

# THE WELLINGTON CITY COUNCIL TRADE WASTE BYLAW 2004



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# CONTENTS

<b>PART 1</b>	<b>INTRODUCTION.....</b>	<b>5</b>
1.1	TITLE .....	5
1.2	COMMENCEMENT AND APPLICATION .....	5
1.3	PURPOSE OF THE BYLAW .....	5
1.4	REVOCATION .....	5
1.5	SCOPE OF THE BYLAW .....	5
1.6	DEFINITIONS .....	6
<b>PART 2</b>	<b>COMPLIANCE WITH THE BYLAW.....</b>	<b>10</b>
2.1	CONTROL OF DISCHARGES .....	10
2.2	STORAGE, TRANSPORT, HANDLING AND USE OF HARMFUL MATERIALS .....	10
<b>PART 3</b>	<b>TRADE WASTE CONSENTS.....</b>	<b>11</b>
3.1	CLASSIFICATION OF TRADE WASTE DISCHARGES .....	11
3.2	APPLICATION FOR A TRADE WASTE CONSENT .....	11
3.3	CONSIDERATION OF AN APPLICATION BY THE COUNCIL.....	11
3.4	DECISION ON AN APPLICATION.....	13
3.5	CONDITIONS OF A CONSENT .....	13
3.6	TECHNICAL REVIEW AND VARIATION.....	14
3.7	SUSPENSION OR CANCELLATION OF A CONSENT.....	14
<b>PART 4</b>	<b>WASTEWATER QUALITY MEASUREMENT.....</b>	<b>16</b>
4.1	DILUTION OF WASTE .....	16
4.2	MEASUREMENT OF WASTE QUALITY .....	16
4.3	MASS LIMITS.....	16
<b>PART 5</b>	<b>SAMPLING, TESTING AND MONITORING .....</b>	<b>18</b>
5.1	INTRODUCTION .....	18
5.2	SAMPLING AND MEASUREMENT .....	18
5.3	MONITORING OF CONSENTS .....	18
5.4	INDEPENDENT ANALYSTS.....	18
5.5	SAMPLING AND TESTING .....	19
5.6	FLOW METERING.....	20
5.7	ESTIMATING DISCHARGE.....	21
5.8	INTERPRETATION OF TEST RESULTS AND FLOW MEASUREMENTS .....	21
<b>PART 6</b>	<b>BYLAW ADMINISTRATION .....</b>	<b>23</b>
6.1	DIVISION OF DISTRICT INTO ZONES .....	23
6.2	FEES AND CHARGES .....	23
6.3	SERVICE OF DOCUMENTS .....	23
6.4	TRANSITIONAL PROVISIONS .....	23

<b>SCHEDULE 1</b>	<b>GENERAL CONDITIONS OF CONSENT .....</b>	<b>25</b>
S1.1	INTRODUCTION.....	25
S1.2	ACCESS .....	25
S1.3	ACCIDENTS .....	25
S1.4	ALTERATION OF ANY CHAMBER, MANHOLE, METER OR DEVICE USED FOR MEASUREMENT.....	25
S1.5	COMPLIANCE WITH THE CONSENT .....	26
S1.6	DISPUTES .....	26
S1.7	DURATION OF CONSENT .....	26
S1.8	FEES, CHARGES AND COSTS .....	27
S1.9	INDEMNITY OF THE COUNCIL .....	27
S1.10	OFFENCES AND PENALTIES.....	28
S1.11	REVIEW OF DECISIONS .....	28
S1.12	TRANSFER OR TERMINATION OF RIGHTS AND RESPONSIBILITIES .....	28
<b>SCHEDULE 2</b>	<b>DISCHARGE CHARACTERISTICS FOR CONTROLLED TRADE WASTE.....</b>	<b>29</b>
S2.1	INTRODUCTION.....	29
S2.2	CONTROLLED TRADE WASTE.....	29
<b>SCHEDULE 3</b>	<b>CHARACTERISTICS OF PROHIBITED TRADE WASTE.....</b>	<b>32</b>
S3.1	INTRODUCTION.....	32
S3.2	DEFINITIONS .....	32
S3.3	PROHIBITED CHARACTERISTICS.....	33
S3.4	PHYSICAL CHARACTERISTICS .....	33
S3.5	CHEMICAL CHARACTERISTICS .....	35
<b>SCHEDULE 4</b>	<b>SAMPLING PROCEDURE .....</b>	<b>39</b>
S4.1	INTRODUCTION.....	39
S4.2	SAMPLES .....	39
S4.3	SAMPLING METHODS FOR TRADE WASTE.....	39
S4.4	SAMPLE PRESERVATION, TRANSPORTATION AND STORAGE.....	40
S4.5	SAMPLE IDENTIFICATION AND RECORDS .....	40
<b>SCHEDULE 5</b>	<b>DRAINAGE ZONES WITHIN WELLINGTON CITY .....</b>	<b>42</b>
S5.1	INTRODUCTION.....	42
S5.2	MAP OF ZONES .....	42
<b>SCHEDULE 6</b>	<b>PORIRUA CITY COUNCIL TRADE WASTE BYLAW 1990 SCHEDULES I, II AND III.....</b>	<b>43</b>
S6.1	<b>SCHEDULE I - DESCRIPTION OF SIMPLE TRADE WASTES .....</b>	<b>43</b>
S6.2	<b>SCHEDULE II - DESCRIPTION OF CONTROLLED TRADE WASTES .....</b>	<b>47</b>
S6.3	<b>SCHEDULE III - MEASUREMENT AND SAMPLING OF THE CHARACTERISTICS OF A TRADE WASTE DISCHARGE .....</b>	<b>50</b>

# PART 1 INTRODUCTION

The Wellington City Council makes the following bylaw under the authority of and in accordance with the provisions of the Local Government Act 2002 and the Bylaws Act 1910.

## 1.1 TITLE

The Wellington City Council Trade Waste Bylaw 2004.

## 1.2 COMMENCEMENT AND APPLICATION

- (a) This Bylaw comes into force on 1 July 2004.
- (b) This Bylaw applies throughout the district of the Wellington City Council except the Northern Zone (refer Schedule 5 for details) where the Schedules I, II and III of the Porirua City Trade Waste Bylaw 1990 (refer Schedule 6) shall apply, rather than Schedules 2 and 3 of this bylaw.

## 1.3 PURPOSE OF THE BYLAW

The purpose of the Trade Waste Bylaw is to control trade waste discharges into the wastewater system to protect:

- (a) sewers, pumping stations, storage tanks, wastewater treatment plants and other related wastewater system structures
- (b) workers operating in or with the wastewater system
- (c) the environment by ensuring the necessary Resource consents are met.

The bylaw also provides a basis for charging persons who use the wastewater system and a basis for the introduction and implementation of the New Zealand Waste Strategy.

## 1.4 REVOCATION

The following Bylaw is revoked: Wellington City Council: Wellington Trade Waste Bylaw 1992.

## 1.5 SCOPE OF THE BYLAW

The Bylaw provides for the:

- (a) acceptance of long-term, intermittent, or temporary discharge of trade waste to the wastewater system
- (b) establishment of three grades of trade waste: controlled, conditional and prohibited
- (c) evaluation of individual trade waste discharges to be against specified criteria
- (d) correct storage of materials in order to protect the wastewater system from spillage
- (e) installation of flow meters, samplers or other devices to measure flow and quality of the trade waste discharge
- (f) pretreatment of waste before it is accepted for discharge to the wastewater system
- (g) sampling and monitoring of trade waste discharges to ensure compliance with the Bylaw
- (h) Council to accept or refuse a trade waste discharge
- (i) charges to be set to cover the cost of conveying, treating and disposing of or reusing trade waste and the associated costs of administration and monitoring
- (j) administrative mechanisms for the operation of the Bylaw
- (k) establishment of waste minimisation and management programmes for trade waste producers.

## 1.6 DEFINITIONS

1.6.1 For the purposes of the Wellington City Council Trade Waste Bylaw 2004 the following definitions shall apply:

NOTE: Words in *italics* in these definitions are also defined.

**‘Access point’** means a place where access may be made to a *private sewer* for inspection (including sampling or measurement), cleaning or maintenance that meets the requirements of the New Zealand Building Code.

**‘Approval or approved’** means approved in writing by an *authorised officer* of the *Council*.

**‘Authorised agent’** means any person appointed by an *authorised officer*.

**‘Authorised officer’** means any person appointed by the Chief Executive of the *Council* for the purposes of acting as an *authorised officer* under this Bylaw.

**‘BS 5728’** means the latest edition, complete with any amendments, of British Standard 5728 - Measurement of flow of cold potable water in closed conduits: Part 3:1997 Methods for determining principal characteristics of single mechanical water meters (including test equipment).

**‘Characteristic’** means any of the physical or chemical *characteristics* of a trade

waste referred to in Schedules 2 and 3.

**‘Condensing water or cooling water’** means any water used in any trade, industry, or commercial process or operation in such a manner that it does not take up matter into solution or suspension.

**‘Conditional trade waste’** means trade waste that has, or is likely to have, *characteristics* which exceed any of the *controlled trade waste characteristics* defined in Schedule 2, but which does not have any *characteristics* of a *prohibited trade waste* defined in Schedule 3.

**‘consent’** means a consent in writing given by the *Council* authorising a *consent holder* to discharge *trade waste* to the *wastewater system*.

**‘consent holder’** means a person who has obtained a *consent* for the discharge of trade waste to the wastewater system.

**‘Controlled trade waste’** means a trade waste with physical and chemical *characteristics* that complies with the requirements of wastes in Schedule 2 of this Bylaw.

**‘Council’** means the Wellington City Council.

**‘Discharge management plan’** means a plan for the monitoring, programming and controlling of the production of *trade waste* by the *consent holder* that is acceptable to the *Council*.

