



Public Works & Transportation Committee

Date: Wednesday, February 18, 2009
Place: Anderson Room
Richmond City Hall
Present: Councillor Linda Barnes, Chair
Councillor Sue Halsey-Brandt, Vice-Chair
Councillor Derek Dang
Councillor Ken Johnston
Mayor Malcolm Brodie
Absent: Councillor Harold Steves
Call to Order: The Chair called the meeting to order at 4:30 p.m.

MINUTES

1. It was moved and seconded
That the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, January 21, 2009, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

2. Wednesday, March 18, 2009 (tentative date) at 4:30 p.m. in the Anderson Room.

DELEGATION

3. **VANCOUVER AIRPORT FUEL DELIVERY PROJECT**

(Memo: February 10, 2009, File No.: 10-6600-06-01) (REDMS No. 2573189)

To introduce and describe the Vancouver Airport Fuel Delivery Project, Adrian Pollard, Director of Engineering (West FSM Management Group Inc.) accompanied by Scott Hanna, lead technical and environment advisor (Hatch Ltd.) and David Bursey, concerned with the project's regulatory issues (Bull, Howser & Tupper) addressed Committee.

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Mr. Pollard explained that the proposed underground jet fuel delivery project is the responsibility of the Vancouver Airport Fuel Facilities Corporation (VAFFC), a not-for-profit company owned by a consortium of commercial airlines. VAFFC owns and operates fuel storage and distribution facilities at the Vancouver International Airport (YVR). Work on the proposed project has been on going for the past eight or nine years, and VAFFC is now in a position to move ahead with (i) an environmental review and (ii) seeking approvals. He remarked that the City of Richmond is a significant player in the process as the proposed project involves moving aviation fuel within Richmond's City boundaries.

VAFFC is proposing a new fuel delivery system to meet the growing and long-term needs for aviation fuel at YVR. The existing aviation fuel delivery network does not have the capacity to meet the anticipated future increases in fuel consumption at YVR. Currently YVR's supply of jet fuel is delivered by: (i) a 40 km underground jet fuel pipeline through Burnaby, and across north Richmond that was constructed in the 1960s and (ii) tanker trucks travelling to Richmond via Highways 91 and 99 towards YVR. An average of 25 truck deliveries occur each day.

The four components of the project are: (i) Sea Island Jet Fuel Storage Tank Facility, (ii) proposed Jet Fuel Off Loading Facility in South Richmond (VAFFC owned), (iii) proposed South Richmond Jet Fuel Storage Tank Facility, and (iv) the underground Jet Fuel Pipeline;

Mr. Pollard distributed information regarding VAFFC's proposed Vancouver Airport Fuel Delivery Project (attached as Schedule 1 to these Minutes) and highlighted the following information:

- jet fuel is an unleaded paraffin oil-based fuel used for aviation; it is clear or straw coloured and is not highly combustible, as it has a high thermal stability; the nature of jet fuel is unlike diesel fuel used in vehicles, and is unlike rocket jet fuel; it is relatively safe to handle, and is regularly stored in above ground tanks, after it is piped through subterranean pipelines;
- the proposed underground jet fuel pipeline will remove tanker trucks from the road, thereby reducing emissions;
- a small environmental footprint will result from the proposed fuel off loading facility in South Richmond;
- ships on the South Arm of the Fraser River, bringing jet fuel from refineries around the world, will deliver their cargo to the proposed terminal in South Richmond;
- VAFFC is in receipt of a letter from the Provincial Environmental Assessment Office, advising that the proposed Vancouver Airport Fuel Delivery Project be designated as a reviewable project;

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- VAFFC will lead a thorough community consultation process to achieve an understanding on the part of the general public of the proposed project; a series of public information sessions in Richmond has been scheduled, starting on Monday, February 23, 2009 (the schedule is attached as Schedule 2 to these Minutes);
- VAFFC's goal is to have the system operational by mid-2012.

The Chair thanked the delegation for its presentation. Discussion ensued regarding details of the proposed project and in particular on:

