



SEWER USE BY-LAW

The City of Thunder Bay sewage treatment plant is designed to deal primarily with human, not industrial wastes.

Pollutants discharged into the sewage collection system which this facility is not designed to remove will pass untreated or partially treated into the environment. To prevent this from occurring, the discharge of waters and wastes into the City's sewage collection and treatment works is regulated, controlled, and prohibited through this document, the Sewer Use Control By-Law.

This booklet has been prepared to provide information to all sewage collection system users regarding their obligations under the Sewer Use Control By-law, with respect to the quality of wastewater acceptable for discharge.

Any questions, comments, or concerns pertaining to this by-law should be directed to the Corporation of the City of Thunder Bay, Sewer and Water Division of the Infrastructure & Operations Department. The current telephone listing can be found in the blue pages of the telephone directory.

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A By-law for the control of waste
discharge to the Municipal Sewers
of the City of Thunder Bay

WHEREAS the Council of The Corporation of the City of Thunder Bay has determined it necessary and expedient to regulate and control the discharge of wastes to the Municipal Sewers of the City of Thunder Bay;

AND WHEREAS it has been determined that the said regulation and control shall be carried out pursuant to the authority vested in The Corporation pursuant to The Municipal Act under Sections 102, 210(83), (84), (140), (150), 221(1), 221(20), 221(21), 221(22), 221(25), 320 and 327.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF THUNDER BAY ENACTS AS FOLLOWS:

1.00 SECTION 1 INTERPRETATION

1.01 In this by-law:

- (a) "acute hazardous waste chemical" means a material which is an acute hazardous waste chemical within the meaning of Ontario Regulation 309 made under the Environmental Protection Act (Ontario);
- (b) "authorized representative of the owner or operator" means
 - (i) A principal executive officer of at least the level of vice president, if the owner or operator is a corporation; or
 - (ii) A general partner or proprietor if the owner or operator is a partnership or proprietorship, respectively; or
 - (iii) A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the sewage discharge originates;
- (c) "biochemical oxygen demand" means carbonaceous oxygen demand (biochemical) as determined by Method 507 in Standard Methods when an inhibiting chemical has been added to prevent ammonia oxidation;
- (d) "blowdown" means the discharge of recirculating noncontact cooling water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentrations in amounts exceeding limits established by best engineering practices;
- (e) "combined sewer" means a sewer intended to function simultaneously as a storm sewer and a sanitary sewer;
- (f) "commercial waste chemical" means a material which is a commercial waste chemical within the meaning of Ontario Regulation 309 made under the Environmental Protection Act (Ontario);
- (g) "composite sample" means a sample which is composed of a series of grab samples taken at intervals during the sampling period;

- (h) "cyanide (total)" means cyanide as determined by Methods 412B plus one of Method 412C or 412D in Standard Methods;
- (i) "de minimis dose" means a dose of radiation to an individual of .05 millisieverts per year;
- (j) "de minimis waste" means any waste radioactive material that will not result in a dose of radiation exceeding the de minimis dose regardless of the quantity of the material or how it is used or managed;
- (k) "fuels" includes:
 - (i) any ignitable liquid intended for use as a fuel with a flash point less than 61° Celsius as determined by one of the methods in Ontario Regulation 309 made under The Environmental Protection Act (Ontario) and
 - (ii) gasoline, naphtha, diesel fuel or fuel oil;
- (l) "grab sample" is an aliquot of the flow being sampled taken at one particular time and place;
- (m) "hailed sewage" means waste removed from a cesspool, a septic tank system, a privy vault or privy pit, a chemical toilet, a portable toilet, a sewage holding tank or any other sewage system of a type regulated under Part VIII of The Environmental Protection Act (Ontario);
- (n) "hazardous industrial waste" means a material which is a hazardous industrial waste within the meaning of Ontario Regulation 309 made under The Environmental Protection Act (Ontario);
- (o) "hazardous waste chemical" means a material which is a hazardous waste chemical within the meaning of Ontario Regulation 309 made under The Environmental Protection Act (Ontario);
- (p) "ignitable waste" means a material which is an ignitable waste within the meaning of Ontario Regulation 309 made under The Environmental Protection Act (Ontario);
- (q) "industrial" shall mean of or pertaining to industry, manufacturing, commerce, trade, business, or institutions as distinguished from domestic or residential;
- (r) "industrial process area" means any industrial building, property or land area which during manufacturing, processing or storage comes into direct contact with any raw material, intermediate product, finished product, byproduct, or waste product;

- (s) "Kjeldahl Nitrogen" means organic nitrogen as determined by one of Method 420A or 420B in Standard Methods;
- (t) "matter" includes any solid, liquid or gas;
- (u) "municipality" means The Corporation of the City of Thunder Bay;
- (v) "noncontact cooling water" means water which is used to reduce temperature for the purpose of cooling and which does not come into direct contact with any raw material, intermediate product other than heat, or finished product;
- (w) "once-through cooling water" means noncontact cooling water that has been circulated once through the cooling device;
- (x) "owner" or "operator" means the owner or operator of any facility or activity subject to the provisions of this by-law;
- (y) "pathological waste" means a material which is a pathological waste within the meaning of Ontario Regulation 309 made under The Environmental Protection Act (Ontario) or any material which may be designated in writing by the Chief Medical Officer of Health (Ontario);
- (z) "PCB" means any monochlorinated or poly-chlorinated biphenyl or any mixture of these or mixture that contains one or more of them;
- (aa) "PCB waste" means a PCB waste within the meaning of Ontario Regulation 148/86 made under The Environmental Protection Act (Ontario);
- (bb) "person" includes an individual, association, partnership, corporation, municipality, Provincial or Federal agency, or an agent or employee thereof;
- (cc) "pesticides" means a pesticide regulated under The Pesticides Act (Ontario);
- (dd) "pH" means the logarithm to the base 10 of the reciprocal of the concentration of hydrogen ions in moles per litre of solution;
- (ee) "phenolic compounds" means those derivatives of aromatic hydrocarbons which have a hydroxyl group directly attached to the ring as determined by one of Method 510B or 510C in Standard Methods;

- (ff) "phosphorus" means total phosphorus as determined by both Method 424C plus one of Method 424D, 424E, 424F, or 424G in Standard Methods;
- (gg) "reactive waste" means a material which is a reactive waste within the meaning of Ontario Regulation 309 made under the Environmental Protection Act (Ontario);
- (hh) "sanitary sewer" means a sewer for the collection and transmission of domestic, commercial, institutional and industrial sewage or any combination thereof;
- (ii) "severely toxic material" means any material listed in Schedule 3 of Ontario Regulation 309 made under The Environmental Protection Act (Ontario);
- (jj) "sewage" means any liquid waste containing animal, vegetable or mineral matter in solution or in suspension, except uncontaminated water;
- (kk) "sewage service rate" means a charge for the operation, repair, and maintenance of sewage works and includes a charge for depreciation, deferred maintenance or a reserve fund for any such purpose.
- (ll) "sewage works" means any works for the collection, transmission, treatment or disposal of sewage, or any part of such works;
- (mm) "SIC code" means Standard Industrial Classification Code contained in either the Standard Industrial Classification Manual published by the Minister of Supply and Services Canada, 1980 (Canadian SIC) or the Standard Industrial Classification Manual published by the Executive Office of the President, Office of Management and Budget, 1972 (U.S. SIC);
- (nn) "solvent extractable matter of animal or vegetable origin" means grease and oil as determined by one of Methods 503A, 503B, 503C, or 503D in Standard Methods;
- (oo) "solvent extractable matter of mineral or synthetic origin" means grease and oil as determined by Method 503E in Standard Methods;
- (pp) "Standard Methods" means a procedure set out in Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, American Water Works Association

and Water Pollution Control Federation, current at the date of testing, or a procedure published by the Ontario Ministry of the Environment as a standard method or the equivalent of a standard method;

- (qq) "storm sewer" means a sewer for the collection and transmission of uncontaminated water, stormwater, drainage from land or from a watercourse or any combination thereof;
- (rr) "stormwater" means water from rainfall or other natural precipitation or from the melting of snow or ice;
- (ss) "suspended solids" means solid matter in or on a liquid which matter is removable by filtering and dried at 103-105°C as determined by Method 209°C in Standard Methods;
- (tt) "uncontaminated water" means water to which no matter has been added as a consequence of its use, or to modify its use, by any person;
- (uu) "waste disposal site leachate" means leachate from any waste disposal site; and
- (vv) "waste radioactive materials" means any waste material exhibiting the property of spontaneous disintegration of atomic nuclei usually with the emission of penetrating radiation or particles.

