

## **Deltaport Third Berth Project Air Quality Fact Sheet**

This document contains ten questions on Air Quality that were presented to the Vancouver Port Authority (VPA) by the Deltaport Third Berth Project Community Liaison Committee (DCLC). The responses to these questions have been provided by the VPA.

The committee then distributed these responses to Environment Canada, the Corporation of Delta and Metro Vancouver for comment on VPA's responses.

Response-specific comments from Environment Canada, the Corporation of Delta and Metro Vancouver can be found in italics under VPA responses within this document. General comments were also received, as follows:

*Environment Canada – Noted that, to their knowledge, VPA continues to meet its air quality commitments. Noted that Environment Canada continues to act as a Responsible Authority with respect to the DP3 Project, ensuring that the mitigation measures and follow-up programs are implemented. Noted that in May 2007 Environment Canada joined the VPA, the Ports of Seattle and Tacoma, and the United States Environmental Protection Agency in introducing the draft Northwest Ports Clean Air Strategy that the VPA describes. The intent of this draft strategy is to stimulate discussion, input and commitment to a high-reaching yet achievable set of actions to reduce greenhouse gas emissions. Environment Canada supports this dialogue and encourages the DCLC to review the draft strategy and provide comments and suggestions to the VPA.*

*Corporation of Delta – Noted that VPA responses appear to be a good summary of the current status and complexity of the issues. Responses appear to be accurate and comprehensive of the work that has been done, or is anticipated to be done, by VPA or other relevant agencies. Noted that not all of the issues are entirely within the VPA's grasp to resolve; other government agencies or private companies need to participate and assist the VPA with resolution. Noted that VPA responses could be improved by the addition of more definitive timelines for completion.*

*Metro Vancouver – Noted that, in general, they are satisfied with the VPA's responses to the 10 questions posed by the DCLC. The responses are consistent with Metro Vancouver's understanding of the actions being taken as part of their DP3 commitments, Integrated Air Emissions Reduction Program, Northwest Ports Clean Air Strategy and other initiatives.*

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**1. What are the specific VPA policies, practices and initiatives for continuous improvement of air quality, and what are the implementation dates of these emissions mitigation initiatives?**

The Port of Vancouver is working hard to reduce air emissions of criteria contaminants, air toxics and greenhouse gases through development of a data baseline, improving operational efficiency, technological innovation and supporting regulatory change. Reducing our emissions now and as we grow will help to maintain good air quality and reduce the impacts of climate change for future generations. The various policies, practices and initiatives are described in detail in the attached Integrated Air Emissions Reduction Program for the Port of Vancouver: Actions to Address Air Quality and Climate Change dated July 2007.

Corporation of Delta response: *The VPA states that the Integrated Air Emissions document was dated July 2007, while the copy attached to the e-mail received is dated January 2007.*

**2. What is the VPA doing to meet the strict Air Quality standards? What specific standards are applicable to VPA and who regulates and monitors them?**

There are a number of emission reduction initiatives already underway and planned by the VPA, our tenants, other industries and regulatory agencies, all of which contribute to reducing emissions and port-related impacts on air quality. A detailed list of some of these initiatives can be found in the VPA's Integrated Air Emissions Reduction Program for the Port of Vancouver: Actions to Address Air Quality and Climate Change dated July 2007, described above and attached.

Ground-level concentrations of criteria air contaminants (i.e., sulphur dioxide, nitrogen dioxide, carbon monoxide, particulate matter, and ozone) are guided and regulated by standards and objectives at various levels of government. Federal, provincial and regional governments use objectives to make decisions about short-term exposure to air contaminants, while standards are long-term target levels for contaminants that all parts of the country are expected to meet by a certain date. With the exception of ozone and some particulate matter, all of these air emissions are primary pollutants, meaning that they are emitted directly from the source. Ozone and some particulate matter are produced through chemical reactions in the atmosphere, and are considered secondary pollutants.

