# SCHEDULES CONTENTS

1.	GENER.	AL SCHEDULES	
1a	Council	's Trade Waste Criteria	
	1A.1 In	troduction	
		ysical Characteristics	
		2.1 Temperature	
	1A	2.2 Solids	
		2.3 Oil And Grease	
		2.4 Solvents And Other Organic Liquids	
		2.5 Embolisms Of Paint, Adhesive, Rubber, Plastic	
		2.6 Radioactivity	
	1A	2.7 Colour	5
		nemical Characteristics	
		3.1 Ph Value	
		3.2 Organic Strength	
	1A	3.3 Maximum Concentration	6
1B		IBITED CHARACTERISTICS	
	1B.1	INTRODUCTION	
	1B.2	PROHIBITED CHARACTERISTICS	12
IC		E TO TYPES OF TRADE ACTIVITIES AND PROCESSES INCLUDED IN PERMI CONDITIONAL CONSENTS	TTED
	1C.1	INTRODUCTION	14
	1C.2	PERMITTED	
		1C.2.1 Conditional	14
ID	ΛD	PPLICATION FORMS	
ID	1D.1	Application For Permitted Trade Waste Discharge	17
	10.1		
		1D.1.1 Description Of Trade Waste And Premise For Permitted Trade Waste Disch	arge 19
	1D.2	Application For Conditional Trade Waste Discharge	21
		1D.2.1 Description Of Trade Waste And Premise For Conditional Trade Waste Dis	scharge 23
	1D.3	APPLICATION FOR TEMPORARY DISCHARGE	25
1E	SAMPL	ING PROCEDURE	
	1E.1	SAMPLING EQUIPMENT	27
		1E.1.1 Sample Containers	27
		1E.1.2 Apparatus	28
	1E.2	SAMPLING LOCATION	
	•		
		1E2.1 Safety Precautions	28

	1E.3	CHOICE OF SAMPLING METHOD	29
		1E3.1 Types Of Sample	29
		1E3.2 Spot Sample	29
		1E.3.3 Composite Sample	30
		1E3.4 Instantaneous Composite Sample	30
		1E3.5 Four Hour Average Composite Sample	
		1E.3.6 Twenty Four Hour Flow Proportionate Sample	31
	1E.4	Frequency, Number And Timing For Samples	
		1E.4.1 Frequency And Number Of Samples	31
		1E4.2Sampling Programme	31
		1E.4.3 Sampling Period	33
	1E.5	Sample Preservation, Transportation And Storage	33
	1E.6	Sample Identification And Records	34
lF	TH	RADE WASTE CHARGES	
	1F.1	INTRODUCTION	35
	1F.2	CHARGE, ITEMS AND TERMS	35
		1F.2.2 Drainage	35
		1F.2.2.1 Trade Wastes	35
	1F.3.	Method Of Determining The Excess Characteristics Of A Trade Waste Discharge	37
	1F.4	Method Of Calculating Charges	<i>3</i> 8
	1F.5	Method Of Setting The Charge Rates	<i>3</i> 8
	1F.6	Definition And Means Of Calculation Of The Items Used In Calculating Trade Waste Charges	39
2	M	ODEL TRADE WASTE CONSENTS	
	2.1 Pe	ermitted Trade waste Consents	43
	2.2 Ca	onditional Trade Waste Consents	43
	2A.1	Model Trade Waste Consent Form	45
	2A	.1a Summary of General Conditions for All Trade Waste	46
	2A	.1b Conditions Specific to Trade Waste Consent	48
	2B PF	ROFORMA MODEL TRADE WASTE CONSENT FORMS	
		2B.1 Pro Forma Trade Waste Consent For The Discharge Of Conditional Type Trade Waste	51
		2B.2 General Conditions Of Conditional Trade Waste Consent	52
		2B.3 Specific Conditions Of Trade Waste Consent	55
		2B.3.1 Costs	55
		2B.3.2 Non-Compliance	55
		2B.3.3 Monitoring	55
		2B.3.4 Waste Management	57
		2B.3.5 Point Of Discharge	58
		2B.3.6 Treatment	58
		2B.3.7 Trade Waste Charges	
		2B.3.8 Consent	59

2B.4 Schedule Of Characteristics	60
2B.4.1 Physical Characteristics	60
2B.4.2 Chemical Characteristics	62
2B.4.3 Prohibited Characteristics	64
2B.4.4 Discharge	64
2B.5 Schedule Of Treatment Processing And Apparatus	65

## SCHEDULE 1B PROHIBITED CHARACTERISTICS

#### 1B.1 Introduction

This Section defines Prohibited Trade Wastes.

#### 1B.2 Prohibited Characteristics

#### 1B.2.1

Any 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 sewage in the wastewater system, or
- (b) Damage any part of the wastewater system, or
- (c) In any way, directly or indirectly, cause the quality of the effluent or residual biosolids and other solids from any wastewater treatment plant in the catchment to which the waste was discharged to breach the conditions of a consent issued under the Resource Management Act 1991, or water right, permit or other governing legislation, or
- (d) Prejudice the occupational health and safety risks faced by sewerage workers, or
- (e) After treatment be toxic to fish, animals or plant life in the receiving waters, or
- (f) Cause malodorous gases or substances to form which are of a nature or sufficient quantity to create a public nuisance, or
- (g) Have a colour or colouring substance that causes the discharge of any wastewater treatment plant to receiving waters to be coloured.

#### 1B.2.2

A discharge has prohibited characteristics if it has any characteristic that exceeds the concentration or other limits specified in Schedule 1A unless specifically approved for that particular consent.

#### 1B.2.3

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

- (a) Harmful solids, including dry solid wastes and materials which combine with water to form a cemented mass;
- (b) Liquid, solid or gas which could be flammable or explosive in the wastes, including oil, fuel, solvents (except as allowed for in Schedule 1A), calcium carbide, and any other material which is capable of giving rise to fire or explosion hazards either spontaneously or in combination with sewage.
- (c) Asbestos;

- (d) The following organo-metal compounds:
  - Tin (as tributyl and other organotin compounds)
  - Chromium (as organic compounds)
- (e) Any organochlorine pesticides;
- (f) Genetic wastes, as follows:
  - All wastes that contain or are likely to contain genetically altered material from premises where the genetic alteration of any material is conducted.
- (g) Any health care waste covered by NZS 4304 or any pathological or histological wastes.
- (h) Radioactivity levels in excess of National Radiation Laboratory guidelines.

Council reserves the right to refuse any trade waste from any premise, organisation or occupier that there has been serious non-compliance issues with in the past and they reasonably consider that there is a high risk of non-compliance in the future.

## SCHEDULE 1C GUIDE TO TYPES OF TRADE ACTIVITIES AND PROCESSES

#### 1C.1 Introduction

This section is intended as a guide only. The fact that an activity is on this list does not mean that it is either Permitted or Conditional.

Each discharge will need to be assessed to see if it meets the criteria for Permitted and Conditional Trade wastes.

#### 1C.2 Permitted

**Dry Cleaners** 

Restaurants (excluding those with commercial wastemasters)

**Bakeries** 

Take away premises

**Doctors surgeries** 

Retail butchers and fishmongers (excluding those with commercial wastemasters)

Mechanical workshops/service stations

Schools, polytechnics, universities (with laboratories)

Clothing manufacture

Photo processors (modular units only)

**Dentists** 

Mortuaries

Hotels and motels (with catering facilities)

Car wash

Laundries

Churches (with catering facilities)

Marae

#### 1C.2.1 Conditional

Photo and medical laboratories

**Printers** 

Spray painting facilities

Premises with commercial wastemasters

Meat, fish and shellfish processing

Dairy products processing

Waste management processors

Truck wash facilities

Manufacturing of fertiliser

Beverage manufacture

Textile fibre and textile processing

Tanneries and leather finishings

Footwear manufacture

Manufacturing of paper and paper products

Manufacturing of chemicals, and of chemical, petroleum, coal, rubber and plastic products

Manufacturing of clay, glass, plaster, masonry, asbestos, and related mineral products

Manufacturing of fabricated metal products, machinery and equipment Landfill (leachate discharge)

Scientific laboratories

Hospitals

Electroplaters

Galvanizers

Foundries

Metal surfacing

Stock sale yards

Concrete batching plants

Agricultural Sprays

Wineries

Fruit and Vegetable processing and packaging

Concrete products manufacture

Steam cleaning, water blasting and degreasing plants

Sawmills and wood processing

## SCHEDULE 1D MODEL APPLICATION FORMS

- 1D.1 Application for a Permitted Trade Waste Discharge.
- 1D.2 Application for a Conditional Trade Waste Discharge
- 1D.3 Application for a Temporary Discharge

