HALIFAX REGIONAL MUNICIPALITY  
BY-LAW - W-101  
RESPECTING DISCHARGE INTO PUBLIC SEWERS

1 - Short Title

1(1) This By-Law shall be known as By-Law Number W-101, and may be cited as the "Wastewater Discharge By-Law".

2 - Definitions

2(1) In this By-Law:

(a) "biochemical oxygen demand" means the quantity of oxygen utilized, expressed in milligrams per litre, in the biochemical oxidation of matter within a 120 hour period at a temperature of 20 degrees centigrade;

(b) "blow down" means the discharge of recirculating non-contact cooling water for the purpose of discharging materials contained in the water;

(b) "chemical oxygen demand" means the quantity of oxygen utilized in the chemical oxidation of organic matter under standard laboratory procedure, expressed in milligrams per litre;

(c) "combined sewer" means a sewer intended to function simultaneously as a storm sewer and a sanitary sewer;

(d) "combustible liquid" means a liquid that has a flash point not less than 37.8 degrees Celsius and not greater than 93.3 degrees Celsius;

(e) "cooling water" means water that is used in a process for the purpose of removing heat and that has not, by design, come into contact with any raw material, intermediate product, waste product, or finished product, but does not include blow down water.

(f) "discharge" means to discharge, release, permit or cause to be discharged into the municipal wastewater facilities or stormwater system;
(g) “discharger” means the owner, occupant or a person who has charge, management or control of effluent, sewage, stormwater, uncontaminated water or any combination thereof, which is discharged to the municipal wastewater facilities;

(h) “Engineer” means the Municipal Engineer for the Halifax Regional Municipality and includes a person acting under the supervision and direction of the Engineer;

(i) “fuel” includes alcohol, gasoline, naphtha, diesel fuel, fuel oil or any other ignitable substance intended for use as a fuel;

(j) “hauled industrial wastewater” means any industrial wastewater transported to and deposited into any location in the municipal wastewater facilities.

(k) “industrial, commercial or institutional” includes or pertains to industry, manufacturing, commerce, trade, business, or institutions, as distinguished from domestic or residential;

(l) “leachate” includes any liquid that has percolated through solid waste and has extracted dissolved or suspended materials from it, including the liquid produced from the decomposition of waste materials and liquid that has entered the waste material from external sources including surface drainage, rainfall and groundwater.

(m) “municipality” means the Halifax Regional Municipality;

(n) “pathological waste” includes those fluids or materials which may contain pathogens of human or animal origin;

(o) “pesticides” includes any substance that is a pest control product within the meaning of the “Pest Control Products Act” (Canada) or a fertilizer within the meaning of the “Fertilizers Act” (Canada) that contains a pest control product;

(p) “phenolic compounds” means hydroxyl derivatives of benzene and its condensed nuclei;

(q) “sanitary sewer” means a sewer receiving and carrying liquid and water-carried wastes and to which storm, surface or groundwaters are not intentionally admitted;

(r) “sewage” means the combination of liquid and water-carried wastes from buildings, containing animal, vegetable or mineral matter in suspension or solution, together with such groundwater, surface water or stormwater as might be present;
(s) “sewer” means a pipe or conduit for carrying sewage, groundwater, stormwater or surface runoff, and includes all sewer drains, storm sewers, clearwater sewers, storm drains and combined sewers vested in, or under the control of, the municipality;

(t) “solvent extractable matter” includes grease or oils from animal, vegetable, mineral or synthetic sources;

(u) "Standard Methods" means Standard Methods for the examination of water and wastewater by the utilization of analytical and examination procedures provided in the edition current at the time of testing, published jointly by the American Public Health Association and the American Water Works Association or any publication by or under the authority of the Canadian Standards Association for the testing of water and waterworks to determine water quality standards;

(v) “storm sewer means a sewer that carries stormwater and surface runoff water, excluding sewage;

(w) “stormwater” means water from precipitation of all kinds, and includes water from the melting of snow and ice, groundwater discharge and surface water;

(x) “Stormwater system” means a method or means of carrying stormwater including, but not limited to, those ditches, swales, sewers retention ponds, streets or roads that are owned by the municipality;