**‘Disconnection’** means the physical cutting and/or sealing of the *private sewer* from the *wastewater system*.

**‘Domestic wastewater’** means either *wastewater* that is typical of that discharged from *premises* that are used solely for residential activities or *wastewater* of the same character discharged from other *premises*.

**‘IANZ’** means International Accreditation New Zealand.

**‘Independent analyst’** means an *IANZ* accredited test laboratory appointed for the purposes of sampling and testing *wastewater* in accordance with the requirements of this Bylaw.

**‘ISO 5667’** means the latest edition, complete with any amendments, of International Standard ISO 5667: 1994 Water quality – Sampling:

- Part 1: 1980      Guidance on the design of sampling programmes.
- Part 2: 1991      Guidance on sampling techniques.
- Part 3: 1994      Guidance on the preservation and handling of samples.
- Part 10: 1992     Guidance on sampling of waste waters.

**‘ISO TR 9824’** means the latest edition, complete with any amendments, of International Standard ISO TR 9824: Measurement of liquid flow in open channels:

- Part 1: 1990      Measurement of free surface flow in closed conduits – Methods.
- Part 2: 1990      Measurement of free surface flow in closed conduits – Equipment.

**‘Local government act’** means the Local Government Act 2002.

**‘Mass limit’** means the total mass of any *characteristic* that is allowed to be discharged to the *wastewater system* over any twenty-four hour period from any single point of discharge or collectively from several points of discharge.

**‘Maximum concentration’** means the peak concentration of any *characteristic* that may not be exceeded.

**‘National radiation guidelines’** means the latest edition, complete with any amendments of NRL C1:1996 Code of safe practice for the use of unsealed radioactive materials, National Radiation Laboratory.

**‘New Zealand waste strategy’** means a programme established by the Ministry for the Environment that requires effective waste management, recycling and reuse of waste.

**‘NZS 4304’** means the latest edition, complete with any amendments, of New Zealand Standard 4304:2002 Management of healthcare waste.

**‘NZS 10012’** means the latest edition, complete with any amendments, of New Zealand Standard NZS 10012:1993 Quality assurance requirements for measuring equipment:

Part 1: 1993 Metrological confirmation system for measuring equipment.

**‘Person’** includes a corporation sole and also a body of persons whether corporate or incorporate.

**‘Point of discharge’** is the physical point where a *trade waste* discharge enters the *wastewater system*.

**‘Pretreatment’** means any processing of *trade waste* designed to reduce any *characteristic* in a waste, before discharge to the *wastewater system*.

**‘Premises’** means either:

- (a) a property or allotment which is held under a separate certificate of title or for which a separate certificate of title may be issued and in respect to which a building consent has been or may be issued, or
- (b) a building that has been defined as an individual unit by a cross-lease, unit title or company lease and for which a certificate of title is available, or
- (c) land held in public ownership (for example reserve) for a particular purpose, or
- (d) separately leased, individual units within buildings.

**‘Private sewer’** means that section of a sewer between the *premises* and the *wastewater system*.

**‘Prohibited trade waste’** means a *trade waste* having physical and chemical *characteristics* as defined in Schedule 3 of this Bylaw.

**‘Publicly notified’** means published on at least one occasion in a newspaper circulating in the *Council’s* district, or under emergency conditions by the most practical means available at that time.

**‘Receiving waters’** means coastal waters or any natural waters which will receive treated wastes.

**‘Sewage sludge’** means the material settled out from *wastewater* during the treatment process.

**‘Standard methods for the examination of water and wastewater’** means the latest edition, complete with any amendments and Supplements as published by the American Water Works Association/American Public Health Association/Water Environment Federation.

**‘Stormwater’** means all surface water run-off resulting from precipitation.

**‘Tankered waste’** is water or other liquid that has waste matter in solution or suspension and which is conveyed by vehicle for disposal.

**‘Temporary discharge’** means any discharge of an intermittent or short duration. Such discharges include the short-term discharge of an unusual waste from premises subject to an existing consent and the discharge of tankered wastes.

**‘Trade premises’** means any *premises* used or intended to be used (whether for profit or not) for carrying on any trade, business, education, research or industry and includes any land or *premises* wholly or mainly used for agricultural or horticultural purposes.

**‘Trade waste’** means any liquid, with or without matter in suspension or solution therein, that is or may be discharged from trade premises in the course of any trade or industrial process or operation or in the course of any activity or operation of a like nature.

**‘Wastewater’** means any water with matter in solution or suspension, domestic wastewater, or liquid trade waste.

**‘Waste minimisation’** means the implementation on trade premises, of operations, methods and processes appropriate to the goal of reducing or eliminating the quantity and toxicity of wastes.

**‘Wastewater system’** means all sewers, pumping stations, storage tanks, wastewater treatment plants, sea outfalls and other related structures owned by the Council and used for the reception, treatment and disposal of wastewater.

**‘Zones’** means the drainage catchment areas of Wellington City that are served by separate wastewater treatment plants, see map in Schedule 5.

# PART 2 COMPLIANCE WITH THE BYLAW

## 2.1 CONTROL OF DISCHARGES

2.1.1 No person shall:

- (a) discharge, or cause to be discharged, any trade waste to the wastewater system except in accordance with a consent issued under the provisions of this Bylaw
- (b) discharge, or cause to be discharged, a prohibited trade waste into the wastewater system
- (c) add or permit the addition of condensing or cooling water to any wastewater unless specific approval is given in a consent
- (d) add or permit the addition of stormwater to any wastewater unless specific approval is given in a consent.

2.1.2 In the event of failure to comply with 2.1 (a-d) the Council may physically prevent discharge to the wastewater system.

## 2.2 STORAGE, TRANSPORT, HANDLING AND USE OF HARMFUL MATERIALS

- (a) No person shall store, transport, handle or use, or cause to be stored, transported, handled or used any of the materials listed in 2.2(c) in a manner that may cause the material to enter the wastewater system and cause harmful effects.
- (b) All persons in trade premises shall take all reasonable steps to prevent the accidental entry of any of the materials listed in 2.2(c) of this Bylaw from entry into the wastewater system as a result of leakage, spillage or other mishap.
- (c) Materials referred to in 2.2 (a) and (b) are those:
  - (i) products or wastes containing corrosive, toxic, biocidal, radioactive, flammable or explosive materials
  - (ii) likely to generate toxic, flammable, explosive or corrosive materials in quantities likely to be hazardous, when mixed with the wastewater stream
  - (iii) likely to be deleterious to the health and safety of the Council's staff and the public or be harmful to the wastewater system or environment.

## PART 3 TRADE WASTE CONSENTS

### 3.1 CLASSIFICATION OF TRADE WASTE DISCHARGES

Trade waste discharges shall be classified as one of the following types:

- (a) **controlled** trade waste - trade waste for which standard conditions can be applied in a consent, refer Schedule 2
- (b) **conditional** trade waste - trade waste that exceed the requirements for a controlled consent but are not a prohibited trade waste, see 3.1(c). Conditional consents shall include consents for temporary discharges
- (c) **prohibited** trade waste - trade waste that contains, or is likely to contain, characteristics that are prohibited or are present in concentrations that are prohibited. Refer to Schedule 3.

### 3.2 APPLICATION FOR A TRADE WASTE CONSENT

3.2.1 Every person who wishes to:

- (a) discharge any trade waste into the wastewater system, or
- (b) change the characteristics of a trade waste discharged under an existing consent, or
- (c) change the conditions of an existing consent, or
- (d) make a temporary discharge

shall make an application to the Council for a consent to discharge to the wastewater system.

3.2.2 An application shall be made using the prescribed application form obtainable from Council. The Council may determine the nature and content of the application form which may be altered or amended at any time.

3.2.3 The application form shall be accompanied by the application fee.

3.2.4 The application for consent will not be processed until the application fee is paid.

### 3.3 CONSIDERATION OF AN APPLICATION BY THE COUNCIL

3.3.1 On receipt of any application for a consent the Council may require the applicant to provide further material, such as:

- (a) additional information that the Council requires to assess the application. This information may require that any discharge is investigated and analysed as provided for in Part 4 of this Bylaw
- (b) an independent review to verify any or all information supplied by the applicant
- (c) a discharge management plan.

3.3.2 In considering any application for a consent and in imposing any conditions in the consent the Council shall take the quality, volume and rate of discharge of the trade waste into consideration in relation to the:

- (a) health and safety of the Council staff, authorised agents, independent analysts and the public
- (b) limits and/or maximum values for characteristics of trade wastes as specified in Schedules 2 and 3 of this Bylaw
- (c) extent to which the trade waste may react with other trade waste or domestic wastewater to produce an undesirable effect
- (d) flows and velocities in the sewer or sewers in relation to the material or construction of the sewer or sewers
- (e) capacity of the sewers in any wastewater catchment area and the capacity of any wastewater treatment works serving the catchment in which the trade waste is produced
- (f) nature of the Council's wastewater treatment processes and the degree to which the trade waste is capable of being treated in the relevant wastewater treatment works
- (g) existence of any statutory requirements relating to the conveyance, treatment or discharge of raw or treated wastewater to receiving waters, the disposal of sewage sludge and any discharge to air (including the necessity for compliance with any resource consent, discharge permit or receiving water quality guidelines)
- (h) amenability of the trade waste to pretreatment
- (i) existing pretreatment works on the premises and the potential for their future use.

3.3.3 In considering any application for a consent and imposing any conditions in the consent the Council shall take into account other consideration such as:

- (a) the applicant has a waste minimisation and management programme in operation that complies with the New Zealand Waste Strategy and its guidelines and any Council Waste Management Plan
- (b) there are multiple drainage connections to the sewer from a single trade waste process or where two or more trade waste processes are involved with separate drainage connections to the sewer
- (c) there are any other existing or possible future discharges.

