

Liquid Trade Waste

Large or Industrial Dischargers

Category 3 Classification C



Definition

Liquid trade waste (LTW) is any discharge to a sewerage system other than domestic waste from a hand wash basin, shower, bath or toilet.

Central Coast Council is referred to as Council.

Introduction

This Fact Sheet is provided to assist you to treat and dispose of liquid trade waste in an efficient and approved manner.

For further information, please contact Council's Trade Waste Section on 1300 463 954

For LTW application forms, refer to www.centralcoast.nsw.gov.au.

Activities

Category 3 comprises high risk and large liquid trade waste dischargers where concurrence must be sought by the Council from the Director-General of the NSW Department of Industry Water.

High risk, large or industrial dischargers are those conducting an activity that:

- is of an industrial nature, and/or
- discharges volumes that exceed 20 kL/d

Large dischargers include

Discharger		
Abattoir	Feather Washing	Oil Recycling
Acid Pickling	Fellmonger	Oil Refinery
Adhesive/Latex Manufacture	Felt Manufacture	Paint Manufacture
Agriculture and Veterinary Drugs Manufacture	Fertilisers Manufacture	Paint stripper
Aluminium Processing	Fibreglass Manufacture	Paper Manufacture
Anodising	Filter Cleaning	Pet Food Processing
Bakery (wholesale)	Fish Co-op	Pharmaceuticals Manufacture
Bitumen and Tar	Flour Mill	Plants Nursery (Open Areas)
Bottle Washing	Food Processing	Plaster Manufacture
Brewery	Foundry	Potato Processing
Butcher (wholesale)	Fruit and Vegetable Processing	Poultry Abattoir and Processing
Cannery	Fruit Juice (factory)	Printing
Cardboard and Carton Manufacture	Galvanising	Rubber Production
Carpet Manufacture	Glass Manufacture	Saleyards
Caustic Degreasing	Glue Manufacture	Seafood Processing
Cereals Manufacture	Grease Trap Waste Disposal	Sheet Metal Fabrication
Chemicals Manufacture	Honey Processing	Slipway
Chemical Repackaging	Ice Cream Manufacture	Smallgoods Manufacture
Condiments/Sauces Manufacture	Industrial Waste Treatment	Soft Drink Manufacture
Confectionery Manufacture	Ink Manufacture	Starch Manufacture
Contaminated Site Treatment Facility	Joinery and Furniture	Sugar Refinery
Cooling Towers	Laboratory Agriculture Research	Tanker Washing
Cosmetics and Perfumes Manufacture	Laboratory Animal Health (Parasitology)	Tannery
Cotton/Synthetics Dyeing/Spinning	Laboratory Chemical (Pesticides)	Tea/Coffee Manufacture
Cyanide Hardening	Laboratory Film (Movies)	Textile Manufacture
Dairy Products Processing	Laboratory Nuclear Medicine and Radioisotope	Timber Processing
Detergent/Soaps Manufacture	Laboratory Pharmaceutical	Tip Leachate
Detergent Mixing	Laboratory Veterinary Research	Transport Depot/Terminal
Drum Washing	Laboratory Police Crime Scene	Truck Washing (internal)
Edible Oils and Fats Manufacture	Leather Finishing	Water Treatment Backwash
Egg Processing	Liquid Wastewater Treatment Facility	Waxes/Polishes
Electroplating	Meat Packing/Preserving	Wine and Spirit Bottling
Engine/Gearbox Reconditioning	Metal Finishing	Winery
Essence and Flavours Manufacture	Metal Processing	Wool Processing
Extrusion and Moulding	Mirrors Manufacture	Yeast Manufacture

Application to Discharge Liquid Trade Wastes into Council's Sewerage System

Manufacturing Industry Category 3

OFFICE USE ONLY				
CATEGORY 3:	Date:	Fee Paid \$	Debtor	HOT KEY:

For further enquiries on the application process, please contact the Liquid Trade Waste Supervisor on 4350 5515.

