



**Metro Vancouver –
Lions Gate Secondary
Wastewater Treatment Plant**

Development Permit Application Public Information Meeting

September 18, 2014
6:30 – 9:00 p.m.
Grouse Inn
1633 Capilano Road
North Vancouver, BC

Submitted to:

Doug Allan, Community Planner
Planning Department
District of North Vancouver
355 West Queens Road
North Vancouver, BC V7N 4N5

Submitted by:

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1.0 BACKGROUND

Metro Vancouver (MV) has submitted a Development Permit application to the District of North Vancouver (DNV) to build a secondary wastewater treatment plant on a vacant site bounded by West 1st Street, McKeen Avenue, Pemberton Avenue and Phillip Avenue. The section of Pemberton Avenue adjacent to the proposed plant (between West 1st Street and McKeen Avenue) will be developed under a Licence Agreement for public open space and plant visitor parking.

In DNV's Official Community Plan (OCP), the subject site is designated as 'Light Industrial Commercial' and is identified as a location for a wastewater treatment plant. Metro Vancouver requires a Development Permit issued by DNV Council as the site is designated as a Development Permit Area for the regulation of the Form and Character of Industrial Development and for Energy and Water Conservation and Greenhouse Gas Emission Reduction. The site is zoned Comprehensive Development Zone 55, which permits a range of industrial uses.

The plant is an elongated 4-storey structure anchored by wastewater processing equipment and facilities at the west end, with operations and maintenance activities located at the east end of the site. The facility will include 20 secured parking spaces for employees with 10 spaces for visitors located in the Pemberton Avenue road allowance. Height and parking variances will be required.

2.0 PUBLIC MEETING

On September 18, 2014, Metro Vancouver hosted a Public Information Meeting to present the wastewater treatment plant project to the community and to seek feedback from community members, specifically with respect to the exterior design of the building and landscaping. Marni Robinson, Director, Context Research Ltd. acted as the facilitator for the meeting.

In accordance with DNV requirements, notification of the public information meeting included: hand delivery of an information package to residents, businesses and property owners within 100 metres and beyond of the site (from Marine Drive south to the waterfront, and from Capilano to MacKay Avenue) two weeks prior to the event; emailing the information package to Norgate Park Community Association representatives, the Industrial Waterfront Users Group, the Lions Gate Secondary Wastewater Treatment Plant Public Advisory Committee, Community Resource Forum and community members on Metro Vancouver's opt-in email notification list two weeks prior to the event; advertising the meeting in the North Shore News on September 12 and 14, the week prior to the event; and, a vertical sign on the property two weeks prior to the event.

Approximately 40 people attended the meeting, which was held at the Grouse Inn from 6:30 pm to 9:00 pm. Participants were invited to browse display panels about the project from 6:30 to 7:00pm, with a formal presentation from the project team beginning at 7:00 pm.

Following introductions to the Metro Vancouver project team and a review of the agenda, Fred Nenninger, Manager, Policy Planning and Analysis, Metro Vancouver, provided a presentation during which he highlighted the regulatory drivers behind the project, the location of the new facility, the key objectives of the project and the on-going community engagement activities.

Mr. Nenninger introduced Jeff Cutler, Landscape Architect, Space2Place and Scott Wolf, Architect, The Miller Hull Partnership. Mr. Cutler and Mr. Wolf continued the presentation, speaking to the integrative design process undertaken for the project. The team highlighted the guiding themes for the design process, neighbourhood context, design features of proposed public amenities, and anticipated benefits to the surrounding community of the site layout and design. The team also spoke to illustrated renderings of the facility design, landscape and streetscape plans, traffic flow and site circulation, as well as future neighbourhood context including the built facility. The proposed zoning variances of the Development Permit Application were also explained.

Following the presentation, participants were invited to ask questions and offer comments to the project team.

ISSUES, COMMENTS, QUESTIONS

While participants were informed the purpose of the meeting was to seek feedback on aesthetic considerations of the project including the exterior design of the building and landscaping, the majority of the issues, comments and questions were related to other potential community impacts such as odour, noise, traffic, construction and project funding. A number of questions were also raised about the railway crossing at the foot of Pemberton and the Philip Avenue Overpass. While unrelated to the wastewater treatment plant plans, the project team attempted to provide information as it relates to the site and plans in question.

While participants had questions and some expressed concerns over specific potential impacts of the project as noted above, there was no expressed opposition to the plant overall.