- at present VAFFC has not identified a specific route for the underground jet fuel pipeline between the South Richmond fuel storage facility (near Williams Road) and the Sea Island tank storage facility; the City will discuss all route options with VAFFC;
- VAFFC will adhere to City policies, bylaws, approvals, standards, agreements and fees, and all City requirements will be met;
- the element of risk when jet fuel is delivered by cargo ships; how the risk can be mitigated by the best practices design of the storage facility and the vessels on the Fraser River meeting international standards; fuel vessels have strict safety standard protocols and are only operated when the accepted standard is met;
- a series of meetings has been held by VAFFC and the Fraser River Pilot Association and both parties agree the fuel can be moved safely;
- there are limits to what the existing pipeline can achieve as it is approaching the end of its lifespan; it is operating at a higher than usual capacity but is still not able to satisfy peak demands at YVR;
- why the existing pipeline cannot continue to deliver fuel to YVR with the proposed new pipeline used for excess fuel;
- the proposed new jet fuel pipeline would be submerged deeper than the existing pipeline and would be built to modern standards; welding standards, steel standards, malleability standards would be met; pipeline flexibility is important when considering potential seismic activity; the new pipeline would be listed as a utility with the City and its location would be well marked;
- preliminary discussions regarding the potential route of the proposed jet fuel pipeline through Richmond have taken place with City staff; pros and cons of the alignment are being considered; it will be of interest to all City residents, but more so to those whose homes are in the immediate area of its ultimate location; VAFFC will communicate with the public, and specifically to residents directly affected;
- when the new jet fuel pipeline is operational it will eliminate the need for tanker trucks to deliver jet fuel to YVR;

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- the outcome if an oil slick occurs on the Fraser River if jet fuel spills; jet fuel is the production of distillation and would evaporate and dissipate over time; ongoing studies are exploring effects a spill would have on the river; study results will be included in further reports on the proposed project;
- ultimate approval for the proposed project would be given by a variety of parties, including the Provincial Government (for the pipeline) Metro Port Vancouver (for the storage tank facility) and YVR;
- in addition to the public information sessions, VAFFC's website includes a feedback component that is operational for the next 18 months and the public can submit their comments;
- the shallow depth and the limited width of the North Arm of the Fraser River precludes that arm of the river from being used as the site of the storage facility; a seafloor pipeline was explored but limitations were identified;
- discussions regarding the underground jet fuel pipeline have included looking at constructability, engineering, socio-economic factors, sensitivity analysis and environmental aspects;
- all environmental concerns will be considered as part of the consultation and approval processes; City staff will actively participate in the environmental assessment process;
- the City will not incur any construction costs for the proposed project;
- when the proposed new jet fuel pipeline takes over from the existing pipeline, transition plans will be discussed by VAFFC and the current pipeline's owner; the City will be informed of when and how the transition would take place after the existing pipeline ceases to operate and the proposed pipeline is in full operation; and
- discussions with Port Metro Vancouver regarding land use, shore power, and all other environmental components are necessary.

The Chair noted that Councillor Derek Dang, Council Liaison for the Advisory Committee on the Environment (ACE) would share VAFFC's print material with members of ACE at the advisory committee's February, 2009 meeting, and would seek the committee's comments on the proposed project.

The Chair remarked that VAFFC's efforts to coordinate (i) all aspects of the project, and (ii) all the parties involved, was important. She added that VAFFC's coming to the City at this stage in the development of the proposed project was commendable.

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ENGINEERING & PUBLIC WORKS DEPARTMENT

4. **CORPORATE USE OF BIODIESEL AND OTHER ALTERNATIVE FUELS**

(Report: February 11, 2009, File No.: 10-6125-00/Vol 01) (REDMS No. 2570276)

In response to queries Suzanne Bycraft, Manager, Fleet & Environmental Programs and Mike Lederer, Trades Foreman, Fleet Operations provided the following information:

- the City does not use blends that have no warranties, and there are no issues with regard to quality;
- reducing emissions from diesel vehicles leads to an environmental gain;
- new technology has led to: (i) diesel engines becoming very quiet and (ii) new exhaust systems;
- the City's current use of biofuel is from rendered animal fats and not from food-based crops; and
- the City's fuel purchases, including biodiesel, are undertaken via a regional consortium of member municipalities throughout the Lower Mainland.

In response to a comment made that the environmental impact should outweigh the cost when purchasing biofuel, Robert Gonzalez, General Manager, Engineering and Public Works, advised that the City has set its fuel budget, but if, in the future, any consideration was given to non typical tenders for fuel, and if the cost factor affected the budget, staff would come back to Council to ensure that the future purchase was: (i) within budget and (ii) within Council policy.

Ms. Bycraft introduced Fred Ghatala to Committee, and remarked that he is Assistant Director, Policy and Regulatory Affairs for Canadian Bioenergy Corporation, North Vancouver.

Mr. Ghatala made the following points:

- animal tallow is a globally traded commodity and is put to many uses by buyers;
- biofuels from Canada's canola crops should be considered and taken into account when discussing the use of biodiesel fuels; and
- cities with progressive biodiesel fuel programs could consider a purchase policy that takes into account feed stocks that are grown in abundance.