## 3.4 DECISION ON AN APPLICATION

The Council shall, after considering the matters in 3.3.2 and 3.3.3, do one of the following:

- (a) grant the application as a controlled consent
- (b) grant the application as a conditional consent
- (c) decline the application.

## 3.5 CONDITIONS OF A CONSENT

3.5.1 The general conditions of consent set out in Schedule 1 shall apply to all consents issued by the Council under 3.4.

3.5.2 Any consent to discharge may be granted or renewed subject to such other conditions the Council may impose relating to the:

- (a) particular public sewer or sewers to which the discharge will be made
- (b) maximum daily volume of the discharge, the maximum rate of discharge and the duration of maximum discharge
- (c) maximum limit or permissible range of any specified characteristics of the discharge, including concentration limits as in Schedules 2 and 3 or such lesser amount as specified in the consent and mass limits determined in accordance with Part 4 of this Bylaw
- (d) period or periods of the day during which the discharge, or a particular concentration, or volume of discharge may be made
- (e) characteristics of the trade waste at the point of discharge
- (f) provision of separate sewers to conduct trade and domestic wastewater separately to the Council wastewater system
- (g) provision, maintenance and operation by the consent holder of screens, grease traps, oil traps, silt traps, other partial or preliminary pretreatment processes, equipment or storage facilities designed to regulate the quality, quantity and rate of discharge or other characteristic prior to the point of discharge
- (h) provision and maintenance of inspection chambers, manholes or other apparatus or devices to provide reasonable access to private sewers for flow measurement, sampling and inspection
- (i) establishment of a sampling and testing programme and flow measurement requirements
- (j) stipulation of which of the methods set out in 5.5 and 5.6 are to be used for the taking of samples of the discharge and for measuring or estimating flow rates for use in determining discharge quality and the amount of any trade waste charges applicable to that discharge

- (k) provision and maintenance by the consent holder of such meters or devices as may be required to measure the volume or flow rate of any trade waste being discharged from the premises and for the testing of such meters
- (l) provision and maintenance of such services, (whether electricity, water or compressed air or otherwise), which may be required in order to operate meters and similar devices
- (m) provision by the consent holder of a discharge management plan
- (n) provision by the consent holder of water use data, waste flow data etc
- (o) consent holder's use of third parties for treatment, carriage, discharge and disposal of by-products of pretreatment of trade wastes
- (p) requirement to provide a bond or insurance in favour of the Council where failure to comply with the consent could result in damage to the Council's sewage system, its treatment plants, or could result in the Council being in breach of any statutory obligation
- (q) meeting of any other conditions reasonably necessary to achieve or ensure compliance with this Bylaw.

## 3.6 TECHNICAL REVIEW AND VARIATION

3.6.1 The Council may at any time during the term of a consent, by written notice to the consent holder, vary any condition within the consent to address such issues as a change in the:

- (a) nature of the discharge
- (b) wastewater system
- (c) circumstances that cause the condition(s) to become inappropriate or unnecessary
- (d) resource consent limits imposed on the discharges or the use of liquids or solids from the Council's treatment plant
- (e) legal requirements imposed on the Council.

3.6.2 The consent holder may seek to vary any condition of a consent at any time during the term of a consent by written application to the Council, as provided for in 3.2 of this Bylaw.

## 3.7 SUSPENSION OR CANCELLATION OF A CONSENT

3.7.1 The Council may suspend or cancel any consent immediately by giving written notice to the consent holder, if the:

- (a) Council is lawfully directed to suspend or cancel the consent

- (b) consent holder discharges any trade waste unlawfully which the Council determines may endanger the health or safety of any person, damage any part of the wastewater system or cause serious environmental effects as a result of the discharge
- (c) discharge is not effectively controlled to be in accordance with the requirements of a consent
- (d) discharge contains any prohibited substance.

3.7.2 The Council may suspend or cancel any consent by giving fifteen working-days written-notice to the consent holder, if the consent holder fails to:

- (a) comply with any condition of the consent
- (b) maintain effective control over the discharge
- (c) limit the volume, nature, or composition of trade waste being discharged in accordance with the requirements of the consent
- (d) take any action which in the opinion of the Council, threatens the safety of, or threatens to cause damage to any part of the wastewater system or the treatment plant or threatens the environment or the health or safety of any person
- (e) any charges due under this bylaw.

3.7.3 The Council may suspend or cancel any consent, by giving fifteen working-days notice to the consent holder for circumstances other than those in sections 3.7.2 (a)–(d) where it is in the public interest to do so.

# PART 4 WASTEWATER QUALITY MEASUREMENT

## 4.1 DILUTION OF WASTE

The consent holder shall not, unless approved by the Council, add or permit the addition of any potable water or stormwater to any waste stream in order to vary the level of any characteristic of the waste.

## 4.2 MEASUREMENT OF WASTE QUALITY

Wastewater quality shall be determined by either:

- (a) measuring the concentration of its characteristics alone, refer to Schedules 2 and 3; or
- (b) measuring both mass and concentration.

## 4.3 MASS LIMITS

4.3.1 Any characteristic controlled by mass limit shall have its maximum concentration limited to the value in Schedule 3.

4.3.2 When setting mass and concentration limits for a particular characteristic of a discharge in a consent the Council shall consider the:

- (a) nature of the discharge, i.e. batch or continuous or both
- (b) volume of the discharge
- (c) timing of the discharge
- (d) conditions in the wastewater system near the trade waste discharge point and elsewhere in the wastewater system
- (e) possibility of an interaction with other characteristics which increases or decreases the effect of either characteristic on the wastewater system, treatment process, or receiving water (or land)
- (f) proportion the mass flow of a characteristic of the discharge will be of the total mass flow of that characteristic in the wastewater system
- (g) extent to which the available industrial capacity is being used and is expected to be used in the forthcoming financial year.

4.3.3 In certain circumstances as determined by Council, such as a major change in a process or the establishment of a new industry, and provided it is within the capacity of the wastewater system Council may consider whether:

- (a) there is any net benefit to be gained by the increase of one characteristic concurrently with the decrease of another to justify any application for increased industrial capacity
- (b) there is a waste minimisation and management programme that complies with the New Zealand Waste Strategy and its guidelines and any Council Waste Management Plan.

4.3.4 When establishing the total mass of a particular characteristic that can be made available for trade waste discharges the Council shall consider the:

- (a) operational requirements of the wastewater system
- (b) effect on the final receiving environment of the particular characteristic and the requirements of any resource consent discharge conditions
- (c) requirements of the Council to reduce the pollutant discharge of the wastewater system
- (d) total mass of the characteristic allowable in the wastewater system and the proportion to be reserved for emergencies and for future allocations.

# PART 5 SAMPLING, TESTING AND MONITORING

## 5.1 INTRODUCTION

Sampling, testing and monitoring shall be undertaken to determine whether:

- (a) or not a discharge is in breach of the provisions of this Bylaw
- (b) a discharge is to be classified as a controlled, conditional, or prohibited trade waste, refer 3.1
- (c) or not a discharge is in breach of the provisions of any consent to discharge
- (d) any trade waste charges are applicable to that discharge.

## 5.2 SAMPLING AND MEASUREMENT

- 5.2.1 When taking samples, measurements or readings, then any form of sampling or measurement that is described in 5.5 or 5.6 of this Bylaw shall be used unless other methods are described in the consent to discharge, when these methods shall be used.
- 5.2.2 When an authorised officer or authorised agent has need to investigate a characteristic of a discharge not covered by a consent then any form of sampling or measurement that is described in 5.5 or 5.6 of this Bylaw may be used as specified by the authorised officer.

## 5.3 MONITORING OF CONSENTS

- 5.3.1 The Council may require the consent holder to monitor the discharge of the trade waste under the terms of their consent. The details of the monitoring to be done by the consent holder shall be at the discretion of the Council.
- 5.3.2 The Council may independently monitor the compliance of any consent holder in discharging trade wastes.

## 5.4 INDEPENDENT ANALYSTS

- 5.4.1 An independent analyst may be either appointed by the Council or be chosen by the consent holder to the approval of the Council.
- 5.4.2 An independent analyst shall operate within the requirements of the Bylaw and shall:
  - (a) take samples and make measurements at times and in the manner specified by the Council
  - (b) distribute samples in accordance with 5.5.7

- (c) analyse samples and report results in accordance with 5.5.10 and 5.5.1
  - (d) deliver the results of any such analysis in accordance with 5.4.6.
- 5.4.3 Prior to any scheduled inspection period, the Council shall give not less than five working days notice to an independent analyst of the commencement date of the inspection period.
- 5.4.4 When an independent analyst chosen by the consent holder fails, for whatever reason, to carry out their function at the consent holder's premises, then an independent analyst chosen by the Council may be appointed to carry out the function.
- 5.4.5 During any inspection period, the independent analyst shall take such samples, recordings and measurements at such time as may be directed by an authorised officer prior to the commencement of the inspection period.
- 5.4.6 Every independent analyst shall provide to the Council a certificate signed by the analyst at the time when any sample or finding is delivered to the Council. The certificate shall:
  - (a) describe the source of any sample, the time and date it was taken and the method used to take it
  - (b) certify that the sample has been taken in accordance with the requirements of this Bylaw
  - (c) describe the findings of any analysis, their source and the methods used to determine them
  - (d) certify that the analysis has been made in accordance with the requirements of this Bylaw.