2.00 SECTION 2 DISCHARGES TO SANITARY SEWERS/DISCHARGES TO COMBINED SEWERS

2.01 No person shall discharge or deposit or cause or permit the discharge or deposit of matter of a kind listed below into or in land drainage works, private branch drains or connections to any sanitary sewer or combined sewer:

- (a) matter of any type or at any temperature or in any quantity which may be or may become a health or safety hazard to a sewage works employee, or which may be or may become harmful to a sewage works, or which may cause the sewage works effluent to contravene any requirement by or under the Ontario Water Resources Act or the Environmental Protection Act (Ontario), or which may cause the sludge from sewage works to fail to meet the criteria relating to contaminants for spreading the sludge on agricultural lands under Ontario's Guidelines for Sewage Sludge Utilization on Agricultural Lands (as revised January, 1986) unless the person has been advised in writing by the operator of the sewage treatment works that the sludge from the sewage treatment works will never be used on agricultural lands, or which may interfere with the proper operation of a sewage works, or which may impair or interfere with any sewage treatment process, or which is or may result in a hazard to any person, animal, property or vegetation and;
- (b) without limiting the generality of the foregoing, any of the following:
 - (i) Solid or viscous substances in quantities or of such size as to be capable of causing obstruction to the flow in a sewer, including but not limited to ashes, bones, cinders, sand, mud, straw, shavings, metal, glass, rags, grain, feathers, tar, plastics, wood, unground garbage, animal guts or tissues, paunch manure, and whole blood.
 - (ii) Sewage that may cause an offensive odour to emanate from a sewage works, and without limiting the generality of the foregoing, sewage

containing hydrogen sulphide, carbon disulphide, other reduced sulphur compounds, amines or ammonia in such quantity that may cause an offensive odour.

- (iii) Except in the case of discharge into a combined sewer, stormwater, water from drainage of roofs or land, water from a watercourse or uncontaminated water.
- (iv) Water other than stormwater that has originated from a source separate from the water distribution system of the municipality.
- (v) Sewage or uncontaminated water at a temperature greater than 65 degrees Celsius.
- (vi) Sewage having a pH less than 5.5 or greater than 9.5.
- (vii) Sewage containing more than 15 milligrams per litre of solvent extractable matter of mineral or synthetic origin.
- (viii) Sewage containing more than 150 milligrams per litre of solvent extractable matter of animal or vegetable origin.
- (ix) Sewage in which the biochemical oxygen demand exceeds 300 milligrams per litre.
- (x) Sewage containing more than 350 milligrams per litre of suspended solids.
- (xi) Sewage containing more than 10 milligrams per litre of phosphorus.
- (xii) Sewage containing more than 100 milligrams per litre of Kjeldahl nitrogen.
- (xiii) Sewage containing more than 1 milligram per litre of phenolic compounds.
- (xiv) Sewage which consists of two or more separate liquid layers.
- (xv) Sewage containing dyes or colouring materials which pass through a sewage works and discolour the sewage works effluent.
- (xvi) Sewage containing any of the following in excess of the indicated concentrations;

1500 milligrams/litre

Chlorides expressed as Cl

Sulphates expressed as SO₄

50 milligrams/litre

Aluminum expressed as Al

Iron expressed as Fe

10 milligrams/litre

Fluorides expressed as F

5 milligrams/litre

Antimony expressed as Sb

Bismuth expressed as Bi

Chromium expressed as Cr

Cobalt expressed as Co

Lead expressed as Pb

Manganese expressed as Mn

Molybdenum expressed as Mo

Selenium expressed as Se

Silver expressed as Ag

Tin expressed as Sn

Titanium expressed as Ti

Vanadium expressed as V

3 milligrams/litre

Copper expressed as Cu

Nickel expressed as Ni

Zinc expressed as Zn

2 milligrams/litre

Cyanide (total) expressed as CN

1 milligram/litre

Arsenic expressed as As

Cadmium expressed as Cd

0.1 milligrams/litre

Mercury expressed as Hg

(xvii) The following materials or sewage containing any of the following in any amount;

____ Fuels

PCBs

Pesticides

Severely Toxic Materials Waste Radioactive Materials

(xviii) The following materials or sewage containing any of the following in any amount;

_____ Hauled Sewage
_____ Waste Disposal Site Leachate

(xix) The following hazardous wastes in any amount;

_____ Acute Hazardous Waste Chemicals
_____ Hazardous Industrial Wastes
_____ Hazardous Waste Chemicals
_____ Ignitable Wastes
_____ Pathological Wastes
_____ PCB Wastes
_____ Reactive Wastes

2.02 In determining whether the limit with respect to any matter prescribed in subsection 2.01 is contravened, the volume of any water that has been added for the purpose of enabling the limit to be met and of any storm sewer discharges to a combined sewer shall be disregarded for the purposes of calculating whether the limit has been met so that compliance with the limit cannot be attained by dilution.

2.03 Subclauses 2.01 (b)(ii) and 2.01 (b)(xix) do not apply to prevent the discharge of human waste.

2.04 Subclause 2.01 (b)(iv) does not apply to prevent the discharge of:

(a) Water taken in an amount greater than 50,000 litres per day from a separate source when the owner or operator of the premises has a Permit To Take Water issued by the Ontario Ministry of the Environment, a copy of such permit has been provided to the municipality, and the owner or operator of the premises has provided the municipality with the following information:

(i) Address of premises where the water is being used;

(ii) Location of the water source; and

(iii) Volume of water being discharged.

(b) Water taken in an amount less than 50,000 litres per day from a separate source when the owner or operator of the premises has provided the municipality with the following information:

- (i) Address of premises where the water is being used;
 - (ii) Location of the water source; and
 - (iii) Volume of water being discharged.

- 2.05 Subclause 2.01 (b) (xvii) does not apply to prevent the discharge of waste radioactive materials where they are being discharged in accordance with a licence from the Atomic Energy Control Board and a copy of the licence has been provided to the municipality or to the discharge of de minimis waste.

- 2.06 Subclause 2.01 (b) (xvii) does not apply to prevent the discharge of PCBs when,
 - (a) the owner or operator of the premises has a certificate of approval relating to the premises from the Ontario Ministry of the Environment which expressly allows the discharge or written approval from the Director of the Ontario Ministry of Environment which expressly authorizes the discharge from the premises;
 - (b) the owner or operator of the premises has written approval from the municipality which expressly authorizes the discharge from the premises;
 - (c) the discharge contains a concentration of less than 5 micro- grams per litre of PCBs; and
 - (d) a copy of the certificate of approval or written authorization referred to in clause (a) has been provided to the municipality.

- 2.07 Subclause 2.01 (b) (xviii) does not apply to prevent the discharge of waste disposal site leachate when,
 - (a) the waste disposal site leachate is being discharged pursuant to a certificate of approval or order relating to the premises under The Environmental Protection Act (Ontario) or the Ontario Water Resources Act which expressly allows the discharge;
 - (b) the owner or operator of the premises has written approval from the municipality which expressly authorizes the discharge from the premises; and
 - (c) a copy of the certificate of approval or written authorization referred to in clause (a) has been provided to the municipality.

