

The Texas Commission on Environmental Quality (TCEQ, agency, commission) proposes an amendment to §305.541.

### **Background and Summary of the Factual Basis for the Proposed Rule**

This rulemaking is necessary to adopt by reference the new United States Environmental Protection Agency (EPA) airport de-icing effluent limitation guidelines, which were adopted in 40 Code of Federal Regulations (CFR) Part 449 and became effective on June 15, 2012. The requirements generally apply to discharges associated with the de-icing of airfield pavement at airports that have at least 1,000 annual jet departures (non-propeller aircraft) and discharges associated with aircraft de-icing at new airports in cold climate zones that have more than 10,000 total annual departures (jets and all other types of aircraft).

Existing and new airports with at least 1,000 annual jet departures that generate discharges associated with airfield pavement de-icing are to use de-icing agents that do not contain urea or meet the following numeric effluent limitation for ammonia: Daily Maximum of 14.7 milligrams per liter (mg/L).

New airports with more than 10,000 total annual departures (jets and all other types of aircraft) that are located in areas with an annual heating degree day value of more than 3,000 are required to collect 60% of aircraft de-icing fluid after de-icing. Airports that discharge the collected aircraft de-icing fluid directly to waters of the United States must

also meet the following numeric effluent limits for chemical oxygen demand: Daily Maximum of 271 mg/L and Weekly Average of 154 mg/L. The rule does not establish requirements for aircraft de-icing discharges at existing airports.

This rulemaking will amend §305.541 to adopt 40 CFR Part 449 by reference. These effluent limitation guidelines and new source performance standards will be incorporated into the Multi-Sector General Permit (MSGP) TXR050000 upon its renewal in 2016 and any applicable individual permits for airports during their next permit action. Airports will not be required to comply with the new requirements until the requirements are incorporated into the MSGP or their individual permit.

Currently, §305.541 adopts by reference certain parts of 40 CFR that were in effect at the time Texas was awarded delegation of the National Pollutant Discharge Elimination System (NPDES) program and specific parts that were adopted after delegation. This rulemaking will add 40 CFR Part 449 to the list of parts adopted after delegation.

### **Section Discussion**

The proposed amendment to §305.541 adds the adoption by reference of 40 CFR Part 449, as amended, which contains regulations related to controlling discharges of pollutants from airport de-icing operations.

**Fiscal Note: Costs to State and Local Government**

Jeffrey Horvath, Analyst in the Strategic Planning and Assessment Section, has determined that for the first five-year period the proposed rule is in effect, no significant fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rule. Some airports owned or operated by cities or other units of local government may have additional costs for de-icing airport pavement, but in general these costs are not anticipated to be significant.

The proposed rule would adopt by reference the new EPA airport de-icing effluent limitation guidelines, which were adopted and became effective on June 15, 2012. The effluent limitations generally apply to discharges associated with the de-icing of airfield pavement at airports that have at least 1,000 annual jet (non-propeller aircraft) departures. The effluent limitations also apply to discharges associated with aircraft de-icing for new airports in certain cold climate areas that have more than 10,000 total annual departures (jets and all other types of aircraft).

No significant fiscal implications are anticipated for the agency due to the administration or enforcement of the proposed rule. The de-icing criteria would be incorporated into the storm water MSGP which authorizes affected airports.

Under the proposed rule, existing and new airports with at least 1,000 annual jet departures are to use de-icing agents that do not contain urea or alternatively, meet a numeric effluent limitation for ammonia. Based on data provided by the Federal Aviation Administration, there are 42 existing airports in Texas that exceeded 1,000 jet departures for the period of August 2012 through July 2013.

New airports with more than 10,000 total annual departures that are located in the Trans-Pecos, Panhandle, and Wichita Falls areas of Texas would be required to collect 60% of aircraft de-icing fluid after de-icing and meet a numeric effluent limitation for chemical oxygen demand. The rule does not establish requirements for aircraft de-icing discharges at existing airports. If government entities decide to own or operate a new airport located in one of these areas of the state and the airport has more than 10,000 total annual departures, the airport will be required to collect 60% of available aircraft de-icing fluid and meet an effluent limit for chemical oxygen demand. At this time, TCEQ is not aware of any new or proposed airports that would be located in the Trans-Pecos, Panhandle, or Wichita Falls areas with 10,000 total annual departures and therefore fiscal implications are not anticipated for airports due to the implementation of this part of the proposed rule.

Airfield pavement de-icing/anti-icing removes or prevents the accumulation of frost, snow, or ice on runways, taxiways, aprons, gates, and ramps. These methods are

typically conducted by airport personnel or contractors using a combination of mechanical methods and chemical de-icing/anti-icing agents. The method used more often for pavement de-icing is mechanical removal, but many airports also use sand and/or chemical de-icing agents such as potassium acetate, sodium acetate, sodium formate, glycol-based products, or urea. Based on the data collected by EPA in an airport questionnaire, the most common airfield de-icing chemical currently used by United States airports is potassium acetate.

