CITY OF PORTAGE LA PRAIRIE BY-LAW NO. 7863

BEING A BY-LAW OF THE CITY OF PORTAGE LA PRAIRIE TO CONTROL THE DISCHARGE OF SEWAGE INTO THE SEWAGE SYSTEM OF THE CITY OF PORTAGE LA PRAIRIE.

- WHEREAS Section 349 of <u>The Municipal Act</u>, R.S.M. 1988, c.M225 provides in part: "Subject to The Environment Act, The Public Health Act, and any other Act of the Legislature or of the Parliament of Canada, and the regulations or orders duly made under any such Act, and without restricting the generality of Section 330, the council of any municipality may pass by-laws for
 - (a) preventing or restricting, controlling and regulating the discharge into any stream, watercourse, drain, sewer or sewage system of any deleterious matter, substance or thing, whether liquid or solid, that would be injurious to health, life, or property, or injure, pollute, or damage any stream, watercourse, drain, sewer, sewage system, or wastewater treatment plant;
 - (b) providing for, and regulating and controlling, the preliminary treatment of any wastewater or other deleterious matter, substance, or thing, whether liquid or solid, before it is discharged into any stream, watercourse, drain, sewer, or sewage system;
 - (c) compelling any owner or occupant of land to construct and properly maintain such works as the council considers necessary for the proper treatment of any wastewater or other deleterious matter, substance or thing, whether liquid or solid, before it is discharged into any stream, watercourse, drain, sewer, or sewage system, and preventing any such discharge where such works have not been so constructed or are not so maintained;...".

AND WHEREAS it is deemed expedient and in the public interest to:

- (1) prevent, restrict, control and regulate discharges into the sewage system of the City of Portage la Prairie;
- (2) provide for and regulate and control the preliminary treatment of discharges into the sewage system of the City of Portage la Prairie; and
- (3) compel owners or occupants to construct and maintain certain works for the treatment of discharges, before such discharge into the sewage system of the City of Portage la Prairie.

NOW THEREFORE the Council of the City of Portage la Prairie enacts as follows:

SECTION 1 - DEFINITIONS:

1(1) In this by-law:

"Approved" means approved by the Designated Officer.

"B.O.D." means Biochemical Oxygen Demand being the quantity of oxygen expressed in milligrams per litre, utilized in the biochemical oxidation (carbonaceous plus nitrogenous) of organic matter under standard laboratory conditions for five (5) days at a temperature of 20 degrees Celsius. The laboratory determinations shall be made in accordance with procedures contained in Standard Methods.

"Body of Water" includes any brook, creek, stream, river, lake, pond, waterway, watercourse, canal or other flowing or standing water.

"C.O.D." means Chemical Oxygen Demand being the quantity of oxygen expressed in milligrams per litre utilized in the chemical oxidation of organic matter contained in sewage as set forth in Standard Methods.

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"City" means the City of Portage la Prairie.

"**Designated Officer**" means the Director of Operations of the City or his designate..

"F.O.G." means Fat, Oil or Grease being fats, waxes, oils, and any other non-volatile material determined in accordance with procedures contained in Standard Methods.

"Fuels" means gasoline, naphtha, diesel fuel or fuel oil.

"Gallon" means Imperial Gallon.

"Hazardous Waste" means any substance or group of substances so designated by The Dangerous Goods Handling and Transportation Act Regulations, Province of Manitoba, 1984 and amendments thereto and any Act in substitution or replacement thereof.

"Industrial Pre-Treatment System" includes the Industrial Park lift station, and conveyance system to the anaerobic pretreatment system, clarifier, clarifier odour control, grinders, pH control facilities, anaerobic pre-treatment system, WAS treatment and storage system and industrial flow monitoring stations.

"Land Drainage" means storm, surface, overflow, subsurface, or seepage waters or other drainage from land, but does not include Sewage.

"Land Drainage Sewer" means a Sewer that carries Land Drainage.

"Matter" includes any gaseous, liquid or solid matter.

