



THE CITY OF WINNIPEG
WATERWORKS, WASTE, AND DISPOSAL DEPARTMENT

1500 PLESSIS ROAD • BOX 178 TRANSCONA P.O. • WINNIPEG • MANITOBA • R2C 2Z9

IN REPLY PLEASE REFER TO

FAX: (204) 224-0032

1989 08 15

Environmental Management Division
Department of Environment and Workplace
and Safety and Health
Box 7, Building 2
139 Tuxedo Avenue
Winnipeg, Manitoba
R3N 0H6

ATTENTION: MR. C.B. ORCUTT, DIRECTOR

Dear Sir:

RE: ENVIRONMENTAL ACT PROPOSAL
Our File No. SE 2-9 (C)

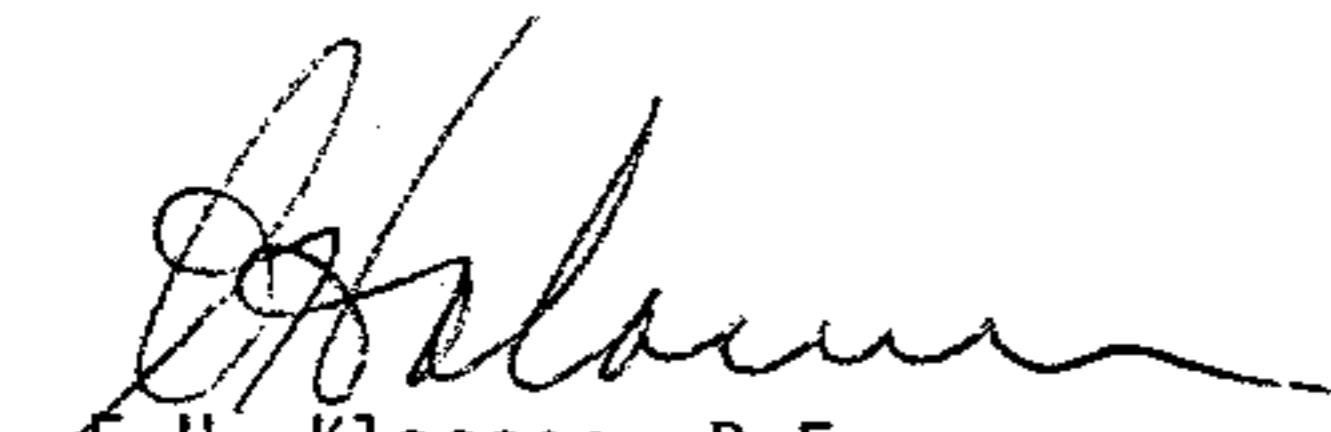


Please find enclosed an Environment Act proposal for construction of the South End Water Pollution Control Centre Primary Clarifier Expansion. This is submitted under Clause 11 (7) of the Environment Act. We are also providing herewith a set of draft drawings and specifications for the primary clarifier project to assist in your review.

As discussed with your Mr. L. Strachan and the City-Province Committee on Environmental Issues, it is intended that this project be considered under Clause 14 (2) of the act.

If you have any questions on this proposal, please do not hesitate to contact me directly.

Yours truly,


E.H. Klassen, P.Eng.
Acting Director

EJS/lm
Encls.

c.c. L. Strachan, P.Eng. - Chief, Environmental Management
R.J. McRae, P.Eng. - Commissioner of Works and Operations
B.D. MacBride, P.Eng.
E.H. Klassen, P.Eng.



WINNIPEG
where the New West begins.

Environment Act Proposal Form

Manitoba
Environment and
Workplace Safety
and Health



This form prescribes the nature and sequence of the information required to file a proposal for a development pursuant to subsections 10(3), 11(7), and 12(3) of the Manitoba Environment Act.