Business Trading Name			Principal Business Activity	
Development Application No.	Lot No.	D.P.	Parcel No.	House No.
Street		Suburb		Postcode
Property Owner's Name			Telephone No. / Email	
Address				
Applicant's Name (if different from Property Owner)			Telephone No. / Email	
Applicant's Address (if different from Property Owner)				
Occupier's Name (if different from Property Owner)			Telephone No. / Email	

DESCRIPTION OF FLOW

Proposed date of commencement of discharge to the sewerage system	Hours of business operation	Hours of the day during which discharge takes place
	Mon-Fri _____	Mon-Fri _____
	Sat _____	Sat _____
	Sun _____	Sun _____
Average daily discharge to sewer (kL)	Maximum rate of discharge to sewer <input type="checkbox"/> kL/hr <input type="checkbox"/> L/sec	Maximum daily discharge to sewer (kL)
Any water supply meter being installed? <input type="checkbox"/> Yes <input type="checkbox"/> No	Existing water meter number	Meter location

EXISTING / PROPOSED EQUIPMENT (GREASE ARRESTOR, BASKET ARRESTOR, COOLING PIT, ETC)

Type	Size/flow rate

PROPOSED CLEANING SCHEDULE OF PRE-TREATMENT EQUIPMENT AND NAMES OF CONTRACTORS USED	
Pre-treatment equipment	Frequency (weeks)
Name of Contractor	Contact number
Location of sampling point	
Refer to Council's Liquid Trade Waste Policy for the Liquid Trade Waste Quality Standards, which lists pollutants and their allowable limits	
SUBSTANCES PROHIBITED FROM BEING DISCHARGED TO THE SEWERAGE SYSTEM <p>The following substances are prohibited from being discharged to the sewerage system:</p> <ul style="list-style-type: none"> • organochlorine weedicides, fungicides, pesticides, herbicides and substances of a similar nature and/or wastes arising from the preparation of these substances • organophosphorus pesticides and/or waste arising from the preparation of these substances • any substances liable to produce noxious or poisonous vapours in the sewerage system • organic solvents and mineral oil • any flammable or explosive substances • discharges from 'Bulk Fuel Depots' • chromate from cooling towers • natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions • rain, surface, seepage or subsoil water, unless specifically permitted • solid matter • any substance assessed as not suitable to be discharged to the sewerage system • waste liquids that contain pollutants at concentrations which inhibit the sewage treatment process – refer <i>National Wastewater Source Management Guideline, July 2008, WSAA</i> • any other substances listed in a relevant regulation. 	
Signature of Property Owner/s	
<p>Owner's authorisation to making the application is mandatory as per Section 78 of the <i>Local Government Act 1993</i></p> <p>Please note that the owner of the property will be billed for water supply, sewerage and liquid trade waste services provided and it is the owner's responsibility to pay such fees and charges within the period specified. The owner may arrange to recover such fees and charges through the lease agreement between the owner and the occupier.</p>	
<p>The applicant should be aware that approval of this application does not constitute a guarantee of any future approval of a variation to the approval. This will be dependent on the available capacity of the sewerage system at that time and any future approval must not be assumed. However, alerting the Council to the applicant's future plans and proposals may assist the Council in planning future sewage management and / or infrastructure additions / modifications.</p>	
Signature of occupier / applicant	
Position in company	Date

Manufacturing Industry Application Attachment Sheet

Please fill out this attachment sheet if your business involves manufacturing processes that discharge liquid trade waste to the sewerage system. In the table below, tick the business type that best describes what your business does.

BUSINESS TYPE		
<input type="checkbox"/> Abattoir	<input type="checkbox"/> Cosmetic	<input type="checkbox"/> Food
<input type="checkbox"/> Metal plating / anodising	<input type="checkbox"/> Paper products	<input type="checkbox"/> Other (please specify) _____

Application to Discharge Liquid Trade Wastes into Council's Sewerage System Additional Details Required For Discharger Category C

The following pages are to be used to include additional information required from businesses that wish to discharge Concurrence Classification C liquid trade wastes to the sewerage system. Please include all details as requested (if insufficient space attach as clearly labelled appendices), and make sure you read the section on substances that must not be discharged to the sewerage system.

Name of processes generating liquid trade waste

Type and quantity of raw materials processed

Description of waste:

- List of all expected pollutants including substances contained in wash down detergents, boiler and cooling water and other sources
- Expected maximum and average concentrations of pollutants
- Sample analysis results of the proposed waste.

Note: The sample analysis tests shall be carried out by a NATA approved laboratory with accreditation for analysis of the nominated pollutants in the application or a laboratory acceptable to NOW.

