Dear Kathy Preston, Esteemed Government & Public Officials and Responsible Individuals serving our community,

I wish to draw your urgent attention to my request that you do not approve the Air Quality Permit application submitted to Metro Vancouver by Semiahmoo RNG GP Corp. (GVA1202) on the following grounds:

- 1) The ranges and types of pollutions and toxins that may be emitted by the proposed facility are neither clearly understood or known, nor clearly projected by Semiahmoo RNG GP Corporation.
- 2) Semiahmoo RNG GP Corporation has not provided any statistically significant scientific evidence regarding the real-world ranges and types of pollutions and toxins emitted from other facilities of this type and size operating in similar geographies and environments and using similar feedstocks.
- 3) Semiahmoo RNG GP Corporation has not provided significant scientific evidence via relevant scientific studies that provide the range and types of pollutions and toxins emitted from other facilities of this type and size operating in similar geographies and environments and using similar feedstocks.
- 4) Given the differentiation in potential ranges and types of pollutions and toxins that may be emitted by the proposed facility, and the lack of provided statistically significant scientific evidence via either real-world examples or scientific studies, Metro Vancouver is unable to fulfill its obligations to the Public to minimize the emissions of pollutions and toxins, thereby risking its mandate to improve air quality, and avoid adverse health impacts and environmental degradation.
- 5) Approving the application may cause undisputable and irreparable harm to both the environment and human health.

Metro Vancouver has serious obligations under the "Provincial Environmental Management Act, S.B.C 2003, c.53" and the "Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008" to ensure that the environment and the health and safety of persons are protected from adverse impacts. The documents relating to the British Columbia Laws and the Greater Vancouver Regional District Laws and Regulations, along with the publicly available documents provided by Metro Vancouver and by Semiahmoo RNG GP Corp. in support of their requested Air Quality Permit that have been referenced in this communication are listed below:

https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/03053 00

https://metrovancouver.org/services/air-quality-climate-action/Documents/air-quality-permitting-process-legal-framework.pdf

https://metrovancouver.org/boards/Bylaws/MVRD Bylaw 1082 Consolidated.pdf

https://metrovancouver.org/services/air-quality-climate-action/Documents/semiahmoo-rng-aq-permit-application-redacted.pdf

https://metrovancouver.org/services/environmental-regulation-enforcement/air-quality-regulatory-

program/PermitApplicationDocuments/2023-08-29%20-%20FINAL%20-

 $\frac{\%20 Air\%20 Quality\%20 Environmental\%20 Protection\%20 Notice\%20-\%20 Semiahmoo\%20 RNG\%20 GP\%20 Corp\%20-\%201202.pdf$ 

 $\underline{\text{https://metrovancouver.org/services/air-quality-climate-action/Documents/air-permit-application-guide.pdf}}$ 

https://metrovancouver.org/services/environmental-regulation-enforcement/air-quality-regulatory-

program/PermitApplicationDocuments/frequently-asked-questions-aq-regulatory-processes.pdf

As you are aware, in late February of 2024, in response to a Freedom of Information Request, Metro Vancouver provided The Clean Air Alliance of Canada with access to 839 pages of historical documents regarding the proposed Semiahmoo RNG GP Corporation RNG Facility in South Surrey, including:

- multiple versions of the Semiahmoo RNG Air Quality Permit application, with differing levels of emissions
- multiple versions of the Environmental Protection Notice, with differing levels of emissions
- multiple versions of a Metro Vancouver Dispersion Modelling plan

- multiple versions of the Tetra Tech Semiahmoo Renewable Natural Gas Facility Air Quality Dispersion Modelling, including a red-lined copy showing edits and revisions as directed by Metro Vancouver and "Andion
- comment tracking tables between Metro Vancouver and "Andion"
- comments from both the Fraser Health Authority and First Nations Health Authority

Please note that these 839 pages of documents revealed information that indicates this proposed facility could represent an even more significant risk to the health of individuals and communities, and may result in further degradation of the environment. Please review the below, which includes some of the most concerning elements of the 839 pages of documents, and please provide answers to the following questions:

1) Within these 839 pages of documents, it is noted that the first application filed for this project was in the name of "Andion North America Ltd.", with an authorization request date of June 1 of 2021.

