

## **ANDION TOWN HALL - BIOFUEL QUESTIONS FROM CLEAN AIR ALLIANCE**

### **QUESTION 1**

How can you promise us, the people of this community, that your plant will not negatively impact our health and environment? Please provide scientific evidence for each toxin listed in the Tetra Tech report that the levels at which these toxins will be generated are completely safe to all life within the ecosystem including human, and that the levels deposited into land and water are also completely safe.

\*See Reference 1 below: Residential Proximity to Biorefinery Sources of Air Pollution and Respiratory Diseases.

### **QUESTION 2**

In consideration of the potential negative impact on quality of life, sensitive ecosystems, and surrounding wildlife – what scientific reports, environmental research and/or environmental leaders were referenced and contacted for consultation? Please share the information and supporting resources referenced in connection to your proposal.

### **QUESTION 3**

We understand the Tetra Tech report is based on 3 years of off-site monitoring. Given the unique ecosystem of our coastal community, will Andion conduct a one year 'on-site' air quality dispersion model to assess the true impact of the biofuel emissions on our health and environment?

\*See References 3 below.

### **QUESTION 4**

How can a site that is in a lowland/wetland area, part of a watershed and prone to flooding even be considered for a biogas production facility?

What engineering steps will be taken to ensure the Little Campbell River downhill 300m from the site will be protected?

\*See Reference 4 below.

### **QUESTION 5**

Semiahmoo Band's own Bylaws\* prohibit noxious uses of the land. How does this legislation allow for the building of a biogas facility that even Andion has admitted will create some level of odour and pollution, and according to the Canadian Biogas Association, creates a multitude of risks including gas leaks and poisoning, fire, and explosion?

\*See Reference 5 below.

## **QUESTION 6**

Given the elevation of site is approx. 15m from sea level, what would be the effect of a significant Tsunami wave which has been projected for area in excess of 90 feet - Has this scenario been modelled into the significant risk scenario ?

Please. note that SFN conducts a weekly Tsunami siren testing for its residents and so this is a significant risk that they have even acknowledged

## **QUESTION 7**

Has Andion and/or SFN applied for the FN-CIDA (First Nations Commercial and Industrial Development Act) agreement? If not, do they plan to and when?

## **QUESTION 8**

Both Andion and SFN express the importance of community on their websites and in corporate material.  
\*See reference 8 below.

The Canadian Impact Assessment Registry (IAA) from the Canadian Environmental Assessment Agency requires “meaningful public participation and transparency” – why was our community not properly informed of this proposal and why have you not hosted an in-person Town Hall to date?

(Zoom excludes certain segments of the population and is a poor platform for meaningful interaction.)

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## **Q1 REFERENCES**

In a study by Lee et al. (Lee E.K., Romeiko X.X., Zhang W., Feingold B.J., Khwaja H.A., Zhang X., Lin S. Residential Proximity to Biorefinery Sources of Air Pollution and Respiratory Diseases in New York State. Environ. Sci. Technol. 2021;55:10035–10045. doi: 10.1021/acs.est.1c00698), it was revealed that living in proximity of biorefineries was associated with an increased risk of suffering from respiratory diseases and other health symptoms.

Even more concerning is that this study showed that there was a negative health impact particularly in the area of respiration for communities within 10 km of the sites. Research studies have been done that indicate a notable correlation between living near biofuel production facilities (for example within 10km radius) and increased rates of respiratory impacts such as increased respiratory symptoms and ER visits. All the chemicals the plant will produce are linked to serious health risks including exacerbation of respiratory illnesses such as asthma and emphysema as well as other serious effects. The admission by Tetra Tech that emissions will be high enough that we will have to close our windows, implies they will be higher than the report suggests. If I can smell the ocean on the breeze from my house and the ocean is farther than the plant will be, these toxins and odors will definitely be carried into my home.

We place special emphasis on the health and safety of our children, seniors, wildlife and especially those already living with illness and disease.

### **Q3 REFERENCES**

Andion's "Semiahmoo Renewable Natural Gas Facility Air Quality Dispersion Modelling Rev.1" is simply that – a model based on current conditions and projections. However, there are many factors that can impact any air quality dispersion modelling, including changing weather patterns, facility operations, and the type of feedstock. Note that food waste has higher nitrogen levels and therefore more odour generating potential. Also, residential sourced organics generally have longer storage and shipping times which increases the odour generation. The Canadian Biogas Association advises in the "Canadian Anaerobic Digestion Guideline: Food and Organic Waste Processing Facilities", that "caution should be exercised when interpreting the results of odour dispersion modeling since they provide no guarantee that receptors outside of zone of impact will not experience or report an adverse odour impact."

