**Presentation to the Woolwich Township Council**

February 22, 2011

Dan Holt, Ph.D.

Good Evening

I come before you tonight as a concerned resident of Elmira and as a representative of almost 600 concerned residents of Elmira who have so far signed a petition regarding the location of the proposed Bio-En facility. We are concerned about our environment and quality of life. I am hopeful that in the next few minutes I can provide you with information that will help you decide that we as a community should not…and cannot allow the proposed Bio-En project to be located in downtown Elmira.

Bio fuel is a good thing for the environment and economy only when located in the appropriate place…away from residential and retail areas. Such facilities are normally located on farms…close to the source of feeder stock, biomass, to be used in such facilities. That makes sense. To locate a bio fuel plant in Elmira does not.

Michael Purves-Smith and I have previously met with all of you regarding this matter. We have prepared information to help you understand the reasons we, as representatives of many hundreds of Elmira residents, oppose this project location. Some of you indicated that you welcomed our information, but understandably also want to have the benefit of the Township staff reports on this issue. Therefore, I would like to provide you with the highlights of previous reports from the Woolwich Township staff along with some additional materials. In summary, the objections of the staff are the same as those of the residents of Elmira.

**Zoning**

**March 31, 2009 Report E25-2009**

**Quote:**

*The subject property is designated “Industrial” in the Township of Woolwich Official Plan and is located in the “North-east Policy Area”. The policies which apply to the North-east Policy Areas include Section 7.8.14.2 (a) (i) which states in part:*

*“a) Prior to consideration of the development of this area for industrial uses the following studies shall be undertaken to the satisfaction of the Township:*

*i) A Land Use Study examining the compatibility of the proposed development with the existing residential development within the High Street Policy Area, potential buffering options and alternative development options for the lands subject to the application”*

(Has that Land Use Study been accomplished? If so what are the results? If not why not? And when will it be accomplished?)

**Quote:**

*The subject property is zoned “M1 Industrial” by the Township’s Comprehensive Zoning By-law 55-86. Uses permitted by the M1 zone include “any manufacturing, fabricating, assembly, processing, repair, indoor storage or warehousing, distribution or transportations operation”. However, these uses must also be a “dry industry” as defined by the By-law. A dry industry is defined as “any industry that does not use water as part of an industrial process, but the foregoing is not meant to include water used for sanitary needs of the employees” In addition; the M1 zone also prohibits the following uses*

*“a) A use which is or may become obnoxious, offensive, or dangerous by reason of the presence, emission or production in any manner of odour, dust, smoke, noise, fumes, vibration, refuse matter or water-borne wastes.*

*(b) The recycling of animal, oil, or waste products, a rendering plant, abattoir or slaughter house.”*

*Initially, the Planning Section of the Engineering and Planning Services Department believed that the proposed bio-gas power generation facility conformed with the M1 zoning on the subject property. However, this determination had been made based on information provided by the applicant that indicated that the only water required by the facility was required for employee washrooms. When it was subsequently determined that the facility’s processing of organics required approximately 1,200 cubic metres of water per year the applicant was advised that the bio-gas facility no longer met the definition of a dry industry and that a zone change would be required in order for the use to be permitted. …*

(Note: I don’t know what was used to determine that 1200 cubic meters, but I don’t think it included cleaning each truck after it dumped its load)

**Storm water, Firefighting and Heat**

*Township staff notes the following key points in respect to these submitted plans:*

* *The proposed storm water facility is designed to be a fire reservoir for firefighting purposes; however storm water is also proposed to be collected and used as part of the operation. Having two sources rely on the pond for water is a concern. Utilizing a storm water management facility as a fire reservoir is problematic at the best of times and with the storage pond volumes competing with additional water uses, staff does not support the storm water management facility being used as a fire reservoir.*
* *The plans do not show the proposed lines for running the heating to any other surrounding industrial use.* **End Quote**

The plans do not show a proposed line for selling the heat produced by the process because there are no buyers in this location. The application makes reference to the Elmira Pet Food plant as a potential customer for the heat, but after speaking personally with one of the owners of Elmira Pet Food I can tell you that they have no intention of buying the heat from Bio-En.