## 5.5 SAMPLING AND TESTING

- 5.5.1 Samples shall be taken in accordance with a programme approved by the Council.
- 5.5.2 Sampling shall be undertaken by an authorised officer, authorised agent or independent analyst.
- 5.5.3 All authorised officers, or authorised agents of the Council, or any independent analyst may enter any premises believed to be discharging trade waste at any time in order to determine any characteristics of any discharge by taking:
  - (a) readings and measurements and/or
  - (b) samples for testingof any solid, liquid, or gaseous material or any combination or mixture of such materials being discharged.
- 5.5.4 The sample location shall be as defined in the consent or an alternative location advised or approved by the authorised officer.
- 5.5.5 Sampling shall be in accordance with the procedure contained in Schedule 4 and ISO 5667: Parts 2, 3 and 10 or some other procedure designed in accordance with ISO

5667: Part 1, with the consent of the Council.

- 5.5.6 An authorised officer may require that samples taken under this Bylaw are retained as separate samples, or that they are mixed to form a composite sample or samples.
- 5.5.7 On completion of sampling, each of the samples or the composite sample, shall be divided into a minimum of three equal portions dependent on the testing requirements. If the consent holder:
- (a) makes no requirement as in (b) below, the samples shall be delivered to the independent analyst nominated by the Council
  - (b) requires one portion of each sample, or composite sample, shall be delivered to the consent holder and at least two portions of each sample, or composite sample, shall be delivered to an authorised officer of the Council or to their appointed independent analyst
  - (c) has nominated their own independent analyst, the consent holder or their independent analyst shall receive two portions and Council may, on request, receive one portion of the sample or composite sample.
- 5.5.8 Where any portion of a sample or composite sample is to be delivered in accordance with this Bylaw, it shall be delivered within four hours of the sampling being completed.
- 5.5.9 Any portions retained for reference and any unused portions of each sample, or composite sample, shall be retained for a period of not less than 20 working days from the date of receipt. It shall be retained in a manner that preserves as far as is reasonably possible the characteristics of the sample.
- 5.5.10 The sample or composite sample shall be analysed to determine those characteristics specified by the Council in the consent to discharge trade waste or for some other range of characteristics approved by the Council.
- 5.5.11 Any testing shall use methods or procedures in accordance with, or validated against, the Standard Methods for the Examination of Water and Wastewater.

## 5.6 FLOW METERING

- 5.6.1 Flow metering may be required in the following situations where the Council:
- (a) determines there is not a reasonable relationship between a metered water supply to the premises and the discharge of trade waste
  - (b) does not approve a method of wastewater flow estimation
  - (c) decides there is a need for the continuous reading of flow.
- 5.6.2 Meters provided by the consent holder for the measurement of the rate or quantity of discharge shall be subject to the approval of the Council, but shall remain the property of the consent holder.
- 5.6.3 Measurement of flow shall be carried out by the consent holder in accordance with ISO TR 9824: Part 1, ISO TR 9824: Part 2 and BS 5728:Part 3.

- 5.6.4 Records of flow and/or volume shall be available for viewing at any time by the Council and shall be submitted to the Council at prescribed intervals.
- 5.6.5 Meters shall be located in a position that is readily accessible for reading and maintenance.
- 5.6.6 The consent holder shall arrange for in-situ or external calibration of the flow metering equipment and instrumentation by a person and method (usually that given in NZS 10012:Part 1) approved by the Council. Calibration shall be done at the time of installation and at least once a year thereafter to ensure performance of the meter is within  $\pm 10\%$  of its reading. In use, meter readings shall be within  $\pm 5\%$  of the most recent calibration check. A copy of independent certification of each calibration result shall be submitted to the Council.
- 5.6.7 Should any meter, after being calibrated, be found to register a greater or lesser discharge than the quantity of wastewater actually passed, the Council may make an adjustment to flow readings in accordance with the results shown by such tests.

## 5.7 ESTIMATING DISCHARGE

- 5.7.1 Where no meter or similar apparatus is warranted, the Council may require that a percentage of the water supplied to the premises, or other such basis as seems reasonable, be used for estimating the rate or quantity of flow.
- 5.7.2 Should any meter be out of repair, or cease to register, or be removed, the Council shall estimate the discharge for the period since the previous reading of such meter, based on:
- (a) the average of the previous four measurement periods, or
  - (b) any other factors for the purpose of arriving at a reasonable estimate when there is reasonable evidence that the average of the previous four measurement periods would be an unreasonable estimate of the discharge.
- 5.7.3 Where, in the judgement of the Council, a meter has been tampered with, the Council (without prejudice to the other remedies available) may declare the reading void and estimate discharge as provided above.

## 5.8 INTERPRETATION OF TEST RESULTS AND FLOW MEASUREMENTS

- 5.8.1 Any characteristic shall be considered in excess of a consent or Bylaw limit if the result was determined by analysis of:
- (a) an instantaneous composite sample and the result exceeds two times the relevant value
  - (b) two instantaneous composite samples taken at different times within a twenty-four hour period which both exceed the relevant value
  - (c) a four hour average composite sample
  - (d) a twenty-four hour flow proportionate sample.

5.8.2 Any flow measurement shall be considered in excess of a consent or Bylaw limit if the result was determined by analysis of a twenty-four hour flow volume, or an instantaneous flow rate as the case may be, which exceeds the relevant values.

## **PART 6 BYLAW ADMINISTRATION**

### **6.1 DIVISION OF DISTRICT INTO ZONES**

The Council may, by publicly notified resolution, divide the district into Northern, Western and Eastern zones for any specified purpose of this Bylaw, including for the purpose of facilitating the calculation of trade waste charges.

### **6.2 FEES AND CHARGES**

6.2.1 The Council may, by special consultative procedure, set fees and charges for the:

- (a) application process
- (b) administration of the consent
- (c) conveyance, treatment and disposal of trade wastes.

6.2.2 The consent holder shall be deemed to be continuing the discharge of trade waste and shall be liable for all charges, until such time as he/she gives notice of disconnection in accordance with S1.11.3.

### **6.3 SERVICE OF DOCUMENTS**

6.3.1 A person authorised by the Council shall sign any notice or document to be given, served or delivered.

6.3.2 Any notice or other document required to be given, served or delivered under this Bylaw to a consent holder may (in addition to any other method permitted by law) be given or served by delivery or courier to or by registered post addressed to the:

- (a) 'address for service' specified in a consent to discharge
- (b) consent holder's last known place of residence or business
- (c) registered office of an incorporated entity.

6.3.3 Further to 6.3.2, if any notice or other document is left at a conspicuous place at the trade premises or is handed to an employee of the consent holder at those premises, then such delivery shall be deemed to be served or delivered to the consent holder.

6.3.4 Any document given or served in accordance with section 6.3.2 or 6.3.3 shall be deemed to have been served upon the consent holder one day after the date of posting or delivery.

### **6.4 TRANSITIONAL PROVISIONS**

6.4.1 Any application for a consent to discharge trade waste made under the Wellington City Council Trade Waste Bylaw 1992 shall be deemed to be an application made under 3.2 of this Bylaw.

6.4.2 Every existing consent shall continue in force as if it were a consent under this Bylaw until it reaches its expiry date.

# SCHEDULE 1      GENERAL CONDITIONS OF CONSENT

## S1.1 INTRODUCTION

These general conditions of consent apply to all controlled and conditional consents issued by the Council under the Wellington City Council Trade Waste Bylaw 2004.

## S1.2 ACCESS

The consent holder shall allow the Council access to the property at all times for the purpose of ascertaining whether the discharge of waste is in accordance with the terms and conditions of this consent.

## S1.3 ACCIDENTS

S1.3.1 The consent holder shall inform the Council of any accident, including spills or process mishaps which may cause a breach of their consent in particular, or this Bylaw in general.

S1.3.2 The notification to the Council required in S1.3.1 shall occur as soon as practicable after the event, certainly within 1 hour and preferably within ½ hour. During the hours of 8.00am to 5.00pm, Council shall be notified. Outside these hours both the Council and the relevant wastewater treatment plant shall be notified.

## S1.4 ALTERATION OF ANY CHAMBER, MANHOLE, METER OR DEVICE USED FOR MEASUREMENT

S1.4.1 If the consent holder of any trade premises wishes to alter, replace, repair or move the position of any measuring chamber, manhole, meter or device, the consent holder shall apply to Council for consent for the proposed alteration, replacement, repair or movement.

S1.4.2 Council shall not unreasonably refuse consent to an application made under S1.4.1.

S1.4.3 Council as a condition of consent to the application made under S1.4.1, may:

- (a) require any necessary work to be carried out in such a manner as the Council may reasonably direct; and
- (b) specify the means by which any monitoring of the characteristics of the discharge may be continued whilst such alteration, replacement, repair or movement is in progress.

## S1.5 COMPLIANCE WITH THE CONSENT

- S1.5.1 Except as provided for in S1.5.4, the discharge of waste by the consent holder to the wastewater system shall at all times comply with the terms of the consent.
- S1.5.2 The consent holder shall submit to the Council at such times as the Council may require details of total water usage on the property and of the quality of waste discharge to the wastewater drainage system.
- S1.5.3 The consent holder shall ensure that his/her drainage system including any pretreatment works or apparatus is designed, installed, maintained and operated, both in its component parts and its entirety, in accordance with the Bylaw and in compliance with the New Zealand Building Code.
- S1.5.4 If the consent holder is unable to meet the terms of the consent for reasons that could not reasonably be foreseen, the consent holder may discharge the trade waste provided that:
- (a) the Council is notified immediately of the need for such a discharge; and
  - (b) reasons for the discharge are substantiated and
  - (c) the Council gives its express approval to the discharge; and
  - (d) the consent holder complies with any conditions for the extraordinary discharge specified by the Council when giving its approval.

