

1 Ans: Yes, I have reviewed chapter 3.1 of the Sumas Energy 2 Draft EIS.

2 Q: Did the information give you cause for concern?

3 Ans: Yes, I noted that the anticipated emissions from the new facility include several of the
4 criteria air pollutants regulated by U.S. EPA, such as, PM, SO₂ and NO₂.

5 Q: Why does this fact concern you?

6 Ans: I have personally been involved in research studies that have investigated the potential
7 impact which such pollutants might have on certain public health concerns, namely asthma. I
8 directed one study myself and collaborated on three others. I have attached copies of the results
9 of each as exhibits hereto. In the study I directed, see Exhibit JQK-3 attached hereto, I
10 concluded that an association exists between lung function in elementary school children with
11 asthma and fine particle air pollution levels for the previous day. In my collaborative work, see
12 Exhibits: JQK- 4,5 & 6 attached hereto, we found associations with aggravation of asthma and
13 air pollution levels in Seattle. In sum, my research has lead me to conclude that the fine particle
14 air pollution which is projected to be emitted by the SE2 plant poses a health hazard to the
15 public, particularly to those suffering from asthma.

12 Q: Are you familiar with the U.S. EPA recommendations pertaining to such fine particle air
13 pollutants?

14 Ans: Yes

15 Q: In relevant part, what are they?

16 Ans: The US EPA has recommended a 24 hour average concentration of PM_{2.5} of 65 ug/m³
17 and an annual standard of 15 ug/m³.

18 Q: Has this recommendation been adopted as a regulatory standard?

19 Ans: No, it has not.

20 Q: How does the recommendation relate to your research findings?

21 Ans: Although this standard is not yet enforced, one can compare those concentrations with
22 concentrations of PM_{2.5} seen in the studies conducted in Seattle. Associations between asthma
23 aggravation and air pollution were found at levels of PM_{2.5} below the concentrations selected by
24 EPA.

25 Q: Have alternative standards been suggested?

1 Ans: Yes, The Puget Sound Air Pollution Control Agency (now Puget Sound Clean Air
2 Agency) formed an ad hoc committee several years ago to study the air pollution/health effects
3 literature. That committee, of which I was a member, concluded its task prior to the
4 announcement by EPA of their standards. The ad hoc committee choose more protective levels
5 as guidelines for public health. The guidelines recommended a level of 25 ug/m3 for PM2.5 for
6 a 24 hour concentration (as opposed to 65 ug/m3).

7 Q: Based on your education and research, as well as the regulatory recommendations of the
8 U.S. EPA and the Puget Sound Air Pollution Control Agency, and the emissions anticipated to
9 be generated by the posed power plant, does the Sumas 2 Generation Facility proposal raise any
10 public health concern in your mind?

11 Ans: Yes.

12 Q: What is that concern?

13 Ans: Since levels in the range of 44-67 ug/m3 PM10 have been measured at the Abbotsford
14 station (and 2.5 is 50 to 80% of PM10), there is very little margin left for the addition of new
15 sources of PM if we plan to protect public health.

16 END OF TESTIMONY

17 I declare under penalty of perjury that the above testimony is true and correct to the best of
18 my knowledge.

19 Executed at _____, Washington, on this _____ day of June, 2000.

20 By: _____
21 Jane Q. Koenig