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It was moved and seconded

That the City's Green Fleet Policy 2020 be amended to expand on existing triple bottom line practices specifically in relation to the use of biofuels as an alternative fuel by adding the following to 'Item 1 – Acquisition' as an additional bullet:

“Biofuels will be evaluated by taking into account their effect on agriculture, environmental impact, cost, source location and energy balance. The highest blends available will be used subject to operational constraints.”

CARRIED

5. **BRITANNIA HERITAGE SHIPYARD: HISTORIC ZONE PROJECT UPDATE**

(Report: January 28, 2009, File No.: 06-2052-25-BHSY1/Vol 01) (REDMS No. 2568020)

In response to queries Mary Brunet, Manager, Facilities Planning & Construction advised that:

- the design for the architectural and building component of the Britannia Phase III Project has been completed and drawings are ready to be issued for tender;
- upon completion of exhibit design and signage production, Phase III will be concluded;
- Phase III does not address the dock area of the Britannia Heritage Shipyard; and
- the Historic Zone at Britannia Heritage Shipyard, which officially opens in May, 2009, will be free of charge to the public.

It was moved and seconded

That the “Britannia Heritage Shipyard: Historic Zone Project Update” report, dated January 28, 2009 from the Director of Engineering, be received for information.

CARRIED

PLANNING AND DEVELOPMENT DEPARTMENT

6. **12th ANNUAL TRAFFIC SAFETY AWARENESS WEEK – MARCH 2-6, 2009**

(Report: February 4, 2009, File No.: 10-6450-09-01/2009-Vol 01) (REDMS No. 2561297)

Victor Wei, Director, Transportation introduced Sandra Jones, coordinator of the Ministry of the Environment's HASTE program.

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Ms. Jones advised that HASTE is designed to reduce school transportation emissions by encouraging alternative means to travel between home and school. The program is communicated throughout the Province using 'webinars'. The Ministry's on-line tools are easily accessible at home or at school.

In response to a query Ms. Jones noted that there is a higher participation rate from students in elementary schools than students in high schools.

It was moved and seconded

(1) That Council endorse:

(a) the 2009 Traffic Safety Awareness Week (March 2-6, 2009) activities initiated by the Richmond District Parents Association, with the participation of the Richmond School Board, HASTE (Hub for Action on School Transportation Emissions) and the BCAA Traffic Safety Foundation, as outlined in the report dated February 4, 2009 from the Director of Transportation;

(b) staff involvement in the 2009 Traffic Safety Awareness Week activities as part of the City's on-going traffic safety education initiatives; and

(2) That the report be referred to the Council/School Board Liaison Committee for information.

CARRIED

7. MANAGER'S REPORT

Mr. Wei reported that as a result of a telephone conference call with the Deputy Minister of the Ministry of Community Development and his staff, conducted on Wednesday, February 18, 2009, City staff is forwarding a submission on the Nelson Road interchange to Ministry staff.

Mr. Wei noted that:

- the project falls within the jurisdiction of the Ministry of Transportation and Infrastructure, and has a preliminary cost estimate of \$27 million;
- City staff cannot consider this provincial infrastructure as a local project of higher priority than the four "shovel ready" projects endorsed by Council, and staff is not prepared to commit the required one-third municipal funding without any funding contribution from: (i) Port Metro Vancouver (PMV) and (ii) TransLink; and

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- the following two conditions inform the City's submission on the Nelson Road interchange to Ministry staff: (i) the submission would not jeopardize the potential of approval for the City's other submitted local projects; and (ii) the 1/3 municipal funding would be contingent upon contribution from PMV and TransLink so that no, or minimal, City funding would be required, as municipal funding has already previously been committed to the associated roadway widening improvements adjacent to the Westminster Highway/Nelson Road interchange.

In response to a query, Mr. Wei advised that TransLink does not have funds for new major capital projects, but TransLink is an active partner in the Nelson Road Interchange project. He further stated that the desired outcome is to have PFM and TransLink absorb the municipal share of the project cost.

A brief discussion ensued during which a comment was made that PMV is interested in having the situation of the Nelson Road interchange solved.

Mr. Wei advised that staff would continue discussions with PMV and Translink to confirm their respective funding commitment, should this project be approved for provincial and/or federal grants.

Staff will report further on the submission on the Nelson Road interchange to seek Council's approval of any funding commitment from the City, should this be approved to proceed to the next stage.

ADJOURNMENT


It was moved and seconded
That the meeting adjourn (5:52 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, February 18, 2009.