- 2.08 Subclause 2.01 (b) (xviii) does not apply to prevent the discharge of hauled sewage when,
- (a) the carrier of the hauled sewage is a waste transportation system operating under a licence issued under Part VIII of The Environmental Protection Act (Ontario);
 - (b) the carrier has a valid permit to discharge hauled sewage or holding tank wastes as issued by the municipality, and all conditions for discharge as contained within said permit are observed;
 - (c) the permit shall be in the form attached as Schedule A to this by-law.
- 2.09 Subclause 2.01 (b) (xix) does not apply to prevent the discharge of pathological waste that has been decontaminated prior to discharge when,
- (a) the owner or operator of the premises has a certificate of approval from the Ontario Ministry of the Environment which expressly allows the discharge or written approval from the Director of the Ontario Ministry of the Environment which expressly authorizes the discharge from the premises;
 - (b) the owner or operator of the premises has written approval from the municipality which expressly authorizes the discharge from the premises; and
 - (c) a copy of the certificate of approval or written authorization referred to in clause (a) has been provided to the municipality.

3.00 SECTION 3 DISCHARGES TO STORM SEWERS

- 3.01 No person shall discharge or deposit or cause or permit the discharge or deposit of matter of a kind listed below into or in land drainage works, private branch drains or connections to any storm sewer,
- a) matter of any type or at any temperature or in any quantity which may:
 - (i) interfere with the proper operation of a storm sewer;

- (ii) obstruct a storm sewer or the flow therein;
 - (iii) result in a hazard to any person, animal, property or vegetation;
 - (iv) impair the quality of the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse; or
 - (v) result in the contravention of an approval, requirement, direction or other order under The Ontario Water Resources Act or The Environmental Protection Act (Ontario) with respect to the storm sewer or its discharge; and
- (b) without limiting the generality of the foregoing, any of the following:
- (i) water at a temperature greater than 40° Celsius;
 - (ii) water having a pH less than 6.0 or greater than 9.0;
 - (iii) water containing more than 15 milligrams per litre of suspended solids;
 - (iv) water containing dyes or colouring material which discolour the water;
 - (v) water containing solvent extractable matter of animal or vegetable origin or of mineral or synthetic origin which causes a visible film, sheen or discolouration on the water surface;
 - (vi) water containing any of the following in excess of the indicated concentrations:
 - 200 micrograms/litre
Chromium expressed as Cr
 - 50 micrograms/litre
Zinc expressed as Zn
Lead expressed as Pb
Nickel expressed as Ni
 - 10 micrograms/litre
Copper expressed as Cu
 - 1 microgram/litre
Cadmium expressed as Cd
Mercury expressed as Hg
 - 200 per 100 millilitres
Fecal coliforms

- (vii) the following matter in any amount:
 - Sewage
 - Once-through cooling water
 - Blowdown
- (viii) the following materials in any amount:
 - Automotive Oils
 - Machine Oils and Greases
 - Fuels
 - Paints and Organic Solvents
 - PCBs
 - Pesticides
 - Severely Toxic Materials
 - Waste Disposal Site Leachate
 - Waste Radioactive Materials
- (ix) the following hazardous wastes in any amount:
 - Acute Hazardous Waste Chemicals
 - Hazardous Industrial Wastes
 - Hazardous Waste Chemicals
 - Ignitable Wastes
 - Pathological Wastes
 - PCB Wastes
 - Reactive Wastes

- 3.02 Subclause 3.01 (b) (vii) does not apply to prevent the discharge of once-through cooling water or blowdown when,
- (a) the once-through cooling water or blowdown is being discharged pursuant to a certificate of approval or order relating to the premises under The Environmental Protection Act (Ontario) or the Ontario Water Resources Act which expressly allows the discharge;
 - (b) the owner or operator of the premises has written approval from the municipality which expressly authorizes the discharge from the premises; and
 - (c) a copy of the certificate of approval or order referred to in clause (a) has been provided to the municipality.
- 3.03 The provisions of Clause 3.01 (b) apply only to
- (a) the discharge of stormwater runoff from industrial process areas to a storm sewer, and

- (b) to any stormwater discharge to a storm sewer to which the matter prohibited by subsection 1 has been added for the purpose of disposing of the matter.
- 3.04 The provisions of Subclauses 3.01 (b) (iii), (iv), (v) and (vi) do not apply to prevent the discharge of stormwater runoff from industrial process areas to a storm sewer when,
 - (a) the owner or operator of the premises has a certificate of approval or order relating to the premises under The Environmental Protection Act (Ontario) or The Ontario Water Resources Act which expressly allows the discharge and a copy of the certificate of approval or order has been provided to the municipality; or
 - (b) the owner or operator of the premises has written approval from the municipality for a Best Management Practices Plan (BMP) which has been prepared in accordance with Schedule B, as attached and forming part of this By-law.

4.00 SECTION 4 REPORTS

- 4.01 Notwithstanding sections 2 and 3, the owner or operator of any industrial premises or class of industrial premises listed in Schedule C, as attached to and forming a part of this By-law, shall not discharge or deposit or cause or permit the discharge or deposit of sewage into or in land drainage works, private branch drains or connections to any sanitary sewer, combined sewer or storm sewer, after the 30th day of June, 1990.
- 4.02 Subsection 4.01 does not apply with respect to any industrial premises for which a current Waste Survey Report prepared in accordance with Subsections 4.03 and 4.04 has been filed at the municipality.
- 4.03 The Waste Survey Report shall contain the following information and shall be signed by an authorized representative of the owner or operator:
 - (a) name and address of the premises, and names of its owner and operator;
 - (b) description of process operations, including waste

discharge rates and contaminant concentrations, hours of operation, and Canadian or U.S. Standard Industrial Classification codes;

- (c) a schematic process diagram indicating waste discharge points and waste descriptions;
- (d) the generator registration number, if any, assigned with respect to the premises under Ontario Regulation 309 made under The Environmental Protection Act (Ontario); and
- (e) the waste class, hazardous waste number, primary and secondary characteristics and analytical data and the name of the laboratory, if any, furnished to the Ontario Ministry of the Environment under Ontario Regulation 309 made under The Environmental Protection Act (Ontario) relating to any material discharged into or in land drainage works, private branch drains or connections to any sanitary, combined or storm sewer.

4.04 The Waste Survey report shall be in the form attached as Schedule C1 to this By-law.

4.05 Where a change occurs in the information required under Clause 4.03 (a) contained in a Waste Survey Report, the owner or operator of the premises shall submit the new information within 30 days of the change.

4.06 Where a change occurs in any information required under Clauses 4.03 (b), (c), (d), or (e) described in a Waste Survey Report, the owner or operator of the premises shall not discharge or deposit or cause or permit the discharge or deposit of sewage into or in land drainage works, private branch drains or connections to any sanitary sewer, combined sewer or storm sewer, after 60 days after the change occurs unless a new Waste Survey Report has been submitted setting out the change.

5.00 SECTION 5 AGREEMENTS

- 5.01 Subject to subsections 5.02, 5.03, and 5.04, the discharge or deposit of sewage that would otherwise be prohibited by this by-law may be permitted into or in any connection to any sanitary sewer or combined sewer to an extent fixed by agreement with the municipality under such conditions with respect to payment of additional sewage service rates or otherwise as may be necessary to compensate for any additional costs of operation, repair, and maintenance of the sewage works.
- 5.02 An agreement can only be made for discharge of the following parameters in sewage: suspended solids, biochemical oxygen demand, and phosphorus.
- 5.03 The agreement shall be in the form attached as Schedule D to this By-law and, upon recommendation of the General Manager Public Works and the Manager of Sewer and Water Services, the Mayor and City Clerk are authorized to execute such agreements under authority of this by-law.
- 5.04 A person who has entered into an agreement with the municipality shall not be prosecuted under Section 2 of this by-law for the discharge or deposit of sewage containing the matters specified in the agreement and in compliance with the agreement during the period within which the agreement is applicable and so long as the agreement is being fully complied with.