**Odor**

**Quote**

*With regard to odour, this determination was based on information submitted by the applicant that provided some assurances, but was also based on a willingness to rely on the Ministry of Environment’s Certificate of Approval process to ensure that odour would not be a problem. The Planning Section is now of the view that there is a responsibility for the Township to reach its own conclusions with respect to odour in order to finally determine whether the proposed use satisfies the section of the zoning By-law prohibiting uses that are, or might become, obnoxious, offensive or dangerous because of odour. The requirement for a zone change created by the fact that the use is not a dry industry provides a good opportunity to address the odour issue.*

 *With regard to recycling of waste products, the Planning Section’s determination that the proposed bio-gas facility did not involve the recycling of waste products was initially based on an interpretation of the By-law which suggested that recycling involved the conversion of waste products into an intermediary product which would then be processed again in order to produce a final product. If the processing of waste products results in a final product, then the processing would not be considered recycling. This interpretation had been used in the past to permit uses similar to the proposed bio-gas facility and had, therefore, become something of a precedent. However, in considering the issue again, the Planning Section is now of the view that the previous interpretation of what was meant by recycling within the Zoning By-law was too narrow an interpretation and that the intent of the By-law was to acknowledge that the recycling of waste products often brings special concerns with it that require special scrutiny within the land use planning process. In order to trigger the land use planning process and ensure this special scrutiny, a broader concept of what constitutes recycling of waste products is necessary.*

 *Conclusion*

 *Staff are now of the view that, in order for the proposed bio-gas power generation facility to be permitted at the subject location, a rezoning is required not only to address the dry industry aspect of the Zoning By-law, but also to address the prohibition of uses that are, or may become, obnoxious, offensive or dangerous by reason of odour (etc.) and the prohibition of uses that involve the recycling of waste products.*

**End Quote**

I believe that livestock manure, oils and greases, animal fats (glycerin), and organic solids skimmed from dissolved air flotation (DAF) would fall under the definition of “waste product” which means that the M1 zoning prohibits this activity on this land.

In addition *to* the staff concerns let me mention a few others.

The consulting firm of **WIP Renewable Energies**, located in Munich, is in the business of consulting on the selection of locations for, building of, and operation of bio-fuel facilities. The document from which I will quote has been provided on the CD, prepared by Michael Purves-Smith, and given to all Council members. Quoting from the WIP Renewable Energies document ***Guidelines for Selecting Suitable Sites for Biogas Plants (***4 April 2008, p. 14)

**Location near biomass**

**Quote:**

*The first step is to select suitable regions for biogas production. Suitable regions are defined by the availability of biomass. Due to the low energy content per volume and large quantities it is economically and energetically usually not useful to transport liquid agricultural feedstock further than 5 km, and stackable energy crops not more than 15 km. Thus, a biogas plant should be located in a radius of less than 15 km from the available biomass sources. Also the digestate which is usually used as fertilizer for feedstock production should not be transported further than 15 km due to increasing transport costs.*

*Emissions, particularly* ***smell and noise emissions cannot be avoided****. Thus, the site has to be selected in view to possible conflicts with neighbouring areas.*

**End Quote**

**This location is NOT suitable to “real green energy”**

I believe that Bio-En will be hard pressed to find supplies of biomass within 15 km of this site adequate to keep this facility running.

**Traffic and Emissions**

Going by the application submitted by Bio-En we are told that the company is requesting authority to add 80 diesel trucks per day (we believe that to be 80 in and 80 out adding up to160 trucks/day) to the already overcrowded Arthur and Church streets. Bio-En has stated that the number of trucks will be less, but we can only go by what they have in their application and what would be approved…why would they ask for approval of 80 trucks if they have no intention of utilizing 80 trucks? The noise of the heavy trucks is bad enough, but couple that with the fumes of the diesel engines and the waste products that will be hauled without an air tight cover and you have a one-two knockout punch to the value of property and quality of life in Elmira.

Research on diesel fumes and health has been conducted in most of the developed countries of the world and studies are readily available from Canada, several of the states in the United States, the Netherlands, Sweden, and the United Kingdom to name only a few.