## **1D.1** Application for Permitted Trade Waste Discharge

## The Wastewater Authority of the Central Otago District Council

Application for Permitted Trade Waste Discharge

Application for Fermitted 1	Taue Waste Discharge
PLEASE PRINT	CLEARLY
TRADE NAME AND STREET ADDRESS OF TRADE	VALUATION NUMBER
PREMISES	
Phone: Fax:	LOT NUMBER
After hours contact:	
Phone:	
	DP NUMBER
POSTAL ADDRESS OF CUSTOMER FOR CHARGING	
Name:	
Address:	
	ARE THE PREMISES ALREADY CONNECTED TO PUBLIC SEWER?
	YES NO .
OWNER OF PREMISES (if different from above)	
Name:	CONNECTIONS REQUIRED
Address:	Size: No:
	Size: No:
	Note: Minimum size 100mm
ADDRESS FOR SERVICE FOR FURTHER ENQUIRIES CONCERNING THIS APPLICATION	DESCRIPTION OF MAIN TRADE ACTIVITY
Name:	
Address:	
Phone: Fax:	
T HOILE.	
THIS APPLICATION RELATES TO:	
Proposed new discharge	
An existing discharge for which no consent	
exists. Current point or place of discharge	
Renewal of consent	
Variation to an existing consent	
Nature of variation:	
ivature of variation.	
Use and attach additional sheets as required.	

## 1D.1 Application for Permitted Trade Waste discharge (continued)

SIGNATURE BLOCK
(Full Name)
(Position)
I. I am duly authorised to make this application.
2. I believe that all the information contained in this
application is true and correct.
Signature:
Date:

FOR	OFFICE USE ONLY
Application Numb	per
APPLICATION RE	CEIVED AND CHECKED BY
Inspector/Clerk: ····	Date:
	controlled Conditional
PROPERTY LINK	IDENTIFICATION NUMBER
BUILDING CONS	ENT NUMBER
TRADE WASTE C	ONSENT
Approved by:	
No:	Date:
APPLICATION FE	E
	\$
GST	\$
Total	\$
Cashier Receipt:	
File No:	

# 1D.1.1 Description of Trade Waste and Premise for Permitted Trade Waste Discharge

DESCRIPTION OF TRADE WASTE AN	D PREMISES – PLEASE PRINT CLEARLY
1 GENERAL PREMISES	1.10 List any substances contained in Schedule 1A or
1.1 Trade name and street address	1B of the Bylaw which are stored, used, or generated on
	the premises.
Phone: Fax:	Describe of the first section of the
1.2 Name and address of owner/occupier	Describe mitigation measures employed to prevent
1.2 Name and address of owner/occupier Name:	accidental spillages of these substances from entering the public sewer or storm water system
Address:	
1.3 Contact for enquiries (if different from above)	1.11 Site plans of the premises are attached which
Name:	clearly show the location of the following as appropriate:
/ (dd 655	process areas flow measuring devices
	☐ trade waste drains ☐ emergency spill devices
	☐ domestic waste- open ☐eas draining to
1.4 Total volume of wastes:	water drains trade waste drains
Average daily volumem 3	storm water drains
Maximum volume in any 8 hr period m 3  Maximum daily volume 3	containment  other, (specify)
Maximum daily volume 3  Maximum flowL/sec	Uniter, (specify)
Seasonal fluctuation (range)	Main trade waste pretreatment systems
Couconal nucleation (range) minimum	screens pH control
1.5 General characteristics of wastes:	flow balance grease traps
TYPICAL RANGE	☐ chemical treatment ☐ biological treatment
Temperature ( o C)	
BOD (mg/litre)	<b>1.12</b> Detailed drawings and descriptions for the
COD (mg/litre)	Following are attached as appropriate:  Pretreatment systems
pHpH	Flow measuring devices
Oil and greases	Emergency spill containment
•	Sampling points
1.6 The source of water used on the premises is:	☐ Method of flow meter calibration
(a) from Council m 3 /working day	
(b) from other sources (state source)	<b>1.13</b> An independent waste audit of the premises
m 3 /working day	has / has not been carried out by:
1.7 The wastes do / do not, contain condensing water or	<b>1.14</b> A Discharge Management Plan is / is not attached.
1.7 The wastes do / do not, contain condensing water or storm water and the layout of drains on the	
premises is / is not, such as to reasonably exclude the	
possibility of such becoming mixed with trade wastes.	1.15 The Health and Safety Requirements and
	, ,
4.0 lt in the next area and that the second accordance and	security arrangements for Wastewater Authority staff
<b>1.8</b> It is / is not proposed that domestic wastewater and trade waste should be discharged at the same point of	entering the premises are as follows: (specify)
discharge	
<b>1.9</b> The proposed method for flow measurement is:	
a permanent installation of suitable flow	
measuring equipment	
Based on water usage as measured by meter	
Other, (specify)	

1D.1.1 Description of trade waste and premises (continued)

2. PROCESS	2.3 Volume of	wastewater		
(Use a separate page for each process and attach copies			mз	
of typical analyses for wastewater from each separate	Average daily volume: m 3  Maximum daily volume: m 3  Maximum flow: L/sec			
process)				
process)	Maximum now	L/	Sec.	
2.1 Process name and description:	2.4 If batch dis	charnes.		
2.11 100000 Hame and description.		-		
	Quantity: m 3  Frequency: m 3			
	. ,			
O O Transactions and an advantage and a	Rate of discha	rge:	. L/Sec	
2.2 Type of product processed:				
2.5 The wastewater contains the following characteristics which	h when mixed w	ith other wastew	aters and discha	rged from
the premises, are near or in excess of the limits stipulated in S	chedule 1B of th	ne Bylaw.		
(NOTE - The characteristics in Schedule 1A.3.3.3 Heavy meta	als and 1A.3.3.4	Organic compou	ınds have a limit	of zero
unless approval for that particular characteristic is applied for.,				
		VALUE OR COM	CENTRATION	
	From P	rocess	At point of	discharge
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
	Typical	Max	Typical	Max
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
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2.6 The following steps have been / will be taken to improve the				

## 1D.2 Application for Conditional Trade Waste Discharge

### The **Central Otago District Council**

Application for Conditional Trade Waste Discharge

PLEASE PRINT CLEARLY TRADE NAME AND STREET ADDRESS OF TRADE **VALUATION NUMBER PREMISES** Phone: LOT NUMBER After hours contact: DP NUMBER POSTAL ADDRESS OF CUSTOMER FOR CHARGING Name: Address: ARE THE PREMISES ALREADY CONNECTED TO PUBLIC SEWER? YES NO OWNER OF PREMISES (if different from above) CONNECTIONS REQUIRED Address: Size: No: Size: Note: Minimum size 100mm ADDRESS FOR SERVICE FOR FURTHER ENQUIRIES **DESCRIPTION OF MAIN TRADE ACTIVITY CONCERNING THIS APPLICATION** Name: THIS APPLICATION RELATES TO: Proposed new discharge An existing discharge for which no consent exists. Current point or place of discharge Renewal of consent Variation to an existing consent Nature of variation: Use and attach additional sheets as required.