## S1.6 DISPUTES

- S1.6.1 Where a dispute arises as to the validity of the methods or procedures used for sampling or testing, or results of sampling or testing, the dispute shall be referred to an independent mediator agreed upon by the parties.
- S1.6.2 Where mediation does not resolve the dispute to the satisfaction of both parties, the dispute shall be referred to an independent arbitrator agreed upon by the parties. Failing agreement, the dispute shall be referred to two arbitrators (one to be appointed by each party) and an umpire to be appointed by the arbitrators before their entering upon the reference.
- S1.6.3 The parties shall share equally the costs of mediation and, should the dispute require arbitration, the parties shall share the costs of arbitration subject to any award or order that may be made as a result of arbitration.
- S1.6.4 The arbitrators ruling shall be final.

## S1.7 DURATION OF CONSENT

The duration of any consent shall be twelve months. The provisions of the consent shall be operative as and from the commencement date specified and shall expire on the date specified.

## **S1.8 FEES, CHARGES AND COSTS**

- S1.8.1 The consent holder shall pay all fees and charges payable to the Council for the administration of the consent and for the conveyance, treatment and disposal of trade waste.
- S1.8.2 All sums payable for fees and charges for wastewater services under this Bylaw shall be recoverable as a debt of the consent holder to the Council.
- S1.8.3 Failure to pay fees and charges for wastewater services under this Bylaw will result in the withdrawal of the trade waste consent and services.
- S1.8.4 The consent holder shall pay all costs associated with the:
- a) installation or upgrading of pretreatment facilities
  - b) alteration of plumbing or drainage
  - c) installation of inspection chambers, manholes or sampling points
  - d) installation of water meters or other meters and associated maintenance or calibration costs
  - e) provision and maintenance of services needed to operate meters, samplers and associated devices
  - f) sampling, testing and analysis of discharge samples.

## **S1.9 INDEMNITY OF THE COUNCIL**

- S1.9.1 The consent holder shall not instigate any claim for damage, loss or injury of any kind against the Council that may arise as a result of the consent holder discharging trade waste into the wastewater system. Further, the consent holder shall indemnify the Council and keep the Council indemnified against all legal actions by any person or body that may arise as a consequence of the consent holder discharging waste into a sewer.
- S1.9.2 The consent holder shall not claim payment or compensation from the Council for or in respect of the exclusion of any trade waste from a sewer during the examination, alteration, repair or maintenance of the wastewater system.
- S1.9.3 Where for any reason the consent ceases to be valid then the Council may request the consent holder to immediately disconnect the pipes and equipment used to discharge trade waste into the wastewater system. In the event of his failure to do so, the Council may enter upon such property and carry out works at the expense of the consent holder that may be necessary to prevent the discharge of waste into the sewer.
- S1.9.4 The Council may repair any damage to any part of the wastewater system caused by the discharge of trade waste that failed to comply with the terms and conditions of its consent. The Council shall determine the cost and expense of such repair and such determination shall be final and conclusive to such the amount that shall be paid by the consent holder on demand to the Council.

## S1.10 OFFENCES AND PENALTIES

S1.10.1 Every person who fails to comply with this bylaw or breaches any condition of a consent granted under the bylaw, may be prosecuted under the Local Government Act 2002 and is liable for the penalties set out in the Local Government Act 2002.

## S1.11 REVIEW OF DECISIONS

If any person is dissatisfied with a decision of an authorised officer, that person may, request the Chief Executive Officer of the Council to review any such decision. The notice shall be delivered to the Chief Executive Officer not later than 20 days after the decision of the authorised officer has been received. The decision of the Chief Executive Officer shall be final.

## S1.12 TRANSFER OR TERMINATION OF RIGHTS AND RESPONSIBILITIES

S1.12.1 Unless written approval is obtained from the Council the consent holder shall not:

- (a) transfer the rights and responsibilities provided for under this Bylaw and under their consent to any other party
- (b) allow a point of discharge to serve another premises, or the private sewer to that point to be extended by pipe or any other means to serve another premises.

S1.12.2 The transfer of a consent on change of ownership of a premises shall be granted if the characteristics of the wastewater remain unchanged from those authorised by the consent.

S1.12.3 The consent holder shall give forty-eight hours notice in writing to the Council of their requirement for disconnection of the discharge connection and/or termination of the consent and shall notify the Council of any new contact details.

S1.12.4 When the consent holder of any property from which waste is discharged into a wastewater drainage system ceases to occupy such property then this consent shall, save and except for the terms and conditions still to be performed by the consent holder, be at an end.

# SCHEDULE 2 DISCHARGE CHARACTERISTICS FOR CONTROLLED TRADE WASTE

## S2.1 INTRODUCTION

S2.1.1 A controlled trade waste consent is intended for low volume, low toxicity trade wastes.

S2.1.2 Any one characteristic that exceeds the levels indicated in this Schedule may be cause for control under a conditional trade waste consent. Also, as indicated in Part 3 of this Bylaw, local catchment requirements may also dictate that a low volume, low toxicity waste is covered by a conditional trade waste consent.

## S2.2 CONTROLLED TRADE WASTE

To be classed as a controlled trade waste under this Bylaw then the nature and levels of the characteristics of any wastewater that is discharged shall comply with the following.

### S2.2.1 General description

The discharge shall be characterised by a:

- (a) flow not exceeding 5 m<sup>3</sup> per day
- (b) instantaneous flow rate not exceeding 2 L/s
- (c) Biochemical Oxygen Demand (BOD) concentration not exceeding 600 g/m<sup>3</sup>
- (d) Suspended Solids (SS) concentration not exceeding 600 g/m<sup>3</sup>.

Notwithstanding the above, a higher flow than 5 m<sup>3</sup>/day may be accepted provided that the BOD mass does not exceed 3 kg/day and the SS mass does not exceed 3 kg/day. A higher flow will only be accepted after examination of the local wastewater system situation particularly in relation to the sewer capacity, gradient and the material from which the sewer is made.

### S2.2.2 Temperature

The temperature shall not exceed 50 °C.

### S2.2.3 Solids

- (a) Non-faecal gross solids shall have a maximum dimension that shall not exceed 15 mm.

- (b) The total dissolved solids concentration in any wastewater shall be subject to the approval of the Council having regard to the volume of the waste to be discharged and the suitability of the drainage system and the treatment plant to accept such waste.
- (c) No fibrous, woven, or sheet film or any other materials that may adversely interfere with the free flow of wastewater in the wastewater system shall be present.

S2.2.4 Oil and grease

This clause applies to mineral oils, fats and grease used by industry and oils, fats and grease used in food preparation where:

- (a) there shall be no free or floating layer
- (b) mineral oil and grease shall have a maximum concentration not exceeding 20 g/m<sup>3</sup>
- (c) oil and fat used for food preparation shall have a maximum concentration not exceeding 100 g/m<sup>3</sup>, maximum mass 0.5 kg per day.

S2.2.5 Solvents and other organic liquids

There shall be no free layer (whether floating or settled) of, petroleum, benzene, naphtha, fuel, solvents or organic liquids.

S2.2.6 Condensing water, cooling water or stormwater

Unless specifically approved in a consent, condensing water, cooling water or stormwater shall not be present.

S2.2.7 Emulsions of paint, adhesive, rubber, plastic

There shall be no emulsions of paint, adhesive, rubber or plastic in the discharge.

S2.2.8 Colour

No waste shall have colour or colouring substance that causes the discharge to be coloured to the extent that it impairs wastewater treatment processes or compromises the final effluent discharge consent.

S2.2.9 pH value

The pH shall be between 6.0 and 10.0 at all times.

S2.2.10 Presence of chemicals

Any characteristics not mentioned below will be subject to separate evaluation for inclusion in a conditional consent:

- (a) sulphides shall not exceed 5 g/ m<sup>3</sup>
- (b) sulphate shall not exceed 500 g/m<sup>3</sup>

- (c) toxic pollutants as listed in Table 2 and Table 3 of Schedule 3 shall not be present above background domestic sewage levels.

S2.2.11 Any other characteristic

Any characteristic not mentioned in this schedule that is present in quantities above background domestic sewage levels, but not above the prohibited levels of Schedule 3, shall cause the discharge to be the subject of a conditional consent.

# SCHEDULE 3 CHARACTERISTICS OF PROHIBITED TRADE WASTE

## S3.1 INTRODUCTION

S3.1.1 A discharge has prohibited characteristics if it has any solid, liquid or gaseous matters or any combination or mixture of such matters which by themselves or in combination with any other matters will immediately or in the course of time:

- (a) interfere with the free flow of wastewater in the wastewater system
- (b) damage any part of the wastewater system
- (c) in any way, cause the quality of the effluent or residual sewage sludge and other solids from any of the Council's wastewater treatment plant to breach the conditions of a consent issued under the Resource Management Act 1991, or water right, permit or other governing legislation
- (d) prejudice the occupational health and safety risks faced by workers in the wastewater system
- (e) after treatment be toxic to fish, animals or plant life in the receiving waters
- (f) cause malodorous gases or substances to form which are of a nature or sufficient quantity to create a public nuisance
- (g) have a colour or colouring substance that causes the discharge of any wastewater treatment plant to receiving waters to be coloured.

## S3.2 DEFINITIONS

In this Schedule:

**'Biodegradable oils and greases'** means the oil and grease content of the waste decreases by 90 % or more when the wastewater is subjected to a simulated wastewater treatment process which matches the *Council* treatment system.

**'Emulsion'** means a stable mixture of two or more liquids that normally will not mix. The liquids are held together in suspension by the addition of small quantities of other substances called emulsifiers.

**'Latex emulsion'** means an emulsion containing paint, adhesive, rubber, plastic or similar material.

**'Treatable'** in respect of **'latex emulsions'** means the Total Organic Carbon content of the waste decreases by 90 % or more when the wastewater is subjected to a simulated wastewater treatment process which matches the Council treatment system.