Odors references by Mozatte, Italy plant in recent news reports: <https://nobiofuel.wixsite.com/learnmore/post/more-olfactory-harassment-in-rescaldina-impossible-to-open-the-windows>

### **Q4 REFERENCES**

The Canadian Biogas Association represents Canada's biogas industry technical experts. In 2019, the association published the "Canadian Anaerobic Digestion Guideline: Food and Organic Waste Processing Facilities", which creates a clear outline of best practices for biogas projects and was written so that future anerobic digester, biogas and renewable natural gas (RNG) projects can learn from mistakes of the past.

The information in this Guideline relating to site selection is at odds with the selection of the Semiahmoo First Nations land as a suitable location for this proposed facility. In Section 3.8 "Other Environmental Considerations", the report states that "facilities should not be sited in areas known to experience flooding due to the potential for contamination from feedstock and other contaminants if flooding occurs. Provincial and municipal authorities often prohibit the development of waste management facilities in areas at risk of flooding."

The Semiahmoo First Nations land has an elevation difference of 15 m from the site's highest point to sea level. The mouth of the river and the western portion are relatively at sea level, within 1-3 m elevation at high tide. Little Campbell River watershed drains approximately 25 square miles including agricultural lands to the east and south including the US. Drainage in the area is considered poor and the land has flooded periodically over the years, including areas of Beach Road.

### **\*Q5 REFERENCES:**

**In Part II of the Enacted First Nations Legislation, Semiahmoo Band Zoning By-law, Sections 16 and 32.**

Noxious Uses 16.

No use is permitted which is offensive or dangerous by reason of the emission of odour, smoke, dust, noise, gas, fumes, vibration or refuse matter. This also applies to any use which, from its nature or the materials used therein, is declared to be a noxious trade, business or manufacturer under the [Public Health Act. (British Columbia) and regulations thereunder or the Environmental Protection Act. (British Columbia) and regulations thereunder).

Industrial (I) Zone Permitted Uses 32. Land may be used and buildings and structures may be erected, altered or used in an Industrial (I) Zone only for: a) A high-tech industry or manufacturing establishment, except one involving the danger of fire or explosion or likely to create a nuisance by reason of fumes, dust, odour, or excessive noise;

An article published in Biogas World on December 18th of 2020 titled “Risks and Safety Measures for Anaerobic Digestion: How Can you Make your Plant Safer” was written for companies who operate biogas facilities. This article highlights many of the risk factors in these types of facilities, including fire and explosion, confined space hazards, risk of asphyxiation, risk of gas poisoning, risk of high-pressure gas or liquid leaks, risks associated with rotating mechanical equipment, and risks associated with pathogens. The article also provides the details of some of the 800 accidents that occurred at various biogas facilities between 2005 and 2015.

**SOURCE: [HTTPS://WWW.BIOGASWORLD.COM/NEWS/SAFETY-PRECAUTIONS-ANAEROBIC-DIGESTION-SYSTEMS/?FBCLID=IWAR08TIZ3OXY0HYMZTK\\_IT6Y-H3UUQPAMRIUD4NGPU6RVIUURUJ-RHIO9LQ](https://www.biogasworld.com/news/safety-precautions-anaerobic-digestion-systems/?fbclid=IWAR08TIZ3OXY0HYMZTK_IT6Y-H3UUQPAMRIUD4NGPU6RVIUURUJ-RHIO9LQ)**

## **Q8 REFERENCES**

Both Andion and SFN express the importance of community -

Andion Global website states “Every step in the process is community-centric and local relationships are an essential consideration. We work diligently to create strong partnerships with local groups and organizations at an early stage, setting all parties up for success into the future.” However, Andion has never attempted to connect with our community, and the only reason we find ourselves here, at this Zoom meeting because the people of this community have demanded it.

Semiahmoo First Nation website displays a quote from Chief Harley Chappell, “People say that fences make good neighbours. I say we just need a long table.” However, this community has not been invited to join Chief Harley at his table; perhaps his table in Chilliwack is not long enough to meet the people of the community surrounding Semiahmoo.