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The VPA falls under federal jurisdiction and is therefore subject to federal air quality standards and objectives including those under the *Canada Wide Standards* (CWS) and the *Canadian Environmental Protection Act* (CEPA). The CWS were developed by the Canadian Council of Ministers of the Environment, which includes participation and administration by the federal, provincial and territorial governments. CEPA is administered by Environment Canada. Discharges to air, land and water within federal port jurisdiction are authorized pursuant to the *Canada Marine Act* (CMA) by port authorities.

The CWS contain specific requirements for PM2.5 and ozone. For areas that meet these specific requirements, the CWS' Annex A includes provisions for continuous improvement and keeping clean areas clean. With very few exceptions, monitoring locations throughout the Lower Fraser Valley meet the specific requirements for PM2.5 and ozone, leading to Annex A as the generally more applicable federal guidance within the CWS.

CEPA provides for three levels of air quality objectives: "Desirable", "Acceptable" and "Tolerable" for a number of pollutants including carbon monoxide, nitrogen dioxide, ozone, sulphur dioxide total suspended particulate and hydrogen sulphide. The BC Ministry of Environment also has ambient air quality objectives referred to as Level A (most stringent), Level B and Level C (least stringent). The basis for the three tiered federal approach to ambient objectives can be described as follows:

**Maximum Desirable:** (most stringent) the long term goal for air quality and provides a basis for an antidegradation policy for the nation and for the continuing development of control technology.

**Maximum Acceptable:** intended to provide adequate protection against effects on soil, water, vegetation, animals, visibility, and personal comfort and well-being.

**Maximum Tolerable:** (least stringent) denotes time-based concentrations of air contaminants beyond which appropriate action is required to protect the health of the general population.

Additionally, through airshed management planning processes, local and regional governments including the GVRD are developing their own ambient air quality objectives that are used to help manage airshed-specific air quality.

In terms of discharges, Section 5 of the *Port Authorities Operations Regulations* under the CMA prohibits anything that has or is likely to have an adverse effect on soil, air or water quality unless otherwise authorized by the port authority. The CMA as a whole is administered by Transport Canada.

Regardless of jurisdiction, through its commitment to continuous improvement in terms of reducing emissions of criteria air contaminants, air toxics and greenhouse gases, the VPA clearly recognizes that standards and objectives are not considered levels to be

polluted up to. Rather, for example, with the Deltaport Third Berth Project the VPA's objective is to reduce emissions such that growth in trade will not result in any net increase in air emissions, and it is working in collaboration with its tenants, other industry and regulatory agencies to ensure that goal is attained. The VPA is committed to developing sustainable port operations, which includes reducing emissions while fulfilling its mandate to operate the Port of Vancouver in the best interest of Canadians.

### **3. What is the VPA doing to mitigate the impact and address the issue of the burning of heavy bunker oils by ships entering the Port of Vancouver jurisdiction?**

In addition to a number of programs being undertaken by its tenants, the shipping industry and regulatory agencies, the VPA is pursuing the following initiatives to reduce emissions from ocean going vessels:

- Implementation of the Differentiated Harbour Dues Program on April 1, 2007 to provide incentives and recognize ships using cleaner fuels and technologies (details are available in the attached brochure).
  - This program has helped to raise awareness in the shipping industry and as a result shipping lines such as K-Line are making ongoing commitments to use cleaner fuels for all calls to Port of Vancouver terminals on a year-round basis, beyond just those where the lower harbour due rates apply.
- Participation in seawater scrubber feasibility and demonstration project with Holland America Line, U.S. Environmental Protection Agency, Puget Sound Clean Air Agency, Environment Canada, Port of Seattle and others.
- Pilot tests using West Vancouver developed fuel-borne catalyst in ocean going vessel auxiliary and main engines completed in 2005. Success of pilots led to catalyst's continued, regular use in Seaboard International Shipping's the M.V. Skaubryn and the M.V. Skaugran's auxiliary engines
- Shore Power
  - A feasibility assessment for use of shore power at Port of Vancouver cruise ship berths has been completed and we are working on resolving implementation issues with the cruise ship lines and the federal and provincial governments.
  - In Spring 2007, a feasibility study was completed for shore power at Deltaport's Third Berth
  - Through the Differentiated Harbour Dues Program, gathering of information on vessels calling the Port of Vancouver that are equipped with shore power that will provide input into local assessments
  - Shore power infrastructure provisions that will allow for future installation with minimum disruption to terminal operation have been incorporated into Centerm, Vanterm container terminals and eventually into the Deltaport Third Berth.
- Actively supporting federal government ratification of International Maritime Organization's (IMO) MARPOL 73/78's Annex VI, Regulations for the Prevention