"**Pathological Waste**" means pathogenic or disease-producing organisms that cause disease in the host organism by their parasitic growth.

"PCB Waste" means polychlorinated biphenyl.

"**Person**" means any individual, firm, partnership or corporation.

"Pesticides" means any substance or chemical applied to kill or control animal pests.

"**pH**" means the logarithm of the reciprocal of the concentration of hydrogen ions in grams per litre of solution and denotes alkalinity or acidity, as determined in ion-specific probe.

"**Phenolic Compounds**" means hydroxy derivatives of benzene, determined in accordance with procedures contained in Standard Methods.

"**Premise**" means any land or building or both or any part thereof.

"Sanitary Sewer" means a Sewer that carries Sewage.

"Secondary Treatment System" includes the SBR's, equalization basins, filters, disinfection facilities, effluent pump station, outfall, and ancillary equipment.

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> **"Sewage"** means any waste discharged or permitted to flow from residences, business buildings, institutions and industrial establishments.

> "Sewage System" means the Sanitary Sewer system in the City, the sewage lift stations, and the sewage treatment plant or plants and includes the Industrial Pre-Treatment System.

> "Sewer" means an artificial, usually subterranean, conduit to carry off water and certain waste matter including:

(1) surface water due to rainfall, snow melt;

(2) household water, as slops, wastewater from sinks, baths, etc., excreta consisting of urine and feces;

(3) sewage from industrial works.

"**Standard Methods**" means those methods as described in the latest edition, whatever it is from time to time, of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, Inc.

"Suspended Solids" means solids that are contained in the sewage as determined by the laboratory procedure set forth in Standard Methods.

"T.K.N" means total kjeldahl nitrogen being the sum of organic and ammonia nitrogen, as determined by the laboratory procedure set forth in Standard Methods.

"Toxic Waste" means Hazardous Wastes which, when they come in contact with a biological entity, cause an adverse response.

"User" means any Person, either individually or jointly with others, owning or occupying any Premise and shall also include any agent, workman, servant, or employee of such Person.

"WAS" means waste activated sludge from the secondary treatment system.

SECTION 2 - DISCHARGES TO SANITARY SEWERS

- 2(1) No Person shall discharge or permit, cause or allow any discharge into the Sewage System any of the following;
 - (a) matter of any type or at any temperature or in any quantity which may be or may become harmful to the Sewage System, or which may cause the Sewage System effluent to contravene any requirement of The Environment Act or regulations thereunder, or which may cause the sludge from the Sewage System to fail to meet the Provincial Licensing criteria relating to applying the sludge on agricultural lands, or which may impair or interfere with the Sewage treatment process, or which may be or may become a hazard to any Person, animal, property or vegetation and;
 - (b) without limiting the generality of the foregoing, any of the following:
 - Sewage that may cause an offensive odour to emanate from the Sewage System, and without limiting the generality of the foregoing, Sewage containing hydrogen sulphide, carbon disulphide, other reduced sulphur compounds, amine or ammonia;
 - (ii) water from drainage of roofs or land, water from a watercourse or uncontaminated water, or Land Drainage.

- (iii) Sewage or uncontaminated water at a temperature greater than 65 degrees Celsius;
- (iv) Sewage having a pH less than 5.5 or greater than 10.5;
- (v) Sewage which consists of two or more separate liquid layers;
- (vi) Sewage containing dyes or colouring material which may pass through a Sewage System and discolour the Sewage System effluent;
- (vii) Sewage that may obstruct the Sewage System or flow therein.

