

APPENDIX E1

COMMENTS FROM THE MINISTRY OF THE ENVIRONMENT
AND THE MINISTRY OF NATURAL RESOURCES



Ministry of Natural Resources
Ministère des Richesses naturelles

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TOTTEN SIMS HUBICKI ASSOCIATES
WHITBY, ONTARIO

Minden, Ontario
KOM 2KO

(705) 286-1521

September 12, 1989

Your File #52-7897

Totten, Sims, Hubicki
1500 Hopkins Street
Whitby, Ontario
LIN 2C3

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

Dear Sir:

RE: Municipality of Dysart et al
Haliburton Sewage Treatment Plant Expansion
MOE Project #3-0706

Staff from this office have reviewed the above noted Phases 1 and 2 Report and offer the following comments.

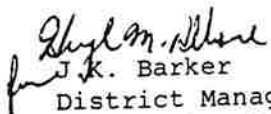
Kashagawigamog lake is a Policy II lake and as such no increase in phosphorous loading is acceptable.

Our other major concern would be in regard to any reduction in oxygen concentration and the effect this would have on Lake Trout habitat. It appears from advice received from Ministry of the Environment that if the project is completed as outlined, oxygen depletion will not be a problem.

We feel a thorough review of the document should be made by the Ministry of the Environment for water quality implications.

Thank you for the opportunity to review this document.

Yours truly,


J.K. Barker
District Manager
Minden District

DWJ/sev

c.c. Fish and Wildlife Supervisor



Ontario

Ministry
of the
Environment

Ministère
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l'Environnement

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PROJECT ENGINEERING BRANCH

TOTTEN SIMS HUBICKI ASSOCIATES

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5th Floor

September 5, 1989

Totten Sims Hubicki Assoc. Ltd.
Consulting Engineers
1500 Hopkins Street
Whitby, Ontario
L1N 2C3

Attention: Mr. R.B. Baker, P.Eng.
Vice-President
Environmental Engineering Group

Dear Sirs:

RE: TOWNSHIP OF DYSART ET AL
HALIBURTON SEWAGE TREATMENT PLANT EXPANSION
DIRECT GRANT SEWAGE WORKS PROJECT NO. 3-0706
YOUR FILE NO. 52-7897

I refer to your transmittal dated August 10, 1989, forwarding two copies of the Class Environmental Assessment Phases I and II report with respect to the above-noted project.

I have forwarded one copy of the report to Mr. D.F. Carr of the Ministry's Approvals Branch for his review and comment.

I have reviewed the subject report and on the whole, I find it satisfactory with only a few comments which I feel may improve the report somewhat. The comments are as follows:

1. Page 5-7, Para. 4, Line 5

There appears to be a typographical error. The word "ion" should read "in".

2. Page 9-5, Para. 1

Reference is made to Figure 9.2. This Figure is not included in the report..

3. Pages 9-17, 9-18, 9-19, 9-20, 9-21 and 9-22.

These pages include the estimated capital cost for the various alternatives of the proposed works. For information please expand the description of each alternative in the heading of each Table. Further,

please clarify whether the engineering cost and an allowance for contingency have been included in the estimated capital cost for each alternative.

4. Page 9-23

Provide a separate "Table" to summarize the capital cost of the five alternatives. This will assist in comparing the cost of the five alternatives at a glance.

5. Page 9-27, Section 9.4

The consultant has estimated an additional cost of \$150,000 to achieving a phosphorous concentration of 0.2 mg/L in the treated effluent as required by the Ministry. This cost should be included as a separate item in the table of estimated capital cost for each alternative.

6. Page 9-42, Section 9.6 - Selection of Preferred Alternatives

I believe it would be better if the order of the words "technical performance, costs and environmental impacts" is interchanged. It should read that "the selection of the preferred alternative is based on three concerns: environmental impacts, technical performance and costs (capital and operating)".

7. Page 9-43, Para. 1, Line 6

Correct a typographical error by including the word "been" between the words "has" and "included".

8. Page 9-44, Section 9.6, Para. 3, Line 1

As explained under item 6 above, please change the order of the words "technical performance, estimated costs and environmental impacts" to read "environmental impacts, technical performance and estimated costs". As you are aware under the class environmental assessment planning process the environmental impact is more critical and should come first than the matter of cost.

9. Page 11-1, Para. 5, Line 1

As before, please change the order of the words "technical, economical and environmental considerations" to read "environmental, technical and economical considerations".

10. Page 11-1, Para. 6, Line 7

The estimated cost of alternative 1 is stated as \$4,650,100. Surely this is incorrect. This amount includes an allowance of capitalized 20-year operating cost. The actual estimate of capital cost for alternative 1 is \$2,310.00 according to Table 9.17 on page 9-43. This fact should be made clear in this paragraph.

11. Page 11-2, Para. 1

The report indicates that the design criteria for phosphorous concentration is 0.3 mg/L for the expansion of the Haliburton sewage treatment plant. This is incorrect. The Ministry has categorically stated that the effluent phosphorous concentration shall not exceed 0.2 mg/L. This fact should be clearly stated in the ESR report. Any design based on a higher effluent phosphorous concentration will not be acceptable to the Ministry.

These are the review comments from the Project Engineering Branch with respect to Phases I and II of the Report. You have also forwarded copies of the subject Report to Mrs. J. Beaver at our Central Region and Mr. T. O'Neill at Ministry's District Office in Gravenhurst. By copy of this letter, I am requesting that they provide their review comments to you directly so that the Report can be finalized.

Yours very truly,

A handwritten signature in black ink, appearing to read 'R.S. Dhillon', with a horizontal line drawn underneath the name.

R.S. Dhillon, P.Eng.
Senior Project Engineer
SW/WC/C Regions

RSD/hw



September 15, 1989

Totten Sims Hubicki Associates Ltd
Consulting Engineers
1500 Hopkin Street
Whitby, Ontario
L1N 2C3

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

Dear Sir:

RE: Township of Dysart et al
Haliburton Sewage Treatment Plant Expansion
MOE Project No. 3-0706
Our File: SW 24-0636

We have reviewed the Class Environmental Assessment Phase 1 and 2 Report for the above mentioned project, which accompanied your letter of August 10, 1989, and the comments which have been provided by the Project Engineering Branch (Dhillon to Baker, 1989 09 05).

The Region's position with regard to phosphorus loadings to North Kashagawigamog Lake and effluent requirements for any new or expanded discharges upstream of, or directly to this lake warrants re-iteration.

Based on the modelling by Senes, the existing phosphorus loading from the sewage treatment facility, plus those resorts on the north shore of North Kashagawigamog which would be serviced by an expanded facility is 160 kg/yr.

Initially, a total phosphorus load of 160 kg/yr would not be allocated to an expanded facility, but rather a phosphorus loading requirement of 54 kg/yr would be stipulated. This would be increased incrementally, to a maximum of 160 kg/yr as service connections are completed with the identified resorts.

The primary regulatory control on an expanded facility would be the total phosphorus loading. As the average daily flows increase, the effluent phosphorus concentration would need to decrease, in order to remain in compliance with the loading requirement.

Assuming service connections were completed to all of the identified resorts, and thus the entire phosphorus load of 160 kg/yr was available for utilization by the plant; at an average daily flow of 1,933 m³, an effluent phosphorus concentration of 0.23 mg/L would be required to maintain this loading. This translates to an effluent requirement of 0.2 mg/L.

Should you have any questions regarding the above, please contact the undersigned.



Chief, Environmental Quality Assessment Unit

cc. R. Dhillon
T. O'Neill
B. Neary

RS\c:\work\haliburt.ea