## 1D.2 Application for Conditional Trade Waste discharge (continued)

SIGNATURE BLOCK
(Full Name)
(Position)
I am duly authorised to make this application.
2. I believe that all the information contained in this
application is true and correct.
Signature:
Date:

FOR OFFICE USE ONLY	
Application Number	
APPLICATION RECEIVED AND CHECKED BY	
Inspector/Clerk: Date: Conditional	
PROPERTY LINK IDENTIFICATION NUMBER	
BUILDING CONSENT NUMBER	
TRADE WASTE CONSENT	
Approved by:	
No: Date:	
APPLICATION FEE	
\$	
GST \$	
Total \$	
Total \$	
Total \$	

# 1D.2.1 Description of Trade Waste and Premise for Conditional Trade Waste Discharge

DESCRIPTION OF TRADE WASTE AN	D PREMISES – PLEASE PRINT CLEARLY
1 GENERAL PREMISES	1.10 List any substances contained in Schedule 1A or
1.2 Trade name and street address	1B of the Bylaw which are stored, used, or generated on
	the premises.
Dhono: Fow	
Phone: Fax:	Describe mitigation measures employed to prevent
1.2 Name and address of owner/occupier	accidental spillages of these substances from
Name:	entering the public sewer or storm water system
Address:	
1.3 Contact for enquiries (if different from above)  Name:	1.11 Site plans of the premises are attached which clearly show the location of the following as appropriate:  ☐ process areas ☐ flow measuring devices ☐ trade waste drains ☐ emergency spill devices ☐ domestic waste- open ☐ eas draining to ☐ water drains ☐ trade waste drains
Average daily volume	storm water drains emergency spill
Maximum volume in any 8 hr period	containment
Maximum daily volume 3	other, (specify)
Maximum flowL/sec	
Seasonal fluctuation (range)	Main trade waste pretreatment systems
General characteristics of wastes:     TYPICAL RANGE	☐ screens       ☐ pH control         ☐ flow balance       ☐ grease traps         ☐ chemical treatment       ☐ biological treatment
Temperature ( o C)	
BOD (mg/litre)	1.12 Detailed drawings and descriptions for the
COD (mg/litre)	Following are attached as appropriate:
Suspended solids (mg/litre)	☐ Pretreatment systems ☐ Flow measuring devices
pH	Emergency spill containment
- Cir and groupes	Sampling points
1.6 The source of water used on the premises is:	Method of flow meter calibration
(a) from Council m 3 /working day	
(b) from other sources (state source)	1.13 An independent waste audit of the premises
m 3 /working day	has / has not been carried out by:
1.7 The wastes do / do not, contain condensing water or storm water and the layout of drains on the premises is / is not, such as to reasonably exclude the	1.14 A Discharge Management Plan is / is not attached.
possibility of such becoming mixed with trade wastes.	1.15 The Health and Safety Requirements and
	security arrangements for Wastewater Authority staff
1.8 It is / is not proposed that domestic wastewater and trade waste should be discharged at the same point of	entering the premises are as follows: (specify)
discharge	
1.9 The proposed method for flow measurement is:  a permanent installation of suitable flow measuring equipment  Based on water usage as measured by meter Other, (specify)	

1D.2.1 Description of trade waste and premises (continued)

2. PROCESS	2.3 Volume of	wastewater		
(Use a separate page for each process and attach copies			mз	
of typical analyses for wastewater from each separate	Average daily volume: m 3  Maximum daily volume: m 3  Maximum flow: L/sec			
process)				
process)	Waxiiiiuiii iiow	L/	Sec.	
2.1 Process name and description:	2.4 If batch dis	charnes.		
2.11 100000 Hame and description.		-		
	Quantity: m 3 Frequency: m 3			
O O Transactions and an advantage and a	Rate of discha	rge:	. L/Sec	
2.2 Type of product processed:				
2.5 The wastewater contains the following characteristics which	ch when mixed w	ith other wastew	aters and discha	rged from
the premises, are near or in excess of the limits stipulated in S	Schedule 1B of the	ne Bylaw.		
(NOTE - The characteristics in Schedule 1A.3.3.3 Heavy meta	als and 1A.3.3.4	Organic compou	ınds have a limit	of zero
unless approval for that particular characteristic is applied for.,	)			
		VALUE OR COM	CENTRATION	
	From F	rocess	At point of	discharge
	Turning	Max	Tomical	May
	i ypicai	Max	Typical	Max
	Typical	IVIAX	турісаі	IVIAX
	Турісаі	wax	Турісаі	Max
	Турісаі	max	гурісаі	Max
	Турісаі	Wax	Турісаі	Wax
	Турісаі	wax	турісаі	Max
	Турісаі	wax	турісаі	Wax
	Турісаі	wax	турісаі	Max
	Турісаі	wax	Турісаі	Max
	Турісаі	Max	турісаі	wax
	Typical	Wax	Typical	Max
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
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2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				
2.6 The following steps have been / will be taken to improve the				

## 1D.3 Application for Temporary Discharge

## **Central Otago District Council**

Application for Temporary Discharge

APPLICANT	LIQUID WASTE
Name:	Quantity: m 3
Company:	Source:
Address:	
Phone:	Process in which waste was produced:
Fax:	
Applicant responsible for liquid waste	
☐ Transportation	
Generation	
GENERATOR / TRANSPORTER OF LIQUID WASTE	General characteristics
(Delete applicant's responsibility	BOD: mg/L
Name:	COD: mg/L
Company:	Suspended solids: mg/L
Address:	pH:
	Oil and grease: mg/L
Phone:	
Fax:	
	List any characteristics which are likely to be greater
APPLICATION COLLOUT FOR	than 50 % of concentrations stipulated in Schedule 1A of
APPLICATION SOUGHT FOR	the Trade Waste Bylaw
☐ One discharge	
A number of discharges of the same kind of	
liquid waste over a period of one year.	
PROPOSED POINT OF DISPOSAL	ANALYSIS
	(Check with Wastewater Authority whether this is
	required)
If from premises to public sewer, which is existing trade	☐ Appended
waste consent number	☐ Not required
PROPOSED TIMING OF DISPOSAL	DECLARATION
Time:	We hereby certify that the above liquid waste is
Date:	accurately described
	Applicant:
	Transporter / Generator:

1D.3 Application for temporary discharge (continued)

FOR OFFICE USE ONLY		
APPLICATION NUMBER	TEMPORARY DISCHARGE FEE	
APPLICATION  Received by: Date:	\$ GST \$	
Discharge: Approved  Not approved  By:	Total \$	
Date:		
If approved:  Where discharged:  Time and date:  If not approved:	Cashier Receipt:  File No:	
Where referred to:		

## SCHEDULE 1E SAMPLING PROCEDURE

## 1E.1 Sampling equipment

#### **1E.1.1 Sample containers**

#### 1E.1.1.1

The laboratory responsible for analysing the samples should be consulted about the type of container that should be used for sample collection and subsequent sample, storage and transportation.

#### 1E1.1.2

Desirable factors to be considered when selecting sample containers are:

- (a) High resistance to breakage;
- (b) Good sealing efficiency;
- (c) Ease of reopening;
- (d) Good resistance to temperature extremes;
- (e) Practical size, shape and mass;
- (f) Good potential for cleaning and re-use;
- (g) Availability and cost;
- (h) Able to be clearly labelled.

#### 1E.1.1.3

The sample container needs to prevent losses due to adsorption, volatilisation and contamination by foreign substances.

#### 1E.1.1.4

Plastic containers are recommended for most characteristics. Some exceptions exist where glass containers only should be used, when for example the following analyses are to be made:

- (a) Oil and grease;
- (b) Hydrocarbons;
- (a) Detergents;
- (b) Pesticides.

### **1E.1.2** Apparatus

#### 1E1.2.1

The sampling procedures set out in this Schedule assumes the use of manual sampling equipment. The simplest equipment used for taking effluent samples consists of a bucket, ladle, or wide-mouthed container that may be mounted on a handle of a suitable length. The volume should not be less than 100 ml. Where manual samples are to be used for the preparation of composite samples, the volume

of the bucket, ladle or container should be well defined and known to a precision of within ±5 %. Manual samples can also be taken with a Ruttner or Kemmerer sampler, consisting of a 1 litre to 3 litre volume tube with a hinged lid at each end of the tube, or other samplers operating on a similar principle.

#### 1E1.2.2

Manual sampling equipment should be made of an inert material that does not influence the analyses that will be carried out on the samples later.

#### 1E1.2.3

Before starting sampling, the equipment should be cleaned with detergent and water, or as directed by the equipment manufacturer, and finally rinsed with water. The sampling equipment may be washed before use in the wastewater stream from which the sample is taken in order to minimise the risk of contamination. Special attention should be paid to rinsing after cleaning, if the analyses under study are detergents. The sampling equipment cannot be washed in the waste stream where this will influence the analysis carried out later (e.g. analysis of oil and grease, and microbiological analysis).

## 1E.2 Sampling location

### **1E2.1 Safety precautions**

In all cases when selecting sampling locations health and safety aspects should be observed.

#### 1E2.1.1

The sampling location shall be the first manhole or other access point upstream of the point of discharge, unless, because of poor mixing or some other reason, a location giving more representative samples can be found.

#### 1E2.1.2

The sampling location should be kept clean by removing scale, sludge, bacterial film etc. from the walls.