(viii)	Sewage containing any of the for indicated concentrations as		g, in excess of the rmined by the
			/
	appropriate method specified in		
	<u>Constituent</u> <u>Conce</u> Chlorides expressed as Cl		<u>on (mg/L)</u> 500
	•		000
	Sulphates expressed as SO_4	1500	50
	Aluminum expressed as Al		50
	Iron expressed as Fe		50
	Fluorides expressed as F		10
	Phosphorus expressed as P	10	_
	Antimony expressed as SB		5
	Bismuth expressed as Bi		5
	Chromium expressed as Cr		5
	Cobalt expressed as Co		5
	Manganese expressed as Mn		5
	Molybdenum expressed as Mo		5
	Selenium expressed as Se		5
	Silver expressed as Ag		5
	Tin expressed as Sn	5	
	Titanium expressed as Ti		5
	Vanadium expressed as V		5
	Cyanide (total) expressed as CN		2
	Arsenic expressed as As		1
	Cadmium expressed as Cd		1
	Copper expressed as Cu		1
	Lead expressed as Pb		1
	Nickel expressed as Ni		1
	Phenolic Compounds		0.1
	Zinc expressed as Zn		1
	Mercury expressed as Hg		0.1
			0.1

(ix) Sewage containing any of the following in any amount; Fuels Hazardous Waste Pathological Waste

PCB Waste Toxic Waste

- 2(2) No Person shall discharge Sewage containing in excess of:
 - i) 300 milligrams per litre of B.O.D.;
 - ii) 300 milligrams per litre of Suspended Solids;
 - iii) 450 milligrams per litre of C.O.D.;
 - iv) 75 milligrams per litre of T.K.N.;
 - v) 100 milligrams per litre of F.O.G.;

unless, prior to any such discharge, the Person applies for and obtains permission of the City pursuant to Section 5.

- 2(3) No Person shall discharge Sewage in a quantity in excess of 200,000 litres/day unless, prior to any such discharge, the Person applies for and obtains permission of the City pursuant to Section 5.
- 2(4) In determining whether the limit with respect to any matter prescribed in subsection 2(1) or 2(2) is contravened, any water that has been added for the purpose of enabling the limit to be met shall be disregarded for the purposes of calculating whether the limit has been met so that

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compliance with the limit <u>cannot be attained by dilution</u>.

2(5) Subclause 2(1) (b)(i) does not apply to prevent the discharge of human waste.

SECTION 3 - DISCHARGES TO LAND DRAINAGE SEWERS

- 3(1) No Person shall discharge or permit, cause or allow any discharge into or in any Land Drainage Sewer or Body Of Water, any of the following;
 - (a) matter of any type or at any temperature or in any quantity which may:
 - (i) interfere with the proper operation of a Land Drainage Sewer;
 - (ii) obstruct a Land Drainage Sewer or the flow therein;
 - (iii) be or become a hazard to any Person, animal, property or vegetation;
 - (iv) impair the quality of the water in any Body Of Water;
 - (v) which may result in the contravention of an approval, requirement, direction or other order under The Environment Act with respect to the Land Drainage Sewer or its discharge; and
 - (b) without limiting the generality of the foregoing any of the following matter:
 - (i) Sewage;
 - (ii) uncontaminated water at a temperature greater than 65 degrees Celsius;
 - (iii) waste paints and waste organic solvents;
 - (iv) waste automotive or machine oils and waste greases;
 - (v) Pesticides;
 - (vi) water containing any of the following in excess of the indicated concentration: Concentration (ug/L) Constituent Arsenic expressed as As 100 Chromium expressed as Cr 100 Selenium expressed as Se 100 Phosphorus expressed a P 30 30 Zinc expressed as Zn Lead expressed as Pb 25 Nickel expressed as Ni 25 Copper expressed as Cu 5 5 Cyanide (free) expressed as CN 0.1 Phenolic compounds Cadmium expressed as Cd 0.2 Mercury expressed as Hg 0.2 Silver expressed as Ag 0.1 Fecal coliforms 100 per 100 millilitres

SECTION 4 - PRELIMINARY TREATMENT

- 4(1) Except as provided in Section 5, Sewage containing prohibited materials or materials in excess of the allowable limits as set out in Section 2, shall be preliminarily treated by the User prior to discharge to the Sewage System in order that the discharged Sewage does not contravene Section 2.
- 4(2) Interceptors acceptable to the Designated Officer shall be installed by

