

Trade Waste Policy and Environmental Management Plan

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Abstract:

Trade expansion has raised the issue of the relationship between trade and the environment. Is trade good or bad for the environment? The answer is not obvious. The production of goods will often have environmental effects. But will these effects increase or decrease with expanded trade? Will they affect the exporting nation, the importing nation, or the world as a whole? And whose responsibility is it to respond to environmental problems associated with trade? Questions such as these have received increasing attention in recent years.

All products and services have environmental impacts, from the extraction of raw materials for production to manufacture, distribution, use and disposal. To ensure the continued protection of our environment and waterways, Water and Waste's policy is to accept, subject to conditions, biodegradable waste into the sewerage system provided that water and waste may consider the acceptance of trade waste containing toxic or hazardous substances and non-degradable pollutants.

The options for producers of trade waste are to have it treated at an approved treatment facility, obtain approval from Water and Waste to discharge to the sewerage system, or to obtain an environmental authority under the Environmental Protection Act 1994 to treat the waste themselves before discharge to the environment. The system is of adequate capacity to effectively collect, transport and treat the wasteland all practicable waste minimization, recycling and reuse options have been applied by the trade waste generator. In order to maintain community confidence in Water and Waste's sewerage operations, and in line with national practice, trade waste approvals are available for public scrutiny.

In this research, study has been done on the options for producers of trade waste, Waste hierarchy, Selected legislation relevant to trade waste, Trade waste policy, Trade waste management plan, Source reduction.

Key-Words: Trade waste, domestic sewage, public scrutiny, storm water, Source reduction.

Introduction:

Trade waste is defined under the Water Supply Act as 'water-borne waste from business, trade or manufacturing premises, other than waste that is a prohibited substance, human waste or storm water'.

Trade waste may have an organic strength many times that of domestic sewage and may overload the treatment facility. Trade waste may also contain other substances such as high levels of fats and grease, heavy metals, organic solvents and chlorinated organic substances which sewerage systems are not designed to treat. These substances may:

- pose a serious risk to the safety and health of sewerage workers;
- damage the infrastructure of the sewerage system;
- inhibit biological processes at the treatment land; accumulate in bios lids, making their reuse difficult or impracticable; or
- Pass through the plant untreated resulting in environmental contamination.

Domestic sewage consists mostly of water which, after treatment to reduce biodegradable material, suspended solids and nutrients, can be disposed of in accordance with its environmental authority requirements. Water and Waste is actively seeking opportunities to reuse and recycle treated effluent and bios lids.

Research Methodology:

This is an empirical study based on secondary data. The secondary data has been collected from Books, Periodicals, Newspapers, Journals and Internet.

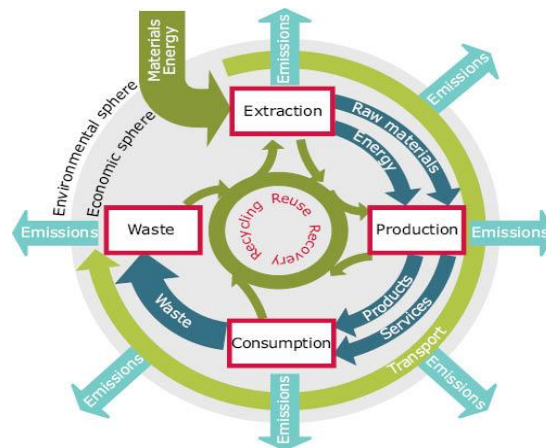
Research Objectives:

- 1) To study the options for producers of trade waste.
- 2) To understand the Waste hierarchy.
- 3) To know the Selected legislation relevant to trade waste.
- 4) To study Trade waste policy
- 5) To understand Trade waste management plan
- 6) To know Source reduction

❖ The Options For Producers Of Trade Waste

Life cycle thinking and assessment can be used to support decision-making in the area of waste management and to identify the best environmental options. It can help policy makers understand the benefits and trade-offs they have to face when making decisions on waste management strategies.