### S3.3 PROHIBITED CHARACTERISTICS

S3.3.1 A discharge has a prohibited characteristic if it has any amount of:

- (a) harmful solids, including dry solid wastes and materials that combine with water to form a cemented mass
- (b) liquid, solid or gas which could be flammable or explosive in the wastes, for example solvents, fuels, calcium carbide and any other material which is capable of giving rise to fire or explosion hazards either spontaneously or in combination with wastewater
- (c) asbestos
- (d) organo-metal compounds:
  - (i) tin (as tributyl and other organotin compounds)
  - (ii) chromium (as organic compounds)
- (e) organochlorine pesticides
- (f) genetic wastes, including all wastes that contain or are likely to contain genetically altered organisms, unless approved by the Council;
- (g) any health-care waste not identified and discharged as required by NZS 4304 or any pathological or histological wastes that have not been subject to an agreement or consent with the Council
- (i) radioactivity levels in excess of National Radiation Laboratory guidelines.

### S3.4 PHYSICAL CHARACTERISTICS

The physical nature of a discharge or of particular characteristics shall be as follows.

S3.4.1 Temperature

The temperature shall not exceed 50 °C.

S3.4.2 Solids

- (a) Non-faecal gross solids shall have a:
  - (i) maximum dimension that shall not exceed 15 mm
  - (ii) quiescent settling velocity that shall not exceed 50 mm/minute.
- (b) The suspended solids content of any wastewater shall have a maximum concentration that shall not exceed 2000 g/m<sup>3</sup>. However, suspended solids levels shall normally be controlled at 600 g/m<sup>3</sup> maximum. Higher levels than 600 g/m<sup>3</sup> shall only be possible in specific situations covered by a mass-flow based conditional consent. In such a consent particular account is taken of the nature of the waste, the volume and timing of the discharge and the ability of the wastewater system to receive it. See also 4.3 of this bylaw.

- (c) The settleable solids content of any wastewater shall not exceed 50 mL/L.
- (d) The total dissolved solids concentration in any wastewater shall be subject to the approval of the Council having regard to the volume of the waste to be discharged and the suitability of the drainage system and the treatment plant to accept such waste.
- (e) Fibrous, woven, or sheet film or any other materials which may adversely interfere with the free flow of wastewater in the drainage system or treatment plant shall not be present.

#### S3.4.3 Oil and grease

This clause applies to mineral oils, fats and grease used by industry and oils, fats and grease used in food preparation where:

- (a) there shall be no free or floating layer
- (b) emulsified oil, fat or grease are within the following limits:

	Usual type of oil, fat or grease	Emulsion state	Diluted with sewage	pH range of sewage	Temperature (°C)	Extracted oil, fat & grease content (g/m <sup>3</sup> )
(i)	Mineral based	Not biodegradeable and stable at:	x10	6-10	15	100
(ii)	Animal or vegetable based	Biodegradeable and stable at:	x10	4.5-10	15	500
(iii)		Unstable at:	x10	4.5-10	15	100

#### S3.4.4 Solvents and other organic liquids

There shall be no solvents or organic liquids the form of:

- (a) an emulsion above background sewage levels
- (b) a free layer (whether floating or settled).

#### S3.4.5 Emulsions of paint, adhesive, rubber, plastic

- (a) Latex emulsions which are not treatable by the Council wastewater treatment plant may be discharged into the wastewater system subject to the total suspended solids not exceeding 1000 g/m<sup>3</sup>, subject also to any other limitation as set under clause S3.4.2(b).
- (b) The Council may require pretreatment of latex emulsions if the emulsion wastewater unreasonably interferes with the operation of the Council treatment plant.
- (c) Latex emulsions of both treatable and non treatable types, shall be discharged to the wastewater system only at a concentration and pH range that prevents coagulation and blockage at the mixing zone in the public sewer.

#### S3.4.6 Colour

No waste shall have colour or colouring substance that causes the discharge to be coloured to the extent that it impairs wastewater treatment processes or compromises the final effluent discharge consent.

## S3.5 CHEMICAL CHARACTERISTICS

The chemical nature of a discharge or of particular characteristics shall be as follows.

### S3.5.1 pH value

The pH shall be between 6.0 and 10.0 at all times.

### S3.5.2 Inhibitory chemicals

At the choice of the Council no waste that is being diluted at a fixed ratio to wastewater, as nominated by the Council, shall inhibit the performance of the wastewater treatment process such that the Council is significantly at risk or prevented from achieving its Resource consent requirements.

### S3.5.3 Organic strength

#### S3.5.3.1 Biochemical Oxygen Demand (BOD<sub>5</sub>)

The BOD<sub>5</sub> content of any wastewater shall have a maximum concentration that shall not exceed 2500 g/m<sup>3</sup>. However, BOD<sub>5</sub> levels shall normally be controlled at 600 g/m<sup>3</sup> maximum. Higher levels than 600 g/m<sup>3</sup> shall only be possible in specific situations covered by a mass-flow based Conditional consent. In such a consent particular account is taken of the nature of the waste, the volume and timing of the discharge and the ability of the wastewater system to receive and convey it. See also 4.3 of this Bylaw.

#### S3.5.3.2 Maximum concentrations

The maximum concentrations permissible for the chemical characteristics of an acceptable discharge are set out in the following:

Table 1 General chemical characteristics

Table 2 Toxic pollutants – inorganic compounds

Table 3 Toxic pollutants – organic compounds and pesticides.

**TABLE 1 GENERAL CHEMICAL CHARACTERISTICS**

<b>Characteristic</b>	<b>Measured as</b>	<b>Maximum concentration (g/m<sup>3</sup>)</b>
Anionic detergent	Methylene blue active substances	500
Ammonia	N	50
• free ammonia		200
• ammonium salts		
Kjeldahl nitrogen	N	500
Total phosphorus	P	150
Sulphate	SO <sub>4</sub>	500
	With good mixing	1500
Sulphite	SO <sub>2</sub>	15
Sulphide	H <sub>2</sub> S on acidification	5
Chlorine	Cl <sub>2</sub>	3
• free chlorine		30
• hypochlorite		
Dissolved aluminium	Al	300
Dissolved iron	Fe	300
Boron	B	25
Bromine	Br <sub>2</sub>	5
Fluoride	F	30
Cyanide	CN weak acid dissociable	5

**TABLE 2 TOXIC POLLUTANTS\* – INORGANIC COMPOUNDS**

<b>Inorganic compound of</b>	<b>Maximum total concentration* (g/m<sup>3</sup>)</b>
Antimony	10
Arsenic	5
Barium	10
Beryllium	0.005
Cadmium	0.5
Chromium – Total i.e. includes all valent forms	5
Cobalt	10
Copper	10
Lead	10
Manganese	20
Mercury	0.005
Molybdenum	10
Nickel	10
Selenium	10
Silver	2
Thallium	10
Tin	20
Zinc	10

\* Excludes pesticides not registered for use in New Zealand.

† These compounds shall be accepted up to the given maximum concentration only when specifically approved.

**TABLE 3 TOXIC POLLUTANTS – ORGANIC COMPOUNDS AND PESTICIDES**

<b>Compound</b>	<b>Maximum concentration (g/m<sup>3</sup>)</b>
Formaldehyde • measured as HCHO	50
Phenolic compounds • measured as phenols, excluding chlorinated phenols	50
Chlorinated phenols	0.02
Petroleum hydrocarbons	30
Halogenated aliphatic compounds†	1
Monocyclic aromatic hydrocarbons	5
Polycyclic (or polynuclear) aromatic hydrocarbons (PAHs)	0.05
Halogenated aromatic hydrocarbons (HAHs)	0.002
Polychlorinated biphenyls (PCBs)	0.002
Polybrominated biphenyls (PBBs)	0.002
Pesticides (general)* † • includes insecticides, herbicides, fungicides but excludes organophosphate, see below, and organochlorine, refer S3.3.1(e) of this Schedule	0.2

\* Excludes pesticides not registered for use in New Zealand.

† These compounds shall be accepted up to the given maximum concentration only when specifically approved.

# SCHEDULE 4      SAMPLING PROCEDURE

## S4.1 INTRODUCTION

S4.1.1 Where it is necessary to take samples in order to ascertain the characteristics of any discharge or of any ingredient of any discharge pursuant to or for the purposes of any provision of this Bylaw, the provisions of the this schedule shall apply.

S4.1.2 ISO 5667 Part 1 shall be used as a guide to the design of sampling programmes.

S4.1.3 In this Schedule:

**‘A grab sample’** means a discrete sample taken randomly (with regard to time and/or location) from the trade waste.

**‘A composite sample’** means 2 or more samples or sub-samples, mixed together in appropriate known proportions (either discretely or continuously), from which the average result of a desired characteristic may be obtained. The proportions are usually based on time or flow measurements.

## S4.2 SAMPLES

S4.2.1 Sample containers and sampling equipment shall be chosen and prepared for use having regard for the nature of the wastewater to be sampled, the characteristic to be tested and the accuracy required of the test. Guidance in this shall be sought ISO 5667 Part 3.

S4.2.2 Samples of turbulent flow or from the surface shall be taken using techniques that comply with ISO 5667 Part 2 and Part 10.

## S4.3 SAMPLING METHODS FOR TRADE WASTE

Samples shall be either grab samples, composite samples or a sequence of composite samples.

S4.3.1 An instantaneous composite sample

Three grab samples of the discharge shall be taken at intervals of not less than 1 minute nor more than 5 minutes. The three grab samples shall be combined using equal volumes of all three samples to obtain the instantaneous sample.