(y) “suspended solids” means the insoluble matter suspended in wastewater that is separable by laboratory filtration;

(z) “total Kjeldahl nitrogen” means organic nitrogen;

(aa) “uncontaminated water” means potable water or any other water to which no matter has been added as a consequence of its use;

(ab) “waste radioactive substances” includes uranium, thorium, plutonium, neptunium, deuterium, their respective derivatives and compounds and such other substances as the Atomic Energy Control Board may designate as being capable of releasing ionizing radiation;

(ac) “wastewater facilities” means the structures, pipes, devices, equipment, processes or other things used, or intended, for the collection, transportation, pumping or treatment of sewage and disposal of the effluent;
(ad) “waste” means any material discharged into wastewater facilities;

(ae) “wastewater” means liquid waste containing animal, vegetable, mineral or chemical matter in solution or suspension carried from any premises;

3 - Prohibited Discharges to Wastewater Facilities

3(1) No person shall discharge, into wastewater facilities, sewage or wastewater which causes or may cause or results or may result in:

(a) a health or safety hazard;
(b) obstructions or restrictions to the flow in the wastewater facilities;
(c) an offensive odour to emanate from wastewater facilities, and without limiting the generality of the foregoing, sewage containing hydrogen sulphide, mercaptans, carbon disulphide, other reduced sulphur compounds, amines, or ammonia in such quantity that may cause an offensive odour;
(d) damage to wastewater facilities;
(e) interference with the operation and maintenance of wastewater facilities.
(f) a restriction of the beneficial use of sludge from the municipality’s wastewater facilities.
(g) effluent from municipal wastewater facilities to be in violation of any Provincial or Federal Acts or Regulations.

3(2) No person shall discharge, into wastewater facilities, sewage or wastewater with any one or more of the following characteristics:

(a) a pH less than 5.5 or greater than 9.5;
(b) two or more separate liquid layers;
(c) a temperature greater than sixty five degrees Celsius.

3(3) No person shall discharge, into wastewater facilities, sewage or wastewater containing one or more of the following:

(a) combustible liquid;
(b) fuel;
(c) hauled sewage, hauled wastewater or leachate, except where written permission from the municipality has been obtained;
(e) ignitable waste including but not limited to, flammable liquids, solids, and/or gases, capable of causing or contributing to explosion or supporting combustion in wastewater facilities;
(f) detergents, surface–active agents or other substances that may cause excessive foaming in the wastewater facilities;

(g) sewage containing dyes or colouring materials which pass through wastewater facilities and discolour the wastewater facility or effluent;

(h) pathological waste in any quantity;

(i) material containing polychlorinated biphenyls (PCBs);

(j) pesticides;

(k) reactive materials;

(l) radioactive substances;

(m) leachate, except where the discharger has written permission from the municipality.