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of Air Pollution from Ships, and subsequent application to designate the west coast of North America as a Sulphur Emission Control Area (SECA) post-ratification

- Development of the Northwest Ports Clean Air Strategy (attached) in partnership with the Port of Seattle and the Port of Tacoma and with support from Environment Canada, the U.S. EPA and the Puget Sound Clean Air Agency. The strategy includes emission reduction performance goals for port-related sources including ocean going vessels and is currently being circulated for consultation prior to finalization over the next year. This proactive and collaborative effort will help to ensure good air quality in years to come.

Corporation of Delta response: *Regarding the feasibility assessment of the use of shore power at the Port of Vancouver, the VPA states that they are working on resolving implementation issues with cruise ship lines and the federal and provincial governments. The implementation issues are not described, nor is there a proposed timeline for completion. Also, the conclusions of the feasibility study are not described and there is no explanation as to why there is uncertainty regarding the timing of installing shore power infrastructure.*

VPA response to above CoD response: Implementation issues associated with any shore power application include design and operation, and specifically whether a workable design can be achieved. The VPA is working with Princess Cruise Lines, BC Hydro and the Province of British Columbia on shore power for cruise vessels at Canada Place, and is in the process of seeking a federal partner as well. The goal is to have shore power implemented at Canada Place for the 2009 cruise season.

Some specific issues that are being resolved include:

- utility and infrastructure capacity
  - electricity availability
  - capacity for existing infrastructure to transmit required amounts of electricity
  - ability to increase electrical supply or transmission
- physical limitations
  - space available on vessel, on dock and in substation
  - safety concerns on vessel and on dock
  - substation location
  - protrusions above dock level
    - impact on dock operations and mooring lines
    - potential damage
    - safety
  - impact of tides on length and weight of cables
  - ship and shore side positioning of infrastructure
  - ability for vessel to hook up while berthed on one or both sides- navigational, safety and operational issues
- labour
  - skilled, qualified workers on the dock and on the vessel to connect and disconnect shore power

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- security requirements around leaving or boarding a vessel
- consistency
  - to ensure shore power is utilized and that usage is maximized, consideration of requirements for different vessels is needed
    - voltage requirements
    - transformer location
    - cable reel location
    - electrical connection on vessel
- electricity rate structure
  - two rates, based on usage and demand where the latter is based solely on the maximum power used at any time during the billing period and is charged as though it is being required for the entire billing period rather than just the actual period of energy usage
  - interruptable or off peak electricity availability
- cost-benefit
  - social, environmental and economic analysis

Preliminary shore power infrastructure is being built into Deltaport's Third Berth as part of the construction project, and will be similar to the infrastructure already in place at Vanterm and Centerm terminals.

