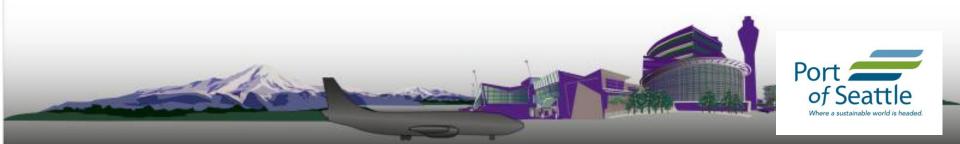


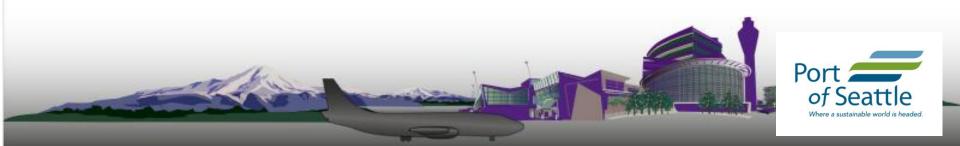
#### **Emission Reduction Credit Banking**

#### February 24, 2009 Elizabeth Leavitt, Russ Simonson



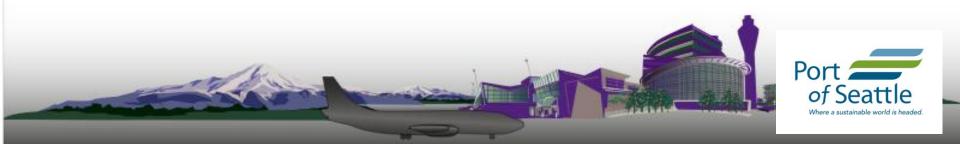
# Memorandum of Agreement (MOA)

- 2000; Port and Clean Air Agency sign MOA allowing emission reduction credits for voluntary actions
- General Regulatory Order established to provide process for emission credits
- First of its kind in Washington



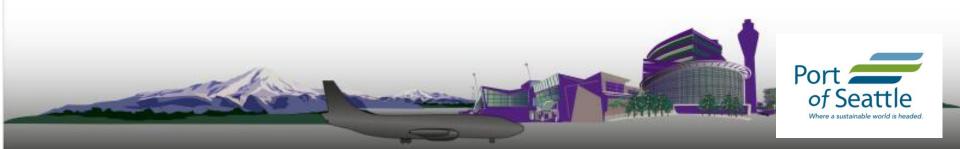
# **Fuel Hydrant System**

- Allows for delivery of Jet-A fuel from tank farm to aircraft gates through piping system
- Use of fuel (hose-only) carts to displace fuel tanker trucks
- Safety and efficiency improvements



# **Emission Reduction Credit Benefits**

- 2007 Emission Benefits;
  - 22 tons/year of carbon monoxide
  - 6 tons/year of hydrocarbons
  - 34 tons/year of oxides of nitrogen
  - 2 tons/year of sulfur oxides
  - 10 tons/year of particulate matter (PM2.5)
  - 971 tons/year of carbon dioxide



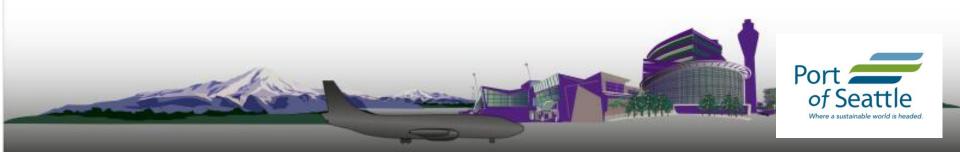
### **Certificate of Title**

1	
	pscleanair.org
	Puget Sound Clean Air Agency
	<b>Certificate of Title for Emission Reductions</b>
	Issued to: Port of Seattle Seattle-Tacoma International Airport 17801 International Blvd.
	lumber of Credits: Seattle, WA 98158 22 tons/year of carbon monoxide 6 tons/year of oxides of nitrogen 2 tons/year of sulfur oxides 10 tons/year of carbon dioxide 971 tons/year of carbon dioxide
С	conditions and Provisions:
1.	. The above credits, in tons per year, are issued as a result of permanent emission reductions attributable to the Port of Seattle's implementation of a hydrant aircraft fueling system installed at Seattle-Tacoma International Airport as described in its March 18, 2008, application to the Agency, hereby incorporated by reference.
2.	. The Port of Seattle must maintain the hydrant fueling system in proper working order. The Port of Seattle must report to the Agency any sustained (more than 24 consecutive hours) shutdown of the system for upsets or emergency conditions by e-mail to davek@pscleanair.org within 24 hours of a shutdown of 24 consecutive hours.
3.	. The Port of Seattle must submit a written report annually to the Agency, no later than July 1 of each year, beginning in 2009. This report will quantify the actual emission benefits for the previous calendar year and describe all periods of upsets or other emergency conditions lasting more than 24 consecutive hours, along with the actions that the Port has taken to avoid these events in the future.
	. In the event that upsets or emergency conditions result in an increase of more than 0.5 tons per year of any pollutant, the Agency may reduce the banked credits and reissue this certificate based upon data included in the report required in Condition 3.
	. The Agency reserves the right to request and review records, and conduct inspections, to ensure that the reductions are permanent.
	. The Agency may revise this Certificate of Title to reduce the amount of credits available to the Port of Seattle or revoke the credits if the Port of Seattle fails to comply with the conditions of this Certificate.
7.	. The Port of Seattle may use these credits in accordance with the Agency's General Regulatory Order No. 8088 issued to Seattle-Tacoma International Airport on March 6, 2000.
	. The Port of Seattle must notify the Agency in writing within 5 business days if it deviates from any condition in this Certificate of Title.
9.	. Correspondence to the Agency related to this Certificate of Title is to be addressed to:
	Manager, Air Resources Department Puget Sound Clean Air Agency 1904 3 <sup>rd</sup> Avenue, Suite 105 Septite WA 08101
	Dicken
	Issue Date Expiration Date Reviewed by: David S. Kircher Approved by: Dennis HcLerran
	Seattle, WA 98101 <u>December 12, 2008</u> <u>December 11, 2018</u> <u>David D. Kincher</u> <u>Approved by: Dennis J: McLerran</u> <u>Issue Date</u> <u>Expiration Date</u> <u>Reviewed by: David S. Kincher</u> <u>Approved by: Dennis J: McLerran</u> <u>Manager, Air Resources</u> <u>V Executive Director</u>



# **Emission Reduction Credit Obligations**

- Must maintain in proper working order
- Immediate notification to PSCAA of shutdowns attributed to upsets and emergency conditions
- Annual reporting of emission benefits, upsets/emergencies, and actions to prevent further upsets/emergencies



# **Future Opportunities**

- Projects may include; pre-conditioned air to aircraft, electric ground support equipment, shuttle consolidation, telework
- Leverage Credits to meet Port Conformity and SEPA mitigation requirements
- Assumption of non-Port emission-causing services in order to make voluntary reductions

# Thank You



Where a sustainable world is headed.