3(4) No person shall discharge, into wastewater facilities, sewage or wastewater containing a concentration in excess of any of the limits set out in Table 1:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Milligrams Per Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum, Total</td>
<td>50</td>
</tr>
<tr>
<td>Antimony, Total</td>
<td>5</td>
</tr>
<tr>
<td>Arsenic, Total</td>
<td>1</td>
</tr>
<tr>
<td>Barium, Total</td>
<td>5</td>
</tr>
<tr>
<td>Benzene</td>
<td>0.01</td>
</tr>
<tr>
<td>Beryllium, Total</td>
<td>5</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>300</td>
</tr>
<tr>
<td>Bismuth, Total</td>
<td>5</td>
</tr>
<tr>
<td>Cadmium, Total</td>
<td>1</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>1000</td>
</tr>
<tr>
<td>Chlorides</td>
<td>1500</td>
</tr>
<tr>
<td>Chloroform</td>
<td>0.05</td>
</tr>
<tr>
<td>Chromium, Total</td>
<td>2</td>
</tr>
<tr>
<td>Cobalt, Total</td>
<td>5</td>
</tr>
<tr>
<td>Copper, Total</td>
<td>1</td>
</tr>
<tr>
<td>Cyanide, Total</td>
<td>2</td>
</tr>
<tr>
<td>1,2 - Dichlorobenzene</td>
<td>0.1</td>
</tr>
<tr>
<td>1,4 - Dichlorobenzene</td>
<td>0.1</td>
</tr>
<tr>
<td>cis - 1,2 - Dichloroethylene</td>
<td>4.0</td>
</tr>
<tr>
<td>Trans - 1,3 - Dichloropropylene</td>
<td>0.15</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.15</td>
</tr>
<tr>
<td>Fluoride</td>
<td>10</td>
</tr>
<tr>
<td>Iron, Total</td>
<td>50</td>
</tr>
<tr>
<td>Lead, Total</td>
<td>1</td>
</tr>
<tr>
<td>Substance</td>
<td>Milligrams Per Litre</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Manganese, Total</td>
<td>5</td>
</tr>
<tr>
<td>Mercury, Total</td>
<td>0.01</td>
</tr>
<tr>
<td>Methylene chloride</td>
<td>0.2</td>
</tr>
<tr>
<td>Molybdenum, Total</td>
<td>5</td>
</tr>
<tr>
<td>Nickel, Total</td>
<td>2</td>
</tr>
<tr>
<td>Oil &amp; Grease - mineral or synthetic in origin</td>
<td>15</td>
</tr>
<tr>
<td>Oil &amp; Grease - animal or vegetable in origin</td>
<td>150</td>
</tr>
<tr>
<td>o-Xylene</td>
<td>0.5</td>
</tr>
<tr>
<td>Phenolic Compounds (4AAP)</td>
<td>1</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td>10</td>
</tr>
<tr>
<td>Selenium, Total</td>
<td>1</td>
</tr>
<tr>
<td>Silver, Total</td>
<td>2</td>
</tr>
<tr>
<td>Sulphates Expressed as SO$_4$</td>
<td>1500</td>
</tr>
<tr>
<td>Suspended Solids, Total</td>
<td>300</td>
</tr>
<tr>
<td>1,1,2,2 - Tetrachloroethane</td>
<td>1.0</td>
</tr>
<tr>
<td>Tetrachloroethylene</td>
<td>1.0</td>
</tr>
<tr>
<td>Tin, Total</td>
<td>5</td>
</tr>
<tr>
<td>Titanium, Total</td>
<td>5</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.01</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>100</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>1.0</td>
</tr>
<tr>
<td>Vanadium, Total</td>
<td>5</td>
</tr>
<tr>
<td>Xylenes, Total</td>
<td>1.5</td>
</tr>
<tr>
<td>Zinc, Total</td>
<td>2</td>
</tr>
</tbody>
</table>

* A reference to “Total” in this table denotes total concentrations of all forms of the metal and ion including both particulate and dissolved species.
3(5) No person shall discharge, into wastewater facilities sewage or wastewater under circumstances where water has been added for the purpose of dilution to achieve compliance with Sections 3(2) and 3(4).

3(6) No person shall discharge cooling water or uncontaminated water to wastewater facilities unless the discharge has been permitted by the municipality.

4 - Discharge to Stormwater System

4(1) No person shall discharge into a stormwater system, matter which causes or may cause or may result in:

(a) a health or safety hazard;
(b) interference with the operation of a stormwater system;
(c) obstruction or restriction of a stormwater system or the flow therein;
(d) damage to the stormwater system
(f) impairment to the quality of the water in a stormwater system
(g) the quality of the water discharged from a municipal stormwater system to be in violation of Provincial or Federal Acts or Regulations.

4(2) No person shall discharge into a stormwater system, matter which results in one or more of the following characteristics;

(a) visible sheen, film or discolouration;
(b) two or more separate layers;
(c) a pH less than 6.0 or greater than 9.5;
(d) a temperature greater than 40 degrees Celsius;

4(3) No person shall discharge into a stormwater system;

(a) hazardous waste chemicals;
(b) combustible liquids;
(c) floating debris;
(d) fuel;
(e) hauled sewage or hauled waste;
(f) pathological waste;
(g) PCB’s
(h) pesticides;
(i) reactive waste;
(j) toxic waste;
(k) waste radioactive substances;
4(4) No person shall discharge into a stormwater system, matter containing a concentration, expressed in milligrams per litre, in excess of any one or more of the limits in Table 2 of this By-law entitled “Limits for Stormwater System Discharge”.