#### 1E2.1.3

If turbulent flow conditions do not exist at the sampling location they shall be induced by restricting the flow, for example with a baffle or weir. The restriction should be made in such a way that sedimentation upstream of the restriction does not occur. The sampling intake point should always be located downstream of the restriction. The inlet of the sampling equipment should preferably face the direction of flow, but may face downstream if too many blockages result. If mixing is good just upstream of the obstacle, then the intake can be located there, taking care that sediment is not sampled and ensuring that the intake remains below liquid level.

#### 1E2.1.4

As a general rule, the sampling point should be one-third of the wastewater depth below the surface.

#### 1E2.1.5

It may be necessary to sample the surface by skimming, in order that qualitative information about emulsified and floating material can be obtained. Guidance on the choice of suitable containers for this sampling technique should be sought from the receiving laboratory.

## 1E.3 Choice of sampling method

### **1E3.1 Types of sample**

It is common to distinguish between 2 sample types:

- (a) Spot (or grab) samples;
- (b) Composite samples.

#### 1E3.2 Spot sample

#### 1E3.2.1

A spot sample is defined as a discrete sample taken randomly (with regard to time and/or location) from the trade waste.

#### 1E3.2.2

In a spot sample, the whole sample volume is taken at one time. Spot samples are useful for determining the wastewater composition at a certain time. In cases with small variations in the volume and composition of the waste stream, a spot sample can be representative of the composition during a longer period.

#### 1E3.2.3

For certain determinations, spot samples only can be used. For example, this is the case with oil and grease, dissolved oxygen, chlorine and sulphide. Here the result

will differ if the analyses are not carried out (or started) immediately after collection of the sample, and if the whole sample volume is not used at a time.

### 1E.3.3 Composite sample

#### 1E3.3.1

A composite sample is defined as 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 for flow measurements.

#### 1E3.3.2

Composite samples are prepared by mixing a number of spot samples or by collection of a continuous fraction of the waste stream.

#### 1E3.3.3

In sampling, each of the spot samples should be greater than 50 ml in volume. Often it is advisable that spot samples are 200 ml to 300 ml in volume, in order to be able to collect representative samples.

#### 1E3.4 Instantaneous composite sample

#### 1E3.4.1

An instantaneous sample is a composite sample taken using the following method.

#### 1E3.4.2

Three spot samples of the discharge shall be taken at intervals of not less than 1 minute nor more than 5 minutes. The 3 spot samples must be combined using equal volumes of all 3 samples to obtain the instantaneous sample.

#### 1E3.4.3

An instantaneous sample shall be used for all routine compliance monitoring unless otherwise specified.

#### 1E3.5 Four hour average composite sample

A 4 hour average sample is a composite sample taken using the following method:

- (a) No less than 12 spot samples shall be taken from the discharge 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 4 hour average sample.
- (b) The 4 hour flow period used when taking a 4 hour average sample shall be a continuous period of 4 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 day's operations.

### 1E.3.6 Twenty four hour flow proportionate sample

A 24 hour flow proportionate sample is obtained using the following method:

- (a) Spot samples shall be taken from the discharge over a continuous 24 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) If the discharge usually flows for a period less than 24 hours then no less than 18 spot samples shall be taken as described in 1E.3.6(a) to represent the nominated 24 hour period.
- (c) The 24 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.

## 1E.4 Frequency, number and timing for samples

## 1E.4.1 Frequency and number of samples

Analyses shall be based on samples taken at regular intervals during each month (the control period).

The samples should be composite samples, unless the determinations to be carried out prohibit the use of a composite sample. The choice of the necessary number of samples taken during each control period should be decided on the basis of statistical techniques (see BS 6068:Section 6.1) but shall not be less than once per month when sampling and analysis is required.

## 1E4.2 Sampling programme

#### 1E4.2.1

The objective of a sampling programme often dictates when and how a sample is collected.

When sampling trade waste, allowance should be made for the following sources of variation in quality:

(a) Diurnal variations (i.e. within-day variability);

(b) Variations between days of the week;

(c) Variations between seasons (if applicable).

1E.4.2.2

If the identification of the nature and magnitude of peak load are important, sampling should be restricted to those periods when peak loads are known to occur.

1E.4.2.3

The most appropriate type of sampling method (grab or composite) may be dependant on the magnitude of the variation in quality.

1E.4.2.4

Relating the times of sampling to the particular process being monitored may be very important when considering discharges that are either seasonal or operated on a batch basis. In either case, the discharge will not be continuous and the sampling programme will need to take this fact into account.

1E.4.2.5

If taking more than one sample, the samples should normally be taken at fixed intervals during the whole control period. The control period shall normally be one month.

1E.4.2.6

The following formula indicates the working day number during which sampling should take place:

$$A + \frac{WD}{n}A + \frac{WDx2}{n}A + \frac{WDx3}{n} \dots A + \frac{365xn}{n}$$

where

WD is the number of working days for the premises in the month

*n* is the number of samples per month

A is a random number in the interval between (-WD/n) and 0.

After determining the intervals and the working day number, it should be ensured that the sampling does not lead to any risk of systematic error, for example by always taking samples on one particular day, or by systematically omitting particular working days.

#### 1E.4.3 Sampling period

#### 1E.4.3.1

The overall sampling period may vary from a few hours, where tracing studies on volatile organics are being monitored, to several days, where stable inorganic species are being monitored.

#### 1E.4.3.2

This subclause deals with the selection of the period over which a composite sample has to be taken. When selecting the period, the following 2 factors should be considered:

- (a) The objective of the sampling. For example, it may be necessary to assess the average organic load in a flow over several 24 hour periods, in which case diurnal flow proportional composite samples will be adequate.
- (b) The stability of the sample. In the example given in (a), it would not necessarily be practical to extend the compositing period for longer than 24 hours, since the organic component in the sample under study may deteriorate.

#### 1E.4.3.3

The stability of the sample may often limit the duration of the sampling period. In such cases, reference should be made to the specific analytical techniques to be employed and the receiving laboratory should be consulted, in order that correct preservative measures can be used. BS 6068:Section 6.3 gives further details on the preservation and storage of samples.

## 1E.5 Sample preservation, transportation and storage

#### 1E.5.1

The most common way of preserving wastewater samples is to cool to a temperature between 0  $_{\circ}$  C and 4  $_{\circ}$  C. When cooled to this temperature and stored in the dark, most samples are normally stable for up to 24 hours. For some determinants, long-term stability may be obtained by deep freezing (below  $-18 {\circ}$  C).

#### 1E.5.2

When collecting composite samples during extended periods, preservation should be an integral part of the sampling operation.

#### 1E5.3

It may be necessary to use more than one sampling device, to allow both preserved and unpreserved samples to be taken.

#### 1E.5.4

The laboratory responsible for analysing the samples should always be consulted with regard to the selection of the preservation method and subsequent transport and storage.

NOTE - Further details may be found in BS 6068:Section 6.3 .

## 1E.6 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) Trade waste 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 IF TRADE WASTE CHARGES

#### 1F.1 Introduction

This section covers the calculation of trade waste charges.

## 1F.2 Charge, items and terms

#### 1F.2.2 Drainage

Item Terms (guideline only)

Connection fee Payable on application for connection to

discharge

Reinspection fee A fee payable for each reinspection visit by the

COUNCIL where a previously issued default notice has not been remedied by the occupier

Disconnection fee Payable on disconnection from collection

system following occupier request for

disconnection

Uniform annual (sewerage or

drainage) charge

A separate charge for wastewater drainage and disposal which is uniform within the COUNCIL's

area, or for areas within it

Rates Wastewater charges included in property rates

Uniform WC levy ("pan charge") A uniform levy on each WC or urinal in each

premises

Special rates for loan charges Additional rates for servicing loans raised for

the purposes of constructing or improving the

COUNCIL wastewater system

#### F.2.2.1 Trade wastes

Temporary discharge fee

A fee payable prior to receipt of temporary

discharge

Trade waste application fee

A fee payable on an application for a trade

waste discharge

Annual trade waste consent

charges.

An annual management fee for holders of trade waste consents to cover the COUNCIL's costs

associated with:

(c) Administration,

(d) Compliance monitoring, and

(a) Inspection of the consents

Volume charge

A set of unit charges incorporating the trade waste share of capital and operational costs for the reticulation, treatment and disposal of wastewater

Suspended solids charge

Biochemical oxygen demand charge

Application Fee

A fee payable for processing an application. This comprises a fixed fee to cover Council's administration and the actual costs of assessing the application.