Acceptable means of sample analysis data collection:

- Sample analysis results from a similar existing process
- Collection of the proposed waste from a trial pre-treatment plant
- Stand alone pre-treatment - manufacturer's waste quality expectations
- Configured pre-treatment - consultant's calculations based on experience of a similar installation

Attach details and supporting documentation of data collection method.

When detailing the nominated pollutants, where there is no possibility of discharge to the sewerage system because none of the substance is stored or used at the premises, write "NIL".

Pollutant	Acceptance Guideline Limits
Aluminium (AL)	100 mg/L
Ammonia (as N)	50 mg/L
Arsenic (As)	1 mg/L *
Barium (Ba)	10 mg/L *
Biological Oxygen Demand (BOD ₅)	600 mg/L
Biocides	Nil
Boron (B)	25 mg/L *
Bromine (Br ₂)	5 mg/L
Cadmium (Cd)	2 mg/L *
Chlorinated Hydrocarbons	Nil
Chlorinated Phenolics	Nil
Chloride	1000 mg/L
Chlorine (Cl ₂)	10 mg/L
Chromate	Nil
Chromium (cr) (Total) #	5 mg/L *
Cobalt (Co)	5 mg/L *
COD	< 3x BOD
Copper (Cu)	5 mg/L *
Cyanide	5 mg/L
Flammable / Explosive substances	Nil
Fluoride (F)	20 mg/L
Formaldehyde	50 mg/L
Grease / Oil	100 mg/L
Herbicides / Weedicides / Fungicides	Nil
Iron (Fe)	100 mg/L
Lead (Pb)	2 mg/L *
Lithium (Li)	5 mg/L *
Methylene Blue Active Substances (MBAS)	50 mg/L
Manganese (Mn)	10 mg/L *
Mercury (Hg)	0.02
Molybdenum (Mo)	10 mg/L *
Nickel (Ni)	5 mg/L *
Nitrogen (N) (Total Kjeldahl Nitrogen)	100 mg/L
Pentachlorophenol	Nil
Pesticides – General	Nil
Pesticides – Organo-chlorine	Nil
Pesticides – Organophosphate	Nil
PCB	Nil
Petroleum Hydrocarbons (non-flammable)	20 mg/L
PH	7.0 - 9.0
Phenolic Compounds	Nil

Phosphorus (Total)	10 mg/L
Polynuclear Aromatic Hydrocarbons (PAH)	Nil
Pollutant	Acceptance Guideline Limits
Selenium (Se)	5 mg/L *
Silver (Ag)	2 mg/L *
Sulphate (SO ₄)	500 mg/L
Sulphide (S)	1 mg/L
Sulphite (SO ₃)	15 mg/L
Suspended Solids (SS or NFR)	300 mg/L
Temperature	38°C maximum
Tin (Sn)	5 mg/L *
Total Dissolved Solids	1000 mg/L
Zinc (Zn)	5 mg/L *
Other Substances	Nil refer notes

Notes to Quality Standards and Excluded Substances
Flow Rate – The maximum daily and instantaneous rate of discharge (kL/h or L/s) is set on the available capacity of the sewer. Large dischargers are required to provide a balancing tank to even out the load on the sewage treatment works.
Colour – No visible colour when the waste is diluted to the equivalent dilution afforded by domestic sewage flow.
Radioactive substances – The discharge must comply with the Radiation Control Act 1900.
Chromium # - Where hexavalent chromium (Cr ⁶⁺) is present in the process water, pre-treatment will be required to reduce it to the trivalent state (Cr ³⁺), prior to discharge into the sewer.
No discrete oil, fat or grease may be discharged.
Hazardous wastes are totally excluded.
Animal matter (including carcasses but not including human waste), wool, hair, grease, dust, ashes, cinders, soil, rubbish, filth, oil, salt, mud, medical waste, sand, gravel, garbage, offal, vegetable or fruit parings, rags, house refuse, steam or solid matter is prohibited.
Any flammable, volatile solvent or explosive substance are excluded.
Wastes arising from the preparation of pesticides, organo-chlorine weedicides, fungicides, herbicides and substances of a similar nature are not permitted.
Any substance liable to produce noxious or poisonous vapours in the sewerage system is excluded.
Organic solvents and mineral oils are excluded.
Natural or synthetic resins, plastic monomers, synthetic adhesives and rubber plastic emulsions are not permitted.
Waste liquids that contain pollutants at concentrations which inhibit the sewerage treatment process are not permitted – refer to Guidelines for Sewerage Systems: Acceptance of Trade Waste (Industrial Waste) (ARMCANZ/ANZECC, 1994).
The discharge of Hexavalent Chromium (from Chromate compounds) used as corrosion inhibitors or organometallic algicides is not permitted.
Infectious or contagious solid or liquid waste is excluded.
Rain, roof, surface, flood, seepage and / or subsoil waters are not permitted.
Any substance likely to cause injury to personnel employed in the sewerage system or the environment for which the sewage effluent is discharged is not permitted.
Any other matter determined by Council to be of an environmental health or other risk to Council's sewerage system is prohibited.
Substances or mixtures of substances that are not miscible with water are not permitted in the sewer system.
Quality Standards for substances other than those listed in above table in Schedule A are to be determined by Council.
* Total Heavy Metals is the sum of all metals in the waste stream excluding Aluminium, Iron, Manganese and Molybdenum. This shall not exceed 30 mg/L.
The quality of trade waste from some low risk commercial activities in Classification A will exceed guideline limits in this Table. As a higher level of pre-treatment is not cost-effective, such waste is acceptable if the discharger installs and properly operates and maintains the required pre-treatment equipment.

