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FaxMemo

To: Allen Fiksdal,

From: Chris Smith (Resident, Business
Owner, Parent, Concerned Citizen)

Organization: EFSEC Manager

Fax: 360-956-2158

Date: April 19, 2000

Re: Proposed Sumas Energy 2 Generation Facility

Please be advised that I am strongly opposed to a Gas fired Generation Facility being located anywhere in the Fraser Valley, on either side of the International border. Specifically, I am opposed to the Sumas Energy 2 Generation Facility because of the following issues that affect residents on both sides of the border.

The orange/yellow haze that partially obliterates the view of Sumas Mountain is already a common phenomenon in the Fraser Valley air shed. In the winter, there are few periods of air stagnation, insufficient warmth to aid pollutant chemical reactivity, less photochemical activity, and relatively frequent cleansing of the air by precipitation. Yet in this recent winter, there have been several sunny days when the haze has been here. It is hardly surprising that, on the balmy days of summer, when people in the Valley wish to be outside enjoying the weather, we are frequently under air quality advisories, which recommend that sensitive people remain indoors. The Fraser Valley currently has the third worst air quality in Canada.

Several actions are currently being taken, on both sides of the border, to identify the components and causes of the haze that so adversely affects the air in the Valley. However, while some statistics are available, there is much that is unknown about the constitution of this chemical soup. "Acceptable Levels" of various contaminants are set by regulatory authorities in Canada and the US. These are currently under review, and most authorities, including the EPA, anticipate that emission restrictions will become more and more stringent in the near future.

Scientists try to measure the component trace elements in the air we breathe such as mercury, nitrous oxides, sulphurous oxides, benzene, toluene and formaldehyde. These elements are difficult to measure in minute concentrations, but as measuring tools become more and more accurate, there remains one clear indicator of the effects of these chemicals. This is the number of people who suffer from respiratory problems. Most Abbotsford residents know of at least one individual who has moved out of the Valley because of the respiratory problems they experience more and more frequently here. Unfortunately, much of this clear evidence is anecdotal.

Meanwhile, in the summary of the draft EIS that we have seen, the proponent states; "Use of Best Available Control Technology (BACT) [will be used] to control levels of pollutant emissions. Under BACT, the 'most stringent control technology' must be applied to the control of each pollutant, unless it can be demonstrated to EPA that less stringent measures will provide required control." We interpret this to mean that the S2GF Project operator is prepared to attempt to meet EPA standards. These standards are questionable when considered in the big picture of the Fraser Valley. Further, the EPA does not consider smaller particulate matter (PM 2.5). In Canada, this has been recognized as a major

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cause of respiratory problems and as an ingredient in our orange/brown haze. The Sumas Energy 2 Generation Facility will be emitting PM 2.5 particulates. We do not know how much.

1

The contention that emissions from the Sumas Energy 2 Generation Facility are a fraction of those coming from other sources (such as the automobile) does not alter the fact that the Sumas Energy 2 Generation Facility would still be a significant source of emissions. Studies may show that the components coming from the proposed plant represent a tiny percentage of the overall total of that contaminant in the air. However, the Environmental Impact Study represents the quantity of elements emitted from the plant as a percentage of the air in the total air shed region. It fails to identify what percentage the plant emissions would be at specific points, such as Sumas Mountain, Chilliwack or Hope. This is where the plant emissions will be headed under the prevailing wind. If there is no wind, and there is a temperature inversion, the toxic emissions from the plant will remain indefinitely in the immediate area of the plant, which includes most of Abbotsford. What will the toxic concentrations be under these conditions?

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The Environmental Impact Statement does not specify how much pollution will be emitted into the airshed. We gather that the plant will emit particulate matter to the equivalent of 350,000 vehicles per year, and of carbon dioxide – the equivalent to 450,000 vehicles per year. These numbers can be interpreted in several ways. One thing, however, is absolutely certain. The Fraser Valley has its work cut out already to reduce emissions of all types into the air we breathe. We certainly cannot afford to put the equivalent of almost half a million vehicles into the Valley.

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The Environmental Impact Statement appears to be flawed in terms of accuracy and omissions. For example, the statement claims that research into local wildlife was carried out over the period of a year. Reality is that research was carried out on one day in October and one day in September – a year apart. The wildlife studied revealed only 8 bird species. September and October are neither nesting season or over-winter season for birds. In the period of 45 minutes at the proposed plant site in March, 24 species of birds were identified, including seven of the eight species identified in the study.