Given that the original application with Metro Vancouver was filed in January of 2021, why did it take 2 ½ years of back-and-forth communications between "Andion" and Metro Vancouver prior to the application being ready for public knowledge? Also, the fact that this earlier application was in the name of "Andion North America Ltd." once again calls into question the current relationship between Semiahmoo RNG GP Corp. and "Andion". Can you confirm whether "Andion" will continue to be the company providing the technical know-how, proprietary systems and processes, development expertise, and operational guidance to the Semiahmoo RNG GP Corp.? This is especially confusing and concerning given "Andion's" recent "exit" from the North American market.

2) There are examples throughout the multiple applications where the information does not match what has been publicly promoted. For example, on page 29 of the 839-page document (page reference numbers are as per the numbering at the bottom right-hand corner of each page), another version of the application indicates that "waste deliveries are received up to 16 hours per day". This is contrary to "Andion's" reassurances to the public both in the "Public Information on the Semiahmoo RNG Facility" and on the November 9<sup>th</sup>, 2023, ZOOM call that there would only be 20 trucks per day entering the site, and that they would only be at night.

Please confirm if trucks will only be entering and exiting the facility at night? Or will the facility have trucks entering and exiting during the day and for up to 16 hours per day? How can the public have any confidence and trust in either Metro Vancouver or Semiahmoo RNG GP Corp when the above information is different from what has been presented publicly?

3) A further example where the information does not match what has been publicly promoted can also be found on page 29 of the 839-page document (page reference numbers are as per the numbering at the bottom right-hand corner of each page). This version of the application indicates that "it is likely that the doors will be open for only 2-4 hours per day, however it is difficult to track this and maximum hours equate to the hours waste reception is open." This is contrary to "Andion's" inferences in the "Public Information on the Semiahmoo RNG Facility" that odours will be minimized due to the fact that "door bays are open only during the tipping process and immediately closed afterwards".

Given that is appears the Facility will be open and accepting waste for up to 16 hours per day, can you please confirm how long the door bays will actually be open and releasing odours into the atmosphere, as the above statement appears to indicate that this could be for up to 16 hours per day? How can the public have any confidence and trust in either Metro Vancouver or Semiahmoo RNG GP Corp when the above information is different from what has been presented publicly?

4) The Environmental Protection Notice that was published in September of 2023 claimed that the proposed facility would emit approximately 40 metric tonnes of pollution and toxins annually. This Environmental

Protection Notice is based on 125,000 metric tonnes of feedstock being processed annually, as per the 114-page Air Permit Application documents released to the public.

## REFERENCE:

https://metrovancouver.org/services/environmental-regulation-enforcement/air-quality-regulatory-program/PermitApplicationDocuments/2023-08-29%20-%20FINAL%20-%20Air%20Quality%20Environmental%20Protection%20Notice%20-%20Semiahmoo%20RNG%20GP%20Corp%20-%201202.pdf

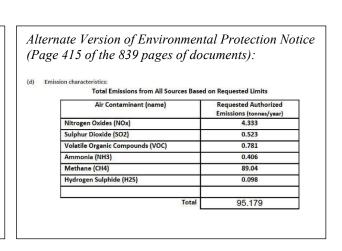
However, there are multiple versions of this same Environmental Protection Notice within the 839 pages of documents. For example, on page 415 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), an earlier version of the Environmental Protection Notice shows approximately 95 metric tonnes of pollution and toxins emitted annually, including:

- an increase of 155% in Nitrogen Oxide emissions annually over the September 2023 published version (4.33 metric tonnes annually vs. the published figure of 2.79 metric tonnes annually)
- an increase of almost 250% in Methane emissions annually over the September 2023 published version (89.04 metric tonnes annually vs. the published figure of 35.8 metric tonnes annually)

The version of the Environmental Protection Notice showing 95 metric tonnes of pollution and toxins emitted annually is based on 125,000 metric tonnes of feedstock being processed annually, which is the same amount reflected in the 114-page Air Permit Application documents released to the public.