4(2) The provisions of subsection 4(1) apply to the discharge of storm water runoff from industrial, commercial and institutional process areas to a stormwater system, and to any storm water discharge to which the matter prohibited by subsection 4(1) has been added for the purpose of disposing of the matter.

Table 2 - Limits for Stormwater System Discharge

<table>
<thead>
<tr>
<th>Substance</th>
<th>Milligrams per litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>0.5</td>
</tr>
<tr>
<td>B.E.T.X. (benzine, ethyl benzine, toluene, xylene)</td>
<td>0.02</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>15</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.015</td>
</tr>
<tr>
<td>Carbon tetrachloride</td>
<td>0.02</td>
</tr>
<tr>
<td>Chromium</td>
<td>0.02</td>
</tr>
<tr>
<td>Copper</td>
<td>0.03</td>
</tr>
<tr>
<td>Cyanide</td>
<td>0.05</td>
</tr>
<tr>
<td>Fluoride</td>
<td>1.5</td>
</tr>
<tr>
<td>Lead</td>
<td>0.05</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.001</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>15</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.5</td>
</tr>
<tr>
<td>Selenium</td>
<td>0.01</td>
</tr>
<tr>
<td>Silver</td>
<td>0.001</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>15</td>
</tr>
<tr>
<td>Thallium</td>
<td>0.01</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>0.02</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.30</td>
</tr>
</tbody>
</table>
5 - Grease, Oil, Sediment, Sand Traps or Interceptors

5(1) Grease, oil, sediment and sand traps or interceptors shall be installed in all food service establishments or operations, vehicle service facilities, and car or truck washes when, in the opinion of the municipality, such a device is necessary for the proper handling and control of wastewater being discharged to the municipal wastewater facilities.

5(2) Traps or interceptors shall be installed such that they are easily accessible for all aspects of cleaning and inspection.

5(3) Traps or interceptors shall be maintained by the owner or operator in a condition of continuous efficient operation at the owner’s expense.

5(4) No retained or trapped oil, grease, sediment, sand, silt or other matter in any form shall be allowed to pass from the installed trap or interceptor into the wastewater facilities: instead removal of retained or trapped materials shall be achieved by pumping or other physical means and shall be hauled away and disposed of as required by law.

5(5) Whenever an inspection of an installed trap or interceptor results in a written notice for action on the part of the person(s) responsible for the installed device, such action shall be completed within the compliance period granted by the written notice.

5(6) The owner or operator of an establishment shall provide the municipality, upon request, with the frequency of inspection and maintenance of any installed grease, oil, sediment and sand traps or interceptors as well as information as to the disposal method employed and location of hauled waste material.

5(7) Any reasonable request for inspection by the municipality shall be granted by the owner or operator of the establishment.

6 - Reporting Requirements

6(1) No industrial, commercial or institutional discharger shall discharge sewage, wastewater, cooling water, uncontaminated water or any combination thereof, to wastewater facilities without first submitting to the Engineer of the municipality the following completed reports:
(a) the “Short Version of the Discharger Information Report” attached as Form 1; and
(b) the “Complete Discharger Information Report” attached as Form 2 where, in the opinion of the Engineer, the discharge may have a significant impact on the wastewater facilities, and the municipality has notified the discharger that completion of the report is required; or where the discharger has or requires an extra strength or large volume surcharge agreement with the municipality.
6(2) If a discharger has been discharging to wastewater facilities prior to the enactment of this by-law, the discharger shall comply with the requirements set out in subsection 6(1) within 30 days of receipt of written notice from the Engineer.

6(3) The discharger shall provide written notification to the municipality of any changes to the information filed pursuant to subsections 6(1) and 6(2) within 60 days of the change.

7 - Discharger Self-Monitoring

7(1) The discharger shall undertake the monitoring or sampling of any discharge to the wastewater facilities as may be required by the Engineer, and provide the results in accordance with written notice from the Engineer.

7(2) The obligations set out in or arising out of subsection 7(1) shall be completed at the expense of the discharger.