BOD concentration up to 600 mg/L and in some cases higher concentration for low mass loadings may be acceptable if the treatment works has sufficient capacity and odour will not be a problem.

Details of management arrangement of waste streams / wastes that are not permitted or not intended to be discharged to the sewerage system.

The maximum daily and instantaneous rate of discharge (kL/h or L/s) is set on the available capacity of the sewer. Large dischargers are required to provide a balancing tank to even out the load on the sewage treatment works.

Peak periods of discharge during the day

Type of discharge

☐

Batch Flow

☐

Intermittent Flow

☐

Continuous Flow

Detail any special circumstances applicable to the discharge, for example:

- Seasonal discharges
- Large differences between average and maximum daily loads
- Variations to flow, which avoid peak domestic flows, etc
- Retention of discharges for extended periods

Does the proposed installation contain open areas that will drain to the sewerage system?

☐

YES

☐

NO

If YES, please give details and attach stormwater drainage plan for the site.

Stormwater is prohibited from being discharged into the Council's sewerage system. The capacity for such flows is not provided in the sewerage system. Therefore, council does not generally accept the discharge of stormwater to the sewerage system.

The discharge of limited quantities of first flush water from sealed liquid trade waste generating areas will be considered where roofing cannot be provided because of safety or other important considerations.

Reasons why the area cannot be fully or partially roofed and bunded to exclude stormwater

The dimensions of the area under consideration

Is the open area sealed?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Estimated volume of the stormwater discharge
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Information on a first flush system, if proposed

Measures proposed for diverting stormwater away from the liquid trade waste generating area

Report on other stormwater management options considered and why they are not feasible

Identify the water supply source

- | | |
|---|---|
| <input type="checkbox"/> Bore / groundwater / on-site dam / watercourse | <input type="checkbox"/> Town water |
| <input type="checkbox"/> Recycled / reuse water | <input type="checkbox"/> Any water supply meter being installed |

Flow measurement location and proposed flow measurement to sewer (attach details of flow measurement installed / proposed)

Application to be accompanied by two copies of plans showing:

- Details and location of all processes, tanks, pits and apparatus associated with the generation of industrial waste
- Details of the proposed liquid waste treatment processes
- Details of pipes, floor drainage used to convey the effluent
- A full schematic layout of the proposed / existing waste pre-treatment facilities for liquid trade waste prior to discharge to the sewerage system
- Flow diagram and hydraulic profile of proposed treatment apparatus
- Capacity / dimensions, material of construction and lining, operation and maintenance of all pits, tanks, dosing systems, pumps, etc
- Details of the integrity of the pH correction system (diversion system, recording, alarms - location, fail-safe, tamper-proof)

Proposed cleaning schedule of pre-treatment equipment and contractor				
Substance	Qty	Storage liquid / solid	Location	Bunding

NOTE: Attach Material Safety Data Sheets prepared in accordance with the National Code of Practice (NOHSC:2011) for chemicals to be used and are likely to be contained in the waste effluent

Any proposed plans for future expansion? (If Yes, give details on a separate attachment)

☐ YES
 ☐ NO