

APPENDIX H3

COMMENTS AND RESPONSES - GLEN CARTER

RECEIVED

AUG 30 1989

TOTTEN SIMS HUBICKI ASSOCIATES
WHITBY, ONTARIO

MINISTRY OF THE ENVIRONMENT

HALIBURTON SEWAGE TREATMENT PLANT EXPANSION

CLASS ENVIRONMENTAL ASSESSMENT REPORT

August 15, 1989

Introduction

This "Information Centre " has been arranged to provide the public and any interested agencies or groups with information on the proposed expansion of the Haliburton Sewage Treatment Plant.

Information regarding the study is displayed on the panels. Staff from the project team are available to answer any of your questions. If you have any comments on the Study, or on the presentation at the "Public Information Centre", please record them in the space provided below, together with your name and address.

Please leave this Comment Sheet either with us this evening or mail it by August 25, 1989 to:

Totten Sims Hubicki Associates
1500 Hopkins Street
Whitby, Ontario
L1N 2C3

Attention: Mr. R. B. Baker, P.Eng.

COMMENTS

I was unable to attend this meeting but have talked with four people who did attend and was shocked to hear that your firm stated that weeds are not a problem in Lake Kashiagawigamog. I have lived on this lake for 18 years and I have witnessed a dramatic increase in weed and algae growth. For the past 5 years I have participated in the MOE Self Help program which as I'm sure you know monitors water clarity and chlorophyll a. It may be a coincidence but both of these "yardsticks" indicated a definite decline in water quality since 1975 when the sewage plant was installed in Haliburton. Prior to 1975 secchi disc readings were consistently between 4 and 6 m. and chlorophyll a was below 2 ug/L. By 1981 the secchi disc dropped to the 3 to 4 m range and chlorophyll a had risen ^{to} over 10 ug/L. I am sure that these changes are due to the sewage plant and not to the lake itself.

namely that you couldn't see as far down into the water as you could previously and there was a higher concentration of nutrients in the water to stimulate weeds and algae. By 1984 I became so concerned with the slimy rocks, "gucky" sediment, and the brown film on everything (even the weeds weren't green anymore) that I contacted the MOE and became involved with the testing process. The Self Help report that year declared that "Data collected prior to 1979 indicated that water quality conditions indicate that Kashagawigamog lake was an unenriched lake but that from 1979 to the present water quality conditions indicate that the lake has changed to moderately enriched." To further alarm me, I noticed on a graph in the same report that our lake was rated in 1984 as being at the identical level of "enrichment" (i.e. pollution) as Sturgeon lake in 1982. Obviously too much phosphorus was getting into lake Kashagawigamog. It was only a matter of time before the nutrient-enriched water spawned enough ^{algae and} weeds to seriously deplete the oxygen during their annual decomposition cycle. As a matter of fact, 1985 data indicates that there is no optimum lake trout habitat left in the north basin of Lake Kashagawigamog (i.e. temperatures ^{at} below 10°C and oxygen 6 parts per million minimum.) For this reason MOE has recently declared the north basin a Policy Two waterbody which means no additional phosphorous loading will be allowed and therefore severances and expansions are restricted. This is good news to those of us who are concerned about the lake's long-term health. However it would appear that your firm is intent on pressing ahead with the sewage treatment expansion in spite of the testimony of those who swim in the lake and the Ministry of the Environment's conclusions. Although I realize that sewage effluent is not the only cause of phosphorous loading, doubling the quantity of effluent is certainly not going to help reverse the dangerously high rate of decline in water quality. Even a "marginal increase" in Grass Lake as your report concludes is frankly too risky when the long-term impact of this effluent (especially at low water levels in the shallows near the discharge pipe) is considered. And this doesn't even take into account the inevitable expansion of the resorts etc. which I understand could quadruple the quantity of effluent within a few years. I would submit that the cheapest alternative would be the least desirable one in the long term. Any of the other choices your firm has outlined would be preferable to Alternative C which boils down to "more of the same" when it has not been satisfactorily demonstrated that the undeniable decline in water quality in Grass, Kashagawigamog and Canning lakes will be slowed down by this decision. Glen Carter

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MOE PROJECT #3-0706

H. Reply to Comments by Glen Carter (Exhibit H)

H.1

The report by Totten Sims Hubicki has been quoted incorrectly. The report did not state that "weeds are no problem in Lake Kashagawigamog". The correct statement was that the increased weed growth cannot be related to nutrient discharges from the Haliburton sewage treatment plant. The effluent from the sewage treatment plant has been implicated as the primary cause of water quality deterioration since 1972. However, water quality data indicate otherwise. It is evident, that the northern basin of Kashagawigamog Lake would be impacted most severely from the nutrient discharges from the sewage treatment plant. However, any measurement of trophic level (phosphorus, chlorophyll-a or Secchi disc transparency) would suggest that this basin has shown the least degree of change since 1972. In fact, the effluent from the sewage treatment plant accounts for less than 4% of the total phosphorus load. It can be shown that most of the load (70-80%) originates upstream (Head Lake and Grass Lake) of the sewage discharge point.

H-1

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I Reply to Comments by Dawn Brohman (Exhibit I)

I.1

The chemical removal of phosphorus involves the addition of a chemical reagent that forms an inert precipitate (mineral) with phosphate. This settles out readily and will not reach the lake. The technique of chemical phosphate removal is practiced at numerous locations. The "chemical loading" on Grass Lake would be inconsequential.

I.2

The problems with silting and excessive weed growth are unrelated to the discharge from the sewage treatment plant. We wish to reiterate, that effluent from the sewage treatment plant is not the cause of water quality deterioration. In fact, the function of the plant is to remove pollutants, including nutrients, from the wastewater. Well designed sewage treatment plants have been demonstrated to bring about improvements in water quality at a number of locations.

I.3

The water quality data for 1985 has been chosen, because it was sufficiently extensive and complete for performing the analysis. The 1989 database, of course, was not completed at the time of the study.