6.00 SECTION 6 COMPLIANCE PROGRAM

- 6.01 A compliance program may be issued as set out in subsections 6.02 to 6.06 and 6.09 for the discharge of a non-complying effluent during the period of planning, design, construction or installation of facilities to eliminate the non-compliance.
- 6.02 The owner or operator of industrial premises may submit to the municipality a program to prevent or to reduce and control the discharge or deposit of sewage into or in land drainage works, private branch drains or connections to any sanitary sewer or combined sewer from premises.

- 6.03 The owner or operator of industrial premises may submit to the municipality a program to prevent or to reduce and control the discharge or deposit of uncontaminated water or stormwater or eliminate the discharge or deposit of sewage into or in land drainage works, private branch drains or connections to any storm sewer from the premises.
- 6.04 The municipality may issue an approval for a compliance program to the person who submitted the program.
- 6.05 Every compliance program shall be for a specified length of time during which the facilities are to be installed and shall be specific as to the remedial actions to be implemented, the dates of commencement and completion, and the materials or other characteristics of the sewage, uncontaminated water or stormwater to which it relates. The final activity completion date shall not be later than the final compliance date in the compliance program.
- 6.06 The compliance program shall be in the form attached as Schedule E, to this By-law and, upon recommendation of the Manager, Sewer and Water Services, the General Manager of Public Works is authorized to execute such compliance programs under the authority of this by-law.
- 6.07 A person to whom a compliance program has been issued shall submit a compliance program progress report within 14 days after the scheduled completion date for each activity listed in the compliance program.
- 6.08 The compliance program progress report shall be in the form attached as Schedule F to this By-law.
- 6.09 A person to whom a compliance program has been issued shall not be prosecuted under Sections 2 or 3 of this by-law for the discharge or deposit of sewage, uncontaminated water or stormwater containing the matters specified in the compliance program and in compliance with the compliance program during the period within which the compliance program is applicable and so long as the compliance program is being fully complied with.

7.00 SECTION 7 SAMPLING AND ANALYSIS

- 7.01 Where a sample is required for the purpose of determining the characteristics or contents of the sewage, uncontaminated water or stormwater to which reference is made in this by-law;
- (a) One sample alone is sufficient and, without limiting the generality of the foregoing the sample may be a grab sample or a composite sample, may contain additives for its preservation and may be collected manually or by using an automatic sampling device;
 - (b) except as otherwise specifically provided in this by-law, all tests, measurements, analyses and examinations of sewage, uncontaminated water and stormwater, shall be carried out in accordance with Standard Methods; and
 - (c) for each one of the following metals: aluminum, antimony, arsenic, bismuth, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, tin, titanium, vanadium and zinc whose concentration is limited in Subclauses 2.01 (b) (xvi) and 3.01 (b) (vi), the analysis shall be for the quantity of total metal, which includes all metal both dissolved and particulate.

8.00 SECTION 8 SPILLS

- 8.01 Every person who discharges or deposits or causes or permits the discharge or deposit of sewage into or in land drainage works, private branch drains or connections to any sanitary sewer or combined sewer shall, if such discharge or deposit is not in the ordinary course of events forthwith notify the municipality or the agency responsible for operating the sewage works receiving the discharge or deposit.
- 8.02 Every person who discharges or deposits or causes or permits the discharge or deposit of uncontaminated water or stormwater into or in land drainage works, private branch drains or connections to any storm sewer shall, if such discharge or deposit is not in the ordinary course of events forthwith notify the municipality

or agency responsible for managing the land drainage works or storm sewer.

- 8.03 Every person who discharges or deposits or causes or permits the discharge or deposit of any of the items listed in subclauses 2.01 (b) (xvii) and (xix) into or in land drainage works, private branch drains or connections to any sanitary sewer or combined sewer shall, forthwith notify the municipality or the agency responsible for operating the sewage works receiving the discharge or deposit.
- 8.04 Every person who discharges or deposits or causes or permits the discharge or deposit of any of the items listed in Subclauses 3.01 (b) (vii) and (ix) into or in land drainage works, private branch drains or connections to any storm sewer shall forthwith notify the municipality or agency responsible for managing the land drainage works or storm sewer.
- 8.05 For any of the discharges in subsections 8.01, 8.02, 8.03 and 8.04 for which the person is required to forthwith notify the municipality or agency, the notification shall include the following information:
- (a) name of the company and the address of location of spill;
 - (b) name of person reporting the spill and telephone number where that person can be reached;
 - (c) time of the spill;
 - (d) type and volume of material discharged and any associated hazards; and
 - (e) corrective actions being taken to control the spill.
- 8.06 Within five days following a discharge to which subsection 8.05 applies, the person shall submit to the municipality or agency a detailed written report describing the cause of the spill and the actions taken or to be taken to prevent a recurrence.

9.00 SECTION 9 GENERAL

- 9.01 The owner or operator of industrial premises with one or more connections to a sewage works shall 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 with the written approval of the Manager, Sewer and Water Services of the municipality.
- 9.02 The manhole or alternate device shall be located on the property of the owner or operator of the premises, unless the Manager, Sewer and Water Services of the municipality has given written approval for a different location.
- 9.03 Every manhole, device or facility installed as required by subsection 9.02 shall be designed and constructed in accordance with good engineering practice and the requirements of the municipality, and shall be constructed and maintained by the owner or operator of the premises at his expense.
- 9.04 The owner or operator of industrial premises shall at all times ensure that every manhole, device or facility installed as required by subsection 9.02 is at all times accessible for purposes of observing and sampling the sewage and measuring the flow of sewage therein.
- 9.05 The municipality may require the owner or operator of industrial premises to install and maintain devices to monitor sewage discharges and to submit regular reports regarding the discharges to the municipality.
- 9.06 For the purpose of the administration of this by-law, a person appointed by council for the purpose may, upon production of his identification, enter any industrial premises, to observe, to measure the flow of sewage to any sewer and to collect any samples required.
- 9.07 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 a sewage works; or
 - (b) any permanent or temporary device installed in a sewage works for the purpose of measuring, sampling and testing of sewage.

- 9.08 The agreement contemplated by Section 5 and the compliance program contemplated by Section 6 may be terminated by the municipality on 30 days written notice if the discharge of sewage covered by such agreement or compliance program is causing contravention of Clauses 2.01 (a) and 3.01 (a) of the by-law.
- 9.09 The agreement contemplated by Section 5 and the compliance program contemplated by Section 6 may be terminated by the municipality by written notice at any time where there is an emergency situation of immediate threat or danger to any person, property, plant or animal life, or waters.

10.00 SECTION 10 OFFENCES

- 10.01 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 \$2,000 for every day or part thereof upon which such offence occurs or continues.
- 10.02 Every person other than a corporation who contravenes any provision of this by-law is guilty of an offence and on conviction is liable for every day or part thereof upon which such offence occurs or continues to a fine of not more than \$5,000 for a first offence and \$10,000 for any subsequent conviction.
- 10.03 Every corporation which contravenes any provision of this by-law is guilty of an offence and on conviction is liable for every day or part thereof upon which such offence occurs or continues to a fine of not more than \$25,000 for a first offence and \$50,000 for any subsequent conviction.
- 10.04 In this by-law, subsequent conviction means a conviction for an offence which offence occurs after the date of conviction for an earlier offence under this by-law, by-law no. 35-1970, or by-law 124-1990.
- 10.05 Subsections 10.02, 10.03, and 10.04 come into force on the date section 11 of Bill No. 59 of The 1987 Municipal Act Amendment Act comes into force and subsection 10.01 is thereupon repealed.
- 11.00 That by-law 124-1990 of the City of Thunder Bay be and is hereby repealed.
- 12.00 This by-law shall come into force and take effect upon the final passing thereof.