The shore power feasibility study for Deltaport's Third Berth included the following conclusions:

- Only 6% (of 896) worldwide of all new-build container vessels to be delivered in 2005-2008 will be equipped for shore power
- No container vessels calling Deltaport are equipped for shore power
- No container vessels call Deltaport that also call Port of Long Beach or Port of Los Angeles
- No standards exist for shore power, although the International Standards Organization (ISO) is in the process of developing standards
- Marine terminals in Canada are multi-user facilities unlike those in the U.S. which are dedicated to a specific shipping line, which facilitates terminal shore power requirements, ensuring it's use and benefits

The report goes on to recommend:

- Include preliminary infrastructure for shore power as part of the Deltaport Third Berth Project
- Conceptually, allocate space for shore power at Deltaport's Third Berth
- In future, reassess shore power for this facility when any of the following occurs:
  - ISO standards are made public
  - Shore power legislation in Canada is imminent
  - Shipping lines that call Deltaport request shore power be made available, so their shore power equipped vessels can make use of it

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**4. What is the VPA doing to lower emissions resulting from increased truck traffic?**

- In 2005 VPA introduced a Truck Licensing System (TLS) to provide for requirements to improve efficiency, safety and environmental performance of container trucks. In 2008-9 introducing increasingly stringent environmental requirements as follows:

	<b>January 1, 2008</b>	<b>January 1, 2009</b>
<b>Opacity</b>	All trucks to be tested and pass AirCare On-Road (ACOR) opacity requirements <ul style="list-style-type: none"> <li>• ≤ 55 % for 1990 and older</li> <li>• ≤ 40 % for 1991 and newer</li> </ul> If trucks achieve ≤ 10 % get one year exemption	All trucks to be tested and pass opacity requirement of ≤ 20 %, repeated annually thereafter If trucks achieve ≤ 10 % get one year exemption
<b>Truck Age</b>	No trucks older than 1989	No trucks older than 1994
<b>Idle Reduction</b>	Maximum 3 consecutive minutes in a one hour period	Maximum 3 consecutive minutes in a one hour period
<b>Education</b>	Annual	Annual

- Ongoing consideration of additional requirements including mandatory maintenance and addressing emissions from trucks 1994 and newer through phase out and/or use of alternative fuels and retrofits

- Introduced mandatory reservation systems and are currently implementing extended gate hours to alleviate congestion and line ups at terminals, as well as reducing general roadway congestion
- Radio frequency identification system introduced to improve efficient flow of goods through terminals and reduce unnecessary trips
- Under Truck License System, are requiring trucks accessing the Port to undergo and pass random AirCare On-Road emission opacity testing and safety inspections by the Ministry of Transportation
- Developed a truck idle reduction program with help from Better Environmentally Sound Transportation (BEST) and City of Vancouver that includes education packages to be distributed to tenants and drivers
- The Northwest Ports Clean Air Strategy (attached and described above) includes emission reduction performance goals for port-related trucks and other vehicles
- VPA, through a subsidiary acted as a catalyst in development of Coast 2000 Terminals Ltd. in 1999 with Fraser Group Holdings. Coast 2000 is an off-dock facility that reduces the number of empty container truck trips
- Actively assessing short sea shipping as an alternative to reduce local/regional truck trips.

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## **5. How is the air quality impact of idling trains being mitigated by the VPA?**

The Port of Vancouver is working with CN and CP that operate the railways to identify ways to reduce train idling. Presently CP has idle shut down systems on their Lower Mainland fleet.

The Northwest Ports Clean Air Strategy includes emission reduction performance goals for all port-related rail activity including idling.

*Corporation of Delta: The VPA states that it is working with CN and CP to identify ways to reduce train idling. It is not clear when any ways to reduce train idling will be identified or if they will necessarily be implemented once they are identified. The VPA refers to emission reduction goals under the Northwest Ports Clean Air Strategy. The plans and timing for achieving the goals outlined in the Strategy are not outlined.*

VPA response to above CoD response: The VPA is developing the Lower Mainland Ports Land-Based Emission Inventory, which includes cargo handling equipment, trucks and rail associated with operations at the Vancouver Port Authority, Fraser River Port Authority and North Fraser Port Authority. This inventory will provide input into the decision-making process around where to focus emission reduction efforts such as locomotive idling. In the meantime, CP already uses idle shut down technology on their locomotives, as do a number of terminals on their own locomotives.