## **REFERENCES:**

Votice:		
Total Emissions from All Sources Based on Contaminant	Requested Limits and or Estimates*  Emissions (tonnes/year)*	
Nitrogen Oxides (NO <sub>x</sub> )	2.79	
Sulphur Dioxide (SO <sub>2</sub> )	0.523	
Volatile Organic Compounds (VOC)	0.78	
Ammonia (NH₃)	0.410	
Methane (CH <sub>4</sub> )	35.80	
Hydrogen Sulphide (H₂S)	0.108	
Total *Detailed methods for calculating emissions	40.41	



As another example, on page 127 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), yet another earlier version of the Environmental Protection Notice shows approximately 159 metric tonnes of pollution and toxins emitted annually, including:

- an increase of 1577% in Volatile Organic Compound emissions annually over the September 2023 published version (12.3 metric tonnes annually vs. the published figure of .78 metric tonnes annually)
- an increase of 829% in Ammonia emissions annually over the September 2023 published version (3.4 metric tonnes annually vs. the published figure of .41 metric tonnes annually)
- an increase of 395% in Methane emissions annually over the September 2023 published version (141.4 metric tonnes annually vs. the published figure of 35.8 metric tonnes annually)

• an increase of 1167% in Hydrogen Sulphide emissions annually over the September 2023 published version (1.26 metric tonnes annually vs. the published figure of .108 metric tonnes annually)

The version of the Environmental Protection Notice showing almost 159 metric tonnes of pollution and toxins emitted annually is based on 125,000 metric tonnes of feedstock being processed annually, which is the same amount reflected in the 114-page Air Permit Application documents released to the public.

## **REFERENCES:**

Notice:		
Total Emissions from All Sources Based on Requested Limits and or Estimates*		
Contaminant	Emissions (tonnes/year)*	
Nitrogen Oxides (NO <sub>x</sub> )	2.79	
Sulphur Dioxide (SO <sub>2</sub> )	0.523	
Volatile Organic Compounds (VOC)	0.78	
Ammonia (NH <sub>3</sub> )	0.410	
Methane (CH <sub>4</sub> )	35.80	
Hydrogen Sulphide (H₂S)	0.108	
Total	40.41	

Page 127 of the 839 pages of documents):  Total Emissions from All Sources Based on Requested Limits		
Air Contaminant (name)	Requested Authorized Emissions (tonnes/year)	
Nitrogen Oxides (NOx)	0.43	
Sulphur Dioxide (SO2)	0.087	
Volatile Organic Compounds (VOC)	12.3	
Ammonia (NH3)	3.4	
Methane (CH4)	141.4	
Hydrogen Sulphide (H2S)	1.26	

Since the public first became aware of this proposed project in the late summer of 2023, "Andion" has been presented to the public as an "expert" in this type of RNG facility. The public has been told that "Andion" have developed and operated over 50 similar operations in Europe, that their approach and technology were "proven", that "extreme due diligence" had been conducted regarding this project, that they were "reliable" and "efficient", and that they would be meeting "appropriate guidelines and environmental standards".