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> the User on all connections to the Sewage System to intercept Fuels, F.O.G., or grit in the Sewage where, in the opinion of the Designated Officer, they are necessary. Interceptors shall meet the following minimum specifications;

- interceptors shall be so designed that they will not become air bound and be so located as to be readily accessible for cleaning;
- (b) grease or oil interceptors shall be of sufficient capacity to intercept all grease or oil in excess of the limit specified in subsection 5(1)a);
- (c) interceptors for motor vehicle wash floors shall have a capacity sufficient to retain the sand or grit reaching them during any ten-hour period, but in no case shall be less than 1.2 metres long, 0.76 metres wide and 0.61 metres deep, measured from the floor of the interceptor to the invert of the overflow;
- (d) interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature, and shall be of substantial construction, watertight and equipped with easily removable covers which when bolted in place shall be gas-tight and water-tight;
- (e) interceptors shall be maintained by the User, at his expense, in continuously efficient operation at all times. The Designated Officer shall have the right to enter upon the Premise at anytime to inspect the operation of interceptors.

SECTION 5 - PERMISSION/AGREEMENTS

- 5(1) The discharge into the Sewage System of Sewage containing in excess of:
 - i) 300 milligrams per litre of B.O.D.;
 - ii) 300 milligrams per litre of Suspended Solids;
 - iii) 450 milligrams per litre of C.O.D.;
 - iv) 75 milligrams per litre of T.K.N.;
 - v) 100 milligrams per litre of F.O.G.;

may be permitted provided the Person who proposes to discharge such Sewage, prior to any such discharge, applies to and obtains from the City permission to permit, cause or allow such discharge.

- 5(2) The discharge into the Sewage System of Sewage of a quantity in excess of 200,000 litres/day may be permitted provided the Person who proposes to discharge such Sewage quantity, prior to any such discharge, applies to and obtains from the City permission to permit, cause or allow such discharge.
- 5(3) The application for permission referred to in subsections 5(1) and 5(2) shall consist of:
 - (a) a completed application in the form set out as Schedule "A" hereto; and
 - (b) such additional information and documentation as the City may require.
- 5(4) The City may grant such permission on such terms, conditions and considerations as it deems in the public interest in the construction, operation and maintenance of the Sewage System and the City may, if it deems it necessary, require such Person to enter into an agreement, in writing, with it in respect of such discharge on such terms, conditions and considerations as the City deems necessary.
- 5(5) The permission granted pursuant to subsection 5(4) may be reviewed by the City and may be suspended or cancelled by the City without notice to the applicant and without restricting the generality of the foregoing power of suspension or cancellation, by reason of the breach of or failure to comply with any term or condition on which the permission was granted. In the event of a conflict between a written agreement

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that the City has entered into in accordance with subsection 5(4) and this subsection, the written agreement shall take precedence.

5(6) Any written agreement entered into in accordance with subsection 5(4) shall be subject to such approvals as the Public Utilities Board ("PUB") may deem necessary and until the date of approval by the PUB or their determination that the agreement is outside their jurisdiction, existing limits pursuant to this By-Law shall apply.