Councillor Linda Barnes
Chair


Sheila Johnston
Committee Clerk


VAFFC 

Vancouver Airport
Fuel Delivery Project

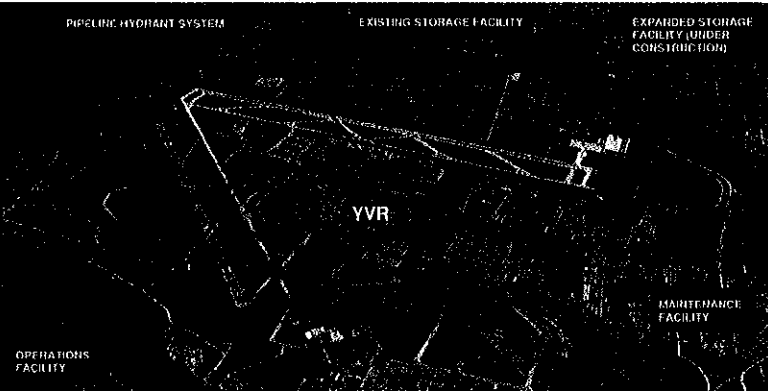
City of Richmond
Public Works and Transportation Committee

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VAFFC BACKGROUND 

- Not-for-profit organization
- Most airlines at YVR are members of VAFFC
- VAFFC owns and operates the fuel system at YVR
- VAFFC has operated for over 20 years



FUEL SYSTEM AT YVR

VAFFC 

AVIATION FUEL (JET-A)

- A clear, straw-coloured liquid that flows like water
- Kerosene-based, like diesel
- Low volatility, safe to handle
- All major commercial airlines use Jet-A aviation fuel

SYSTEM

- Fuel is stored in above-ground tanks
- Fuel is pumped from the tanks through underground pipeline to the airport terminal
- Fuel is transferred from underground pipeline to aircraft by small trucks

FUEL DELIVERY PROJECT

VAFFC 

PURPOSE

- To serve long-term growth at YVR
- Improve reliability of fuel supply for the airlines
- To reflect changes in the supply market
- Provide a sustainable solution

BENEFITS

- Support local, regional and wider economic growth
- Remove tanker trucks from local roads
- Reduce emissions and increase safety on roads
- State-of-the-art system will serve YVR for the long term
- Safer, more reliable, smaller environmental footprint

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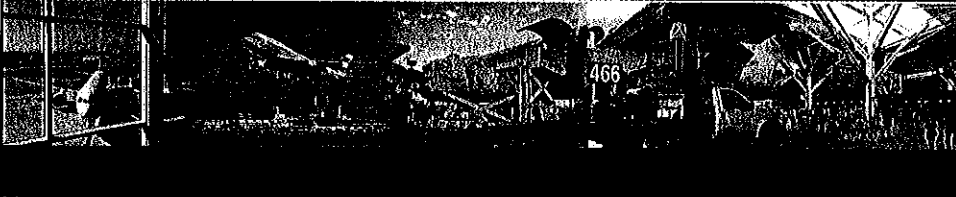
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VAFFC 


Vancouver Airport Fuel Delivery Project

City of Richmond
Public Works and Material Administration Committee

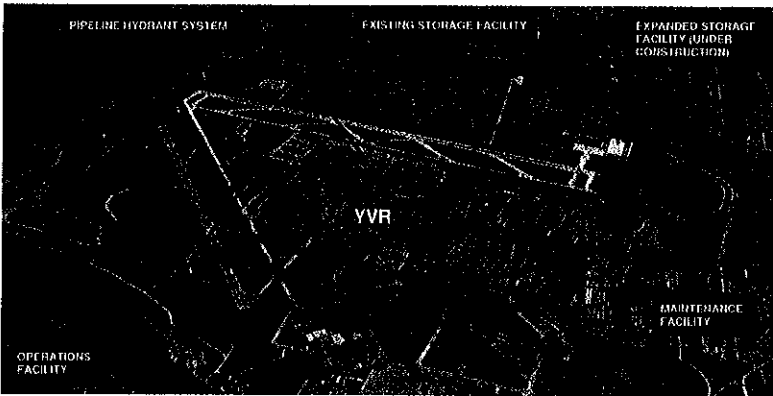
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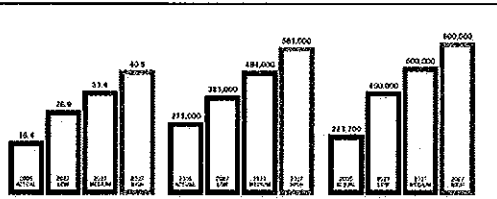