The second draft of the Northwest Ports Clean Air Strategy contains performance goals by sector for the short term (2010) and longer term (2015). The plan recognizes that railways are neither tenants or customers of ports which makes setting performance goals more difficult than other sectors. Specific goals for all sectors are still in the process of being finalized based on feedback from stakeholders. For details on the most recent draft goals for the rail and other sectors please refer to the attached copy of the Northwest Ports Clean Air Strategy.

## **6. Long Beach requires certain vessels to use exhaust control technology and cleaner fuels while at berth – Will VPA implement similar requirements at Deltaport?**

The VPA is committed to reducing port-related air emissions that contribute to air quality and climate change, including those from ocean going vessels (“OGVs”). The VPA takes a multi-pronged approach to reducing emissions, including both mandatory and collaborative initiatives that apply to OGVs and other port-related sources at Roberts Bank and Burrard Inlet such as:

- Prohibition of excessive vessel exhaust opacity of any colour with the exception of steam (water vapour)
- Increased fees for vessels that do not implement eligible emission reduction measures beyond those required by the IMO, through the VPA Differentiated Harbour Dues Program implemented April 1, 2007 (details are available in the attached brochure)

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- The Northwest Ports Clean Air Strategy is designed to ensure good air quality now and in the future by taking a proactive and collaborative approach to reducing emissions, prior development of degraded air quality
- The VPA's Integrated Air Emissions Reduction Program for the Port of Vancouver: Actions to Address Air Quality and Climate Change will feed into and support the Northwest Ports Clean Air Strategy

**7. GVRD has established maximum levels for Particulate Matter (PM). Does VPA intend to stay below these levels?**

The GVRD developed air quality objectives for PM<sub>10</sub> and PM<sub>2.5</sub>. These objectives were under development in 2003/04 and accepted by the GVRD Board in October 2005, after the submission of the Deltaport Third Berth application. When VPA reassessed the air quality assessment released for public review in November 2005 the GVRD objective was selected for evaluating predicted PM<sub>10</sub> and PM<sub>2.5</sub> concentrations for the Deltaport Third Berth Environmental Assessment on the basis that there were objectives for both daily and annual averaging periods (CWS only has an annual objective for PM<sub>2.5</sub>) and the GVRD objective was the most stringent objective or standard presently in Canada or US.

Corporation of Delta response: *The VPA response does not directly answer the DCLC question as to whether the VPA intends to stay below the GVRD levels.*

VPA response to above CoD response: Metro Vancouver's (MV) PM<sub>10</sub> and PM<sub>2.5</sub> objectives are based on ambient air quality. Air quality is a function of the number and magnitude of emission sources, as well as meteorology and chemistry. No such objectives exist that are emission-based, however the VPA has committed to continuous improvement in terms of reducing emissions that contribute to air quality and climate change.

Based on the worst-case scenario modeling done for the Deltaport Third Berth Application, the project should not result in an exceedance of MV ambient air quality PM<sub>10</sub> and PM<sub>2.5</sub> objectives.

The VPA is working with the Corporation of Delta, MV, Tsawwassen First Nation and Environment Canada to locate, install and operate an air quality and meteorological monitoring station in the community of Delta to monitor ambient air quality and help monitor impacts from DP3 emissions.

The VPA intends to work with its stakeholders to ensure emissions associated with the Deltaport Third Berth Project are managed to meet our commitment to continuous improvement, which will contribute to ensuring the MV PM<sub>10</sub> and PM<sub>2.5</sub> levels are met. The VPA also intends to use results from the monitoring station or other studies to confirm impacts from DP3 are minimized. However, DP3 is one of many contributors to air quality and there is a need for emissions from all sources to be addressed.