SCHEDULE A HAULED SEWAGE MANAGEMENT PERMIT

PERMIT NO.: _____

ANNUAL PERMIT TO DISCHARGE HAULED SEWAGE OR HOLDING TANK WASTES

1. NAME OF COMPANY:

2. ADDRESS OF COMPANY:

3. MINISTRY OF THE ENVIRONMENT
CERTIFICATE OF APPROVAL NO.:

(Attach copy of certificate)

4. VEHICLE(S) LICENCE NO.:

TANK CAPACITY (LITRES):

5. SIGNATURE OF COMPANY OWNER:

DATE:

6. SIGNATURE OF OPERATING AUTHORITY:

DATE:

6. PERMIT EXPIRES ON DECEMBER 31, 20 _____

7. DISPOSAL LOCATION

All waste shall be disposed of at the City of Thunder Bay Water Pollution Control Plant, Atlantic Avenue, in a location to be designated by the Operating Authority of the Water Pollution Control Plant.

10. HOURS OF DISPOSAL

Waste shall be disposed of between the hours of 8:00 a.m. and 4:30 p.m. Monday to Friday. Saturday, Sunday, and Statutory Holiday disposals may be allowed providing prior arrangement has been made with the Operating Authority.

11. RECORDING

It shall be the responsibility of the Hauler to accurately record each truck load of waste disposed of. The required information shall include the waste generators name and address, type of waste, volume of waste, time of disposal, drivers initials, and all other information as requested by the City of Thunder Bay Waste Tracking Form. No waste will be accepted without the requested information.

12. CLEANLINESS

It shall be the responsibility of the Hauler to ensure that the designated truck unloading area is kept clean and free from all waste material.

13. GEOGRAPHICAL BOUNDARIES

Only wastes generated within the City Limits will be accepted for disposal at the City of Thunder Bay Water Pollution Control Plant unless written authorization has been obtained prior to time of discharge.

14. SAMPLING WASTE

Prior to discharge of hauled waste the Hauler shall allow the WPCP personnel to sample the waste to ensure compliance with discharge limits and requirements. The hauler may be required to suspend the discharging of waste until the analysis is complete. The WPCP reserves the right to refuse permission to dump any load that is suspected of being incompatible or is so determined through sampling and analysis.

15. WASTE TYPES

Only waste of human origin contained in septic and holding tanks will be accepted for discharge. In no case shall the wastes exceed the limits in the Sewer Use By-law for toxic contaminants. Hazardous waste as per Regulation 309 shall not be permitted for discharge.

16. AUTHORITY

The Hauler shall adhere to all instructions given by Operating Authority personnel while at the Water Pollution Control Plant.

17. MINISTRY OF THE ENVIRONMENT CERTIFICATE OF APPROVAL

The Hauler shall provide a copy of their Ministry of the Environment Certificate of Approval as issued under Part VIII of the Environmental Protection Act (Ontario) to the City of Thunder Bay.

18. RIGHT TO REFUSE

The City of Thunder Bay reserves the right to refuse permission to discharge any load that is suspected of being incompatible or is so determined through sampling and analysis.

Notwithstanding anything elsewhere herein contained, the City of Thunder Bay reserves the right in its sole discretion to refuse permission to discharge any load where it is in the interests of the safe and efficient operation of the plant to do so or where due to prevailing circumstances it is not desirable or practicable to permit the same and in all such cases the City shall not be liable for any losses or consequential damages sustained by the hauler or others.

19. SUSPENSION OF PRIVILEGES

Suspension of privileges to dispose of waste at the City of Thunder Bay Water Pollution Control Plant will result for failure to comply with any of the foregoing clauses.

SCHEDULE B BEST MANAGEMENT PRACTICES (BMP) PLAN

A Best Management Practices Plan is a plan agreed to by the municipality and is developed for activities which are associated with or ancillary to industrial manufacturing or treatment processes. The ancillary sources addressed in BMP plan are material storage areas; loading and unloading areas; plant site runoff; in-plant transfer, process, and material handling areas; and sludge and hazardous waste disposal areas. In general, the BMP Plan will include practices used by industry for pollution control from these sources, safety programs, fire protection, protection against loss of valuable raw materials or products, etc. The following elements must be included in a BMP Plan:

General

1. Name and location of facility
2. Statement of BMP policy and objectives
3. Review by plant manager

Specific

1. Establishment of BMP Committee
2. Risk Identification and Assessment
3. Reporting of BMP Incidents
4. Materials Compatibility
5. Good Housekeeping
6. Preventive Maintenance
7. Inspection and Records
8. Security
9. Employee Training

SCHEDULE C INDUSTRIAL SECTORS

CATEGORY	SIC	SIC (CANADIAN)
Construction Industry	1600-1799	4011-4499
Food and Kindred Products		
Meat	2011-2013	1011
Poultry	2016-2017	1012
Dairy	2021-2026	1041-1049
Fruit and Vegetables	2032-2038	1031-1032
Grain Mills	2041-2048	1051-1059
Fats and Oils	2074-2079	1061
Bakery Products	2051-2052	1071-1072
Sugar Processing	2061-2067	1081-1089
Beverages	2082-2087	1111-1141
Seafood Processing	2091-2092	1021
Misc. Food Processing	2095-2099	1091-1099
Tobacco	2110-2141	1211-1221
Textile Mill Products		
Primary Textiles	2211-2269	1800-1899
Textile Products	2271-2299	1900-1999
Apparel & Other Textile Prod.	2311-2399	2441-2499
Lumber and Wood Products		
Timber Products Processing	2411-2499	2511-2599
Wood Preserving	2491	2591
Wood & Metal Furniture Manu.	2510-2599	2611-2699
Paper and Allied Products		
Pulp, Paper & Paperboard Mills	2600-2631	2711-2712
Misc. Converted Paper Products	2640-2655	2731-2799
Building Paper and Board Mills	2661	2713-2719
Printing and Publishing	2700-2799	2811-2899
Chemicals and Allied Products		
Inorganic Chemicals Manufact.	2810-2819	3711
Phosphate Manufacturing	2819	3721-3729
Plastics, Resins & Synthetic Fibers M.	2821-2824	3731
Pharmaceutical Manufacturing	2830-2834	3741
Soaps and Cosmetics	2840-2844	3761-3771
Paints, Varnishes Manufacture	2851	3751
Gums and Wood Chemicals	2861	3712

Continued...

CATEGORY	SIC	SIC (CANADIAN)
Dye Manufacture	2865	3712
Organic Chemicals & Pesticide Man.	2869	3712
Pesticide Formulation	2879	3712
Fertilizer Manufacture	2873-2875	3721-3729
Adhesives and Sealants	2891	3792
Explosives	2892	3711
Ink Manufacture	2893	3791
Carbon Black	2895	711
Chemicals & Chemical Prepar.	2899	3711
Petroleum Refining	2911	3611
Paving and Roofing Materials	2951-2952	3699
Coal & Petroleum Products	2991-2999	3612-3698
Rubber and Misc. Plastic Products		
Rubber Products	3011-3069	1500-1599
Plastics Molding	3070-3079	1600-1699
Leather and Leather Products		
Leather Tanning and Finishing	3111	1711
Leather Goods	3131-3199	1712-1719
Stone Clay and Glass Products		
Stone, Clay and Glass Products	3200-3299	3511-3599
Asbestos Manufacturing	3292	3592
Glass Manufacturing	3211-3229	3561-3562
Cement Manufacturing	3271-3273	3521-3551
Primary Metal Industries		
Iron and Steel	3300-3317	2911-2921
Foundries	3321-3325	2941
Nonferrous Metals		
Forming/Manu.	3331-3369	2951-2999
Aluminum Forming	3353-3355	2951
Copper Forming	3351-3357	2959
Misc. Primary Metal Products	3390-3399	2999
Fabricated Metal Products		
Metal Finishing	3411-3469	3011-3099
Electroplating	3471	3011-3099
Coil Coating	3479	3011-3099
Ordnance and Accessories	3482-3489	3011-3099
Misc. Fabricated Metal Products	3490-3499	3011-3099

Continued...