WHY THE SYSTEM IS NEEDED

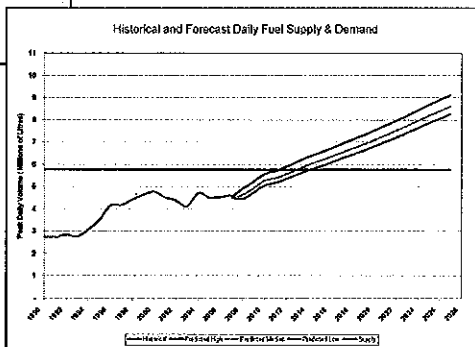


- Existing infrastructure is aging
- More delivery capacity is needed
- Increased tanker truck traffic is unsustainable
- Local refining capacity cannot meet demand
- Access to international markets is limited

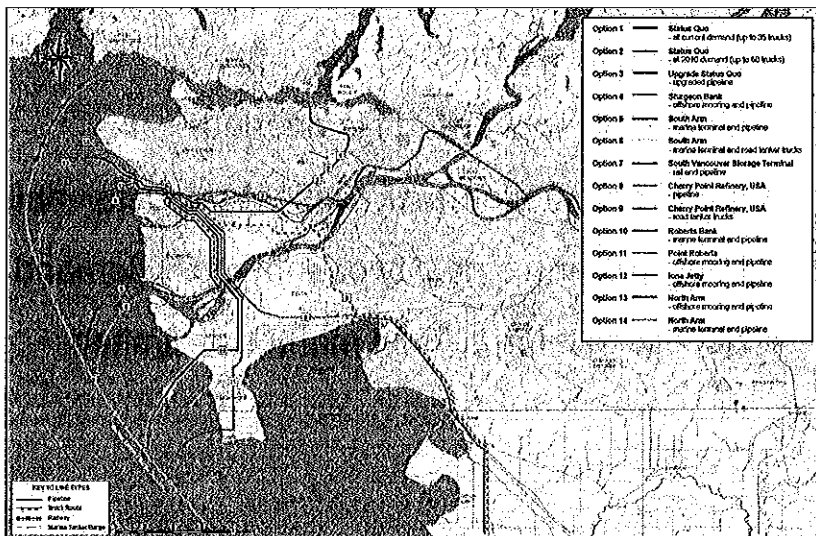
YVR FUEL REQUIREMENTS



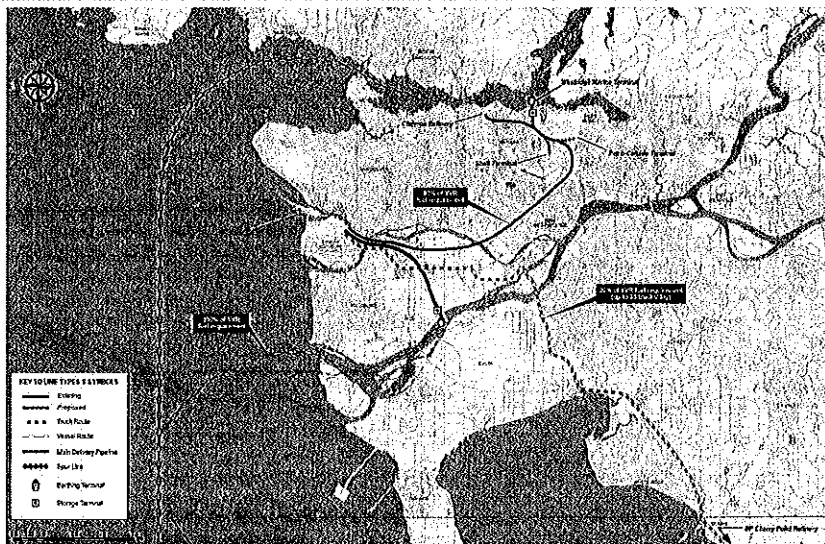
2027 Forecasts—Low, Med, High Growth Scenarios
VALUABLE AIRCRAFT ENGINE