Name of development South End Water Pollution Control Centre	
Name of the proponent of the development City of Winnipeg, Waterworks, Waste and Disposal Department	
Location (city, town, legal description) Lot 149 St. Mary's Road; South East Corner of St. Mary's & Perimeter	
Name of principal contact person for purposes of the environmental assessment Mr. W.D. Carroll, Director	
Mailing address 1500 Plessis Road	Postal code R2C 2Z9
	Telephone 986-3333
Date	Signature of Contact Person

OFFICE USE ONLY	
Date Received	Aug 16/89
Client File Number	
Development Review Class	
Region	
Department Contact Person	
Phone Number	

(The proponent should reproduce the underlined portions of each section as noted below adding the required information following each section).

DESCRIPTION OF THE DEVELOPMENT:

- i) Certificate of Title showing the legal description of the development; or in the case of highways, rail lines, electrical transmission lines, or pipelines a map or maps at a scale no less than 1:50,000 showing the location of the proposed development;
- ii) Name of the owner(s) of the land upon which the development will be constructed;
- iii) Name of the owner of Mineral Rights beneath the Land if this is not the same as the surface owner;
- iv) Description of the existing land use on the site and adjoining it as well as changes that will be made thereto for the purposes of the development;
- v) Land use designation for the site and adjoining land as identified in a development plan adopted pursuant to the Planning Act or the City of Winnipeg Act and the zoning designation as identified in a Zoning By-Law, if applicable;
- vi) Description of the previous studies and activities relating to feasibility, exploration, or project siting and prior authorization received from other government agencies;
- vii) A description of the proposed development and the method of operation including hours of operation;
- viii) A description of the potential impacts of the development on the environment, including, but not necessarily limited to:
 - type, quantity and concentration of pollutants to be released into the air, water or land
 - impact on wildlife
 - impact on fisheries
 - impact on surface water, and groundwater
 - forestry related impacts
 - impact on heritage resources
 - socio-economic implications resulting from the environmental impacts

- ix) A description of the proposed environmental management practices to be employed to prevent or mitigate adverse implications from the impacts identified in (viii) which will have regard to, where applicable: containment, handling, monitoring, storage, treatment and final disposal of pollutants; conservation and protection of natural or heritage resources; environmental restoration and rehabilitation of the site upon decommissioning; and protection of environmental health.

SCHEDULE:

- i) The date of commencement of construction, commencement of operation including staging of the development and termination of operation, if known;
- ii) Latest date by which the proponent would like to complete the requirements of the Environment Act and seek approval for the development. Briefly state the reasons for the selection of this date.

FUNDING:

Name and address of the the Government Agency (Federal, Provincial or otherwise) from which a grant or loan of capital funds have been requested, where applicable.

NOTE:

The Environment Act requires that subject to the Confidential Information clause, Section 47, a proposal shall be filed in the public registry.

Proprietary information provided in this form should be clearly noted. A separate summary of the proposal excluding the proprietary information should accompany the proposal for the public registry file.

The completed Proposal Form should be sent together with a covering letter to:

Environmental Management Division
Department of Environment and Workplace
and Safety and Health
Box 7, Building 2
139 Tuxedo Avenue
Winnipeg, Manitoba
R3N 0H6

ENVIRONMENT ACT PROPOSAL

CITY OF WINNIPEG

**SOUTH END WATER POLLUTION CONTROL CENTRE
PRIMARY CLARIFIER EXPANSION**

i) Certificate of Title

A copy of the certificate of title is appended to this proposal as Appendix 1.

ii) Owner of the Land

The owner of the land is the City of Winnipeg.

iii) Owner of Mineral Rights

The owner of the Mineral Rights beneath the land is the City of Winnipeg.

iv) Existing Land Use

The existing land use on the site is a sewage treatment plant, the South End Water Pollution Control Centre (SEWPCC). The site includes over 170 hectares which are leased for agricultural use to the east and west of the facility as well as over 30 hectares on the north and south dedicated to City use.

Urban residential development is located to the north, across the Perimeter Highway from the site.

No changes to the land use will be made for the purposes of this development.

v) Land Use Designation

The site is designated "A1" Agricultural District under St. Vital Town Planning Scheme 1951. Zoning designations for the site and adjacent lands are shown in Appendix 2.