SECTION 6 - GENERAL

- 6(1) Except as otherwise specifically provided in this by-law, all tests, measurements, analyses and examinations of Sewage, uncontaminated water and Land Drainage, their characteristics or contents shall be carried out in accordance with the latest edition of Standard Methods;
- 6(2) The owner or occupant of any premises with one or more connections to the Sewage System shall, when required by the Designated Officer, install and maintain in good repair in each connection a suitable manhole to allow observation and sampling of the Sewage and measurement of the flow of Sewage therein, provided that where installation of a manhole is not possible, an alternative device or facility may be substituted if approved by the Designated Officer.
- 6(3) The manhole or alternate device shall be located on the property of the owner or occupant of the Premises, unless the Designated Officer gives written approval for a different location.
- 6(4) Every manhole, device or facility installed as required by subsection (2) shall be designed and constructed in accordance with good engineering practice, including a power supply that is separate and secure, and the requirements of the Designated Officer, and shall be constructed and maintained by the owner or occupant of the Premise at his expense.
- 6(5) Any User shall at all times ensure that every manhole, device or facility installed as required by subsection (2) is at all times accessible for purposes of observing and sampling the Sewage and measuring the flow of Sewage therein.
- 6(6) The Designated Officer may require the owner or occupant of the Premise to install devices to monitor Sewage discharge flow rates, volumes, and characteristics and to submit regular reports regarding the discharge flow rates, volumes, and characteristics to the Designated Officer.
- 6(7) For the purpose of the administration of this by-law, the Designated Officer may, upon production of his identification, enter any Premise, to observe, measure the flow of Sewage to any Sewer and collect any samples.
- 6(8) No Person shall break, damage, destroy, deface or tamper or cause or permit the breaking, damaging, destroying, defacing or tampering with:
 (a) any part of the Sewage System; or
 - (b) any permanent or temporary device installed in the Sewage System for the purpose of measuring, sampling and testing of Sewage.
- 6(9) Every Person who discharges or deposits or causes or permits the discharge or deposit of Sewage into or in a Land Drainage Sewer or Sewage System shall, if such discharge or deposit is not in the ordinary course of events, forthwith notify the Designated Officer.
- 6(10) Every Person who discharges or deposits or causes or permits the discharge or deposit of uncontaminated water or Land Drainage into a Land Drainage Sewer or Body Of Water shall, if such discharge or deposit is not in the ordinary course of events, <u>forthwith</u> notify the

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Designated Officer.

SECTION 7 - OFFENSES

- 7(1) Every Person who contravenes any provision of this by-law is guilty of an offence and on conviction is liable to a fine of not more than \$1,000 for every day or part thereof upon which such offence occurs or continues.
- 7(2) It is the intention of this by-law that all offenses created herein are deemed to be <u>of absolute liability</u>.
- 7(3) Every Person who contravenes any provision of this by-law and as a result of which contravention damage or injury is or may be caused to the Sewage System or any part thereof is liable to the City for the full costs of such damage or injury including any fine or penalty imposed on the City in relation to said contravention.

SECTION 8 - REPEAL OF BY-LAWS

- 8(1) The following By-Laws are hereby repealed:
 - i) By-Law No. 6282;
 - ii) Section 2 of By-Law No. 7045; and
 - iii) Section 18 of Schedule "A" of By-Law No. 7045.

SECTION 9 - EFFECTIVE DATE OF BY-LAW

9(1) This by-law shall come into force and take effect January 1, 1997.

DONE AND PASSED AS A BY-LAW OF THE CITY OF PORTAGE LA PRAIRIE BY COUNCIL THEREOF IN OPEN SESSION THIS DAY OF , A.D., 1996.

MAYOR

MANAGER OF ADMINISTRATION

Read a 1st time this 22nd day of April, 1996 Read a 2nd time this day of , 1996 Read a 3rd time this day of , 1996

Appendix "A"

INFORMATION FORM RELATING TO THE DISCHARGE OF INDUSTRIAL WASTES TO THE MUNICIPAL SEWER SYSTEM

The Wastes to be in compliance with Sewer-Use By-Law No. <u>7863</u> and the maximum concentration of contaminates contained therein.

Note:All flows that are to be directed to a storm system or watercourse must be approved by the Manitoba Department of Energy, Mines, Resources and Environmental Management and the Council of the City of Portage la Prairie. An information form shall contain the completed attached questionnaire, supplemented by plans, reports, etc., to satisfy the following items A to D, where applicable:

A. Process Description, Water Supply and Waste Disposal

A written description including a flow diagram of industrial process(es) in sufficient detail to indicate:

-quantity of water used in specific process(es) and/or industrial operations (Item 6).

-quantity and measured (or estimated) quality of wastes arising from water use or other liquids (Items 7 and 8).