8 - Extra Strength and Volume Surcharge Agreement

8(1) Where large volumes of sewage, extra strength sewage or wastewater is discharged to wastewater facilities, the municipality may enter into a surcharge agreement with a discharger permitting exceedances of the limits set out in subsection 3(4), including, but not limited to, any one or more of the following:

(a) biochemical oxygen demand;
(b) solvent extractables - animal or vegetable in origin;
(c) total kjeldahl nitrogen;
(d) phosphorous, total;
(e) suspended solids, total; or
(f) large volumes.

8(2) The agreement may include terms and conditions under which the discharge is permitted and the method by which the municipality shall recover costs incurred by the pumping and treatment of the wastewater.

8(3) During the term of the agreement, the discharger shall be exempt from meeting the limits set out in subsection 3(4) for the parameter(s) included in the agreement, if all conditions stipulated in the agreement are met.

8(4) Notwithstanding Section 8(1), where a discharger has entered into an extra strength surcharge or large volume agreement, any anticipated change in the information provided
pursuant to Section 5 must be submitted to the municipality prior to the change to allow an assessment of the impact of the change on the agreement.

8(5) The municipality may terminate the agreement at any time and the termination shall be effective within 30 days of the delivery of a written notice to the discharger’s site or head office.

9 - Compliance Agreement

9(1) Where the discharger, at the coming into force of this by-law, is out of compliance with one or more conditions in Section 3, the municipality may enter into a compliance agreement with a discharger to provide a plan for achieving compliance with the by-law within a specified time.

9(2) The agreement shall:
   (a) be for a fixed term;
   (b) contain reporting requirements to the Engineer on significant stages in the progress towards compliance as determined by the municipality; and
   (c) include a maximum interim limit for the parameter or parameters covered by the agreement.

9(3) During the term of the compliance agreement, the discharger shall be exempt from those parts of Section 3 specified in the compliance agreement provided that all of the conditions of the agreement are met by the discharger prior to the expiry of the agreement.

9(4) The agreement may be terminated with 48 hours notice by the municipality at any time where the terms and conditions of the agreement are not being met.

10 - Sampling and Analytical Requirements

10(1) Where the Engineer determines that monitoring of any discharge to the wastewater facilities is required, the owner or operator of industrial, commercial or institutional premises may be required to monitor, analyse, and report to the Engineer the results of the monitoring program at the owner’s expense.

10(2) The Engineer may specify specific time periods for collection of samples and analytical requirements based on practices of the business, as required.

10(3) The Engineer may from time to time enter any premises and conduct such tests as deemed
necessary.

10(4) All tests, measurements, analyses and sample handling shall be carried out in accordance with "Standard Methods" and by a laboratory certified by the Canadian Association of Environmental Laboratories.

11 - Control Service Access

11(1) The Engineer may require the installation of a control service access or the upgrading of an existing control service access, for each connection to the wastewater facilities for the purpose of monitoring or sampling discharges.

11(2) A control service access required under subsection 11(1) shall be:
(a) located on the property of the discharger unless the municipality permits an alternative location;
(b) constructed and maintained at the expense of the discharger;
(c) accessible at all times by the municipality;
(d) constructed in a manner which meets the standards of the municipality; and
(e) maintained to ensure access and structural integrity.

12 - Penalty

12(1) Any person who contravenes any provision of this by-law shall be liable upon summary conviction for every such offence to a penalty of not less than five hundred dollars ($500.00) and not exceeding fifty thousand dollars ($50,000.00) or in default of payment, to imprisonment for a term not exceeding ninety days and each day that the offence continues shall constitute a new offence.

12(2) Any person alleged to have violated this bylaw, who is given notice of the alleged violation and where the said notice so provides for payment, may pay a penalty in the amount of $500.00 to the HALIFAX REGIONAL MUNICIPALITY provided that said payment is made within a period of 14 days following the day on which the alleged violation was committed, and said payment shall be in full satisfaction, releasing and discharging all penalties and imprisonments incurred by the person for said violation.