# 1F.3. Method of determining the excess characteristics of a trade waste discharge

#### 1F.3.1

The excess volume is the average daily 4 hour flow volume of the discharge less the estimated average daily 4 hour flow volume from an equivalent number of dwellings. It is calculated using the following formula:

Excess 4 hour flow volume  $(X_4) = F_{t4} - (F_{d4}n)$ 

Should the calculation based on this equation yield a negative value then the excess 4 hour flow volume ( $X_4$ ) is 0.

#### 1F.3.2

The excess biochemical oxygen demand is the average total daily mass of biochemical oxygen demand of the discharge less the estimated total daily biochemical oxygen demand mass from an equivalent number of dwellings. It is calculated using the following formula:

Excess biochemical oxygen demand  $(X_b) = B_t - (B_d n)$ 

Should the calculation based on this equation yield a negative value then the excess Biochemical Oxygen Demand  $(X_b)$  is 0.

#### 1F.3.3

The excess suspended solids is the average total daily suspended solids mass of the discharge less the estimated total daily suspended solids mass from an equivalent number of dwellings. It is calculated using the formula:

Excess suspended solids (X s) = S t - (S d n)

Should the calculation based on this equation yield a negative value then the excess suspended solids ( $X_s$ ) is 0.

#### 1F.3.4

The items in the above formulae are defined and their method of calculation is set out in 1F.6.

#### 1F.3.5

Table 1F.2 contains values which are believed to be reasonable estimates of data necessary for use in the above formulae.

## 1F.4 Method of calculating charges

#### 1F.4.1

The excess volume reception and disposal charge (volume charge) is calculated using the formula:

Excess volume charge = X + C + C + C

#### 1F.4.2

The excess biochemical oxygen treatment charge (BOD charge) is calculated using the formula:

BOD charge = X b C t C b

#### 1F.4.3

The excess suspended solids treatment charge (SS charge) is calculated using the formula:

SS charge =  $X \circ C \circ C \circ$ 

#### 1F.4.4

The total trade waste charges due is the sum of:

- (a) The excess volume charge,
- (b) The BOD charge, and
- (c) The SS charge.

#### 1F.4.5

The items in the above formulae are defined and their method of calculation in set out in 1F.6.

#### 1F.4.6

Table 1F.2 contains data which are believed to be reasonable estimates for use in the above formulae.

## 1F.5 Method of setting the charge rates

#### 1F.5.1

The 4 hour flow volume charge rate is calculated using the following formula: Four hour flow volume charge rate ( $C_4$ ) =  $R/TQ_4$ 

#### 1F.5.2

The Biochemical Oxygen Demand treatment charge rate is calculated using the following formula:

Biochemical Oxygen Demand treatment charge rate ( $C_b$ ) =

#### 1F.5.3

The suspended solids treatment charge rate is calculated using the following formula:

Suspended solids treatment charge rate  $(C_s)$  =

#### 1F.5.4

The items in the above formulae are defined and their method of calculation is set out in 1F.6.

#### 1F.5.5

Table 1F.2 contains data which are believed to be reasonable estimates for use in the above formulae.

# 1F.6 Definition and means of calculation of the items used in calculating trade waste charges

ltem	Units	Definition
BOD	g/m³	Biochemical Oxygen Demand
$B_d$	kg/day	Estimated total daily biochemical oxygen demand mass from an average dwelling as specified in table F.2
$B_t$	kg/day	The average total daily mass of biochemical demand per operational day from the trade premises. $B_{t}$ is calculated using the following formula:
		$B_t = b_t Q_t$
$b_t$	g/m³	The average biochemical oxygen demand concentration.  Determined as the mean of the results of the analysis of no fewer than 3 samples taken in accordance with the Council's trade waste bylaw
$C_4$	\$/m <sup>3</sup>	Four hour flow volume charge rate as calculated pursuant to F.5 and shown in table F.1.
$C_b$	\$/kg	Biochemical oxygen demand treatment charge rate demand as calculated pursuant to F.5 and shown in table F.1.

C <sub>s</sub>	\$/kg	Suspended solids (SS) treatment charge rate as calculated pursuant to F.5 and shown in table F.1.
$C_t$	Days	Operational days. The number of days on which the discharge occurs during the charge period determined in accordance with clause 12.1.4 of this bylaw.
F <sub>d4</sub>	$m^3$	Estimated average daily 4 hour flow volume from an average dwelling as specified in table F.2.
F <sub>t4</sub>	m <sup>3</sup>	Average daily 4 hour flow volume determined by taking the mean of no less than 5 determinations of the 4 hour flow volume of a discharge made within a charge period in accordance with the methods specified in the trade waste bylaw.
F <sub>t24</sub>	m <sup>3</sup>	Average 24 hour flow volume determined by taking the mean of no less than 5 determinations of the 24 hour flow volume of a discharge made within the charge period in accordance with the methods specified in the trade waste bylaw.
H <sub>t</sub>	Hours	The average number of hours of discharge on an operational day, as specified in the notice of consent to discharge trade waste, or reasonably estimated by the COUNCIL whenever it is found that actual operational hours exceed those on the consent.
n		The equivalent number of dwellings. It means the number of dwellings with substantially the same rateable value as the trade premises in question, and is calculated using the formula: $Vt$
		$n = \frac{Vt}{Vd}$
$Q_t$	m <sup>3</sup> day	The average total volume of a discharge during an operational day. Where the consent to discharge specified the use of 4 hour flow volume measurement and 4 hour average sampling then $Q_t$ is calculated using the following formula:
		$Q_t = F_{t4} \frac{Ht}{4}$
		Where the consent to discharge specifies the use of 24 hour flow measurement and 24 hour flow proportionate sampling, then $Q_t$ is calculated using the following formula:
		$Q_t = F_{t4}$
SS	Kg/day	Suspended solids
$S_d$	Kg/day	The average daily total mass of suspended solids per operational day from the trade premises. $S_t$ is calculated using the following formula:
		$S_t = s_t Q_t$
$S_t$		The average suspended solids concentration. Determined as the mean of the results of the analysis of no fewer than 3

		samples taken in accordance with the trade waste bylaw.
$T_b$	kg	Estimated total annual biochemical oxygen demand load of the total flow into the wastewater treatment plant as specified in table F.2.
TQ₄	m <sup>3</sup>	Estimated maximum potential 4 hour flow volume of all wastewater received and disposed of from the district on an annual basis. Being the estimated 4 hour flow capacity of the wastewater treatment plant multiplied by the number of days in the year.
$T_s$	kg	Estimated total suspended solids load of the total flow into the wastewater treatment plant as specified in table F.2.
$V_d$	\$	Average rateable value of a dwelling in the district
$V_t$	\$	Rateable value of the trade premises
$X_4$	m <sup>3</sup> /day	Excess 4 hour flow volume as calculated pursuant to F.3.
$X_b$	Kg/day	Excess biochemical oxygen demand as calculated pursuant to F.3.
$X_s$	Kg/day	Excess suspended solids as calculated pursuant to F.3.
\$B		The estimated annual BOD treatment costs for all wastewater from the district calculated as follows:
		\$B = \$STP 0.3
\$D	\$	The estimated annual cost of providing, financing, operating and maintaining the wastewater drainage network including the wastewater pumping stations, as specified in table F.2.
\$R	\$	The estimated annual reception and disposal costs for all wastewater in the district calculated as follows:
		\$R = (\$STP 0.4) + \$D
<b>\$</b> S	\$	The estimated annual SS treatment cost for all wastewater in the district calculated as follows:
		\$S = \$STP 0.3
\$STP	\$	The estimate annual cost of providing, financing, operating and maintaining the relevant wastewater treatment plant and the outfall, as specified in table F.2.