S4.3.2 A four-hour average composite sample

(a) No less than 12 grab samples shall be taken from the discharge over a continuous four-hour period. The samples shall be taken at reasonably even intervals over the whole period. The intervals between the samples shall not be less than 5 minutes nor more than 30 minutes. The samples shall be mixed using equal volumes of all samples to obtain the four hour average sample.

- (b) The four-hour flow period used when taking a four-hour average sample shall be a continuous period of four hours during which the discharge is occurring and:
  - (i) shall as far as practical be representative of the discharge occurring on a typical working day
  - (ii) may include periods of decreased discharge prior to or after the days operations.

#### S4.3.3 A twenty-four hour flow proportionate sample

- (a) No less than 18 grab samples shall be taken from the discharge over a continuous twenty-four hour period. The samples shall be taken at reasonably even intervals over the whole period. The intervals between the samples shall not be less than 5 minutes nor more than 60 minutes. Whenever more than one sample is taken within a 60 minute period the samples shall be of equal quantity and may be stored with other samples taken during that 60 minute period in a common container.
- (b) The twenty-four hour flow proportionate sample is then obtained by taking a part of the contents of each container and mixing all such samples together. The size of the part of each container sample that is used shall be in direct proportion to the volume of discharge that occurred from the time a sample was first placed in the particular container to the time a sample was first placed in the next container.

### S4.4 SAMPLE PRESERVATION, TRANSPORTATION AND STORAGE

S4.4.1 The preservation and storage of samples shall be in accordance with ISO 5667 Part 3.

#### S4.4.2 Sample storage

- (a) When samples are stored prior to analysis, they shall be kept in a manner which as far as possible preserves the samples' characteristics.
- (b) When it is not possible to preserve a particular characteristic of a sample, then analysis of the sample to determine that characteristic shall begin promptly upon receipt of the sample.

### S4.5 SAMPLE IDENTIFICATION AND RECORDS

A printed form for the sampling report should as a minimum include at least the following information:

- (a) name of the trade premises
- (b) consent number
- (c) sampling point

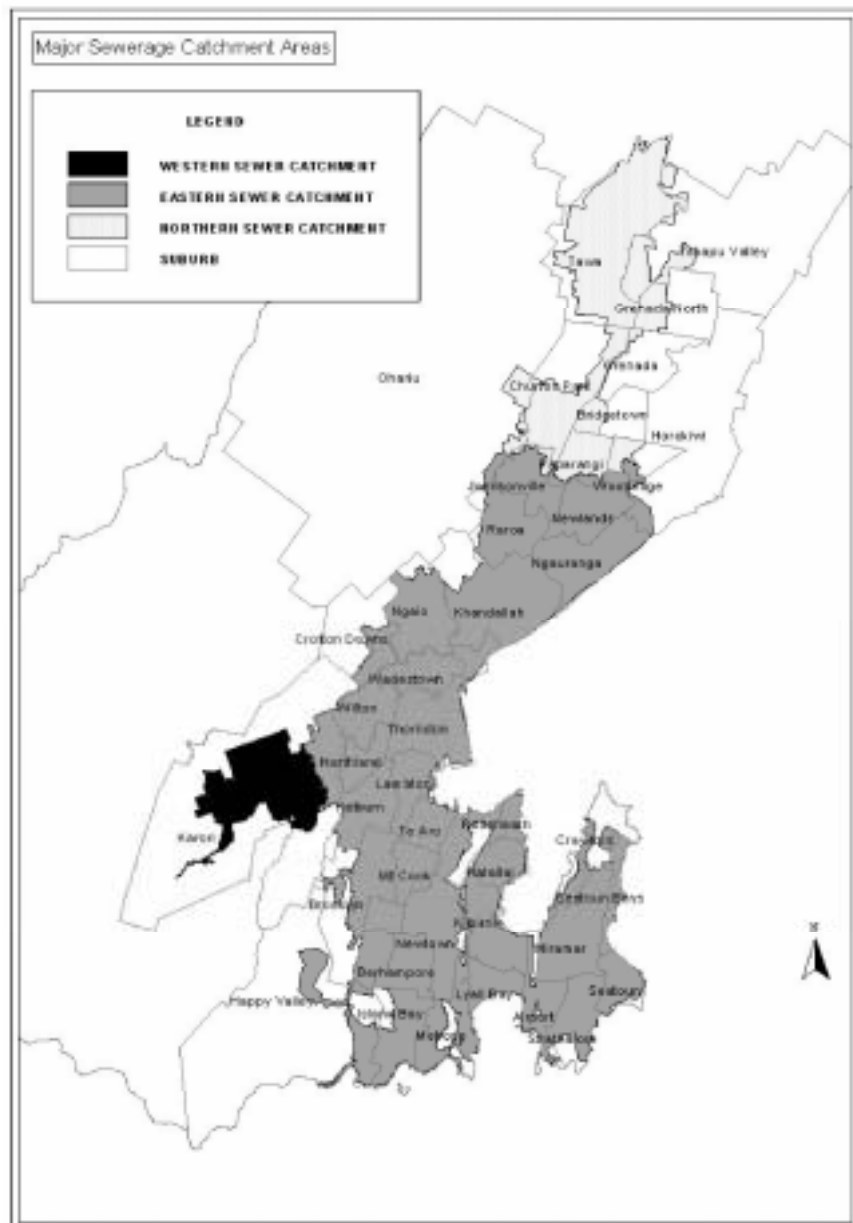
- (d) date, start and stop of sampling
- (e) time, start and stop of sampling
- (f) duration of the sampling period
- (g) details of the sampling method
- (h) preservation method
- (i) details of any field tests
- (j) name of the person who carried out the sampling.

# SCHEDULE 5 DRAINAGE ZONES WITHIN WELLINGTON CITY

## S5.1 INTRODUCTION

Wellington City's wastewater is treated by three wastewater treatment plants: Moa Point treating waste from the Eastern zone; Karori treating waste from the Western zone; and the Porirua City waste water treatment plant treating waste from the Northern zone.

## S5.2 MAP OF ZONES



# SCHEDULE 6      PORIRUA CITY COUNCIL TRADE WASTE BYLAW 1990 SCHEDULES I, II AND III

## S6.1    **SCHEDULE I - DESCRIPTION OF SIMPLE TRADE WASTES**

1.      Any trade waste discharge, is a simple trade waste if it has no trade waste characteristics which exceed the limits or maximum values specified in clause 2 and Table 1.1 of this Schedule.
  
2.      For the purposes of clause 1 of this schedule simple trade wastes are those discharges which:-
  - (i)     do not contain any:-
    - (a)    chlorinated bi-phenols, or
    - (b)    halogenated hydrocarbons, or
    - (c)    organo-tin compounds, or
    - (d)    pesticides, herbicides, insecticides, fungicides or material of a similar nature, or
    - (e)    cooling water, condensing water, or surface water, or
    - (f)    any garbage that contains any particle that will not pass freely through a twelve millimetre mesh, or
    - (g)    any solid liquid or gaseous matter or any combination of such matters, which in relation to the sewerage system may be prejudicial to the safety of any person, or
    - (h)    any solid liquid or gaseous matter or any combination of such matters, which in relation to the receiving waters, may be toxic to fish or animals or affect the growth of plant life or vegetation, or
    - (i)    any solid, liquid or gaseous matters or any combination or mixture of such matters which by themselves or in combination with any other matters may immediately or in the course of time interfere with the free flow of the contents of the sewer or injure any part of the sewerage system, or in any way directly or

indirectly cause the quality of effluent from any treatment plant in the catchment of the discharge to no longer comply with the conditions of a water right, or permit, or

- (j) any liquid, solid or gas which could be flammable or explosive in the wastes,
  - (k) any petroleum, benzene, naphtha, fuel or oil, or
  - (l) any significant quantity of soap or detergent or other surfactant, that is in excess of that in an equivalent volume of domestic sewage, or
  - (m) any noxious or malodorous gas or substance which is of a quantity or nature to be more offensive to the public than the same quantity of domestic sewage, or
  - (n) any colour or colouring substance that causes the discharge to the sewerage system to be excessively coloured,
- (ii) do not have—
- (o) a pH greater than 10, or less than 6, or
  - (p) a temperature greater than 50<sup>o</sup> C, or
  - (q) any characteristic determined by analysis of a four hour average sample or of a twenty four hour flow proportionate sample as the case may be, which exceeds the values in table 1.1, or
  - (r) any characteristic determined by analysis of an instantaneous sample which exceeds two times any of the values in table 1.1, or
  - (s) any characteristic determined by analysis of two instantaneous samples taken at different times within a twenty four hour period which both exceed the values in table 1.1, or
  - (t) a twenty four hour flow volume, or an instantaneous flow rate as the case may be, which exceeds the values in table 1.1.