13 - Repeal of By-laws, Regulations and Ordinances

13(1) Halifax Regional Municipality By-Law W-100 Respecting Wastewater Discharge is hereby repealed.
Halifax Regional Municipality Pollution Prevention Program

Discharger Information Report
( Form 1 )

1. General Information

___________________________________________________________________
(Company Name, Corporation, Owner)

___________________________________________________________________
(Telephone Number) (Fax Number)

___________________________________________________________________
(Mailing address) (Postal Code)

Location of Premises:

___________________________________________________________________
(Street Name, Number, Block Number, Unit Number)

Company Officer responsible for waste effluent control:

___________________________________________________________________
(Name) (Title) (Telephone Number)

2. Product or Service Information

(a) Number of Employees: __________________________________________
    Plant: ___________________ Office: ________________________

(b) Number of shifts per day: _______ Number of days per week: __________

(c) What are your principal products produced or services rendered:
    _______________________________________________________________
3. Waste Characteristics and Disposal

(a) Consumption of water:

______________________________________________________________

(Please provide a recent copy of water billing records)

(b) Please list the types and volumes of chemicals used in your manufacturing process and/or stored on site.

<table>
<thead>
<tr>
<th>Chemicals:</th>
<th>Quantities:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(c) Please list the type of chemicals, cooling water or other waste materials that are discharged to the sanitary sewer.

______________________________________________________________

(d) Is your wastewater subjected to any type of treatment before discharge into the sewer system? Please describe the treatment provided to the wastewater.

______________________________________________________________
(e) Has your company sampled and analysed wastewater that is discharged to the sewer system? If yes, please provide details and attach a copy of any available sample information.

Name of person submitting report:

(Name)

(Title)

(Date of Completion)
1. General Information

_____________________________________________________________________
(Company Name, Corporation, Owner)

_____________________________________________________________________
(Telephone Number)                (Fax Number)

_____________________________________________________________________
(Mailing address) (Postal Code)

Location of Premises:

_____________________________________________________________________
(Street Name, Number, Block Number, Unit Number)

Company Officer responsible for waste effluent control:

_____________________________________________________________________
(Name)       (Title)                         (Telephone Number)

2. Product or Service Information

(a) What are your principal products produced or services rendered:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
(f) Provide a brief description of your manufacturing or service activities:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(c) Standard Industrial or Canadian Codes (SIC) of those products produced:

___________________ ______________________    __________________
___________________ ______________________    __________________

Indicate if these are (   ) SICs, or Canadian (   ) SICs.

(d) Provide a brief description of the process(es) used in the manufacturing or servicing:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(e) Number of employees:

Plant: __________________ Office: __________________

(f) Number of shifts per day:_______ Number of shifts per week:________

(g) Please indicate if major processes are:

(   ) Batch   (   ) Continuous   (   ) Both

(h) Is the production subject to seasonal variation: (   ) yes   (   ) no

If yes indicated, briefly describe your seasonal production cycle:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
3. Waste Characteristics

(a) List all sources of water supply:

- Municipal water _______________________________
- Private well water _______________________________
- Hauled water _______________________________
- Other sources (Describe) _______________________________

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

- ( ) Sanitary sewage Estimated volume: _____________ m³/day
- ( ) Non-contact cooling water Estimated volume: _____________ m³/day
- ( ) Contact cooling water Estimated volume: _____________ m³/day
- ( ) Process water Estimated volume: _____________ m³/day
- ( ) Others Estimated volume: _____________ m³/day

(c) Wastewater is discharged to: (please check all that apply)

<table>
<thead>
<tr>
<th>Location</th>
<th>Estimated Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Sanitary # 1</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Sanitary # 2</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Storm sewer # 1</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Storm sewer # 2</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Surface water, pond, creek, river etc.</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Storage tank</td>
<td>________________ m³/day</td>
</tr>
<tr>
<td>( ) Ground water or well</td>
<td>________________ m³/day</td>
</tr>
</tbody>
</table>

( ) Liquid waste hauler - please indicate company used and disposal site if known.