Table 1F.1 – Trade waste charge rates

Symbol	Variable	Charge	Charge rates*
		units	
$C_4$	Four hour flow volume charge rate	\$/m <sup>3</sup>	
C <sub>b</sub>	Biochemical oxygen demand treatment charge rate	\$/kg	
$C_s$	Suspended solids treatment charge rate	\$/kg	

[\*to be set by Council. Refer to clauses 12.1.2 and 12.1.3 of this bylaw]

Table 1F.2 – Trade waste charging variables

Symbol	Variable	Charge	Charge rates*
		units	
$V_d$	Average rateable value of a dwelling in the district.	\$	
$B_d$	Estimated total daily BOD mass from an average	Kg/day	
	dwelling		
$S_d$	Estimated total daily SS mass from an average	Kg/day	
	dwelling	_	
$F_{d4}$	Estimated average daily 4 hour flow volume from	m³/day	
	an average dwelling		
T <sub>b</sub>	Estimated total annual BOD mass of wastewater	Kg/year	
	treated from the district		
$T_s$	Estimated total annual SS mass of wastewater	Kg/year	
	treated from the district		
$TQ_4$	Estimated maximum potential 4 hour flow volume of	m³/year	
	all wastewater received and disposed of from the		
	district on an annual basis.		
\$D	The annual cost of providing, financing, operating	\$	
	and maintaining the wastewater drainage network		
	including the wastewater pumping stations		
\$STP	The annual cost of providing financing, operating	\$	
	and maintaining the Wastewater Treatment		
	Plant		
\$B	Estimated annual BOD treatment costs for all	\$/year	
	wastweater from the district		
\$S	Estimated annual SS treatment costs for all	\$/year	
	wastewater from the district	<b>.</b>	
\$R	Estimated annual reception and disposal costs for	\$/year	
	all wastewater in the district		

## CHAPTER 2 MODEL TRADE WASTE CONSENTS

#### 2.1 Permitted

Trade waste discharges of the permitted type will be granted by use of a consent form. Schedule 2A contains the recommended documents.

#### 2.2 Conditional Trade Waste Consents

Trade waste discharges of the conditional type will be granted by use of a specific consent between the Council and the occupier. Schedule 2B contains the documents recommended for a specific consent.

## **SCHEDULE 2A**

## MODEL CONTROLLED TRADE WASTE CONSENT FORM AND SUMMARY SCHEDULES

**Schedule 2A.1** Model Trade Waste Consent Form

Schedule 2A.1A Summary of General conditions for All Trade Waste

Schedule 2A.1B Specific conditions

## **Schedule 2A.1 Model Trade Waste Consent Form**

## THE

## **Central Otago District Council**

CONSENT TO DISCHARGE TRADE WASTE TO THE PUBLIC SEWER Pursuant to the Central Otago District Council Trade Waste Bylaw 2001

To:	
(Occupier t	rade name)
Address:	
(Street address of	f trade premises)
Phone: Fax:	
Name:	
(Contac	et name)
Address:	
(Address for charging ar	nd service of documents)
(Trade	activity)
In response to and in terms of the information declared in	
your application of to discharge trade	
waste from the above premises, the consent of the	
COUNCIL is hereby given for the term and subject to the	
conditions set out below:	
That this consent relates to a proposed new discharge	6. That this consent is subject to the specific conditions
/ an existing non-consented discharge/ renewal of a	set out in Schedule 2A.1B which is attached.
consent / variation to an existing consent.	
2. That this is a controlled/ conditional consent.	
3. That the provisions of the Central Otago District	For and on behalf of the COUNCIL of the
Council Trade Waste Bylaw 2001are complied with at all	Central Otago District Council
times.	
4. That this consent is valid for a period of	Authorised Officer:
years and will expire on	Name:
5. That the trade waste discharged under this consent	Signature:
shall consist only of wastes from the following processes:	Date:
	For office use only
	Consent No.:
	Application No.:
	File No:

# Schedule 2A.1a Summary Of General Conditions For All Trade Waste

[Some of the following conditions may be altered to reflect the different conditions pertaining to each scheme.]

The following general conditions are summarised and do not replace this Bylaw in any way.

[Conditions recommended for general adoption]:

- (1) This Consent is personal to the occupier and is not transferable without written approval.
- (2) If the quantity of wastewater or the point of discharge is to be changed from that requested by the Occupier and approved in this Consent, the Occupier must apply for a variation to this Consent.
- (3) A Consent can be cancelled if the occupier fails to comply with any condition of the Consent, or fails to maintain effective control over the discharge.
- (4) Records of flow and/or volume shall be available for viewing at any time by the COUNCIL.
- (5) No trade waste shall be acceptable if it contains any matter or substances which are prohibited in Schedule 1B of the Trade Waste Bylaw.

[Standard conditions unless authorized otherwise in Schedule 2A.1B]:

- (6) Temperature must not exceed 50  $_{\circ}$  C unless a higher temperature is approved in Schedule 2A.1B.
- (7) pH must be between 6.0 and 10.0 at all times unless a variation is approved in Schedule 2A.1B.
- (8) Solids which may block sewers or pumps are prohibited. These include dry solids, non-faecal solids in excess of 15 mm, heavy solids which settle faster than 50 mm/minute, fibrous material, sheet films, and anything which may react to form a solid mass or interfere with the free flow of wastewater in the drainage system.
- (9) Solvents, fuels and organic fluids (including oil, fat and grease) must not be present as a free layer (whether floating or settled).
- (10) Dissolved or emulsified solvents, fuels and organic liquids are prohibited unless authorized in Schedule 2A.1B.
- (11) Emulsified oils must not exceed 500 g/m 3 and the emulsion must be stable.

- (12) Sulphides must not exceed 5 g/m  $_3$  (as H  $_2$  S on acidification) unless authorized in Schedule 2A.1B.
- (13) Oxidized sulphur compounds must not exceed 500 g/m  $_3$  (as sulphate) unless authorized in Schedule 2A.1B of individual Consents
- (14) Toxic pollutants heavy metals are prohibited unless authorized in Schedule 2A.1B.
- (15) Toxic pollutants organic compounds and pesticides are prohibited unless authorized in Schedule 2A.1B.
- (16) Stormwater and condensing or cooling waters are prohibited unless specified in Schedule 2A.1B.

Schedule 2A.1b Conditions Specific To Trade Waste Consent Number .......... To Discharge Permitted Trade Waste To The Central Otago District Council Wastewater Drainage System

[The following example sets out some specific conditions that could apply for a generic trade requirement schedule, e.g. take away food premises]:

Point of discharge This consent is for trade waste to enter the public sewer	
2 Flow	
(a) No more than*	
3 Temperature	
The temperature shall not exceed 50 o C.	
4 Discharge characteristics	
No characteristics of the discharge determine tabulated below:	ned by analysis may exceed the values
Characteristic	Limit applying to this consent
Biochemical oxygen demand Suspended solids content Settleable solids content Oil and grease content	* g/m <sup>3</sup> * g/m <sup>3</sup> * g/m <sup>3</sup> * g/m <sup>3</sup>
[* Insert acceptable limit values or other lim	it values as appropriate.]
Other specific limits are:	
5 Pre-treatment	
The occupier shall provide the following pre-treatment works:	
500 litre grease trap – to be cleaned at least monthly.	

**6 Measurement** 

The occupier shall provide the following meters or devices to measure the volume of the discharge or its flow rate:
A potable water meter on the water inlet.
The trade waste discharge volume or flow rate shall be measured by:
Reading the volumetric potable flow meter and multiplying by a factor of
7 Monitoring
The following trade waste monitoring programme shall be implemented by the occupier:
Proof of cleaning of the grease trap shall be recorded in a log book, which shall be made available to the COUNCIL on request.
No laboratory analysis of the wastewater is required.
8 Charges
The occupier shall pay the following charges:

## **SCHEDULE 2B**

# **Conditional Trade Waste Consent Form And Specific Consent Schedules**

2B.1	Pro forma trade waste consent for the discharge of conditional type trade waste
2B.2	General conditions
2B.3	Specific conditions

- 2B.4 Schedule of characteristics
- 2B.5 Schedule of treatment processing

**2B.1** Pro Forma Trade Waste Consent For The Discharge Of Conditional Type Trade Waste

Page ..... of .....