Specific questions/comments on design considerations were:

- Interest in understanding the finished state of the silo top (finished or unfinished, flat or conical?)
- The current indicated design treatment of the silos appears to extend the height unnecessarily
- The building is significantly higher than the height allowed by current zoning regulations
- Interest in understanding if the digesters/tanks could be lower profile

There were no comments or questions on the proposed landscaping design for the plant.

Issues, comments and questions along with responses from the Metro Vancouver project team are provided in an appendix (3.0 Appendix).

WRAP UP AND NEXT STEPS

Following the question and answer session, participants were thanked for their input and advised of the next steps in the process as well additional opportunities for input. Participants were also reminded to complete their comment sheets by September 29, 2014 and submit them to Doug Allan at DNV.

The meeting adjourned at 9:00 p.m.

STAFF AND OBSERVERS

Metro Vancouver: Alanna Clark (MV), Jeff Cutler (Space2Place), Echo Lin (MV), Fred Nenninger (MV), Andrea Winkler (MV), Scott Wolf (Miller Hull), Matthew Woodruff (Matthew Woodruff Architecture)

District of North Vancouver: Doug Allan (DNV)

Process Facilitator: Marni Robinson (Context Research)

Recording Secretary: Linda Tylla (Raincoast Ventures)

3.0 APPENDIX

The following table summarizes Metro Vancouver’s (MV) responses to questions and comments raised or noted by participants throughout the public meeting, organized by topic:

Issue, Comment, Question	MV Response
Exterior Building Design	
<p>Will the silo top be finished or unfinished? Will it have a flat or conical top?</p>	<p>The tops of the silos will feature finished construction. The intent of the design is to incorporate elements from the security fence to artistically extend the tower to accentuate the height and create an iconic feature. This concept is for further development.</p>
<p>Could the silos be lower without the pole extensions?</p>	<p>The poles are unnecessary to the solids treatment process.</p>
<p>Do the tanks need to be so high? Could they not be bigger and lower? Investigating other plants might provide examples of lower profile designs.</p>	<p>The treatment process requires height. Because there is limited space on the site, the components are stacked. There is a flood plain level that all equipment is required to be above. The team has taken possible sea level rise into account.</p>
Technical Design and Operations	
<p>Did you consider utilization of the roof to generate solar power for plant?</p>	<p>Yes, and that option could be considered for future accommodation. Currently the cost of a unit of energy provide by UV panel is the least attractive option from a financial perspective. Rising costs of energy could make the option more attractive in the future.</p>
<p>Why was this location chosen?</p>	<p>This is a replacement treatment plant for the North Shore. The location was limited by available space on the North Shore near the current outfall.</p>
<p>Were other areas considered to locate the plant?</p>	<p>Only along this area of foreshore.</p>

Issue, Comment, Question	MV Response
What is the lifetime of this plant? Can it handle the future potential of North and West Vancouver?	The design can accommodate the expected capacity to 2050. It has been designed with features such as deeper tanks so that processes can be switched out if needed. We do not expect to expand or reconstruct the facility in this century.
Will you run hot water conversion boilers within the plant or make gas available for piping to boiler systems offsite for district energy?	The energy aspects of the site will include the production of green biogas that will be used in its entirety to generate half of the electricity and most of the heat required. Low-grade heat from the effluent moved through heat pumps can provide enough heat for the potential needs for any nearby district energy projects.
How many people work at the current plant and how many will be employed at the new plant?	Currently there are about 15 employees. Maintenance staff provide some additional employment on a roving basis. The new plant will employ 20 to 25 staff.
Odour	
Does the odour control system use an activated carbon process?	The odour control is a two-stage process using a bio-filter, followed by polishing with activated carbon filters.
The presentation boards identify a reduced risk of odour, but not zero. What happens if reduced risk results in an unacceptable level of odour for local homeowners?	The odour control system is ongoing and we expect 100% performance. Other similar plants in BC and Washington State have virtually no instances of odour complaints or nuisance odours.
Will trucks that transfer solid waste from the facility cause odours?	Trucks are loaded inside the building while doors are closed and only open once the trucks are loaded.
Noise	
Has noise control for the odour-control venting fans been considered?	All fans and equipment are inside rooms with acoustic buffering. The intent is that you cannot smell or hear the plant.