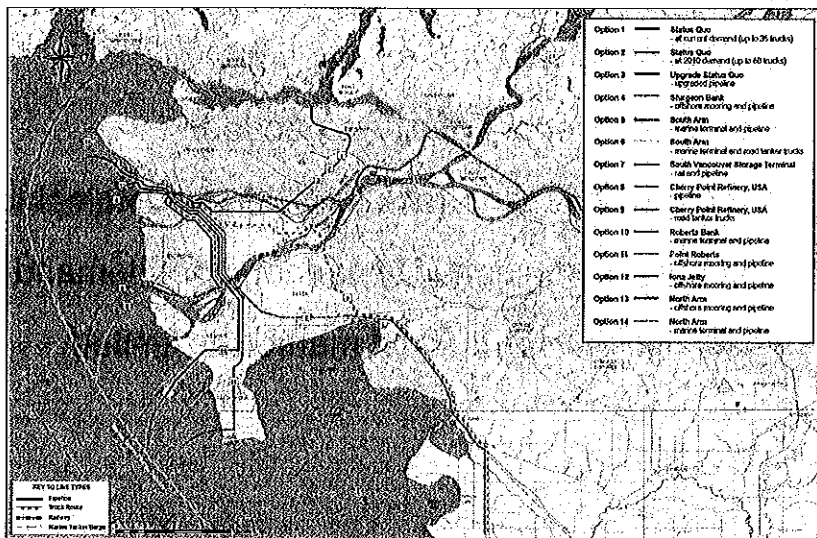
FUEL DELIVERY OPTIONS



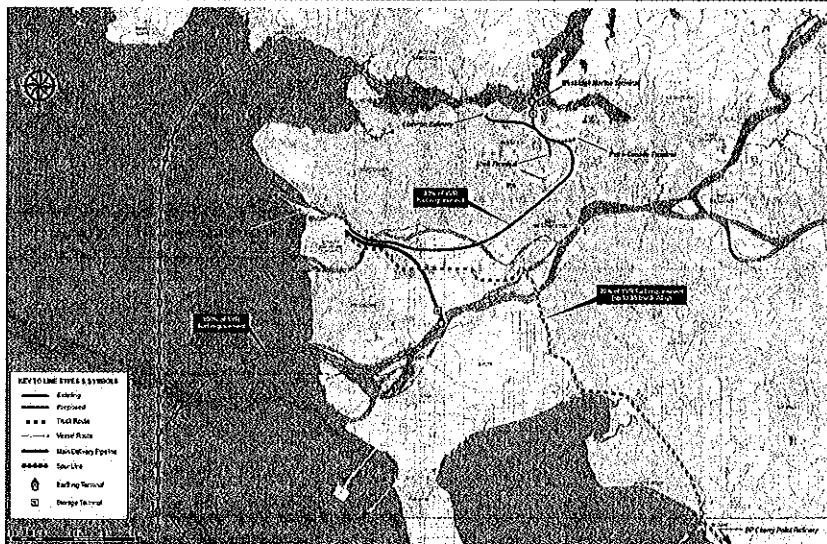
FUEL CAPACITIES



FUEL DELIVERY OPTIONS



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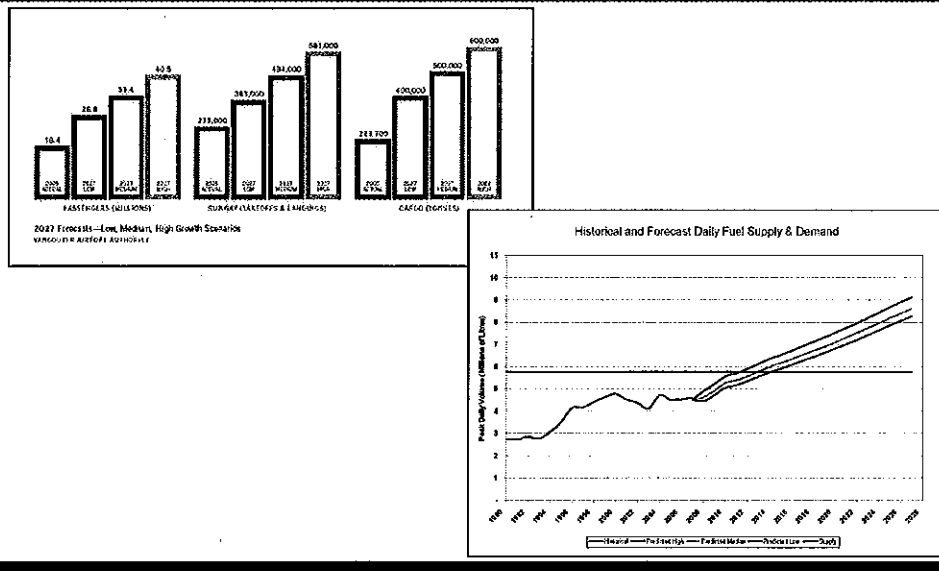