Under Plan Winnipeg, development within 1 km of Water Pollution Control Centres is subject to the following policy:

CHAPTER: WATER, WASTE AND DISPOSAL

SECTION: SEWERAGE AND POLLUTION CONTROL SYSTEM

SUBJECT: ODOR CONTROL

61(1) **POLICY**

- (a) The City shall, through the development approval process and land use controls, regulate all development within the development control lines around wastewater treatment plants and facilities, as defined on the Map attached to this By-law and marked "Plan Winnipeg Policy Areas," in order to minimize the impact of odor emissions on adjoining land uses; and
- (b) The City shall ensure that whenever a major wastewater treatment plant or facility requires expansion or modification, an analysis of odor control methods is included in the expansion design including a review of the separation areas defined by the development control lines on the Map attached to this By-law and marked "Plan Winnipeg Policy Areas."

61(2) **OBJECTIVE**

To minimize the impacts of odor emissions from wastewater treatment facilities upon living and working areas.

vi) **Previous Studies and Activities**

The existing SEWPCC was commissioned in 1974. It was an entirely new facility designed to provide primary and oxygen based secondary treatment to serve the southern portions of the City. The facility was located outside the Perimeter Highway, as far as practical from existing development to minimize operational impacts on the community. The original design was developed to facilitate future anticipated expansion.

The report titled "Conceptual Design Study - Expansion Requirements of South and West End Water Pollution Control Centres", November 1986, was prepared by MacLaren Engineers Inc. for the Waterworks, Waste and Disposal Department. The report considered alternatives for expansion of the SEWPCC and WEWPCC and ultimately recommended that independent expansion projects be undertaken for each location. A river water quality assessment was also undertaken as part of the project with the results being inconclusive on the requirement for advanced treatment. A need for odor control was also identified in the Study.

Based on the results of the conceptual design study, MacLaren Engineers Inc. was engaged for final design services for the SEWPCC expansion. The draft report titled "South End water Pollution Control Centre-Functional Design Report" was submitted to the City in August, 1988. The report recommended a staged approach for construction of the expansion.

A chapter of the report "Odor Control Assessment" was prepared in advance and submitted to the City under a separate cover in March, 1988. This report was presented to the Clean Environment Commission and resulted in CEC Order No. 1190.

vii) Description of the Proposed Development and Method of Operation

The proposed development includes the construction of a 51.9 m by 19.2 m primary clarifier including a concrete superstructure and appurtenances. The new structure will abut the south side of the existing primary clarifier.

The addition of the primary clarifier will expand the treatment capacity of the existing facility and will be operated in a similar manner as the existing primary clarifier. Operations and maintenance staff are currently and will continue to be on-site five days per week during normal working hours. During off hours the plant will operate automatically. A standby crew will be available at all times to respond to alarm conditions.

viii) Potential Impacts

- 1) Ventilation air from the process area of the new primary clarifier will be exhausted to a previously constructed 45 m high odor dispersion stack. As part of the primary clarifier expansion, the ventilation air from the existing two primary clarifiers will also be modified to exhaust to the stack. Clean Environment Commission Order No. 1190 dated March 30, 1988 set limits for odor and noise.
- 2) The proposed primary clarifier will be approximately the size of the existing two primary clarifiers combined and will receive approximately half of the total flow. The primary effluent from the existing and new primary clarifiers will then discharge to the existing secondary treatment process. A significant improvement in the effluent quality from the treatment facility is anticipated.

ix) As discussed above the environmental management practices will include ventilation air dispersion in accordance with CEC Order No. 1190. All other environmental practices will be unchanged from existing.

SCHEDULE

i) Date of Commencement of Construction, Operations

Construction of the primary clarifier is anticipated to start in the latter part of 1989, with completion and start-up anticipated in early 1991.

ii) Latest Date to Complete the Requirements of the Environment Act

The latest the City would like to complete the requirements of the Environment Act is September 30, 1989. Approval is requested prior to awarding of a contract.

FUNDING

Grant or Loan of Capital Funds

All funding for this project is through the City of Winnipeg, Sewer Utility budget process.