

WITNESS STATEMENT OF

**T. A. CONSTANTINE P. Eng.
CHIEF ENVIRONMENTAL ENGINEER
M. M. DILLON LIMITED**

**IN THE MATTER OF AN APPLICATION BY
THE REGIONAL MUNICIPALITY OF HALTON
FOR A
CERTIFICATE OF APPROVAL
FOR THE CONTINUED USE OF
THE BURLINGTON LANDFILL SITE**

IN THE MATTER OF an Application by
the Region of Halton for a
Certificate of Approval for the
Continued Use of the Burlington
Landfill Site

Witness Statement

of

Theodore A. Constantine, P. Eng.
Manager of Environmental Engineering
and Chief Environmental Engineer
M. M. Dillon Limited

1. Name: Theodore Andrew Constantine, P. Eng.
Manager of Environmental Engineering
and Chief Environmental Engineer
2. Address and Telephone No:

Office: M. M. Dillon Limited
495 Richmond Street
London, Ontario
N6A 5A9

(519) 438-6192
3. Testimony Requested by: Region of Halton

4. Nature of Expertise:

Resume: Theodore Andrew Constantine, P. Eng.

Memberships: Registered Professional Engineer
Association of Professional Engineers
of Ontario

Designated Specialist Environmental Engineer-
ing (APEO)

Designated Consulting Engineer (APEO)

Diplomate of the American Academy of Environ-
mental Engineers

Registered Professional Engineer
Association of Professional Engineers
of Manitoba

Member
Pollution Control Association of Ontario

Member
Water Pollution Control Federation

Education: B. Eng., McGill University (1959)
Montreal, Quebec

M. Eng., University of Western Ontario (1968)
London, Ontario

Employment History:

1974-Present M. M. Dillon Limited - Chief Environmental
Engineer. Also from 1977 to present - Manager
of Environmental Engineering, London,
Ontario.

1970-1974 M. M. Dillon Limited - Department Head
Environmental Engineering, London, Ontario.

During his 14 years with Dillon, Mr.
Constantine has performed as Design Engineer,
Project Engineer, Project Manager and Project
Director for a wide variety of major projects
in the environmental field for a number of
prominent municipal, provincial and federal
government clients, as well as major companies

Employment History (continued):

in the private sector. In addition, in his capacity of Chief Environmental Engineer, Mr. Constantine's corporate mandate is to review and approve work on all major projects in the environmental engineering field carried out by any office in this Company.

In the London-based engineering group that he heads, Mr. Constantine is responsible for a multi-disciplined engineering team comprising seven engineers and 12 technicians/technologists and one clerical support person. Projects under his control included work in Nova Scotia, Ontario, Manitoba, Alberta and the Northwest Territories.

Mr. Constantine has authored 16 technical papers and has led two major seminars on environmental matters. He also lectures periodically at both the graduate and undergraduate level in the Faculty of Engineering at the University of Western Ontario. His previous experience as a witness includes appearances before the Ontario Municipal Board, the Manitoba Clean Environment Commission, the Ontario Environmental Assessment Board and the Ontario Environmental Appeal Board.

1968-1970

Nisbet Letham Consulting Engineers, Sarnia, Ontario.

Mr. Constantine served as Project Engineer and Project Manager for several municipal, provincial and private industrial projects in Lambton, Middlesex and Elgin Counties.

1966-1968

Independent consulting in Sarnia and Montreal on environmental projects for Polysar, Imperial Oil and Monsanto Chemical Company.

1959-1966

Dow Chemical of Canada Ltd. Employed as Process and Maintenance Engineer and three assignments as Production Unit Supervisor.

1955-1959

Gulf Oil of Canada Montreal East Refinery. Employed as Summer Relief Operator and Process Engineering Assistant.

Pertinent Experience:

Mr. Constantine's experience pertinent to the Burlington Landfill project is in the following areas:

- Area waste management studies
- Design and operation of sewage treatment facilities
- Design and operation of leachate collection transmission and treatment facilities
- Design of advanced waste water treatment facilities
- Hazardous wastes management and treatment
- Landfill gas collection and treatment
- Industrial waste treatment
- Incineration
- Landfill monitoring.

5. Topics to be Addressed:

- Quantities and characteristics of leachate
- Options for leachate management and disposal.

6. Summary of Evidence

We used limited information on hand to develop a quantification and characterization of the leachate from the Burlington site.

We investigated all of the technically and economically feasible options for management and disposal that would meet the required provincial and local regulatory requirements.

We assessed the capability of the Burlington sewage treatment plant to accept leachate generated from the Burlington landfill site. We found that the most economical technically feasible option would be to pump the leachate from the

Burlington landfill site for treatment at the Burlington sewage treatment plant.

7. Acknowledgement:

Mr. Contantine will be available for examination and cross-examination, if required.

8. Signature:

I have prepared the foregoing and affirm that the matters referred to are true and to the best of my knowledge and belief.

T. A. Constantine
T. A. Constantine, P. Eng.
M. M. Dillon Limited