Issue, Comment, Question	MV Response
Do trucks access the facility from the back and then exit on 1st Street? (i.e., do trucks need to back up thereby engaging warning beepers)	The traffic pattern is a one-way street and trucks will not be required to back up.
Will construction involve piling?	The indicative design is based on pile foundations necessary for earthquake codes. MV will be considering piling in terms of the proposals received from proponents. All alternatives that meet requirements including any that involve less piling will be considered.
Alternate methods of piling exist today. Crews at the new recreation centre are boring piles.	Comment noted.
Trucks / Traffic	
Where will the Class A biofuels wastewater be trucked to?	Biosolids have gone to land rehabilitation projects for gravel pits, mines in the Interior, highway green spaces, etc.
Are all solids trucked out of the facility and where do they go?	From the plant directly to a project. Some are local and some are hundreds of kilometres away.
Will there be trucks delivering waste into the plant?	There will be no liquid waste trucked into this facility.
Adding additional pedestrians to the area may impact safety at 1st Street and Pemberton due to speeding.	Comment noted.
Railway Crossing at Foot of Pemberton	
Will there be a bridge to replace the at-grade crossing at the foot of Pemberton?	No. The Philip Avenue Overpass, when completed, will provide a crossing. The Pemberton crossing will still exist, but considered for emergency access only. The treatment of the crossing at Pemberton still needs to be finalized with the municipality at the design stage.
Will the Philip Avenue crossing be at-grade?	No, it is elevated over the railway.

Issue, Comment, Question	MV Response
Traffic is significant down 1st Street to cross the rail line at Pemberton.	The team is not involved in the Philip Avenue Overpass project.
Who is paying for the overpass?	It is funded as part of the Gateway Program, however we are not aware of the composition of the funding sources.
I believe that there was some contribution to the overpass by local businesses but I do not know the details.	Comment noted.
How will traffic access the proposed route to the Philip Avenue Overpass?	Traffic patterns for the overpass were established as a part of the Philip Avenue Overpass project, a separate project from this.
The District of North Vancouver has a section on its website for information on the Philip Avenue Overpass.	

Construction and Timeline

What is construction timeframe?	The design and construction period extends from 2016 to 2020. The design period will take place from 2016 to 2017 and construction activities to follow for about three years.
The neighbourhood should be provided with information as the construction date approaches. Can you restrict construction hours to the daytime?	The advisory committee is being restructured to ensure that there is dialogue with the community to mitigate construction impacts. The project team is working with representatives from Norgate and discussing the upcoming construction including hours.

Funding / Cost to Taxpayers

How much will the plant cost?	There is a \$700 million project budget, with \$450 million for on-site works, \$60 million for conveyance work, \$20 million to deconstruct the old plant, with the remainder being inflation escalation and contingency of \$100 million.
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Issue, Comment, Question	MV Response
Where will the funding come from?	The MV Board has anticipated its 1/3 share and is seeking cost sharing with the Provincial and Federal Governments. MV is applying to the Building Canada Plan which has a billion dollars available for projects in BC. MV is working through the process to access funding from the provincial and federal Governments.
How is funding split between North Shore municipalities and MV? Is there any effluent going to the plant from First Nations communities and will they be involved in funding the project?	30% of the municipal portion is shared by the North Shore, with 70% of the municipal portion shared by all municipalities in MV. Effluent will come from all communities on the North Shore. Funding from First Nations will be through servicing agreements.
Other uses for the property would normally contribute taxes. Is there compensation in lieu of taxes to be provided to the District?	MV does not exchange funds through any facility because all funds ultimately come from citizens. There is no compensation for any treatment plant or other facilities for taxes.
Other municipalities benefit while the District pays for the loss of the taxable land.	Comment noted.
The City of North Vancouver has a hospital used by all of the geography of the North Shore. No taxes are paid to the City.	Comment noted.

Issue, Comment, Question	MV Response
<p>What does MV anticipate the cost per person or household will be?</p>	<p>Generally, for the cost of household wastewater treatment, one-half is for service from MV and one-half is for local municipal service. The average total cost per household is about \$400 (\$200 for MV service and \$200 for municipal service) or about \$90 per person.</p> <p>Looking forward to 2030, MV must factor in the new North Shore and Iona treatment plants and other municipal infrastructure. Projected costs increases will depend on the level of provincial and federal grant funding received. If no funding is received, the cost per person is expected to increase from \$90 to upwards of \$200 in 2030 dollars (adjusted for inflation).</p>
<p>What is the response timeline for the senior government grant applications and what will happen if there is no provincial or federal funding?</p>	<p>We are hoping for a positive response within the next quarter.</p>
Engagement and Communication	
<p>Will tonight's presentation be available online?</p>	<p>The presentation and meeting summary will be posted on the MV website and emailed to those who attended and provided an email address.</p>
<p>Will we be notified by email regarding the date the application will go to Council for consideration?</p>	<p>If you are on the email list or provide an email address this evening you will be notified. You may also join the list from the MV website.</p>