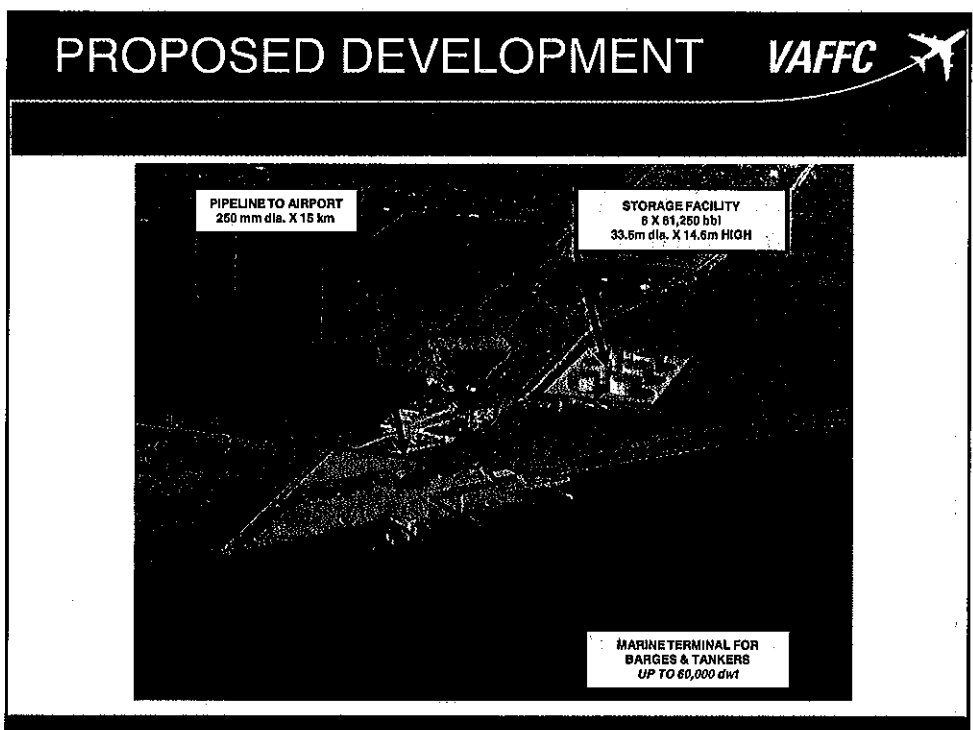
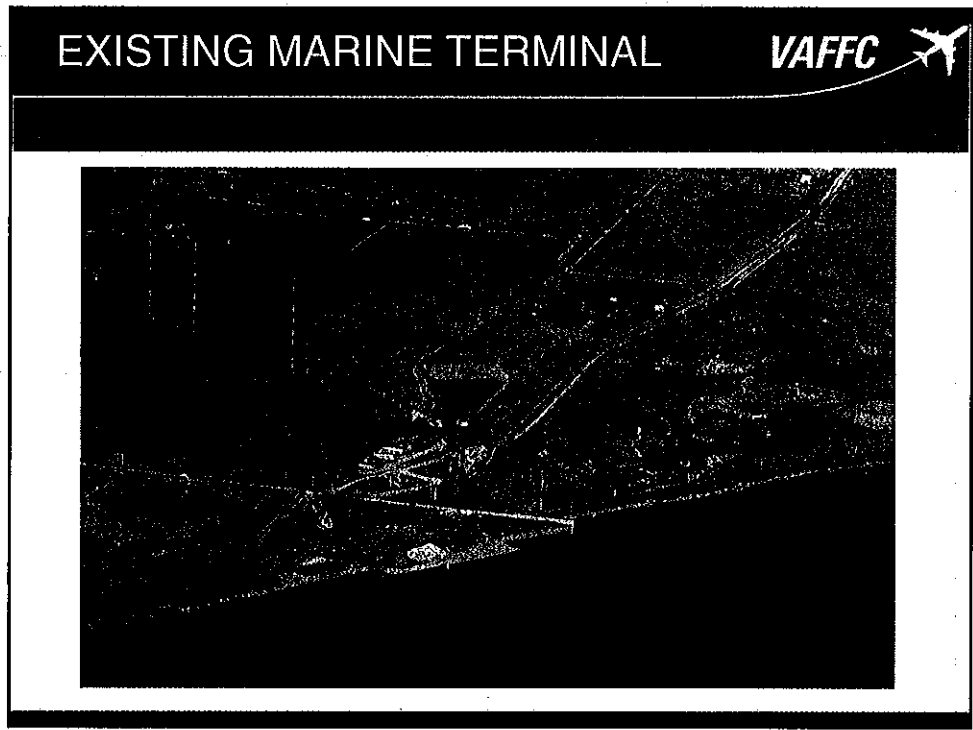
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YVR FUEL REQUIREMENTS





PROJECT STATUS



OVER THE PAST 6 MONTHS

- Community stakeholder consultations
- First Nations engagement
 - Initial discussions with 9 First Nations
- Applied to Opt-in to BC Environmental Assessment Process
- Project accepted for BCEAA review Feb 10, 2009
- Awaiting formation of EA working group(s) to start review process

