

**PRESS RELEASE**

**For immediate release**

## **MONTRÉAL-TRUDEAU AIRPORT INAUGURATES WORLD-LEADING DE-ICING FLUID RECOVERY AND REUSE FACILITY**

**Montréal, October 29, 2014** –Aéroports de Montréal (ADM) and Aéro Mag today inaugurated a state-of-the-art ethylene glycol recovery, recertification and reuse facility at Montréal-Trudeau International Airport’s de-icing centre that will significantly reduce the airport’s environmental record while reducing de-icing charges for airlines.

Representing a \$10 million investment, the facility uses a sophisticated process to concentrate ethylene glycol employed in aircraft de-icing operations and restore it to at least 99.5% purity for reuse. This process is considered a world first. ADM contributed \$7.1 million to the construction of the facility while Aéro Mag invested \$2.9 million.

At the new ethylene glycol recycling facility, collected de-icing fluid is brought to a 50-50 concentration in a first phase, and then to a purity of 99.5% through the use of high-technology distillation tower supplied by Vilokan Sweden AB. Once it has been recertified for quality assurance, the glycol can then be used again for de-icing aircraft. All water generated by the process is filtered and reused.

“This facility makes us a world-leader in the recycling of ethylene glycol and is an important step in our efforts to promote sustainable development in all aspects of our operations,” said Philippe Rainville, Vice-President, Planning, Engineering and Construction, ADM. “It will enhance efficiencies at our de-icing operations while reducing the use of potable water by 2 million litres a year. It will also help to lower ethylene glycol costs by up to 30% for our airline customers during the winter months.”

De-icing airplanes is a vital procedure for airline safety in the winter and a critical component of Montréal-Trudeau’s operations. It involves spraying ethylene glycol diluted with water at a concentration based on current weather conditions – to remove frost, ice or snow from aircraft surfaces prior to takeoff. “Today, we can proudly say that by using the latest available technologies, we can recover virtually all of this fluid, purify it and reuse it, with tremendous environmental and operational benefits,” said Mario Lépine, President of Aéro Mag.

Montréal-Trudeau airport opened its aircraft de-icing facility in 1997 in a joint venture with Aéro Mag, now a Canadian leader in the conception, management and operation of de-icing facilities at airports in North America and the United Kingdom. Expanded in 2012, it features eight bays supported by 24 de-icing trucks capable of handling up to 48 aircraft an hour – or an average of about 9,400 aircraft a year.

### **About Aéro Mag**

Aéro Mag is a Montréal-based company established in 1997 specialized in the planning, design, conception, management, operation and maintenance of centralized deicing facilities. It operates at eight international airports in Canada (Montréal-Trudeau, Montréal-Mirabel, Calgary, Ottawa, St-John's NL, Vancouver, Toronto Island and Edmonton), at Cleveland-Hopkins, Newark Liberty and Denver airports in the United States, and at Heathrow airport in the United Kingdom.

### **About Aéroports de Montréal**

Aéroports de Montréal is a not-for-profit local airport authority that has been responsible for the management, operation and development of Montréal-Trudeau and Montréal-Mirabel international airports since 1992. The Corporation employs about 650 people at both airport sites.

(30)

Source: Christiane Beaulieu  
Vice-President, Public Affairs and Communications

Fact sheet  
Official Opening of the Glycol Recycling Centre

Montreal-Trudeau airport De-icing Centre

Opened in 1997 with 5 de-icing bays for an initial investment of \$40 million

En 2012, further investment of \$11 million: 3 de-icing bays added

State-of-the-art underground catchment system allows used de-icing fluids to be collected and recycled.

Operates from: October 1 to April 30

Trucks: 24

De-icing bays: 8

Capacity: up to 48 aircraft per hour (depending on weather conditions)

Statistics:

9,400 aircraft de-iced per year (average)

5.7 million Litres de-icer applied per year (2013-14)

**Key steps in the design and construction of the glycol recycling centre**

Design and construction: Aéro Mag

Providers:

Equipment provider: Vilokan (Sweden)

De-icing product certification: LNT Solutions

Construction Première: building

Building expanded by 10,000 ft<sup>2</sup>

March 2013

Concentrator installed; increased glycol concentration to 50–55%

Summer 2014

Distillation tower installed; increased glycol concentration to 99.5%

Fall 2014

New glycol recycling centre opened

First airport in the world to achieve a glycol concentration of at least 99.5% and re-use recycled product as a certified aircraft de-icer.

### **Investment**

\$10-million project investment, broken down as follows:

- ADM contribution: \$7.1 million
- Funding from Aéro MAG: \$2.9 million

## Process



### Step 1

Tanks rooms.

Glycol recovered from the de-icing apron flows into these storage tanks.



### Step 2

Glycol is transferred to holding/buffer tanks for the start of the recycling process.

Process: Separation of water and particles. Glycol concentration is increased to 50–55%.



Step 3  
Distillation tower  
Glycol concentration is increased by distillation to 99.5%.



Step 4



Step 4 – cont'd  
Quality-control tanks.





Step 5  
The large white tank at left receives distilled product awaiting re-certification.



Step 6

Recycled, re-certified glycol is pumped into trucks to be re-used.



Step 7

Aircraft de-icing.

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