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Much of the data in the draft EIS is questionable and is often incomplete. The comments in the following quotation from the draft EIS illustrate our concerns.

"3.1.2.4 State and Local Emission Limits

"As a part of the prevention of significant deterioration (PSD) process, EFSEC is reviewing the applicant's evaluation of alternative emission control technologies. The "best available control technology" (BACT) analysis identifies pollutant-specific alternatives for emission control, and the costs and benefits of each alternative technology. The determination of which control technology best protects ambient air quality is made on a case-by-case basis and considers the economic, energy, and environmental costs associated with the control technology.

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Note that in two sentences, 'cost' and 'economic' are the primary terms used. We recognize the importance of controlling costs and of working to increase profit. However, we do not believe that economic considerations should be the prime motivators when others are affected in so many ways. We are not comfortable with leaving the determination of "best available control technology" in the hands of the operators. The plant is located in a small, rural community. How much influence would such a small population have on the decision makers who are answering primarily to their shareholders?

"Chapter 173-460 WAC requires that BACT also be used to control emissions of toxic air pollutants. In general, the same technologies or operational parameters that reduce criteria pollutants (for example, the pollutants listed in Table 3.1-1) also reduce toxic air pollutants. For example, the use of natural gas instead of fuel oil reduces emissions of most criteria and toxic air pollutants. The use of combustion controls to optimize combustion also reduces both criteria pollutants (Table 3.1-1) and toxic air pollutants, such as lead, some heavy metals, and some organics.

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Is the above statement "use of natural gas instead of fuel oil" designed to suggest that the use of gas in the proposed facility is relatively benign? Certainly, emissions from natural gas are infinitely preferable to fuel oil. But NO gas generator is infinitely preferable to the one proposed.

"The determination of what constitutes BACT at the time of the final permit review will define the emission limits for the S2GF project. EFSEC has issued PDS permits for projects similar to the S2GF project that indicate two NOx technologies constitute BACT: "advanced" dry low-NOx (ADLN) combustor technology, and Selective Catalytic Reduction (SCR). SCR is a post-combustion NOx control device that uses a catalyst and ammonia to reduce NOx. SCR is capable of reducing NOx emissions to 4.5 ppm or less, but has the negative aspect of releasing unreacted ammonia as an additional pollutant. Given this tradeoff, recent BACT determinations have indicated that either 9 ppm without SCR or 4.5 ppm with SCR is considered BACT."

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This paragraph would appear to suggest that final emission levels will not be determined until the final permit review – perhaps a little late in the process? It also admits that tradeoffs will have to be made between NOx and unreacted ammonia.

In summary, our interpretation is that there are still many unknowns about air emissions from the proposed plant, and that the proponent will make final determinations as to what to do largely based on economic considerations.

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A number of projects to improve air quality in the Valley are currently under way:

- A Community Energy Plan is being developed in Abbotsford that will significantly reduce pollution resulting from energy use.
- A Business Environmental Pledge will assist all types of businesses to find new ways to reduce their impact on the environment.
- British Columbia has had an Air Care program for several years designed to reduce pollution from vehicles.

We are now faced with the proposition that a Power Plant be located in the middle of this fragile air shed area. Please consider carefully the long-term effects on this sensitive area of such a plant. Consider that many of the emission figures that the proponents are suggesting are based on data for a new plant. How will those emission figures compare with the actual emissions once the plant has been operational for a few years?

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The suggestion in the submission that power might be fed into the grid via a 250kV line running through Huntington and the middle of the Downtown Abbotsford core is totally unacceptable. Businesses in the Downtown area have recently launched a major upgrade to the area. Bench Art, road improvement and renovation of many storefronts have recently begun, and the momentum is building in the revitalization of this historic area. To propose putting high tension power lines through this area is totally unacceptable.

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We know that we can expect continued growth throughout the Fraser Valley Region. We have a growing tourism industry here, which is tied in to tourism throughout the Cascadia corridor. When the view of Mount Baker is obliterated by a pollution induced chemical haze, tourism suffers throughout the area. When the young, the old and the sensitive suffer with asthmatic attacks and other respiratory problems because of poor air quality, medical costs go up throughout the area.

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As respectful neighbors, we do not comment on, or address issues that are solely matters for residents of Washington State to deal with. The air quality issues outlined above affect men, women and children on both sides of the 49th Parallel. We therefore request that you consider our concerns, and that you deny permission to build the Sumas Energy 2 Generation Facility.

Sincerely,