CATEGORY	SIC	SIC (CANADIAN)
Equipment and Machinery		
Machinery Manufacturing	3500-3599	3111-3199
Electrical & Electronic Comp.	3612-3690	3311-3399
Battery Manufacturing	3691-3692	3391
Misc. Electrical Equipment	3693-3699	3392-3399
Transportation Equipment	3711-3799	3211-3299
Instruments & Related Products	3811-3873	3911-3914
Misc. Manufacturing	3911-3999	3921-3999
Photographic Chemicals Manu.	3861	
Transportation and Public Services		
Transportation Services	4000-4799	4511-4599
Electricity Generation & Dist.	4911-4931	4911
Water Supply	4941	4931
Waste Treatment and Disposal	4952	4999
Refuse Systems	4953	4999
Hazardous Waste Treaters	4953	4999
Wholesale and Retail Industry		
Petroleum Products Dealers	5983-5989	5111
Automobile Wrecking	5015	5911
Barrel and Drum Reclaimers	5085	5919
Scrap and Waste Materials	5093	5919
Solvent Reclaimers	5093	5919
Waste Oil Reclaimers	5093	5919
Services		
Furniture Refinishing	7641	6213
Gasoline Service Stations	5541	6331
Automotive Repair	7532-7549	6351-6399
Photographic Services	7384	6571
Hospitals and Clinics	8062-8072	8611-8619
Industrial and Commercial Laundries	7211-7219	9721-9729
Funeral Services	7261	9731
Disinfecting & Exterminating	7342	9951
Building Maintenance	7349	9952-9959

SCHEDULE C1

WASTE SURVEY REPORT

CITY OF THUNDER BAY
WASTE SURVEY REPORT

SECTION 1 - General Information

(a)	NAME OF PERSON SUBMITTING REPORT		
	COMPANY NAME, CORPORATION, OWNER		
	TELEPHONE NO.	FAX NO.	
	POSTAL ADDRESS		POSTAL CODE
(b)	NAME OF COMPANY OFFICER RESPONSIBLE FOR EFFLUENT CONTROL		
	TELEPHONE NO.		
(c)	LOCATION OF PREMISES (number, street, or road, municipality)		

THE INFORMATION CONTAINED IN THIS REPORT TO THE BEST OF MY KNOWLEDGE AND BELIEF IS TRUE, COMPLETE AND ACCURATE.

(authorized representative)

(title)

(date)

SECTION 2 - Product or Service Information

(a) Canadian or Standard Industrial Classification Codes (SIC)

These are [] Canadian SICs or [] SICs.

_____	_____	_____
_____	_____	_____

(b) Brief description of manufacturing or service activities:

(c) Principal products produced or services rendered:

(d) Number of employees:

Plant: _____ Office: _____

(e) Number of shifts per day: _____ Number of days per week: _____

(f) Are major processes:

batch continuous both

If batch, average number of batches per 24-hour day: _____

(g) Is the production subject to seasonal variation:

yes no

If yes, briefly describe seasonal production cycle:

(h) Is there a special clean-up period: yes no

If yes, briefly describe clean-up period activities:

SECTION 3 - Waste Characteristics

(a) List all sources of water supply:

(b) Type of waste discharged (check all that apply):

TYPE	AVG. FLOW/DAY		(m3/day)
<input type="checkbox"/> sanitary	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> noncontact cooling	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> contact cooling	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> process	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> other	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured

(c) Wastes are discharged to (check all that apply):

TYPE	AVG. FLOW/DAY		(m3/day)
<input type="checkbox"/> sanitary #1	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> sanitary #2	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> storm sewer #1	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> storm sewer #2	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> ground water	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> surface water	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured
<input type="checkbox"/> evaporation	_____	<input type="checkbox"/> estimated	<input type="checkbox"/> measured

(attach additional list as necessary)

(d) Expected characteristics of wastes discharged to sanitary and storm sewers (Complete Pollutant Information Sheets for the discharge to each sewer).

SECTION 4 - Physical Lay-out

Layout sketch of property (to scale or approximate) to co-ordinate buildings, pretreatment works, property boundaries, effluent lines, and sanitary and storm sewer connections. (Number sewers so that they can be related to Pollutant Information Sheets).

SECTION 5 - Regulation 309 Information

For wastes discharged into or in connections to any sanitary sewer or combined sewer or storm sewer.

(a) Generator registration number: _____

SECTION 6 - Regulation 309 Information

For wastes discharged into or in connections to any sanitary sewer or combined sewer or storm sewer (complete Section 6 for each sewer).

(a) Description of waste: _____

(b) Description of generating process: _____

(c) Primary characteristic: _____
Analytical data (if applicable): _____
Name of Laboratory (if applicable): _____

Waste Class: _____ Hazardous Waste Number: _____

(d) Secondary characteristic: _____

Analytical data (if applicable): _____

SECTION 7 - Pretreatment

Pretreatment devices or processes used for treating wastes or sludges before discharge to the sanitary sewer system

(check as many as appropriate):

- Air flotation
- Centrifuge
- Chemical precipitation
- Chlorination
- Cyclone
- Filtration
- Flow Equalization
- Grease or oil separation, type
- Grease trap
- Grit Removal
- Ion Exchange
- Neutralization, pH correction
- Ozonation
- Reverse Osmosis
- Screening
- Sedimentation
- Septic tank
- Solvent separation
- Spill protection
- Sump
- Biological treatment, type
- Rainwater diversion or storage
- Other chemical treatment, type
- Other physical treatment, type
- Other, type
- No pretreatment provided

SECTION 8 - Pollutant Information Sheet (Controlled Matter)

Information for: [] sanitary sewer [] storm sewer

Sewer Number _____

Indicate by placing an “x” in the appropriate box for each listed parameter whether it is “suspected to be absent”, “known to be absent”, “suspected to be present” or “known to be present” and the known or expected concentration in milligrams per litre.

Parameter	Known		Suspected		Concentration mg/litre
	Present	Absent	Present	Absent	
1. chlorides	[]	[]	[]	[]	_____
2. sulphates	[]	[]	[]	[]	_____
3. aluminum	[]	[]	[]	[]	_____
4. iron	[]	[]	[]	[]	_____
5. fluoride	[]	[]	[]	[]	_____
6. phosphorus	[]	[]	[]	[]	_____
7. antimony	[]	[]	[]	[]	_____
8. bismuth	[]	[]	[]	[]	_____
9. chromium	[]	[]	[]	[]	_____
10. cobalt	[]	[]	[]	[]	_____
11. lead	[]	[]	[]	[]	_____
12. manganese	[]	[]	[]	[]	_____
13. molybdenum	[]	[]	[]	[]	_____
14. selenium	[]	[]	[]	[]	_____
15. silver	[]	[]	[]	[]	_____
16. tin	[]	[]	[]	[]	_____
17. titanium	[]	[]	[]	[]	_____
18. vanadium	[]	[]	[]	[]	_____
19. copper	[]	[]	[]	[]	_____
20. cyanide	[]	[]	[]	[]	_____
21. nickel	[]	[]	[]	[]	_____
22. zinc	[]	[]	[]	[]	_____
23. arsenic	[]	[]	[]	[]	_____
24. cadmium	[]	[]	[]	[]	_____

Parameter	Known	Suspected	Known	Suspected	Concentration
	Present	Absent	Present	Absent	mg/litre
25. phenolic compounds	[]	[]	[]	[]	_____
26. mercury	[]	[]	[]	[]	_____
27. BOD	[]	[]	[]	[]	_____
28. TSS	[]	[]	[]	[]	_____
29. oil & grease (animal/veg)	[]	[]	[]	[]	_____
30. oil & grease (mineral/syn)	[]	[]	[]	[]	_____
31. Kjeldahl nitrogen	[]	[]	[]	[]	_____

SECTION 9 - Pollutant Information Sheet (No Discharge)

Information for: [] sanitary sewer number _____

Indicate by placing an “x” in the appropriate box for each listed parameter whether it is “suspected to be absent”, “known to be absent”, “suspected to be present” or “known to be present” and the known or expected quantity in kg/month.