Let me read an excerpt from an abstract from just one such study:

*Diesel and Health in America: The Lingering Threat*

*Howard Frumkin, M.D. Emory University*

**Quote**

*…we (are) beginning to understand the impacts of one of the most toxic sources of emissions today – the diesel engine. Diesels churn out a hazardous mix of gaseous and particle pollutants. What’s more, diesel exhaust is emitted at ground level – where we breathe it – by trucks and buses around us in traffic, at school and transit bus stops, and by heavy construction or agricultural equipment. Diesel exhaust contains numerous dangerous compounds, ranging from respiratory irritants to carcinogens including a host of air toxics, particulate matter, carbon monoxide and nitrogen oxides.*

*Furthermore, research on personal exposures demonstrates that these small particles easily penetrate our indoor environment where they may be trapped for days when ventilation is poor.*

*The U.S. Environmental Protection Agency’s Science Advisory Board (SAB) finds that approximately 21,000 people die prematurely each year due to particulate matter pollution from diesels. Other serious adverse health impacts include tens of thousands of heart attacks, asthma attacks, and other respiratory ailments that can lead to days missed at work and at school. Using more highly time-resolved studies we are increasingly able to understand the inflammation mechanism by which particles can lead to atherosclerosis, heart attacks, strokes and ultimately, untimely deaths. From all we know today, we can confidently say that reducing diesel exhaust in our environment will mean improving public health, and as this report demonstrates, reducing preventable premature deaths.*

**Noise**

In addition to diesel air pollution these trucks are sources of noise while transporting waste materials, idling while in line to dump their load, and being cleaned up after dumping their loads. Adding to the noise pollution is the methane gas flare and two diesel engines running to produce the electricity.

**Odor**

Remember the consulting firm WIP Renewable Energies of Munich states the fact that **odor** Quote:“…**cannot be avoided**.”

When transporting kitchen and food processing wastes from restaurants, grocery stores, food distribution companies and milling facilities, livestock manure, fats, oils and greases, and organic solids skimmed from dissolved air flotation (DAF) tanks to the proposed facility through downtown Elmira and while these trucks are waiting in line to dump their load at the facility on hot summer days there will be an unavoidable fragrance in the air above the greater area of Elmira. Most of us have had the experience of driving behind a garbage truck and trying to hold our breath until we could turn or the truck turned…now imagine that all the time and no escape.

Just imagine the Maple Syrup Festival on a day when the air quality in Elmira is especially pungent…I fear it will not be the sweet smell of a successful Maple Syrup Festival.

Of course, the Green Energy and Green Economy Act 2009 came along and the Council at that time basically dropped involvement giving all approval authority to the Province. It is my belief, and that of hundreds of other Elmira residents, that the Township should not be and is not left out of the process. The Township Council has a right and responsibility to make the wishes of the people of Elmira known to the Ministry of Environment and stand for the people it represents.

One last quote from the staff:

Engineering and Planning Services March 23, 2010 Report E27-2010 P.5

**Quote:**

 *…As was expressed in Report E25-2009, staff has concerns as to the suitability of the proposed site for a biogas power generation facility given the proximity of the residential uses on both Arthur and High Streets. Given these concerns, the Township requests that the Ministry of the Environment review the suitability of the location for such a facility. Such a review should include reference to MOE industrial separation distance guidelines. If mitigation is then necessary, the first form of mitigation that should be considered is* ***avoidance****, being that the facility is located to avoid the impacts.*

**End Quote**

In review, the following are some of the reasons that the residents of Elmira stand united against the proposed location of the Bio-En facility:

* Odor
* Noise
* Violation of Township Zoning By-Laws and disregard for Official Township Plans for residential development
* Inadequate water supply for fires and cleaning and operations
* On-site storage of fertilizer by-products
* Traffic impact as well as transporting of waste/bio-hazardous materials through downtown Elmira
* Air quality (from the process itself and diesel trucks and fumes)
* Quality of life in Elmira now and in the future affecting commercial and residential

 development and property values.

* Methane gas explosions (methane gas is notorious for deadly explosions: Deep Water Horizon explosion in the Gulf comes to mind and they had the most recent safety devices installed. We have been told that all the safety procedures will be instituted and all safety devices will be installed and there will be no problems…and the Titanic did not sink.)

This venue does not afford me the time to go on with specifics regarding our opposition to the proposed location of the Bio-En facility so let me close by saying that we propose that this Council not sit idly by, but rather take action.

We call for a traffic impact study to be completed prior to further consideration being given the Bio-En facility.

We also call for a letter from this elected body be sent to the Ministry of Environment that delineates the concerns shared by the staff and residents. We urge that the Council strongly object to granting approval for the facility in this location.

Thank you.