-where the quantity and/or quality of wastes varies according to industrial operating procedure, the variation in rates of flow (normal, maximum and minimum) and the maximum and average concentrations of significant waste components shall be given.

B.Physical Layout

Layout sketch of property (to scale) to coordinate buildings, treatment or disposal works, property boundaries, effluent line(s), and proposed sanitary sewer connections.

C.Design of Treatment Works

Engineering reports on the proposed works shall indicate:

-expected flow and concentrations of liquid industrial wastes, and means of measuring, from all processes contributing to the treatment plant influent (Items 7 and 8). A flow diagram is suggested.

-function, capacity and operation of the individual components comprising the pretreatment facilities, and the system as a whole. Performance data should be given where possible.

-quantities and type of treatment chemicals.

-expected degree of reduction in pollutional load to be effected by the system. Supporting research or pilot plant data shall be given where possible.

-a fair statement setting forth the expected bacterial, physical, chemical and other known characteristics of the pretreated effluent (Item 9).

-Method of sludge disposal, and disposal of other solid or liquid process wastes.

D.Plans of Treatment Works

Engineering drawings shall include plans and profiles of each unit in the pretreatment or control system.

Plans and profiles of the sewer(s):

1.Name of Applicant: corporation, owner)(telephone no.)

(postal address)

(Company,

Company officer responsible for effluent control

_____(name)(telephone no.)

2.Location of Industry:______(number, street, or road, municipality)

Note:For plants producing various products or having a number of waste producing operations, items 3 to 12, which follow, should cover only details concerned with the specific proposal under consideration, including all interrelated process and treatment systems.

3.Production Data (List principal materials used and products produced, giving volume, weight, or quantity per day, week or other production period).

Raw	materials
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Products

4.Industrial Operating Schedule
hours per day
days per week
weeks per year
indicate shift periods

5.Number of Employees:

Office (Admin., Management)

Production

6. Water Supply	Imperial Gallons per Day			
	Source	Average	Maximum	Minimum
a) Industrial Processes (itemize)				
b) Cooling Condensers Compressors				

c) Drinking and Sanitary					
d) Other					
Total Supply					
If daily supply varies from above total, explain in appendix					

7. Waste Disposal	Imperial Gallons per Day				
	Origin of Wastes	Discharge	Average	Minimum	Maximum
a)Process Wastes (itemize)					
b)Cooling and Condenser Water					
c)Sanitary Sewage					
d)Other					
Total					
If combined daily waste flow for disposal varies from above total, explain in appendix.					

	Maximum	Minimum	Daily Average
).D.			
D.D.			
al Solids			
oended Solids			
ase & Oils			
enolic Compounds			
anides (HCN)			
hides (H ₂ S)			
per (Cu)			
omium (Cr)			
el (Ni)			
ad (Pb)			
c (Zn)			
dmium (Cd)			
orides (Cl)			
ohates (SO₄)			
sphates (PO $_4$)			
ates (NO3)			

ıperature (°C)		
her		

9. Expected Characteristics of pretreated waste(s):

	Maximum	Minimum	Daily Average
a) B.O.D.			
b) C.O.D.			
c) pH			
d) Total Solids			
e) Suspended Solids			
f) Grease & Oils			
g) Phenolic			
Compounds			
h) Cyanides (HCN)			
i) Sulphides (H ₂ S)			
j) Copper (Cu)			
k) Chromium (Cr)			
I) Nickel (Ni)			
m) Lead (Pb)			
n) Zinc (Zn)			
o) Cadmium (Cd)			
p) Chlorides (Cl)			

q) Sulphates (SO₄)		
r) Phosphates (PO₄)		
s) Nitrates (NO ₃)		
t) Temperature (°C)		
u) Other		

- 10. Proposed method of pretreated effluent(s) flow measurement
- 12. Estimate of capital cost of proposed industrial waste treatment or control works _____

Engineering charges _____

Estimate of annual operating costs of proposed works

Date: _____

Signature: