

Harbour Dues: Environmentally Differentiated Pricing Strategy

A Presentation to Faster Freight Cleaner Air

May 16, 2007

Christine Rigby
Vancouver Port Authority



Overview

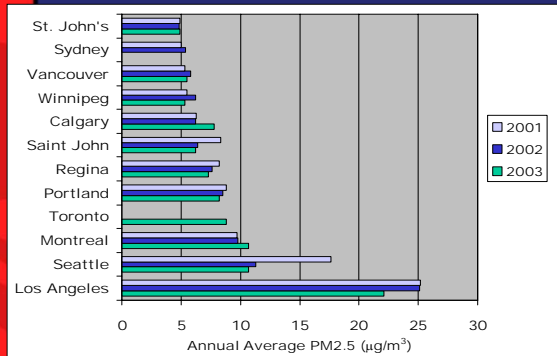
- Background
- Program
- Process
- Next Steps



Background



- Air quality in the Greater Vancouver Regional District is generally good
- Climate change is an issue of increasing concern



- VPA recognizes that local and regional health, environmental and economic impacts are occurring even with current air quality conditions
- VPA is committed to reducing port-related emissions that contribute to air quality and climate change

BC Progress Board 2005

Background



- Recent BC COS inventory showed ocean going vessel emissions are considerably less than previously thought but still important source of NO_x, SO_x and PM in the Lower Fraser Valley



- Potential to increase with growth in international trade
- Challenges - due to international nature and regulation
- Differential pricing is one strategy to encourage and recognize marine vessel emission reductions

Background



- Harbour Dues cover costs related to:

- General Security
- Harbour Safety
- Harbour Cleanliness
- Common user infrastructure maintenance



Differential Pricing Models



- Government based systems
- Higher fees so proportionate rebate improves incentive
- Ferries and other frequent callers
- Focus on low sulphur fuel, NOx or speed reductions



VPA Program




- In-house administration
- Four levels of harbour dues for 2007 (CDN\$ per gross registered tonne or GRT):
 - Basic rate...\$0.097
 - Bronze...\$0.077
 - Silver...\$0.067
 - Gold...\$0.057
- Harbour dues in 2006...\$0.077 per GRT

Bronze



- Ship classification
 - Lloyd's Register Environmental Protection (EP) Classification (or equivalent from another ship classification society)
- Fuel quality "S" % sulphur content
 - $S \leq 2.0\%$
 - Auxiliary engines
 - At anchor and dock
- Vapour control or recovery system

	<p data-bbox="446 283 625 346">Silver</p> 
	<ul style="list-style-type: none"> ● Ship classification <ul style="list-style-type: none"> ● Lloyd's Register EP + any one of S, N or V supplemental notations (or equivalent from another ship classification society) ● Fuel quality "S" % sulphur content <ul style="list-style-type: none"> ● $S \leq 1.0\%$ ● Auxiliary engines ● At anchor and dock

	<p data-bbox="446 1155 592 1218">Gold</p> 	
	<table border="0"> <tr> <td data-bbox="446 1291 812 1711"> <ul style="list-style-type: none"> ● Ship classification <ul style="list-style-type: none"> ● Lloyd's Register EP + any two of S, N or V supplemental notations (or equivalent from another ship classification society) ● Fuel quality "S" % sulphur content <ul style="list-style-type: none"> ● $S \leq 0.5\%$ in auxiliary engines within 24 nautical miles ● $S \leq 0.2\%$ in auxiliary engines at anchor and at dock </td> <td data-bbox="852 1291 1258 1764"> <ul style="list-style-type: none"> ● Technologies <ul style="list-style-type: none"> ● Direct water injection ● Combustion air humidification ● Seawater scrubber ● Fuel/water emulsion ● Selective catalytic reduction ● Exhaust gas recirculation ● Shore power capability ● Fuels <ul style="list-style-type: none"> ● Biodiesel ● Catalysts </td> </tr> </table>	<ul style="list-style-type: none"> ● Ship classification <ul style="list-style-type: none"> ● Lloyd's Register EP + any two of S, N or V supplemental notations (or equivalent from another ship classification society) ● Fuel quality "S" % sulphur content <ul style="list-style-type: none"> ● $S \leq 0.5\%$ in auxiliary engines within 24 nautical miles ● $S \leq 0.2\%$ in auxiliary engines at anchor and at dock
<ul style="list-style-type: none"> ● Ship classification <ul style="list-style-type: none"> ● Lloyd's Register EP + any two of S, N or V supplemental notations (or equivalent from another ship classification society) ● Fuel quality "S" % sulphur content <ul style="list-style-type: none"> ● $S \leq 0.5\%$ in auxiliary engines within 24 nautical miles ● $S \leq 0.2\%$ in auxiliary engines at anchor and at dock 	<ul style="list-style-type: none"> ● Technologies <ul style="list-style-type: none"> ● Direct water injection ● Combustion air humidification ● Seawater scrubber ● Fuel/water emulsion ● Selective catalytic reduction ● Exhaust gas recirculation ● Shore power capability ● Fuels <ul style="list-style-type: none"> ● Biodiesel ● Catalysts 	

Process



- Shipping agent registration online
- Daily download for boat crews
- Boat crew on-board verification
- Boat crew data entry
- Invoicing based on verification
- Dispute resolution



Process



Harbour Dues - Microsoft Internet Explorer

Address: http://www.pacificgatewayport.com/gpportal/approc/3906/ActionForm/MyApplications.aspx

Pacific Gateway Portal

Chamber of Shipping

10 May 2007 - 21:21 PDF Home Search About PGP Contact Help Disclaimer Copyright

You are logged in as cvr11

Application Status

[All Application Status Reason](#) | [View Application for Other Vessel\(s\)](#) | [Fax Detail Document](#) | [Assault](#) | [Exit](#) | [Sign Out](#)

- Incomplete: an Application that is not complete and will not be processed unless completed.
- Processing: an Application that is ready to be processed.
- Cancelled: an Application that was cancelled prior to being processed.
- Verified: an Application that was verified by the VPA as at the air emission standard applied for.
- Denied: an Application that was deemed unable to be verified by the VPA for the air emission standard applied for.
- Appeal: an Application that is currently under appeal.

Existing Applications: Legend ✓: File attached. ✗: Attachment required but no file attached.

Drag a column header and drop it here to group by that column

Reference Number (IMO Application No.)	Create Application(s)	Estimated Date of Arrival	Air Emission Standard	Status	File Attached	Activity
ATST12-3918014	Repeat Data	2007-Apr-10	Change SILVER	Change APPEAL	✗	Upload Cancel Repeat
ATST15-391812	Repeat Data	2007-Apr-11	Change BRONZE	Change CANCELLED	✓	Upload Cancel Repeat
ATST15-3921737	Repeat Data	2007-Apr-11	Change SILVER	Change APPEAL	✗	Upload Cancel Repeat
TEST14-391891	Repeat Data	2007-Apr-30	Change GOLD	Change APPROVED	✓	Upload Cancel Repeat
TEST14-3921527	Repeat Data	2007-May-15	Change GOLD	Change PROCESSING	✓	Upload Cancel Repeat
TEST14-3924254	Repeat Data	2007-Jun-11	Change GOLD	Change PROCESSING	✓	Upload Cancel Repeat

Next Steps...



- Unique program
- Consultation with industry
- Review and improve over time
- Provide leadership for other agencies with port-related dues
 - Potential to increase incentive

Thank you.

Christine.Rigby@portvancouver.com

www.portvancouver.com