	Reference No
	Consent No
coursuant to the Trade Waste Bylaw .for particular (hereinafter referred to as 'waste') to the accordance with and subject to the terms. Subject to the terms, conditions, requires contained; and in consideration of payme	e first part and the occupier named and cribed hereunder from which waste is er has made application to the COUNCIL permission to discharge trade waste COUNCIL wastewater drainage system in and conditions set forth in the said Bylaw. ments, stipulations, and provisos hereinafter ent by the occupier to the COUNCIL of the provisions of the said Bylaw the COUNCI astewater drainage system of those
NAME & ADDRESS OF OCCUPIER	
REGISTERED OFFICE	
ADDRESS OF PROPERTY FROM WHICH WASTE IS DISCHARGED	
COMMENCEMENT DATE	
EXPIRY DATE	
N THE WITNESS WHEREOF the partie	es hereto have executed this Consent this Two Thousand.
E.1.1.1.1 SIGNED FOR AND ON BEH	ALF OF THE
Central Otago District Council	
	MANAGER ASSETS & CONTRACTS
N THE PRESENCE OF:	
THE COMMON SEAL OFaccordance with its Articles of Association	was hereto affixed in on in the presence of:
Date:	

### 2B.2 General conditions of conditional trade waste consent

F	age of
F	eference No
C	onsent No

#### 2B.2.1

That the discharge of waste by the occupier to the COUNCIL's wastewater drainage system shall at all times comply with the conditions set out in the Schedule hereto relating to and specifying:

- (a) The particular public sewer(s) to which the discharge shall be made;
- (b) The nature and characteristics of waste to be discharged to the wastewater drainage system;
- (c) The rate of discharge including the peak rates of discharge and the maximum daily volume of waste to be discharged to the wastewater drainage system;
- (d) The hours of the day and the days of the week during which waste is to be discharged;
- (e) The treatment processes, equipment and storage facilities to be used to regulate the quality, quantity and rate of discharge of waste prior to and at its discharge to the wastewater drainage system;
- (f) Any approved metering device or devices to measure or record the rate of discharge and the total volume discharged;
- (g) Any measurements and records which are to be made and submitted to the COUNCIL.

#### 2B.2.2

That the occupier 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.

#### 2B.2.3

That the occupier 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 Trade Waste Bylaw and in compliance with the New Zealand Building Code.

#### 2B.2.4

That the occupier 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.

#### 2B.2.5

That the occupier shall not make or prefer any claim for damage, loss or injury of any kind whatsoever against the COUNCIL which may arise as a result of the occupier discharging waste into a sewer or drain and the occupier shall indemnify and keep indemnified the COUNCIL against all actions, claims, demands, damages, costs or expenses by or at the instance of any person or body whatsoever or for or by reason of the occupier discharging waste into a sewer or drain.

#### 2B.2.6

That the occupier shall not claim payment or compensation from the COUNCIL for or in respect to the exclusion of any waste from a sewer or drain during the examination, alteration, repair or maintenance of such sewer or drain.

#### 2B.2.7

That the occupier shall give at least 48 hours notice in writing to the COUNCIL prior to terminating the occupancy of the property from which the discharge to a sewer or drain takes place.

#### 2B.2.8

That where for any reason this consent has come to an end or has been terminated then the occupier shall forthwith if requested and at his own expense in all things and to the satisfaction of the COUNCIL disconnect the pipes and equipment used to discharge such waste into the sewer or drain and in the event of his failure to do so the COUNCIL may by its officers servants or agents and workmen enter upon such property and carry out such works at the expense of the occupier as may be necessary to prevent the discharge of waste into the sewer or drain.

#### 2B.2.9

That the provisions of this consent shall be operative as and from the commencement date specified herein, and shall expire on the date specified herein.

#### 2B.2.10

That the COUNCIL may at the expense of the occupier repair remedy and make good any damage or blockage to a sewer or drain or the wastewater drainage system caused by or arising out of or resulting from the discharge of waste failing to comply with the terms and conditions of this consent and the COUNCIL

shall determine the cost and expense of such repair remedy or making good and such determination shall be final and conclusive to such amount which shall be paid on demand to the COUNCIL.

#### 2B.2.11

That if the resource consent(s) for the effluent, sludge, or air discharges from the COUNCIL's treatment plant(s) are changed to become more restrictive from that existing at the date of this consent, that the COUNCIL may vary this consent to meet their new resource consent requirements, within a timetable agreed by the parties.

#### 2B.2.12

That when the occupier 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 occupier, be at an end.

#### 2B.2.13

That the occupier will pay to the COUNCIL upon demand all rates, fees or other charges payable to the COUNCIL pursuant to the provisions of the COUNCIL's Trade Waste Bylaw, set by resolution of the Central Otago District Council.

#### 2B.2.14

That wherever appearing in this consent words importing the singular shall include the plural and words importing the masculine gender shall include the feminine and neuter genders.

## 2B.3 Specific conditions of trade waste consent

Page	of
Reference No	
Consent No	

[Some of the following conditions may be altered, struckout, omitted or added to in order to reflect the different conditions acceptable to different Authorities.]

#### **2B.3.1 Costs**

#### 2B.3.1.1

In the event that any amount payable under this consent or under the Trade Waste Bylaw remains unpaid for longer than 28 days after notice by the COUNCIL that such amount is due, the occupier shall be liable to pay interest on such amount calculated from the date such amount first became due to the COUNCIL at the rate fixed by the COUNCIL.

#### 2B.3.1.2

In addition to all rates, fees or other charges payable to the COUNCIL under 2B.2.13 of the general conditions of this consent the occupier hereby also agrees to pay to the COUNCIL on demand all charges which the COUNCIL may from time to time determine to be payable in respect of the waste components and characteristics specified in the schedule hereto.

#### 2B.3.2 Non-compliance

## 2B.3.2.1

In addition to all rates, fees or other charges payable to the COUNCIL under 2B.2.13 of the general conditions of this consent the occupier hereby also agrees to pay to the COUNCIL all costs and charges which the COUNCIL may determine to be payable in respect of any breach of any term or condition of this consent.

#### 2B.3.2.2

The occupier shall inform the COUNCIL on telephone number 03 448 6797 during normal working hours (or on telephone number 03 448 6979 when out of normal working hours) within one hour of the discovery, of any occurrence, spill or process mishap which may alter the quality or quantity of the final effluent discharging to the COUNCIL's sewer and which may cause a breach of this consent.

#### 2B.3.3 Monitoring

#### 2B.3.3.1

To determine compliance with the nature and levels of the components and
characteristics as specified in the schedule, the discharge shall be sampled at the

## 2B.3.3.2

As from the commencement date of this consent, the occupier shall arrange for a program of self monitoring of the waste discharge, to be implemented as follows:

(a)	On a spot (grab) sample of the waste discharge obtained from the sampling point as specified on one occasion every the levels and		
	concentrations of the following components and characteristics shall be determined:		
	e rate of discharge at the time of sampling shall be estimated or measured, and time and date of sampling recorded, with the analytical results.		
(b)	On a hour flow proportional composite sample of the waste discharge obtained from the sampling point as specified on one occasion every the levels and concentrations of the following components and characteristics shall be determined:		
	Biochemical Oxygen Demand Suspended Solids Total Oxidized Sulphur Total Nitrogen		
	e rate of discharge at the time of sampling shall be estimated or measured, and commencement time and date of sampling recorded, with the analytical results.		
(c)	On a spot (grab) / composite sample of the waste discharge obtained from the sampling point as specified on one occasion every the occupier shall arrange for a Gas Chromatography/Mass Spectroscopy scan of the waste to be undertaken as specified by the COUNCIL.		
	The scan is to be general but will target specific analyses as follows:		

The occupier must retain this sample in accordance with the sample storage requirements as specified in BS 6068: Section 6.3 for a minimum of 14 days after forwarding the report of such Gas Chromatography/Mass Spectroscopy scan for quantification of the Gas Chromatography/Mass Spectroscopy peaks as requested by the COUNCIL.

The rate of discharge at the time of sampling shall be estimated or measured, and the time and date of sampling recorded, with the Gas Chromatography/Mass Spectroscopy report.

- (d) The sampling technique, analytical methods used and sample storage requirements shall be as specified in the most recent editions of BS 6068: Section 6.10 and ACOUNCIL Standard methods for the examination of water and wastewater, and shall be undertaken by a laboratory accredited for the purpose, or a laboratory approved of in writing by the COUNCIL.
- (e) The occupier shall arrange for the results of the self-monitoring program to be forwarded to the COUNCIL, on facsimile number ...... within ...... days of the date of sampling.
- (f) Where any breach of the terms or conditions of this consent is identified by the occupier, the occupier shall submit, within 7 days of such breach, a written explanation to the COUNCIL of the cause of such breach and the proposed action to be undertaken or action taken to prevent its recurrence.

The occupier shall make available for inspection by the COUNCIL all flow charts and records upon request.

(h) The occupier shall arrange for calibration and certification of the flow measuring equipment and instrumentation to be undertaken by a company accredited for the purpose upon installation and at least once every year, thereafter and shall submit to the COUNCIL a certificate for such calibration works.

#### **2B.3.4** Waste management

#### 2B.3.4.1

The occupier shall carry out a waste management audit and submit it to the COUNCIL within ...... months from the commencement date of this consent.

#### 2B.3.4.2

The occupier shall prepare a plan for the achievement of cleaner production techniques within a ....... year time frame, and submit the plan to the COUNCIL within ...... months from the commencement date of this consent.