If all the above is true, why did "Andion" submit so many different applications with so many different levels of pollutions and toxins? Why did "Andion" not know the level of pollution and toxins that these types of facilities emit, especially considering that they have developed and operated over 50 of them? How did "Andion" go from 160 metric tonnes of pollution and toxins down to a mere 40 metric tonnes of pollution and toxins, especially when the application showing the 160 metric tonnes of pollution and toxins reflects that the facility will be processing 125,000 metric tonnes of feedstock annually, which is the same level of feedstock reflected in the final application that has now been made public and upon which the 40 metric tonnes of pollution and toxins was based? Why does Metro Vancouver itself not know the level of pollution and toxins that these types of facilities emit? Does it concern Metro Vancouver that "Andion" does not appear to know what level of pollution and toxins that this type of facility might emit? How can Metro Vancouver rely on the "qualifications" and "expertise" of the Applicant when they appear to lack a clear understanding of the pollutions and toxins that the proposed facility may emit, and appear unable to provide an accurate projection of the pollutions and toxins that the proposed facility may emit?

5) On page 205 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), the Metro Vancouver Dispersion Modelling Plan asks for any abnormal emission scenarios. "Andion" answers that "the emissions and flow rates presented in the application are for an operational facility. As the facility is started up, gas leaving the digester is not yet of quality and does not contain enough methane to flare. During this one- to two-month start-up period, the digester gas will be vented. This scenario will be examined as a special study for potential odour impacts over that period."

The public has never been told that the digester gas will be completely vented for up to two months and that this will be used to conduct a "special study" for odour impacts.

During this up to two-month period that will serve as a "special study", what are the levels of pollutions and toxins that this facility will emit? Has "Andion" disclosed what the levels of pollutions and toxins will be? How does Metro Vancouver know that this direct release of digester gas will be safe? What are the impacts of this direct release of digester gas on the air quality, the environment, and human health? Has the Fraser Health Authority and the First Nations Health Authority been made aware that there will be a two-month period during which the digester gas will be directly released into the air? If so, did they have any concerns regarding the potential negative health impacts of this? Has the British Columbia Ministry of Environment and Climate Change Strategy been made aware that there will be a two-month period during which the digester gas will be directly released into the air? If so, did the Minister have any concerns regarding the potential negative environmental and air quality impacts of this?

6) On page 465 and 474, as examples, of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), it is clear that the Tetra Tech Air Dispersions Modelling report changed as "Andion's" estimates of pollutions and toxic emissions changed. Examples of comments include "Revise with Andion's correct ou let concentrations" and "This will need to be revised with the revised runs with corrected biofilter emissions rates but also make this clearer, using some of the descriptive language from MV response #16". It is extremely concerning that an "expert" with apparently significant experience in developing and operating similar facilities in Europe took multiple attempts to create a pollution emission level that fit well under Metro Vancouver's requirements.

Can you please provide an explanation as to why the levels of pollutions and toxins submitted by "Andion"/Semiahmoo RNG GP Corporation changed so many times through this process? Is this process that occurred with "Andion" considered normal operating procedure for Metro Vancouver? Does this level of support and coaching occur with every Air Quality Permit application that is submitted to Metro Vancouver? If not, then why was it provided to "Andion"? Why does it appear that Metro Vancouver supported and coached "Andion" until such at time that they eventually submitted levels of pollutions and toxic emissions that met the criteria of Metro Vancouver and the Province of British Columbia?

7) On page 578 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), Tetra Tech advises that it "does not accept any responsibility for the accuracy of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH". Further, Tetra Tech advises that it "has relied upon the Client with respect to both the full disclosure and accuracy of any such information". Given that there were multiple versions of the air pollution and toxic emissions estimates, it is not surprising that Tetra Tech will not stand behind its Air Quality Dispersion Modelling, since the modelling changes depending on the inputs.

Has Tetra Tech authorized the use of its Air Quality Dispersion Modelling report to other parties including Metro Vancouver and Semiahmoo RNG GP Corporation? Has Metro Vancouver considered what the Air Quality Dispersion Modelling would reveal if the pollution and toxic emissions estimates were set at 160 metric tonnes annually instead of 40 metric tonnes annually? This is especially concerning given the unacceptable high levels of Nitrogen Oxides, Volatile Organic Compounds, Hydrogen Sulphides, Ammonia and Methane revealed in the earlier versions of the Environmental Protection Notice.

