



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Transportation and
Public Facilities

STATEWIDE ADMINISTRATIVE SERVICES

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February 2, 2013

The Honorable Representative Austerman
The Honorable Representative Stoltze
Co-chairs, House Finance Committee
State Capitol Bldg., Room 505 & 515
Juneau, Alaska 99801

Dear Co-Chairs Austerman and Stoltze,

In response to questions posed by House Finance Committee members on January 28, 2013, the following information is provided:

The Environmental Protection Agency's (EPA) has effectively "banned" the use of urea as a de-icing chemical on existing and new primary airports, as defined as an airport with 1,000 or more annual jet departures ("non-propeller aircraft") that generate wastewater associated with airfield pavement de-icing. The EPA has made the alternatives offered for the continued use of urea at airports with 1,000 or more annual jet departures prohibitively expensive, so it is in effect, a "ban".

Airports meeting these criteria must use non-urea containing de-icers, or alternatively, meet a numeric effluent limitation for ammonia. The new rule impacts six DOT&PF airports that currently utilize urea as their primary airport runway de-icer (Barrow, Bethel, Kodiak, Sitka, Ted Stevens Anchorage International and Fairbanks International). Meeting the numeric effluent limitations for ammonia, as defined in the EPA ruling, is not feasible at these six airports, forcing conversion from urea use to the alternative, Potassium Acetate.

The Federal Aviation Administration (FAA) operational requirement for de-icing at jet serviced airports is to achieve a bare pavement landing and takeoff standard. These standards cannot be violated, reduced, or waived, and it would be unsafe to attempt jet landings and takeoffs outside of the standard. Bare pavement requires almost constant application of chemicals. Ice and snow can also bond to pavements in a manner that compounds the airport crew's ability to achieve safe operations if they "get behind." Accumulation of ice and snow makes an FAA approved safety threshold more difficult, time consuming, and expensive to achieve.

Increased costs are going to vary from airport to airport depending upon size, existing infrastructure, number of daily departures and climate (average temperatures and precipitation).

- ***Is DOT&PF pursuing any new de-icing technology? Has the state looked at any other possible chemicals for de-icing at the airports?***

We have looked at the possibility of meeting the numeric limitations for runoff at both the international airports and the impacted rural airports, and we are certain continued urea use is not an option based on runoff sampling. We have already exceeded the stated minimum.

We also investigated and conducted extensive research on alternative deicers.

For the impacted airports in our rural system, we determined that the use of Potassium Acetate (E36) as our primary de-icing chemical was the most cost-effective and efficient chemical to use. We investigated chemicals such as Sodium Acetate (NAAC), Sodium Formate/Acetate Blend (NAAF), and others. We have been using E36 at several airports for several years and have extensive experience with this chemical. Our conditions are best managed by liquid chemicals (E36) supplemented in some cases (Barrow and Bethel) with small amounts of solid chemicals (NAAC).

At the internationals, we will use NAAC, NAAF, and E36, depending on conditions. These chemicals come in either solid or liquid form and staff makes the determination as to which chemical will achieve the desired effect based on temperature and precipitation.

We have not found any less expensive, effective de-icing chemicals for either internationals or the rural airports.

- ***Have we or can we seek an exemption to new de-icing rules? What municipal airports are involved in the de-icing chemical change and what are they doing?***

DOT&PF participated actively—we pushed back—in the Environmental Protection Agency's (EPA) formal rule-making process which played out over a period of years. We were clear in challenging this ruling as an unfunded mandate in an aviation-centric state. The air carriers (Alaska Airlines et. al.) were also both organized and vocal in challenging this proposed EPA policy (de facto ban) because all airports, to varying degrees, pass cost increases on to their users. This is especially true with respect to our international airports. We did make the “Alaska is unique case,” with help from our federal congressional delegation, and in coordination with the Governor’s Washington DC Office. Regarding the municipal airports, it is my understanding that the Juneau Airport is impacted significantly by this ruling. We have supported them as they have voiced their concerns as well.

- ***Previously there were signs telling drivers to pull off if they had five or more vehicles behind them, what happened to the signs between Copper Landing and Talketna? Can DOT&PF put them back? Also, can DOT&PF put signs up telling drivers when pullouts are ahead?***

The Department received \$30.0 from legislature in 2002 to install slow vehicle signs. We installed DELAY OF 5 VEHICLES ILLEGAL – MUST USE TURNOUTS signs at the entry points to all the corridors except the Sterling Highway. Additionally, we installed multiple KEEP RIGHT EXCEPT TO PASS signs on every segment of the highway where there were 3-lane passing lanes, some of which had a history of head on collisions in the center lane opposing the passing lane. We have installed blue and white “P” (parking) 1000 FT and “P” with arrow signs with each new paving project to identify existing turn outs that can be used for parking. These frequently require a 90 degree turn to enter. A vehicle has to almost come to a stop to enter – causing more delays than they solve. We are reviewing

the recent sign inventory to determine which signs are still in place today. There has never been an effort to remove these signs but some may not have been replaced after a crash or other incidents.

At the time of the last sign request (2002) there were only two "real" slow vehicle turnouts built to usable standards. They were on the Seward Highway at Milepost 113.5 southbound and Milepost 52.5 northbound. A turnout must be parallel to the highway and be close to 600 feet long to effectively function as a location for a vehicle with a trailer to slow down, pull over, stop, and then be able to pull back into traffic. We have built 3 more Slow Vehicle Turnouts for northbound traffic within Turnagain Pass in 2009.

More significantly, in 2010 we launched a project design effort for large scale additions of slow vehicle turnouts (SVTs) for the Seward and Sterling highways. From that effort, construction of 8 additional SVTs between Anchorage and Girdwood will be seen in 2013. Construction of 22 additional SVTs for the Sterling Highway is scheduled for 2014.

Building passing lanes is the Department's goal for two lane highways. They allow for slowing and no need for stopping. Providing them every 5 to 10 miles on busier two lane roads gives drivers the best opportunity to comply with the "Delay of 5 Vehicles" law. DOT&PF has been building passing lanes with each "10 mile" widening and shoulder work project as federal funds allow. Many passing lanes have been built over the last decade.

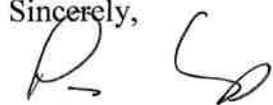
• ***When was the last time AMHS fares were changed? How are fare amounts set?***

In May of 2007 AMHS instituted a 3.2% across the board increase on tariffs. These prices went into effect on services offered as of October 1st of 2007. This was the last time AMHS has changed tariff amounts other than for the addition of new routes.

There is no established formula for setting fare amounts and over the years a number of inequities have developed when city pairs are compared on a per mile basis. The Department is currently reviewing the fare structure to determine if fares should be adjusted to address inequities and/or increased costs.

If you or your committee members have any further questions, please feel free to contact Mary Siroky 465-8974.

Sincerely,



Patrick J. Kemp, P.E.
Commissioner

cc: House Finance Transportation Committee Members
Kim Rice, Deputy Commissioner, DOT&PF
Reuben Yost, Deputy Commissioner, DOT&PF
Mary Siroky, Administrative Services Director, DOT&PF
John Falvey, General Manager, AMHS, DOT&PF