Parameter	Known	Suspected	Known	Suspected	Concentration
	Present	Absent	Present	Absent	kg/month
32. pesticides	[]	[]	[]	[]	_____
33. acute hazardous waste chemicals	[]	[]	[]	[]	_____
34. fuels	[]	[]	[]	[]	_____
35. hazardous industrial wastes	[]	[]	[]	[]	_____
36. hazardous waste chemicals	[]	[]	[]	[]	_____
37. ignitable wastes	[]	[]	[]	[]	_____
38. pathological wastes	[]	[]	[]	[]	_____
39. PCB wastes	[]	[]	[]	[]	_____
40. reactive wastes	[]	[]	[]	[]	_____
41. severely toxic materials	[]	[]	[]	[]	_____
42. waste radio-active materials	[]	[]	[]	[]	_____

SCHEDULE D - AGREEMENT FORM

THIS AGREEMENT made this _____ day
of _____ A.D. 20 _____.
BETWEEN: _____

(hereinafter called the Municipality)

OF THE FIRST PART

-and-

_____ (hereinafter called the Company)

OF THE SECOND PART.

WHEREAS the Municipality enacted By-law No. _____
on the _____ day of _____, relating
to the discharge of sewage in the Municipality; and

WHEREAS the said By-law prohibits the discharge of industrial
sewage containing certain substances in quantities in excess of the
limits set by the By-law but provides that the Municipality may permit
the discharge of industrial waste which would otherwise be prohibited
by the said By-law to an extent fixed by agreement with the Municipality
under such conditions with respect to payment or otherwise as may be
necessary to compensate for any additional costs of treatment; and

WHEREAS the Company carries on an industrial activity within
the Municipality at premises known as _____
which activity produces a sewage discharge in which the quantity of one
or more of Suspended Solids, Biochemical Oxygen Demand (hereinafter
referred to as B.O.D.), or Phosphorus is above the permissible limits
set out in the said By-law which results in materially adding to the cost
of treatment at the municipal sewage works.

NOW THEREFORE THIS INDENTURE WITNESSETH that the
parties hereto mutually covenant and agree as follows:

- (1) During the currency of this agreement the QUANTITY OF
SEWAGE DISCHARGED by the Company from its premises
at _____ to the sanitary sewer or combined sewer
system shall not exceed _____ cubic metres per day
and the RATE OF SUCH DISCHARGE OF SEWAGE from the
said premises shall not exceed _____ cubic metres per hour.
- (2) In calculating the quantity of sewage for the purposes of this
agreement, stormwater shall be excluded.

2. During the currency of this agreement only, the QUALITY OF THE SEWAGE discharged by the Company from the said premises to the sanitary sewer or combined sewer system MAY EXCEED THE LIMITS SET BY THE BY-LAW with respect to the quantity of Suspended Solids, B.O.D., and Phosphorus provided that they SHALL NOT EXCEED THE FOLLOWING LIMITS AT ANY TIME. **

** (Refer to "Letter of Understanding, Section 1".)

- (a) Suspended Solids - _____ milligrams/litre
 - (b) B.O.D. - _____ milligrams/litre
 - (c) Phosphorus - _____ milligrams/litre
3. THE DISCHARGE OF SEWAGE BY the Company from the said premises containing Suspended Solids, B.O.D., and Phosphorus, IN EXCESS OF THE ABOVE LIMITS shall constitute a contravention of this agreement and thus a contravention of the By-law.
 4. In determining the quality of sewage for the purposes of this agreement, the volume of any stormwater or any water which is required to be deducted for the purposes of Section 5.01 of By-law No. _____ shall be deducted and Standard Methods as defined in the by-law shall be used.
 5. THIS AGREEMENT SHALL REMAIN IN FORCE from _____ until December 31st, _____, and be automatically renewed on January 1st, _____ and annually thereafter, on the same terms unless a new agreement is reached or this agreement is terminated as hereinafter provided.
 6. THIS AGREEMENT MAY BE TERMINATED BY THE MUNICIPALITY at any time on 30 days written notice sent by registered mail addressed to the Company at the said premises, if:
 - (a) The sewage is causing a health or safety hazard to a sewage works employee; or
 - (b) The sewage is causing damage to the sewers, materially increasing their maintenance costs or causing a dangerous condition; or
 - (c) The sewage is causing damage to the sewage treatment process or causing a dangerous condition in the treatment works; or
 - (d) The sewage is causing the sludge from the sewage works, to fail to meet criteria relating to contaminants for spreading the sludge on agricultural lands under Ontario's Guidelines for Sewage Sludge Utilization on Agricultural Lands (as revised January, 1986); or

- (e) The sewage is causing the sewage works effluent to contravene any requirement by or under The Ontario Water Resources Act or The Environmental Protection Act (Ontario); or
 - (f) The sewage is causing a hazard to any person, animal, property, or vegetation; or
 - (g) The sewage is contrary to By-law No._____ in any way other than as provided herein.
7. THIS AGREEMENT MAY BE TERMINATED BY THE MUNICIPALITY at any time where there is an emergency situation of immediate threat or danger to any person, property, plant or animal life, or waters.
 8. THIS AGREEMENT MAY BE TERMINATED BY THE COMPANY at any time on 30 days written notice sent by registered mail addressed to the Manager of Public Works of the Municipality.
 9. IN THE EVENT OF A RENEWAL IF THE MUNICIPALITY GIVES WRITTEN NOTICE sent by registered mail to the Company as aforesaid at any time within 30 days before or after the start of each calendar year, THAT THE AMOUNT OF THE FEE OR ANY OF THE LIMITS HEREIN BEFORE SET OUT ARE TO BE CHANGED and no new agreement can be reached between the Municipality and the Company, this agreement may be terminated at the option of the Municipality at any time without notice 90 days after the registered notice was sent.
 10. EXCEPT AS HEREIN OTHERWISE EXPRESSLY PROVIDED THE COMPANY SHALL CONFORM TO THE PROVISIONS OF THE SAID BY-LAW of the Municipality relating to the discharge of sewage and in the event of termination of this agreement the Company shall conform to the provisions of the said By-law.
 - 11.(1) THE COMPANY HEREBY CONVENANTS AND AGREES TO PAY TO THE MUNICIPALITY a fee based on the following sewage service rate calculation:

$$C = QR_i$$

$$R_i = R_n \left[(f_s) \frac{(S_i - S_n)}{S_n} + (f_B) \frac{(B_i - B_n)}{B_n} + (f_p) \frac{(P_i - P_n)}{P_n} \right]$$