Of the 42 existing airports in Texas that exceeded 1,000 annual jet departures, all are either owned or operated by cities or other units of local government or the federal government (Air Force bases). Under the proposed rule, these airports will have to use de-icing agents that do not contain urea or meet numeric effluent limitations for ammonia when de-icing their pavement. The options for managing discharges generated by airfield pavement de-icing activities include: 1) de-icing agents that do not contain urea; 2) disposing or disposal of de-icing agents that contain urea by means other than discharge to water in the state; or 3) discharges that meet an ammonia effluent limitation.

In general, airports located in warm and/or dry weather climates with minimal winter storm events have some aircraft de-icing (usually defrost de-icing) but no airfield pavement de-icing. Government entities that own/operate an existing or new airport

can avoid the effluent limitations required by this rule by using de-icing agents that do not contain urea.

The EPA issued "Technical Development Document for the Final Effluent Limitations Guidelines and New Source Performance Standards for the Airport De-icing Category," in April of 2012. Information collected by EPA indicated that use of urea as an airfield de-icing chemical is being phased out due to concerns with its environmental impacts and the availability of less harmful alternatives. Responses to EPA's airport questionnaire indicated that potassium acetate was by far the predominant airfield de-icing chemical in use, representing about 80% of all airfield de-icing chemical use; therefore, EPA assumed that airports would switch to this chemical to de-ice their pavement.

According to the EPA report (Table 10-16, Summary of EPA's Annualized Costs for Aircraft De-icing Fluid Collection and Treatment, Airfield De-icing Urea Substitution, and Other Compliance Related Costs), all of the major Texas airports including Dallas/Fort Worth, George Bush Intercontinental, Austin-Bergstrom, San Antonio International, William P. Hobby, El Paso International, and Dallas Love Field reported no costs for urea substitution. Therefore, it is assumed that these airports are already using a urea substitute or could easily switch to a different de-icing agent. For the other Texas airports, especially those in north and west Texas (including Lubbock, Amarillo,

Midland-Odessa, Abilene, and Wichita Falls) if they have to switch to a urea substitute then there may be additional costs for application equipment and storage tanks.

New application equipment to apply a liquid rather than a solid as well as liquid storage tanks to contain potassium acetate during the de-icing season may be required for those airports that switch from urea to potassium acetate. A change from solid to liquid chemicals will require an airport to purchase or retrofit equipment to properly apply liquid chemical de-icing agents. These airports would need new mechanical application equipment including new trucks, and storage tanks for liquid potassium acetate. It is not known if these airports would incur additional compliance costs, but if they did the costs would depend upon a wide variety of factors that agency staff is not able to identify at this time.

### **Public Benefits and Costs**

Mr. Horvath has also determined that for each year of the first five years the proposed rule is in effect, the public benefit anticipated from the changes seen in the proposed rule will be the protection of public health and safety through the reduction of the amount of ammonia discharged from airport de-icing activities that can affect water quality while maintaining compliance with federal law.

The proposed rule is not expected to have fiscal implications for businesses or

individuals. None of the 42 existing airports in Texas that exceed 1,000 annual jet departures are privately owned. Under the proposed rule, airports will have to use de-icing agents that do not contain urea or meet numeric effluent limitations for ammonia when de-icing their runways. New airports located in the Trans-Pecos, Panhandle, or Wichita Falls areas of the state with more than 10,000 total annual departures will be required to collect 60% of available aircraft de-icing fluid and meet an effluent limitation for chemical oxygen demand. At this time TCEQ is not aware of new airports that would be located in these areas. Therefore, fiscal implications are not anticipated due to the implementation of this part of the proposed rule.

### **Small Business and Micro-Business Assessment**

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rule for the first five-year period the proposed rule is in effect. None of the 42 existing airports in Texas that exceed 1,000 annual jet departures are privately owned and there are no new airports located in the Trans-Pecos, Panhandle, or Wichita Falls areas of the state with more than 10,000 total annual departures.

### **Small Business Regulatory Flexibility Analysis**

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rule is

required to maintain consistency with federal law and, therefore, are consistent with the health, safety, or environmental and economic welfare of the state.

### **Local Employment Impact Statement**

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect.

### **Draft Regulatory Impact Analysis Determination**

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in the Administrative Procedure Act. A "major environmental rule" is a rule the specific intent of which is 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 intent of the rulemaking is to adopt by reference EPA's new airport de-icing regulations found at 40 CFR Part 449, which require certain airports to comply with chemical oxygen demand or ammonia effluent limitations as

they apply to aircraft or airfield pavement de-icing, respectively. The specific intent of the proposed rulemaking is to amend the commission's rules to incorporate recent federal regulatory changes that do protect the environment and reduce risks to human health from environmental exposure but that 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. Therefore, the proposed rule does not meet the definition of a "major environmental rule."