8) On page 742 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), the Fraser Health Authority state concerns about Hydrogen Sulphide and odour exceedances, though their report was based on Tetra Tech's final Air Quality Dispersion Modelling, which

reflected pollution levels of 40 metric tonnes annually. They also recommend the development of a communications plan to respond to odour complaints as well as a review of the Odour Management Plan, which "Andion"/Semiahmoo RNG GP Corporation has never submitted to Metro Vancouver.

How would the Fraser Health Authority's comments have changed if they had reviewed an Air Quality Dispersion Modelling with pollution and toxic emissions at 160 metric tonnes annually instead of 40 metric tonnes annually? This is especially concerning given the unacceptable high levels of Nitrogen Oxides, Volatile Organic Compounds, Hydrogen Sulphides, Ammonia and Methane revealed in the earlier versions of the Environmental Protection Notice. Given that the Fraser Health Authority did note exceedances of Hydrogen Sulphide in reviewing the Air Quality Dispersion Modelling based on pollution and toxic emissions levels of 40 metric tonnes annually, was the Fraser Health Authority made aware that there had been previous estimates and projections that reflected almost 12 times this level of Hydrogen Sulphide?

- 9) On page 743-744 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), the First Nations Health Authority state concerns that Nitrogen Dioxide levels will not meet upcoming 2025 Canadian Ambient Air Quality Standards, though their report was based on Tetra Tech's final Air Quality Dispersion Modelling, which reflected pollution levels of 40 metric tonnes annually.
  - How would the First Nation's Health Authority's comments have changed if they had reviewed an Air Quality Dispersion Modelling with pollution and toxic emissions at 160 metric tonnes annually instead of 40 metric tonnes annually? This is especially concerning given the unacceptable high levels of Nitrogen Oxides, Volatile Organic Compounds, Hydrogen Sulphides, Ammonia and Methane revealed in the earlier versions of the Environmental Protection Notice. Given that the First Nations Health Authority did note concerns with Nitrogen Dioxide levels (in reference to the 2025 criteria) when reviewing the Air Quality Dispersion Modelling based on pollution and toxic emissions levels of 40 metric tonnes annually, was the First Nations Health Authority made aware that there had been previous estimates and projections that reflected 1.5 times this level of Nitrogen Oxides?
- 10) On page 828-829 of the 839 pages of documents (page reference numbers are as per the document numbering at bottom right hand of each page), there are additional charts shown that were not included in Metro Vancouver's published "Frequently Asked Questions on Metro Vancouver's Air Quality Regulatory Processes" relating to the pollution emission estimates in South Surrey and White Rock. In the published information, Metro Vancouver did not provide any meaningful comparisons between the proposed Semiahmoo RNG Facility and the Surrey Biofuel Facility. However, the Surrey Biofuel Facility processes up to 115,000 metric tonnes annually of feedstock, while the Semiahmoo RNG GP Corp. Air Quality Permit application documents reflect that 125,000 metric tonnes annually of feedstock would be processed. Yet the chart revealed in these pages show an odour discharge level from the Semiahmoo RNG Facility of 5,455 OU's compared to an odour discharge level from the Surrey Biofuel Facility of 97,222 OU's.

Please advise why the OU projections for the proposed Semiahmoo RNG Facility are so much lower than the OU's for the Surrey Biofuel Facility, especially when the amount of feedstock processed at each facility is very similar?

I specifically request that you acknowledge my status as a "Concerned Person" for the purposes of this Air Quality Permit application, and that I receive answers to the above questions based on health concerns for myself, my family, my community and the environment.

I also wish to be kept informed of any changes in the status of this permit application.

Kind Regards, YourName, YourPostalCode, YourEmail