**TABLE 1.1  
MAXIMUM VALUES FOR SPECIFIC  
CHARACTERISTICS OF SIMPLE TRADE WASTES**

CHARACTERISTIC	MAXIMUM VALUE	UNITS
Twenty Four Hour Flow Volume	2,000	1
Instantaneous Flow Rate	0.5	1/s
Biochemical Oxygen Demand	2,000	g/m <sup>3</sup>
Suspended Solids Content	1,000	g/m <sup>3</sup>
Settleable Solids Content	50	ml/l
Animal oil fat and grease content	200	g/m <sup>3</sup>
Mineral oil and grease content	20	g/m <sup>3</sup>
Sulphates, and sulphites expressed as SO <sub>4</sub>	50	g/m <sup>3</sup>
Sulphide content, that may be released as H <sub>2</sub> S on acidification, expressed as H <sub>2</sub> S	1.0	g/m <sup>3</sup>
Hydrocyanic acid or any compounds producing hydrocyanic acid on acidification, expressed as CN	0.5	g/m <sup>3</sup>
Phenols (hydroxy derivatives of benzene), expressed as phenol	1.0	g/m <sup>3</sup>
Dissolved solids fraction either as a compound, element, salt or ion:		
Ag	1.0	g/m <sup>3</sup>
As	0.2	g/m <sup>3</sup>
Cd	0.05	g/m <sup>3</sup>
Cr (total)	1.0	g/m <sup>3</sup>
Cu	1.0	g/m <sup>3</sup>
Hg	0.05	g/m <sup>3</sup>
Ni	1.0	g/m <sup>3</sup>
Pb	1.0	g/m <sup>3</sup>
Sn	1.0	g/m <sup>3</sup>
Zn	1.0	g/m <sup>3</sup>

## MEANING OF UNIT SYMBOLS

Used in Schedule I

### UNIT SYMBOL

l  
ml  
g  
m<sup>3</sup>  
s

### MEANING OF UNIT SYMBOLS

litres  
millilitres  
gram  
cubic metre  
second

## S6.2 SCHEDULE II -DESCRIPTION OF CONTROLLED TRADE WASTES

1. Controlled trade wastes are those discharges which:-
  - (i) do not contain any:-
    - (a) chlorinated bi-phenols, or
    - (b) halogenated hydrocarbons, or
    - (c) organo-tin compounds, or
    - (d) pesticides, herbicides, insecticides, fungicides or material of asimilar nature, or
    - (e) cooling water, condensing water, or surface water, or
    - (f) any garbage that contains any particle that will not pass freely through a twelve millimetre mesh, or
    - (g) solid liquid or gaseous matter or any combination of such matters, which in relation to the sewerage system may be prejudicial to the safety of any person, or
    - (h) any solid liquid or gaseous matter or any combination of such matters, which in relation to the receiving waters, may be toxic to fish or animals or affect the growth of plant life or vegetation, or
    - (i) any solid, liquid or gaseous matters or any combination or mixture of such matters which by themselves or in combination with any other matters may immediately or in the course of time interfere with the free flow of the contents of the sewer or injure any part of the sewerage system, or in any way directly or indirectly cause the quality of effluent from any treatment plant in the catchment of the discharge to no longer comply with the conditions of a water right, or permit, or
    - (j) petroleum, benzene, naptha, fuel or oil or other liquid, solid or gas which could be flammable or explosive in the wastes, or
    - (k) synthetic detergents, soaps or other surfactants in sufficient quantity to interfere with the operation of the sewerage system, or adversely affect the quality of the receiving waters, or
    - (l) any noxious or malodorous gas or substance which is of a nature or sufficient quantity to create a public nuisance, or

- (m) any colour or colouring substance that is capable of causing the discharge of any sewerage treatment plant or to receiving waters to be coloured, and
- (ii) do not have:-
  - (n) a temperature greater than 50°C, or
  - (o) a pH greater than 10, or less than 6, or
  - (p) any characteristic determined by analysis of a four hour average sample or of a twenty four hour flow proportionate sample as the case may be, which exceeds the values in clauses 2 or 3 or table 2.1 of this Schedule for that characteristic, or
  - (q) any characteristic determined by analysis of an instantaneous sample which exceeds two times the value in clauses 2, or 3 or table 2.1 of this Schedule for that characteristic, or
  - (r) any characteristic determined by analysis of two instantaneous samples taken at different times within a twenty four hour period which both exceed the value in clauses 2, or 3 or table 2.1 of this Schedule for that characteristic.

**2. MAXIMUM PERMITTED FIVE DAY BIO-CHEMICAL OXYGEN DEMAND IN g/m<sup>3</sup>**

The maximum concentration of BOD for average four hour flow rates less than or equal to 5 l/s is 2000g/m<sup>3</sup>.

The maximum concentration of BOD for average four hour flow rates between 5 l/s and 25 l/s is 2000g/m<sup>3</sup> for average four hour flow rates equal to 5 l/s, reducing at a uniform rate of 87.5 g/m<sup>3</sup> for every 1 l/s increase in the flow rate up to 25 l/s.

The maximum concentration of BOD for average four hour flow rates greater than or equal to 25 l/s is 250g/m<sup>3</sup>.

**3. MAXIMUM PERMITTED CONCENTRATION OF SUSPENDED SOLIDS IN g/m<sup>3</sup>**

The maximum concentration of suspended solids for average four hour flow rates less than or equal to 5 l/s is 1000g/m<sup>3</sup>.

The maximum concentration of suspended solids for average four hour flow rates between 5 l/s and 25 l/s is 1000g/m<sup>3</sup> for average four hour flow rates equal to 5 l/s, reducing at a uniform rate of 37.5 g/m<sup>3</sup> for every 1 l/s increase in the flow rate up to 25 l/s. The maximum concentration of suspended solids for average four hour flow rates greater than or equal to 25 l/s is 250g/m<sup>3</sup>.

**TABLE 2.1  
MAXIMUM VALUES FOR SPECIFIC CHARACTERISTICS  
OF CONTROLLED TRADE WASTE**

CHARACTERISTIC	LIMITING VALUE	UNITS
Settleable solids content	150	ml/l
Animal oil fat and grease content	200	g/m <sup>3</sup>
Mineral oil and grease	50	g/m <sup>3</sup>
Sulphate and sulphite content expressed as SO <sub>4</sub>	500	g/m <sup>3</sup>
Sulphide content, that may be released as H <sub>2</sub> S on acidification, expressed as H <sub>2</sub> S,	2.0	g/m <sup>3</sup>
Hydrocyanic acid or any compounds producing hydrocyanic acid on acidification, expressed as CN	2.0	g/m <sup>3</sup>
Phenols (hydroxy derivatives of benzene), expressed as phenol,	20	g/m <sup>3</sup>
Dissolved solids fraction either as a compound, element, salt or ion:		
Ag	2.5	g/m <sup>3</sup>
As	0.5	g/m <sup>3</sup>
Cd	0.1	g/m <sup>3</sup>
Cr (total)	5.0	g/m <sup>3</sup>
Cu	5.0	g/m <sup>3</sup>
Hg	0.1	g/m <sup>3</sup>
Ni	5.0	g/m <sup>3</sup>
Pb	5.0	g/m <sup>3</sup>
Sn	5.0	g/m <sup>3</sup>
Zn	8.0	g/m <sup>3</sup>

## S6.3 SCHEDULE III - MEASUREMENT AND SAMPLING OF THE CHARACTERISTICS OF A TRADE WASTE DISCHARGE

### PART 1 MEASUREMENT OF FLOW RATE AND VOLUME

1. **An instantaneous flow rate** is determined using the following method:- Determinations of flow shall be made from 3 readings of flow rate taken at not less than 1 minute intervals nor more than 15 minute intervals. The instantaneous flow rate is the average of the readings.
2. (a) **A four hour flow volume** is determined by either:
  - (i) reading a volumetric flow meter at the start and end of the four hour period and calculating the volume of flow as the difference between the readings, or
  - (ii) by taking the mean of the flow rates determined using a twenty four hour flow measurement over the four hour period.
- (b) The four hour flow period used in calculating a four hour flow volume shall be a continuous period of four hours during which the discharge is occurring and:
  - (i) where the method specified in paragraph (a)(i) of this clause is used, shall, as far as practical be representative of the discharge occurring during a typical working day, and shall exclude periods of decreased discharge prior to or after the day's operations and,
  - (ii) where the method specified in paragraph (a)(ii) of this clause is used, shall include the four hour period having the highest total flow volume as shown by the twenty four hour measurement.
3. **An Average four hour flow volume** is determined by taking the mean of no less than five determinations of the four hour flow volume of a discharge made within a charge period in accordance with the methods specified in clause 2 of this schedule.
4. **A twenty four hour flow measurement** is made using the following method:- Recordings shall be made continuously or at intervals of not more than 15 minutes evenly spaced throughout the twenty four hour measurement period.
5. **A twenty four hour flow volume** is the mean of the records of flow rate made using a 24 hour flow measurement.

6. **An average twenty four hour flow volume** is determined by calculating the mean of no less than five determinations of the twenty four hour flow volume of a discharge made within the charge period in accordance with the methods specified in clause 4 and 5 of this schedule.

## **PART 2 SAMPLING OF A TRADE WASTE**

5. **An instantaneous sample** is a sample taken using the following methods :-  
Three grab samples of the discharge shall be taken at intervals of not less than 1 minute nor more than 5 minutes. The three grab samples must be combined using equal volumes of all three samples to obtain the instantaneous sample.
6. **A four hour average sample** is taken using the following method:
- (a) No less than 12 grab samples shall be taken from the discharge over a continuous four hour period. The samples shall be taken at reasonably even intervals over the whole period. The intervals between the samples must not be less than 5 minutes nor more than 30 minutes. The samples shall be mixed using equal volumes of all samples to obtain the four hour average sample.
  - (b) The four hour flow period used when taking a four hour average sample shall be a continuous period of four hours during which the discharge is occurring and:
    - (i) shall as far as practical be representative of the discharge occurring on a typical working day; and
    - (ii) shall exclude periods of decreased discharge prior to or after the days operations.
7. **A twenty four hour flow proportionate sample** is obtained using the following method:
- (a) No less than 18 grab samples shall be taken from the discharge over a continuous twenty four hour period. The samples shall be taken at reasonably even intervals over the whole period. The intervals between the samples must not be less than 15 minutes nor more than 60 minutes. Whenever more than one sample is taken within a 60 minute period the samples must be of equal quantity and may be stored with other samples taken during that 60 minute period in a common container.
  - (b) The twenty four hour flow proportionate sample is then obtained by taking a part of the contents of each container and mixing all such samples together. The size of the part of each container sample that is used shall be in direct proportion to the volume of discharge that occurred from the time a sample was first placed in the particular container to the time a sample was first placed in the next container.