BCEAA PROCESS



OVER THE NEXT FEW MONTHS

- Formation of Working Group(s)
- BC EAO will contact...
 - City of Richmond
 - Port Metro Vancouver
 - Vancouver Airport Authority
 - Oil & Gas Commission
 - First Nations
 - Provincial & Federal regulatory agencies

...to develop working group(s) and Terms of Reference for the project's environmental assessment

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VAFFC 

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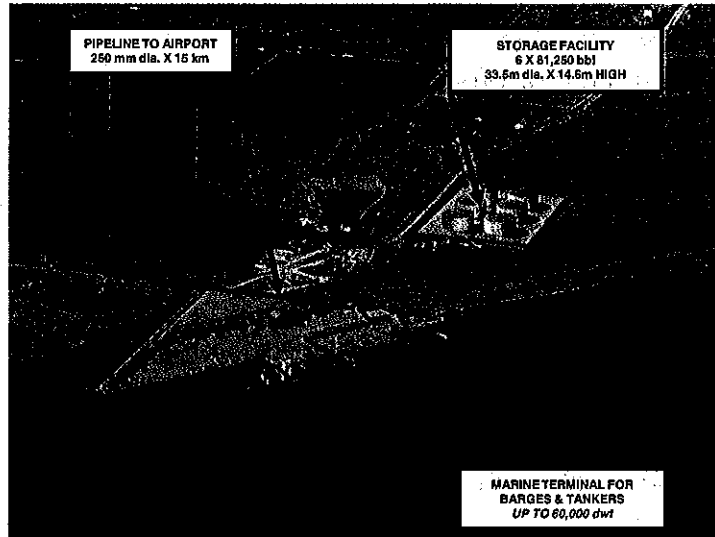
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EXISTING MARINE TERMINAL



PROPOSED DEVELOPMENT



PROJECT TIMELINE



2001- 2004	OPTION ANALYSIS & SCREENING ASSESSMENT
2005	YVR MASTER PLAN SUBMISSION
2006	DETAILED OPTION ANALYSIS AND PROPERTY SEARCH
2007	PROPERTY PURCHASE CONCEPT DESIGN & EA PROCESS REVIEW
2008	DISCUSSIONS WITH REGULATORY AGENCIES BACKGROUND DOCUMENT & PDR DEVELOPMENT INITIATE FIRST NATIONS CONSULTATION
2009	BCEAA OPT-IN INFORMATION SESSIONS CONTINUED FIRST NATIONS CONSULTATIONS ENVIRONMENTAL STUDIES PUBLIC CONSULTATIONS UNDER EAO PROCESS APPROVAL APPLICATIONS BCEAA APPLICATION REVIEW & RECOMMENDATIONS DETAILED DESIGN
2011-12	EA CERTIFICATE AND PERMITS PROPOSED CONSTRUCTION

VANCOUVER AIRPORT FUEL DELIVERY PROJECT



VAFFC strives for:

- *A sustainable fuel system*
- *A system that supports regional growth*
- *A cooperative partnership with Richmond*
- *Feedback and advice for success*

Questions?

Vancouver Airport Fuel Delivery Project

PUBLIC INFORMATION SESSIONS

Vancouver Airport Fuel Facilities Corporation (VAFFC) invites the public to learn about the proposed new aviation fuel delivery system for Vancouver International Airport (YVR).

The proposed project consists of a marine terminal and fuel receiving facility on the south arm of the Fraser River, and an underground fuel pipeline connecting the receiving facility and YVR. The 15-km pipeline is expected to travel under existing transportation corridors in Richmond, with several alignment options under consideration.

As the first stage of consultation, VAFFC is holding information sessions to explain the proposed project to the public, First Nations and other stakeholders prior to submitting an application to the BC Environmental Assessment Office for an Environmental Assessment Certificate.

INFORMATION SESSIONS:

Date	Time	Location
Monday, February 23	3:00-7:00 pm	Holiday Inn International Vancouver Airport 10720 Cambie Road, Richmond, BC
Thursday, February 26	3:00-7:00 pm	Aberdeen Centre 4151 Hazelbridge Way, Richmond, BC
Tuesday, March 3	9:30 am-6:00 pm	Richmond Centre 6551 No.3 Road, Richmond, BC
Saturday, March 7	12:00-4:00 pm	South Arm Community Centre 8880 Williams Road, Richmond, BC

For further information about the information sessions:
Phone: 604-638-7463
Email: info@vancouverairportfuel.ca



WWW.VANCOUVERAIRPORTFUEL.CA