C = surcharge in cents

Q = quantity of sewage discharged per billing period in thousands of litres

R_i = excess cost of treatment per thousand litres in cents

R_n = operating cost of sewage treatment plant in cents per thousand litres of sewage (based on previous year)

f_s = cost allocation factor for TSS = 0.33
 f_B = cost allocation factor for BOD = 0.33
 f_P = cost allocation factor for TP = 0.33
 S_i = average TSS in mg/l of sewage discharged per billing period
 B_i = average BOD in mg/l of sewage discharged per billing period
 P_i = average TP in mg/l of sewage discharged per billing period
 S_n = by-law limit for TSS = 350 mg/l
 B_n = by-law limit for BOD = 300 mg/l
 P_n = by-law limit for TP = 10 mg/l

- (2) The said fee as calculated under subsection (1) shall become due and be paid quarter yearly on the last days of March, June, September and December in each year of any renewal until terminated as herein provided. Quarterly billing of any calender year will be calculated from the Company's discharge data (flow and concentration) as defined by subsections (3) and (4) or (5), of each billing period, and the Water Pollution Control Plant operating cost (R_n , cents per 1000 litres) from the previous year. At the end of the final billing quarter, December 31st, the actual operating costs will be known for that year. The first quarter billing for the following calendar year will therefore be adjusted to reflect the actual treatment cost for the four previously billed periods.
- (3) The actual quantity of effluent discharged to sanitary sewer, referred to as (Q) in subsection (1), shall be determined daily by the Company utilizing flow monitoring equipment installed, operated, and maintained by the Company, as approved by the Municipality.
- (4) Biochemical oxygen demand (B_i), total suspended solids (S_i), and total phosphorus (P_i), concentrations shall be determined by the Municipality from composite samples of the Company's effluent, taken during the Company's normal working day by personnel of the Public Works Department. The samples shall be taken not less than three times per sanitary connection during any three month period. An average concentration of all composite samples taken over the specified three month period will be used in calculating the sewage service rate.
- (5) Notwithstanding subsection (4) above, where approved by the Manager, Public Works Department, data supplied by the Company shall be used in calculating the sewage service rate. The Municipality may, at its discretion, request split samples from the Company or collect samples independently for the purpose of comparative analysis. In the event of a discrepancy in the results of any analysis, an independent laboratory, as selected and agreed to by both the

Company and the Municipality, shall be contracted to conduct confirmatory analyses.

12. (1) THE COMPANY COVENANTS AND AGREES TO PAY TO THE MUNICIPALITY on demand interest on overdue amounts at prime rate plus 2 percent existing for the day on which such amount is due and calculated from such date to the date of payment.
- (2) In Subsection (1), "Prime rate" means the lowest rate of interest quoted by chartered banks to the most creditworthy borrowers for prime business loans as determined and published by the Bank of Canada in the periodic publication entitled the Bank of Canada Review.
13. THE MUNICIPALITY MAY TERMINATE THIS AGREEMENT at its option without notice if the Company fails for more than two months to pay an overdue amount but such termination shall not relieve the Company from its liability to make such payment.
14. THIS AGREEMENT shall enure to the benefit of, and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto affixed their Corporate Seals attested to by the hands of their respective proper officers in that behalf duly authorized.

SIGNED, SEALED AND
DELIVERED in the presence of:

) FOR THE CORPORATION OF
) THE CITY OF THUNDER BAY
)
) _____
) Mayor
)
) _____
) City Clerk
)
) COMPANY
)
) _____
) Company Official
)
) _____
) Company Official

SCHEDULE E

LETTER OF COMPLIANCE PROGRAM

CITY OF THUNDER BAY

Address: _____ Date: _____

Attention of: _____

COMPLIANCE PROGRAM NUMBER _____

In accordance with the provision of Section _____ of _____ By-law _____, you are hereby granted a compliance program for the attached program identified in Appendix I subject to the following conditions:

1. During the period covered by this compliance program only, the quality of the _____ (sewage, uncontaminated water, or stormwater) discharged by your Company from the said premises to the _____ (sanitary, combined or storm) sewer system or land drainage works may exceed the limits set by By-law _____ with respect to the parameters listed below provided that they shall not exceed the following limits at any time:

	<u>parameter</u>	<u>limit (mg/litre)</u>
(a)	_____	_____
(b)	_____	_____
(c)	_____	_____
(d)	_____	_____
(e)	_____	_____
(f)	_____	_____

2. The discharge of _____ (sewage, uncontaminated water or stormwater) by your company from the said premises containing the parameters listed in Item 1 in excess of the limits listed in Item 1 shall constitute a contravention of this compliance program and thus a contravention of the said by-law.
3. The compliance program may be terminated at any time on 30 days written notice sent by registered mail addressed to the Company at the said premises, if

- (a) The sewage is causing a health or safety hazard to a sewage works employee; or
- (b) The sewage is causing damage to the sewers, materially increasing their maintenance costs or causing a dangerous condition; or
- (c) The sewage is causing damage to the sewage treatment process or causing a dangerous condition in the treatment works; or
- (d) The sewage is causing the sludge from the sewage works, to fail to meet criteria relating to contaminants for spreading the sludge on agricultural lands under Ontario's Guidelines for Sewage Sludge Utilization on Agricultural Lands (as revised January, 1986); or
- (e) The sewage is causing the sewage works effluent to contravene any requirement by or under The Ontario Water Resources Act or The Environmental Protection Act (Ontario); or
- (f) The sewage is causing a hazard to any person, animal, property, or vegetation; or
- (g) The sewage is contrary to By-law No. ____ in any way other than as provided herein.

(The above clauses should be appropriately changed if the compliance program is being issued for the discharge of stormwater.)

- 4. The compliance program may be terminated at any time where there is an emergency situation of immediate threat or danger to any person, property, plant or animal life, or waters.
- 5. This compliance program shall remain in force until _____ provided the following timetable is adhered to:

Compliance Program Activities	Scheduled Commencement Date	Scheduled Commencement Date
a. Select Engineer	_____	_____
b. Engineering Investigation of Plant Conditions (Industrial Process Review & Wastewater Characterization)	_____	_____
c. Select Treatment Process & Design Criteria (Treatability Studies)	_____	_____

Compliance Program Activities	Scheduled Commencement Date	Scheduled Commencement Date
d. Detailed Design of Treatment System (Plans & Specifications)	_____	_____
e. Preparation of Operations Manual	_____	_____
f. Select Contractor For Installation/Construction	_____	_____
g. Commence Construction	_____	_____
i. Site Preparation (survey, excavation, etc.)	_____	_____
ii. Foundation Work & Underground Utilities (slabs, sewer, etc.)	_____	_____
iii. Structural Work (bldgs., etc.)	_____	_____
iv. Mechanical Work (control panels, etc.)	_____	_____
v. Electrical Work (control panels, etc.)	_____	_____
vi. Site Finish Work (fences, clean-up, etc.)	_____	_____
h. Pretreatment System Start Up	_____	_____

6. You must, however, take all necessary steps to ensure that all other conditions and parameters listed in the By-law are not exceeded, as there are no other exemptions.
7. You must acknowledge your acceptance of this compliance program by returning a signed copy of this letter of compliance program within 30 days of your receipt of the letter.

Municipal Officer

Operating Authority of STP

SIGNED AND ACCEPTED BY:

Authorized Representative

Company Name

SCHEDULE F

COMPLIANCE PROGRAM PROGRESS REPORT*

COMPANY NAME: _____

ADDRESS: _____

DATE SUBMITTED: _____

AUTHORIZED REPRESENTATIVE: _____

1. Compliance program activity description: _____

2. Scheduled completion date for above activity: _____

3. Activity completed on schedule? YES NO

4. If not on schedule, indicate anticipated completion date:

5. State reason for delay, if applicable:

6. What action has been initiated to return project to original schedule?

*Report is to be submitted within **14 days** after scheduled completion of each Activity listed in the Compliance Program.

CITY OF
Thunder Bay
Superior by Nature