic or plastic waste to be counted as a renewable chemical.

Response

The commission is not selecting or advocating for specific third-party mass balance certification systems as part of this rulemaking. No changes were made in response to this comment.

Comment

An individual commented opposing wastewater effluent to Salado Creek.

Response

This rulemaking does not pertain to wastewater effluent. No changes were made in response to this comment.

SUBCHAPTER L: THIRD-PARTY CERTIFICATION SYSTEMS FOR MASS BALANCE

ATTRIBUTION

§§328.301 - 328.302, 328.304

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; the Administrative Procedures Act under Texas Government Code, Chapter 2001, which authorizes the commission as a state agency to adopt rules pursuant to the rulemaking process; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act; THSC, §361.0151, which requires the commission to base its goals or requirements for recycling or the use of recycled materials on the definitions and principles established by Subchapter N, THSC, §§361.421 through 361.431; THSC, §361.022 and §361.023, which set public policy in the management of municipal solid waste and hazardous waste to include reuse or recycling of waste; THSC, §361.041, which conditionally excludes post-use polymers and recoverable feedstock from classification as solid waste when are converted using pyrolysis, gasification, solvolysis, or depolymerization into valuable raw materials, valuable intermediate products or valuable final products, that include plastic

monomers, chemicals, waxes, lubricants, and chemical feedstocks; THSC, §361.078 which identifies that THSC Chapter 361 Subchapter B does not abridge, modify or restrict the commission's authority to adopt rules issue permits and enforce the terms of permits as necessary to maintain state authorization of Texas' hazardous waste program; THSC, §361.119, which requires the commission to adopt rules and to adopt rules consistent with THSC Chapter 361 to ensure that solid waste processing facilities are regulated as solid waste facilities and not allowed to operate unregulated as recycling facilities; THSC, §361.4215 which authorizes the commission to identify third-party certification systems for mass balance attribution that may be used for the purposes of THSC, §361.421(6) and (6-a); THSC, §361.425 which provides that the commission shall adopt rules for administering governmental entity recycling programs; THSC, §361.426, which provides that the commission shall adopt rules for administering governmental entity preferences for recycled products; and THSC, §361.427 which authorizes the commission to promulgate rules to establish guidelines by which a product is eligible to be considered a recycled product.

The adopted amendments to §§328.301 – 328.302, 328.304, will implement House Bill (HB) 4413, 89th Texas Legislature, 2025, by adding the definitions of "Renewable biomass" and "Renewable chemical" so that they are consistent with the definitions under THSC, §361.421. The adopted amendments to §§328.302, 328.304 will also implement HB 4413 by amending the definition of "Mass balance attribution" so that it is consistent with the definitions under THSC, §361.4215.

§328.301. Purpose and Applicability.

(a) Purpose. The purpose of this subchapter is to:

(1) establish guidelines by which a product is eligible to be considered a recycled product;

(2) identify what is not eligible to be considered a recycled product; and

(3) identify third-party certification systems for mass balance attribution to certify:

(A) "Recycled material, including "Recycled plastics" and a "Renewable chemical"; and

(B) the portion of the total content of a product that consists of recycled material.

[(B) "Recycled plastics"; and]

[(C) the portion of the total content of a product that consists of recycled material.]

(b) Applicability. This subchapter is applicable to determining that a product is eligible to be considered a recycled product and third-party certification systems for mass balance attribution.

§328.302. Definitions.

The following words and terms, when used in this subchapter shall have the following meanings, unless the context clearly indicates otherwise.

(1) Mass balance attribution--A chain of custody accounting methodology with rules defined by a "Third-party certification system" that enables the attribution of "Recycled material," including "Recycled plastics," and a "Renewable chemical" and "Recycled plastics]," as those terms are defined in this section, to a "Recycled product," as described in §328.304 of this title (relating to Recycled Products).

(2) Recycled material--Materials, goods, or products that consist of recovered "Recyclable material," as defined in §330.3 of this title (relating to Definitions), materials derived from "Recoverable feedstocks" or "Post-use polymers" as those terms are defined in §330.3 of this title, or postconsumer waste, industrial waste, or hazardous waste which may be used in place of a raw or virgin material in manufacturing a new product or that are certified under a "Third-party certification system" for "Mass balance attribution," as those terms are defined in this section. The term includes "Recycled plastics" and a "Renewable chemical" as defined in this section.

(3) Recycled plastics--Products that are produced from:

(A) mechanical recycling of post-use polymers; or

(B) nonmechanical recycling of "Recoverable feedstocks" or "Post-use polymers" as those terms are defined in §330.3 of this title, that are certified under a "Third-

party certification system" for "Mass balance attribution," as those terms are defined in this section.

(4) Recycling--A process by which materials that have served their intended use or are scrapped, discarded, used, surplus, or obsolete are collected, separated, or processed and returned to use in the form of raw materials or feedstocks used in the manufacture of new products. The term includes the conversion of post-use polymers and recoverable feedstocks through pyrolysis, gasification, solvolysis, or depolymerization, but does not include waste-to-energy processes or incineration of plastics in an incinerator as defined in §335.1 of this title (relating to Definitions).

(5) Renewable biomass or renewable biomass feedstocks--

(A) materials, pre-commercial thinnings, or invasive species from National Forest System land and public lands, as that term is defined by 43 U.S.C. Section 1702, that:

(i) are byproducts of preventive treatments that are removed:

(I) to reduce hazardous fuels;

(II) to reduce or contain disease or insect infestation; or

(III) to restore ecosystem health;

(ii) would not otherwise be used for higher value products; and

(iii) are harvested in accordance with:

(I) applicable law and land management plans; and

(II) requirements for old growth stand maintenance, restoration, and management direction and large tree retention under Sections 102(e) and (f), Healthy Forests Restoration Act of 2003 (16 U.S.C. Sections 6512(e) and (f)); or

(B) any organic matter that is available on a renewable or recurring basis from nonfederal land or land belonging to an Indian or Indian tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including:

(i) renewable plant material, including:

(I) feed grains and other agricultural commodities;

(II) plants and trees;

(III) algae; and

(IV) microorganisms; and

(ii) waste material, including:

(I) crop residue;

(II) vegetative waste material, including wood waste and wood residue;

(III) animal waste and byproducts, including fats, oils, greases, and manure;

(IV) food waste and yard waste;

(V) plant-derived waste oils;

(VI) municipal solid waste; and

(VII) waste derived from a wastewater treatment facility.

(6) Renewable chemical--A monomer, polymer, plastic, formulated product, or chemical substance produced from renewable biomass feedstocks or certified under a "Third-party certification system" for "Mass balance attribution" as these terms are defined in this section.

(7) [(5)] Third-party certification system--An international or multinational third-party certification system that consists of a set of rules to implement "Mass balance attribution"

approaches for attribution of "Recycled material," including "Recycled plastics," and a "Renewable chemical," to a "Recycled product" as these terms are defined in this section.

§328.304. Recycled Products.

(a) A product is eligible to be considered a recycled product when it conforms with the minimum content of recycled material as specified in the Comprehensive Procurement Guidelines (CPG) and the Recovered Materials Advisory Notice (RMAN) published by the Environmental Protection Agency (EPA) as described in §328.7(4) of this title (relating to Definitions of Terms and Abbreviations).

(b) Manufacturers may use a third-party certification system for mass balance attribution as identified under §328.303 of this title (relating to Third-party Certification Systems for Mass Balance Attribution) to identify the portion of the total content of a product which consists of recycled material, recycled plastics, and renewable chemicals[and recycled plastics].