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**8. Diesel PM is an air toxic of particular concern. What is VPA doing to monitor diesel emissions in the area around the port and compared to regional emissions, how are emissions from other sources being distinguished from VPA emissions?**

The Vancouver Port Authority is leading the development of a local port land-related activity-based emission inventory including trucks, rail and terminal equipment. The inventory will cover the jurisdictions of the Port of Vancouver, Fraser Port and North Fraser Port Authorities. This inventory will include emission estimates for a number of air quality parameters including diesel PM and will be the most accurate port emission inventory ever conducted in Canada. The inventory is being developed in collaboration with Environment Canada and the Greater Vancouver Regional District. The results of the inventory will be used to benchmark emissions and identify priorities for future reduction programs and initiatives. Concurrently, the VPA is developing an emission inventory of port-related fugitive emissions including for example dust and vapours. Earlier this year, the BC Chamber of Shipping released the results of a year long local, activity based emission inventory for ocean going vessels developed in collaboration with the VPA, Environment Canada and the GVRD. Together these inventories, along with those being led by the GVRD will help to better assess and manage port related diesel PM and other emissions.

**9. After completion of DP3, what is the worst-case scenario in terms of emissions from additional vessel calls per year and what ship emission increases are expected when compared to 2003? Is there data to compare today's or the future's air quality to that of 2003?**

This question was specifically addressed in the Environmental Assessment for Deltaport Third Berth Chapter 13, Air Quality and Chapter 23, Cumulative Effects Assessment. The VPA retained the firm Moffat Nichol Ltd. in 2004 to conduct a vessel forecast for the Deltaport Third Berth project. Moffat Nichol is an engineering firm with recognized expertise in planning, designing and building container terminals in North America. The 2003 Deltaport database of over 327 ship calls provided a trend of vessel sizes for the Vancouver market as it existed during that time period. Moffat Nichol conducted a forecast for 2011, the assumed date of DP3 operation based on two potential scenarios. The first scenario assumed an average volume of 2458 twenty foot equivalent (TEU) handled per vessel in 2003 at Deltaport, and a growth rate of 3.3% per year in average vessel size. Based on Scenario 1 Moffat Nichol estimated that there would be 389 vessel calls at Deltaport in year 2011. A second scenario was also evaluated based on the arrival of one 8000TEU vessel per week on a hub port call in which 50% of the vessel is discharged and loaded. This would generate a total vessel count of 306 vessels. The actual number of forecasted vessels used for the projected 2011 DP3 air quality assessment was 393 vessels. As a result of the navigational vessel assessment, four additional ship calls were added. The intent was to provide for a conservative overestimate of emissions to maintain a "precautionary approach" when assessing emissions and the effects on human health and the environment. Presently, Deltaport is averaging about 300 vessel calls per year based on 2005 and 2006 container terminal activity.

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The following table provides a summary of the emissions for the project operation scenario compared to the local study area (LSA) and regional study area (RSA). From Chapter 13, Air Quality Deltaport Third Berth Environmental Assessment Application, November 2005

**Table 13.19 Summary of Emissions (t/yr) Included in the Project Operation Scenario 2011**

SCENARIO	EMISSION SOURCE	NO <sub>x</sub>	CO		SO <sub>2</sub>	VOC	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP
Project Operation	Container Ships	72.2	7.63		56.2	2.29	7.64	7.64	7.64
	Container Trucks	25.6	4.63	0.05	1.22	0.71	0.55	0.71	
	Trains	24.8	2.84	0.36	1.04	0.66	0.66	0.66	
	Tugboat Operations	1.70	0.23	0.03	0.07	0.03	0.03	0.03	
	Employee/Service Vehicles	2.21	76.5	0.03	5.82	0.12	0.06	0.12	
	Dockyard Equipment	61.4	40.6	0.11	4.60	3.99	3.87	3.99	
	<b>Total</b>	<b>188</b>	<b>133</b>	<b>57</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>13</b>	
Existing Baseline		2,249	321		596	90	150	109	252
2000 LSA Total <sup>1</sup>		18,278	58,740		1,827	9,622	2,779	1,489	4,882
% Change Project Operation vs. 2000 LSA Total		1.0	0.23		3.1	0.16	0.5	0.9	0.27
2000 RSA Total <sup>2</sup>		99,897	481,933		18,769	111,196	15,363	8,964	25,627
% Change Project Operation vs. 2000 RSA Total		0.19	0.03		0.30	0.01	0.09	0.14	0.05

<sup>1</sup> Calculated using LFV emission inventory for 2000 and spatially allocating emissions to LSA.

