

Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: Commissioners Date: February 27, 1998

Thru: Eugenia K. Brumm, Ph.D.
Chief Clerk

From: Beverly Hartsock, Deputy Director
Office of Policy and Regulatory Development

Subject: Docket No. 98-0195-RUL. Consideration of a petition for rulemaking, filed by the City of Austin, Texas, to adopt amendments to 30 TAC Chapter 216, Subchapter A, Section 216.6(b)(3), concerning Water Quality Plan. The petitioner proposes to amend the subsection to delete the words, "runoff from." If granted, the agency would initiate rulemaking proceedings in accordance with the Administrative Procedures Act. (Nina Fantl) (Rule Log No. 97187-216-WT)

What the Proposed Rulemaking Would Do:

The City of Austin has submitted a petition for rulemaking for §216.6(b)(3), which is contained in Attachment A.

The petition seeks to amend §216.6(b)(3), which presently refers to water quality plans providing for the capture and retention of runoff from the first 1.5 inches of rainfall from developed areas within a water quality protection zone (WQPZ). The petitioner proposes to delete the text, "runoff from," so that plans would be required to attain water quality protection by capturing and retaining the "first 1.5 inches of rainfall from developed areas." The proposed text change sought by this petition would read:

"Storm Water Capture and Retention. Water quality plans seeking to achieve water quality protection by capturing and retaining ~~runoff from~~ the first 1.5 inches of rainfall from developed areas within the water quality protection zone shall not be required to conduct water quality monitoring, as described in paragraphs (1) and (2) of this subsection."

Recommendation:

The executive director recommends that the petition be denied.

The current rule, providing that zone owners construct ponds that are designed to retain runoff from the first 1.5 inches of rainfall from developed areas, implements §26.179(a)(2), Texas Water Code, which refers to the retention of 1.5 inches of "rainfall from developed areas." The Commission has reasonably interpreted this phrase to mean the runoff from rain that falls upon developed areas. Rain typically absorbs into the ground and, in sufficient quantities, becomes runoff that flows to waterways. The issue becomes whether this statute requires zone owners to capture the runoff that is generated from the first 1.5 inches of a rainfall, as the present rule contemplates, or whether they must capture the first 1.5 inches of rainfall, as the city asserts.

Docket No. 98-0195-RUL

Texas Water Code, §26.179 sets forth two methods of attaining water quality protection: retention of the first 1.5 inches of rainfall from developed areas or maintaining background levels of water quality in waterways. The current commission rules for capturing the runoff from the first 1.5 inches of rainfall pursuant to §216.6(b)(3) is premised on the “first flush” process, in which the runoff from the first 1.5 inches of rainfall carries, to a great extent, the pollutants that build up on surfaces in developed areas. Once the runoff from the first 1.5 inches is captured, subsequent runoff from rainfall during the storm event contains much less pollutants and is less likely to impact water quality in waterways than the first flush. Thus, the retention of the runoff from the first 1.5 inches of rainfall is designed to preclude the first flush from flowing into waterways.

The City alleges that implementation of the present rule could harm the City’s watersheds by allowing rainfall to leach into the ground. The petition’s proposed requirement that zone owners capture the first 1.5 inches of rainfall could only be accomplished by either erecting an inverted umbrella over the entire developed area or causing the developed area to have 100 percent impervious cover. The definition of “developed area” in 30 TAC §216.2 includes any human-made change of the land surface, including landscaping activities and golf courses. Thus, the petition’s proposal appears to preclude the first 1.5 inches of rainfall from reaching such areas which would deprive zone owners of needed precipitation. To the extent that the petition appears to propose that the rainfall be captured before it lands upon the ground and is either absorbed or becomes runoff and retained in ponds, water quality would not be protected in water ways whenever rainfall in excess of 1.5 inches occurs because rainfall in excess of 1.5 inches would carry the first flush of the pollutants into the waterways.

Under the present rule, in preparing a water quality protection plan, a zone owner choosing to attain water quality protection by capture and retention of rainfall would need to analyze how much runoff would be generated from a storm generating 1.5 inches of rain and then design the retention ponds accordingly. This analysis would necessarily involve consideration of the amount of impervious cover of the developed areas, the slope of the topography and the soil type. By way of illustration, if the developed area consisted of 100 percent impervious cover, in order to fully retain the runoff generated from a rainfall of 1.5 inches, the ponds would need to be much larger than those in a zone having less impervious cover due to the higher absorption of rain in the latter zones.

In support of its proposed change, the City points out that a prior version of Senate Bill 1017, which was later codified as §26.179, provided for the capture of the “first 1.5 inches of runoff from developed areas” but was later modified to substitute “rainfall” for “runoff.” The Executive Director notes that “1.5 inches of runoff” represents a larger amount of stormwater to be captured than the stormwater generated from “1.5 inches of rainfall,” of which a percentage evaporates or is absorbed by pervious areas and the remainder runs off the site. Therefore, the legislative intent in substituting “rainfall” for “runoff” was to decrease, rather than increase, the amount of water to be captured.

Docket No. 98-0195-RUL

Further, the commission's present rule differs significantly from the prior version of S.B. 1017 that was later modified before passage. Whereas S.B. 1017 initially provided for the "retention of 1.5 inches of runoff from developed areas," the commission's present rule provides for the "retention of runoff from 1.5 inches of rainfall," and therefore is faithful to the plain language of the statute, which refers to "rainfall."

Reason Rules Are Requested:

The City states that the proposed amendment to the present rule will prevent harm to the City's watersheds and drinking water supplies. The City asserts that the present rule fails to address the water leaching into the ground that would contaminate watersheds within the City and the City's drinking water supply. The City's full discussion of the alleged possible injury is set forth in its petition contained in Appendix A.

Affected Public:

The city alleges that the proposed rulemaking is necessary to prevent harm to its residents who use the City's drinking water supply. See Appendix A.

If the rule were amended as proposed, all plans that could not capture and retain the first 1.5 inches of rainfall from developed areas would be required to conduct water quality monitoring to determine the background levels of water quality and would have to conduct water quality performance monitoring after construction is complete.

Affected Agency Programs:

Implementation of these rule changes would be carried out by field staff in the Austin regional office.

Agency Contacts:

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cc: 7 copies to the Chief Clerk for distribution