____________________________________________________________________________________
____________________________________________________________________________________
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4. Pre-treatment and Disposal

(a) Pre-treatment devices or processes used for treating wastewater or sludges before discharge to the sewer system. (Please check as many as is appropriate):

- ( ) Air floatation
- ( ) Centrifuge
- ( ) Chemical Precipitation
- ( ) Chlorination
- ( ) Cyclone
- ( ) Filtration
- ( ) Flow Equalization
- ( ) Grease or Oil Separation, type:__________________________
- ( ) Grease Trap, type:__________________________
- ( ) Grit Removal
- ( ) Ion Exchange
- ( ) Neutralization, Ph correction
- ( ) Ozonation, type:__________________________
- ( ) Reverse Osmosis
- ( ) Chlorination
- ( ) Sedimentation
- ( ) Septic Tank
- ( ) Solvent Separation
- ( ) Spill Protection
- ( ) Sump
- ( ) Biological Treatment
- ( ) Rainwater Diversion or Storage
- ( ) Other Chemical Treatment
- ( ) Other treatment
- ( ) No Pre-treatment Provided

(b) Describe in detail the treatment process for your waste streams:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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(c) Provide a flow diagram of your Pre-treatment Process in the space below:

(d) Provide a description of the identified pre-treatment facilities and operating data

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(e) Describe how solids are handled, stored and disposed.

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(f) Describe any current operational problems or required shutdowns of pre-treatment facilities that may affect the quality of wastewater discharged to the sewer system.

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(g) Is sludge generated from the pre-treatment process: ( ) yes ( ) no
If yes, please describe the treatment and disposal method for sludge removal,

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(h) Do you recover any chemicals from your wastewater: ( ) yes ( ) no
If yes, please explain

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5. Pollutant Information (Sewer Discharge)

(a) Please indicate in the appropriate location whether the chemical parameter is known, or suspected to be present in each waste stream leaving your facility.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Known present</th>
<th>Suspected present</th>
<th>Concentration (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bismuth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadmium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cobalt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyanide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kjeldahl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manganese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molybdenum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil/Grease (A/V)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil/Grease (M/S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenolics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selenium</td>
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<td></td>
<td></td>
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<tr>
<td>Silver</td>
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<td></td>
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<tr>
<td>Tin</td>
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<td></td>
</tr>
<tr>
<td>Titanium</td>
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<tr>
<td>TSS</td>
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<td></td>
</tr>
<tr>
<td>Vanadium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Pollutant Information (No discharge)

(a) List pollutants or chemicals that have the potential to enter either sanitary or storm sewers due to accidental spills, machinery malfunctions or process upsets:

____________________________________________________________________

____________________________________________________________________

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(b) Does your Company have any existing agreements with the Municipality, former municipalities or the Province regarding wastewater discharged to the sanitary or storm sewers?

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(c) Does the Company have any flow measurement or sampling equipment available?

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(d) Has the Company ever conducted sampling and analysis of wastewater discharged to either the sanitary or storm sewer system? If so, please provide as an attachment to this report any copies of analysis that are available.

____________________________________________________________________

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____________________________________________________________________

Name of person submitting report:

_________________________________________
Done and passed in Council this 17th day of July, 2001

________________________________________

MAYOR

________________________________________

MUNICIPAL CLERK

I, Vi Carmichael, Municipal Clerk for the Halifax Regional Municipality, hereby certify that the above-noted by-law was passed at a meeting of the Halifax Regional Council held on, July 17, 2001.

________________________________________

Vi Carmichael, Municipal Clerk
<table>
<thead>
<tr>
<th>By-Law W-101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice of Motion:</td>
</tr>
<tr>
<td>First Reading:</td>
</tr>
<tr>
<td>“Notice of Intent” Publication:</td>
</tr>
<tr>
<td>Second Reading:</td>
</tr>
<tr>
<td>Approval of Minister of Housing &amp;</td>
</tr>
<tr>
<td>Municipal Affairs:</td>
</tr>
<tr>
<td>Effective:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amendment # 1 (V-101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amending Subsection (1) of Section 12</td>
</tr>
<tr>
<td>Notice of Motion:</td>
</tr>
<tr>
<td>First Reading:</td>
</tr>
<tr>
<td>“Notice of Public Hearing” Publication</td>
</tr>
<tr>
<td>Second Reading:</td>
</tr>
<tr>
<td>Approval of Service Nova Scotia and Municipal Relations:</td>
</tr>
<tr>
<td>Effective Date:</td>
</tr>
</tbody>
</table>