<sup>2</sup> Based on Tables A-1 through A-11 of GVRD Forecast and Backcast of the 2000 Emissions Inventory for the Lower Fraser Valley Airshed 1985-2025

Metro Vancouver response: *Metro Vancouver prepares comprehensive inventories of emissions from all sources in the Lower Fraser Valley every five years, and the next update (for 2005) is scheduled to be completed in the fall of 2007. The inventory includes emissions from ships, as well as forecasts of emissions on a 25-year horizon. The data presented by VPA in response to this question compares DP3 Project operation emissions to the 2000 emission inventory, which was the most current data available at the time. In addition, Metro Vancouver publishes an annual report on air quality in the region, which summarizes data from the ambient air quality monitoring stations, assesses measured air quality against objectives and standards, and examines long-term trends.*

**10. In 2005, VPA committed to considering a number of initiatives, including a permanent air quality monitoring station, short sea barge shipping and an initiative to work with the GVRD and the International Maritime Organization (IMO) to declare Vancouver as an IMO Sulphur Emission Control Area by 2009. Are these initiatives still in place, and if so, when will they be implemented?**

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### ***Air Quality Station***

A Delta Air Quality Monitoring Technical Working Group was formed consisting of staff from Corporation of Delta, Environment Canada, Greater Vancouver Regional District, Tsawwassen First Nation and the Vancouver Port Authority. The Working Group is chaired by the GVRD. The purpose of the Delta Air Quality Monitoring Technical Working Group is to facilitate discussion, information exchange and sharing of technical expertise amongst participating agencies in order to provide a sound basis from which to make the best possible decision on future air quality monitoring in Delta that satisfies the VPA commitment and, where possible, the needs of other Technical Working Group members. Discussions have progressed to the point where some preferred sites have been identified.

Metro Vancouver response: *The intent of the Delta Air Quality Monitoring Technical Working Group is that a new air quality station would be operated by Metro Vancouver as part of the Lower Fraser Valley Air Quality Monitoring Network, which currently includes 27 air quality stations. The Working Group has met several times to review existing information on air quality in Delta, including the air quality modeling conducted for the Deltaport Environmental Assessment Application, and has identified a number of potential monitoring locations. The Technical Working Group will be meeting again in early September and October to finalize their recommendation. We expect that we can bring an update to the DCLC at their October meeting.*

### ***Short Sea Shipping***

VPA is continuing to explore short sea shipping as an alternative to reduce local/regional truck trips and the amalgamation of the three Lower Mainland port authorities is anticipated to facilitate this initiative.

### ***Sulphur Emission Control Area***

Canada must develop legislation to support IMO's Annex VI, Regulations for the Prevention of Air Pollution from Ships prior to ratifying the Annex itself. The federal government has now proposed such legislation and once passed can proceed with ratification. In order for an area to be designated as a SECA, an application must be submitted to the IMO for consideration, clearly demonstrating the need for such a designation. Environment Canada and the U.S. EPA have been developing the information needed to determine whether a case for a North American or West Coast SECA can be made and on what basis, and will submit an application to the IMO for consideration based on the results of their assessments. Since making the initial commitment VPA and the GVRD continue to work with Environment Canada on the SECA application process. VPA is actively supporting the federal government ratification of IMO's Annex VI, and designation of a North America or West Coast SECA post-ratification. The Northwest Ports Clean Air Strategy further supports this.

Metro Vancouver response: *The domestic regulations (Prevention of Air Pollution from Ships) to enforce IMO Annex VI were adopted in July 2007.*

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Environment Canada response: *The Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals, which are administered by Transport Canada, are now in force. Among other things, these regulations impose in Canadian law the requirements of Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).*