#### 2B.3.4.3

The occupier shall inform the COUNCIL in writing at the planning stage of all works or practices that may have the potential to alter the nature or levels of the components and characteristics of the discharge to the COUNCIL's sewer.

#### 2B.3.4.4

The occupier shall not divert, connect, conduct, or direct any stormwater run-off from roofed areas, non-polluted roadways and loading areas to the wastewater drainage system unless otherwise specified in this consent.

#### 2B.3.4.5

The occupier shall make available all documentation and receipts for sludge and spent process liquor removal from site for inspection by the COUNCIL upon request.

#### 2B.3.4.6

The occupier shall not store raw material, products or wastes containing corrosive, toxic, flammable, or explosive materials without taking all reasonable steps to prevent entry into the COUNCIL sewer from leakage, spillage or other mishap.

#### 2B.3.4.7

The occupier shall not discharge spent process solutions containing corrosive, toxic or flammable solutions to the COUNCIL's sewer unless otherwise specified in this consent.

## 2B.3.4.8

The occupier shall inform the COUNCIL immediately on discovery of any accident including spills or process mishaps which may cause a breach of his/her consent in particular, or this bylaw in general.

## 2B.3.5 Point of discharge

#### 2B.3.5.1

The point of discharge to the public sewer for trade waste discharged under this consent shall be ......

#### 2B.3.6 Treatment

#### 2B.3.6.1

The occupier shall be responsible for the installation and operation of the effluent pumping system and all associated equipment.

#### 2B.3.6.2

#### 2B.3.6.3

The occupier shall provide a final pH recorder and/or temperature recorder at the outlet of the trade waste treatment apparatus marked ......, and shall arrange for the recorder(s) to be calibrated on a regular basis. Calibration data shall be documented and made available to the COUNCIL on request.

## 2B.3.6.4

The occupier shall provide and install an automatic close-down system to prevent effluent with a pH of less than 6.0 units entering the COUNCIL's sewer if so directed by the COUNCIL.

## 2B.3.7 Trade waste charges

[Insert either:]

## 2B.3.7.1

From the commencement date of the discharge of trade waste to the COUNCIL sewer and until such time as an alternative assessment is made, the occupier agrees

## 2B.4 Schedule of characteristics

Page	of
Reference No	
Consent No	

The nature and levels of the characteristics of any wastewater discharged to the COUNCIL system shall comply at all times with the following requirements, except where the nature and levels of such characteristics are varied by the COUNCIL as part of this consent to discharge a wastewater.

## E.1.1.2 2B.4.1 Physical characteristics

#### E.1.1.2.1 **2B.4.1.1 Flow**

The 24 hour flow volume shall be less than ...... m 3.

The maximum instantaneous flow rate shall be less than ...... L/s.

## **E.1.1.2.2 2B.4.1.2 Temperature**

The temperature shall not exceed ...... o C.

## **E.1.1.2.3 2B.4.1.3 Solids**

Non-faecal gross solids shall have a maximum dimension which shall not exceed 15 mm and gross solids shall have a quiescent settling velocity which shall not exceed 50 mm/minute.

The suspended solids content of any wastewater shall have a maximum concentration which shall not exceed 2000 g/m <sup>3</sup>.

The settleable solids content of any waste shall not exceed 50 mL/L.

The total dissolved solids concentration in any wastewater shall not exceed  $\dots$  g/m  $_3$ .

Fibrous, woven, or sheet film or other materials, which may adversely interfere with the free flow of wastewater in the drainage system or treatment plant shall not be present.

#### 2B.4.1.4 Oil and grease

There shall be no free or floating layer.

Emulsified mineral oil, fat or grease which in the opinion of the COUNCIL is not biodegradable shall not exceed 200 g/m  $_3$  as petroleum ether extractable matter when the emulsion is stable at a temperature of 15  $_{\circ}$  C and when the emulsion is in

contact with and diluted by a factor of 10 by raw sewage throughout the range pH 6.0 to pH 10.0.

Modified oil, fat or grease which in the opinion of the COUNCIL is biodegradable shall not exceed 500 g/m  $_3$  when the emulsion is stable at a temperature of 15  $_0$  C and when the emulsion is in contact with and diluted by a factor of 10 by raw sewage throughout the range pH 4.5 to pH 10.0.

Emulsified oil, fat or grease shall not exceed 100 g/m  $_3$  as petroleum ether extractable matter when the emulsion is unstable at a temperature of 15  $_0$  C and when the emulsion is in contact with and diluted by a factor of 10 by raw sewage throughout the range pH 4.5 to pH 10.0.

## 2B.4.1.5 Solvents and other organic liquids

There shall be no free layer (whether floating or settled) of solvents or organic liquids.

## 2B.4.1.6 Emulsions of paint, adhesive, rubber, plastic

For the purposes of this sub-clause:

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

**Treatable** in relation to emulsion wastewater, means the total organic carbon content of the wastewater decreases by 90 or more when the wastewater is subjected to a simulated wastewater treatment process.

total suspende	is may be discharged from the following processes subject to the solids not exceeding $g/m$ $_3$ , and the pH being in th to:
(b) Latex emulsion	s shall not be discharged from the following processes:
(c) Latex emulsion	may be discharged from the following processes:
	ment of the wastewater by:

## 2B.4.1.7 Radioactivity

Radioactivity levels shall not exceed National Radiation Laboratory guidelines.

#### 2B.4.1.8 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.

#### 2B.4.2 Chemical characteristics

## 2B.4.2.1 pH value

The pH shall be between 6.0 and 10.0.

## 2B.4.2.2 Organic strength

The biochemical oxygen demand / chemical oxygen demand of any waste shall not exceed a concentration of ................. g/m  $_3$ .

Tables 2B.4.1 and 2B.4.2 set out the ...... for the chemical characteristics of all wastewater discharges.

## Table 2B.4.1 - General chemical characteristics

Characteristic	
MBAS (methylene blue active substances)	
Ammonia (plus ammoniacal ion measured as	
N)	
Kjeldahl nitrogen	
Total phosphorus (as P)	[Insert either maximum
Sulphate (measured as SO <sub>4</sub> )	concentrations permissible for the
Sulphite (measured as SO <sub>2</sub> )	discharge, or where controlling by
Sulphide (as H <sub>2</sub> S on acidification)	mass limit insert maximum
Chlorine (measured as Cl <sub>2</sub> )	concentration (instantaneous flow)
Aluminium (dissolved)	and mass limit per day.]
Iron (dissolved)	
Boron (as B)	
Bromine (as Br <sub>2</sub> )	
Fluoride (as F)	
Cyanide – weak acid dissociable (as CN)	

Table 2B.4.2 – Toxic pollutants

Metal	
Antimony	
Arsenic	
Barium	
Beryllium	
Cadmium	
Chromium	[Insert either maximum concentrations
Cobalt	permissible for the discharge, or where
Copper	controlling by mass limit insert maximum
Lead	concentration (instantaneous flow) and
Manganese	mass limit per day.]
Mercury	
Molybdenum	
Nickel	
Selenium	
Silver	
Thallium	
Tin	
Zinc	
Compound	
Formaldehyde (as HCHO)	
Phenolic compounds (As phenols)	
Chlorinated phenols	
Petroleum hydrocarbons	[Insert either maximum concentrations
Halogenated aliphatic compounds	permissible for the discharge, or where
Monocyclic aromatic hydrocarbons	controlling by mass limit insert maximum
Polycyclic aromatic hydrocarbons (PAHs)	concentration (instantaneous flow) and
Halogenated aromatic hydrocarbons	mass limit per day.]
(HAHs)	mass iimit por day.j
Polychlorinated biphenyls (PCBs)	
Polybrominated biphenyls (PBBs)	
Pesticides (general) (includes	
insecticides, herbicides, fungicides)	
Organophosphate pesticides	

## **2B.4.3 Prohibited characteristics**

All wastewater discharges shall not contain any matters or substances which are prohibited under Schedule 1B of the Trade Waste Bylaw.

	2B.4.4	<b>Disc</b>	har	ge
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Hours of the day when effluent shall be discharged:
Hours of the week when effluent shall be discharged:

E.1.2	<b>2B.5</b>	Schedu	le of	treatment	processing	and a	apparat	us
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Page of
Reference No
Consent No

[Attach copies of "Description of trade waste and premises" from Schedule 1D Application Forms, annotated as necessary and as agreed].