Life-cycle chain: extraction — production — consumption — waste

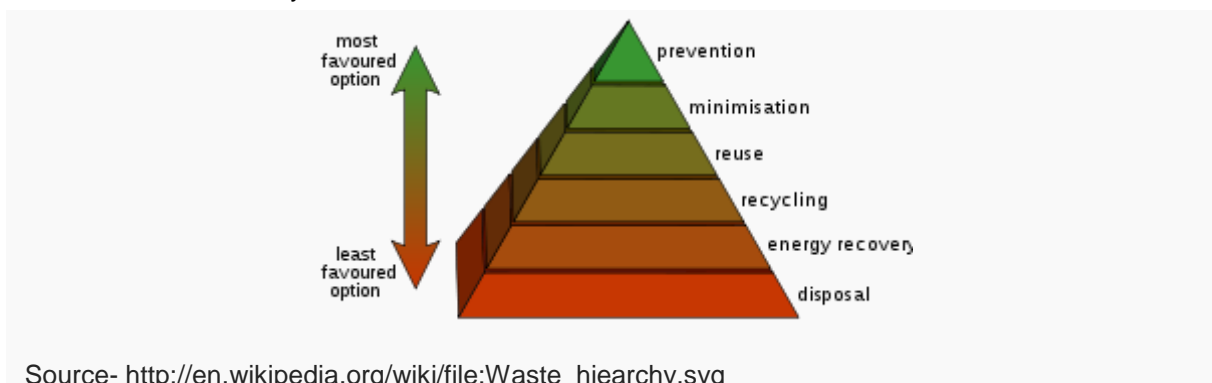


<http://www.eea.europa.eu/soer/synthesis/synthesis/chapter4.xhtml>

The options for producers of trade waste are to:

- Have it treated at an approved treatment facility,
- Obtain approval from Council to discharge to the sewerage system, or
- Obtain an environmental authority under the Environmental Protection Act to treat the waste before discharge to the environment.

❖ Waste Hierarchy



Source- http://en.wikipedia.org/wiki/file:Waste_hierarchy.svg

The waste management hierarchy indicates an order of preference for action to reduce and manage waste, and is usually presented diagrammatically in the form of a pyramid. The hierarchy captures the

progression of a material or product through successive stages of waste management, and represents the latter part of the life-cycle for each product.

The waste hierarchy ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place. If waste is not produced then it has not to be disposed of. When waste is produced, it gives precedence to preparing it for reuse, then recycling, then recovery, and last of all disposal.

❖ **Selected Legislation Relevant To Trade Waste**

- Environmental Protection Act 1994
- Environmental Protection Regulation 1998
- Radiation Safety Act 1999
- Radiation Safety Regulation 1999
- Environmental Protection (Waste Management) Policy 2000
- Environmental Protection (Waste Management) Regulation 2000
- Gene Technology Act 2000 (Commonwealth Legislation)
- Gene Technology Act 2001 (Queensland Legislation)
- Plumbing and Drainage Act 2002
- Standard Plumbing and Drainage Regulation 2003
- Water Supply (Safety and Reliability) Act 2008
- Environmental Protection (Water) Policy 2009
- Local Government Act 2009
- Sustainable Planning Act 2009
- Water and Waste 24 #361786v6

❖ **Trade Waste Policy:**

Purpose:

To provide a liquid waste disposal service for domestic, commercial and industrial waste in accordance with the principles of environmental sustainability and in a manner which safeguards public health and is consistent with Water and Waste's responsibilities and obligations under Queensland legislation.

Objectives:

- To safeguard public health and the environment.
- To prevent harm or injury to sewerage employees.
- To safeguard the sewerage system against damage, blockage or surcharging.
- To exclude non-biodegradable and potentially harmful substances
- To encourage waste minimization and cleaner production, including waste prevention, recycling, and pre-treatment.
- To promote water conservation.
- To assist Water and Waste to meet its statutory obligations.
- To equitably recover the cost of services to commerce and industry including the cost of conveyance, treatment and disposal and, maintenance and repair of damage to the sewerage system.

Process:

Water and Waste aims to achieve these objectives by a process which is transparent, equitable, accountable, abreast of best practice, and responsive to changing community needs and concerns.

❖ **Trade Waste Management Plan:**

pH

This is the measure of acidity or alkalinity of the waste. pH 7 is neutral, below 7 is acidic and above 7 is alkaline.

Premises

A lot as defined in section 10 of the Sustainable Planning Act 2009, or for a lot under the Body Corporate and Community Management Act 1997 or the Building Units and Group Titles Act 1980 – the common property for the lot.

Prohibited substances

A substance prescribed in Schedule 1 of the Water Supply (Safety & Reliability) Act 2008 and section 79 (4) of the Local Government Act 2009.

Quick Break Detergents

Detergents which emulsify oil and grease then break the emulsion in less than one hour.

To ensure the continued protection of our environment and waterways, Council will accept, subject to conditions, biodegradable waste into the sewerage system provided:

- The system is of adequate capacity to effectively collect, transport and treat the waste; and
- The trade waste generator has applied all practicable waste minimization, recycling and reuse options.

Discharge of waste containing substances in amounts liable to be toxic or hazardous to the sewerage system, treatment process, personnel or the environment is prohibited. Council may consider accepting trade waste containing toxic or hazardous substances and non-degradable pollutants only after the waste has been pre-treated by on-site "best practicable treatment" to ensure sewer admission limits are not exceeded.

Control of Trade Waste:

Council is required to meet conditions of a license issued by the Department Environment & