Federal Aviation Administration

Memorandum

Date: January 9, 2026

To: All Airports Regional Division Managers

From: Michael A.P. Meyers, P.E. Manager, Airport Engineering Division, AAS-100

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Subject: Engineering Brief No. 108, Ground Deicing/Anti-Icing Product Awareness

This Engineering Brief (EB) provides interim guidance on deicing and anti-icing products standards, recommendations, and application methods in FAA Advisory Circular 150/5200-30, *Airport Field Condition Assessments and Winter Safety Operations*.

Attachment

FAA
Airports

ENGINEERING BRIEF #108

Ground Deicing/Anti-Icing Product Awareness

I. PURPOSE

This Engineering Brief (EB) provides additional guidance on the deicing and anti-icing products standards and recommendations outlined in FAA Advisory Circular 150/5200-30, *Airport Field Condition Assessments and Winter Safety Operations*.

II. BACKGROUND

FAA Advisory Circular (AC) 150/5200-30, *Airport Field Condition Assessments and Winter Safety Operations*, provides guidance to assist airport operators in developing a snow and ice control plan, methods for ice control and removal, and details on deicing/anti-icing chemicals recommended for use on airfields. Compliance with this AC is also an acceptable means of meeting snow and ice control requirements of 14 CFR part 139, *Certification of Airports* (Part 139).

AC 150/5200-30 provides guidance on recommended products for ground deicing/anti-icing, as well as the approval and acceptance specifications for these products. Specifically, the FAA only recommends deicing/anti-icing products meeting the specifications of the Society of Automotive Engineers (SAE) Aerospace Material Specifications (AMS), as follows:

- Fluid Deicer/Anti-icers approved products include glycol-based products, potassium acetate base, and potassium formate-based fluids with an approved specification as outlined in SAE AMS 1435, *Liquid Runway Deicing/Anti-icing Product.*
- Solid Deicer/Anti-icer approved solid compounds include airside urea, sodium formate, and sodium acetate with an approved specification as outlined in SAE AMS 1431, *Solid Runway Deicing/Anti-icing Product*.

The FAA is now aware that some airport operators are using deicing/anti-icing products on airfields that may not meet the recommended specifications for these products. There may be a lack of awareness on the process that an airport operator must use when preparing and testing their own deicing/anti-icing products, through a process known as brining. The brining process involves mixing solid deicing/anti-icing products with water to create a liquified product.

This technique may not be suitable for use on an airfield because combining airfield solid deicing/anti-icing products that meet SAE AMS 1431 with water results in a product with an

unverified chemical composition. This resulting liquid solution requires lab testing for verification of conformity with SAE AMS 1435 standards.

III. APPLICATION

Use these standards and guidelines contained in this Engineering Brief (EB) as additional guidance and specifications for AC 150/5200-30, *Airport Field Condition Assessments and Winter Safety Operations*, for recommended deicing/anti-icing products. This EB does not constitute a regulation, is not mandatory and is not legally binding in its own right. Conformity with this EB is voluntary, and nonconformity will not affect rights and obligations under existing statutes and regulations, except for as described below:

1. The standards and guidelines contained in this EB are practices the FAA recommends for an acceptable level of safety, performance and operation for deicing and anti-icing procedures on airfield pavements.
2. This EB provides one, but not the only, acceptable means of meeting the requirements of 14 CFR part 139, Certification of Airports.

IV. DESCRIPTION

The following clarification will be included in the future revision of AC 150/5200-30:

- Combining solid deicing chemicals with water ("brining") for application like AMS 1435 applications results in a product with an untested chemical composition with unknown effectiveness. The FAA does not recommend using this method for the following reasons:
    - It is unclear if there is liability transferred to the party performing the brining
    - It is unclear if the brined solution is effective, as no industry approved field test exists for this method

V. EFFECTIVE DATE

This Engineering Brief is effective on the signature date by the Manager of FAA Airport Engineering Division, AAS-100.