

Update on Glycol Treatment Ponds and recycling

A common sight this past winter at YYC was aircraft being sprayed with de-icing fluid prior to departure. The de-icing fluid is made up of primarily glycol mixed with water and is critical to keeping passengers safe and moving at YYC during the icy winter months.

De-icing of the aircraft is the responsibility of each individual airline, with many being members of the Calgary Glycol Facility Consortium. This consortium uses a contractor to operate a de-icing fluid recycling program and facility. The contractor recovers up to 30 per cent of the glycol sprayed using specialized vacuum trucks. The collected glycol then goes through a process that concentrates and distills the recovered product, such that it can then be recertified as de-icing fluid and reused by consortium members.

Glycol remaining on the apron mixes with melted snow and flows into one of two ponds. One pond is the North Retention Pond (NRP), which directs the water and glycol mixture to the City of Calgary's waste water treatment plant. The other pond is the south retention pond, which includes a treatment system allowing the collected water to be treated onsite.

Glycol biodegrades naturally, which unfortunately creates an unpleasant odour.

On warm days this spring, if the north retention pond is still in the process of pumping into a City of Calgary treatment facility, it can emit an odour that is noticeable at nearby surface lots, the apron around the domestic terminal, and the terminal itself.

In 2019, we're taking some direct action to mitigate these odours:

- We are working with the City of Calgary, who controls the volume we are permitted to pump from the NRP to the City's treatment facility, to reduce the volume stored in the NRP.
- We are continuing to aerate all ponds as this increases oxygen levels and reduces odours.
- We are working with our partners to determine measures to reduce the amount of glycol actually flowing to the ponds by increasing the amount that is recovered and recycled.
- We're working on a new east de-icing pad that will increase the amount of fluid that is recycled.