Even if the proposed rule were a major environmental rule, Texas Government Code, §2001.0225 still would not apply to this rulemaking because Texas Government Code, §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 does not meet any of these four applicability criteria because it: 1) does not exceed the requirements of 40 CFR Part 449 or any other federal law; 2) does not exceed an express requirement of state law; 3) 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 4) is not proposed solely under the general powers of the agency, but rather specifically under the Memorandum of Agreement (MOA) between EPA and the commission, which requires the commission to incorporate new federal NPDES rules into the commission's rules. Therefore, this proposed rule does not fall under any of the applicability criteria in Texas Government Code, §2001.0225.

The commission invites public comment regarding this draft regulatory impact analysis determination. Written comments on the draft regulatory impact analysis determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

### **Takings Impact Assessment**

The commission evaluated this proposed rule and performed an analysis of whether it constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of this rule is to adopt by reference EPA's new airport de-icing regulations found at 40 CFR Part 449. The proposed rule would substantially advance this stated purpose by adding a reference to 40 CFR Part 449 to the commission's rules.

The commission's analysis indicates that Texas Government Code, Chapter 2007 does not apply to this proposed rule because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code,

§2007.003(b)(4). The commission is the regulatory agency that administers the state NPDES program and, therefore, is responsible for incorporating federal NPDES regulation changes into its permit program under 40 CFR §123.62(e) and the MOA between EPA and the commission.

Nevertheless, the commission further evaluated this proposed rule and performed an assessment of whether it constitutes a taking under Texas Government Code, Chapter 2007. Promulgation and enforcement of this proposed rule would be neither a statutory nor a constitutional taking of private real property. Specifically, the subject proposed regulation does not affect a landowner's rights in private real property because this rulemaking does not burden nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulation. In other words, this rule requires compliance with federal effluent limitations related to airport de-icing without burdening or restricting or limiting the owner's right to property and reducing its value by 25% or more. Therefore, the proposed rule does not constitute a taking under Texas Government Code, Chapter 2007.

### **Consistency with the Coastal Management Program**

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the

Coastal Coordination Act, Texas Natural Resources Code, §§33.201 - 33.210 and, therefore, must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed rule in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22 and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

The CMP goal applicable to the proposed rule includes ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone.

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

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

### **Announcement of Hearing**

The commission will hold a public hearing on this proposal in Austin on January 23,

2014 at 10:00 a.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services, at (512) 239-1802. Requests should be made as far in advance as possible.

### **Submittal of Comments**

Written comments may be submitted to Patricia Durón, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. Electronic comments may be submitted at: <http://www5.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2013-052-305-OW. The comment period closes January 27, 2014. Copies of the proposed rulemaking can be obtained from the commission's Web site at [http://www.tceq.texas.gov/nav/rules/propose\\_adopt.html](http://www.tceq.texas.gov/nav/rules/propose_adopt.html). For further information, please contact Laurie Fleet, Wastewater Permitting Section, at (512) 239-5445.



**SUBCHAPTER P: EFFLUENT GUIDELINES AND STANDARDS FOR TEXAS  
POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMITS**

**§305.541**

**Statutory Authority**

This amendment is proposed under Texas Water Code (TWC), §5.102, which establishes the commission's general authority necessary to carry out its jurisdiction, TWC, §5.103, which establishes the commission's general authority to adopt rules, TWC, §5.105, which establishes the commission's authority to set policy by rule, TWC, §5.120, which requires the commission to administer the law so as to promote the conservation and protection of the quality of the state's environment and natural resources, TWC, §26.027, which authorizes the commission to issue permits, TWC, §26.040, which authorizes the commission to issue general permits, and TWC, §26.121, which authorizes the commission to prohibit unauthorized discharges.

The proposed amendment implements 40 Code of Federal Regulations Part 449.

**§305.541. Effluent Guidelines and Standards for Texas Pollutant Discharge Elimination System Permits.**

Except to the extent that they are less stringent than the Texas Water Code or the

rules of the commission, 40 Code of Federal Regulations (CFR), Subchapter N, Parts 400 - 471, except 40 CFR Part 403, which are in effect as of the date of the Texas Pollutant Discharge Elimination System program authorization, as amended, and Parts 437 (Federal Register, Volume 65, December 22, 2000), 442 (Federal Register, Volume 65, August 14, 2000), 444 (Federal Register, Volume 65, January 27, 2000), 445 (Federal Register, Volume 65, January 19, 2000), 449 (Federal Register, Volume 77, May 16, 2012), and 450 (Federal Register, Volume 74, December 1, 2009), as amended, are adopted by reference.