

APPENDIX H1

COMMENTS AND RESPONSES - BETTY GUILLIANNO

5a  
201 Elmwood Ave.,  
London, Ont.,  
N6C1K1  
Aug 16/89

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

RECEIVED  
AUG 21 1989  
TOTTEN SIMS HUBICKI ASSOCIATES  
WHITBY, ONTARIO

Dear Mr. Baker,

I attended the Public Information Centre meeting, Aug 15/89 re Haliburton Sewage Treatment Plant Expansion, and heard you and others explain your reasons for recommending that the present S.T.P. be expanded to meet the need of resort owners, and that the effluent continue to be dumped into Wrag River. You assured us that all the M.O.E. criteria would be met (ie phosphates, oxygen levels), that aesthetically there would be no problem, and that economically it would be the most feasible option.

I cannot challenge your statistics based on 1985 readings, as I have nothing more recent (and probably wouldn't understand them if I did!) However, I continue to have nagging questions about:  
A. aesthetics and B. economics.

A. You assured us that the plant itself would not damage the appearance of the environment. However, the appearance and conditions of the water in Grass Lake and the Narrows between it and Kashagawiganog have become so unaesthetically appealing (if not unhealthy) that every excellent report of water quality will be nullified by the increasing sludge at the bottom of the lake that washes up on water front property. The municipality will continue to have to deal with an influx of complaints. Would it not be aesthetically better to have the effluent entering at a point in the system where this "natural" phenomenon of sludge is not already so far advanced?

B. Economics. - The preferred solution which you have recommended is, on paper, cheaper. However, as Grass Lake is a shallow, slow moving lake and filling in more rapidly each year, how long will it be before the effluent from the present S.T.P. will be entering a "dry" bed? Will we not then need a new plant?

1. this becomes increasingly shallow each summer due to draw-down.

You told us that septic tanks play a large part in the deterioration of water quality. Does it not seem likely that those who live on Grass Lake & The Narrows, where quality is the most deteriorated will soon be asking for sewer lines too? Do your projections include that population?

Karen Kae said in her presentation that if there were no "significant objections" the project would proceed. What would be a "significant objection"?

Please think about these questions. Have a look and a swim at the beaches on the big leeching pit.

Sincerely,

Betty Giuliano

cc Stephen Maude M Sc, Ministry of the Environment  
cc. Municipality of Syart et al.

HALIBURTON SEWAGE TREATMENT PLANT EXPANSION  
CLASS ENVIRONMENTAL ASSESSMENT PHASE I AND II REPORTS  
MOE PROJECT #3-0706

C. Reply to Comments by Betty Guilianno dated 16 August 1989

C.1

The first issue raised in Ms. Guilianno's letter questions the buildup of sludge in Grass Lake and the narrows between Grass Lake and Kashagawigamog Lake, the contribution that the existing sewage treatment plant is making to the buildup and whether it would not be better to relocate the outfall to another point in the system.

In response to this question, the first point that should be noted is that the suspended solids in the sewage treatment plant effluent is quite low with average values of 3.7, 6.7 and 4.8 mg/L recorded in 1985, 1986 and 1987 respectively. The historical plant operating data indicates that the effluent quality has consistently been better than the Ministry's criteria of 15 mg/L which applied to this plant when built. With expansion of the plant to include year round effluent filtration, the suspended solids would be lowered further to 3 mg/L or better.

The concentration of suspended solids in natural runoff from the Precambrian Shield is typically of the same order as observed in the sewage treatment plant effluent. The average annual flow in the Drag River opposite the sewage treatment plant is estimated to be over 100 times the effluent flow from the plant. Hence, it can reasonably be stated that the solids load on Grass Lake attributable to the sewage treatment plant represents less than one percent of the solids load carried with the natural stream flow in the Drag River.

C.2

The infilling of lakes is a natural aging process that occurs with time due to erosion of land surfaces and deposition of detritus materials (e.g. tree leaves). While the process occurs slowly, it can be expected that a relatively shallow lake, such as Grass Lake, will eventually infill perhaps within a few thousand years. As previously noted, the solids load from the sewage

treatment plant is a minor sources of solid load on Grass Lake.

### C.3

The largest total phosphorus load on Grass Lake is carried with the inflow from Head Lake (i.e. 830.5 kg/y of the total load of 956 kg/y estimated for 1985). The septic tanks are estimated to contribute perhaps 6% of the total phosphorus load on Grass Lake. The treatment plant expansion proposal provides for connection of the commercial establishments along Highway 121 which accounts for about 60% of the total loading from the septic systems. Connection of the cottages on Grass Lake to the plant would only reduce the phosphorus load by about 2.4%. It is doubtful that the construction of a sewer collection system to connect the cottages to the treatment plant could be justified on a cost basis to achieve such a small reduction in the phosphorus load.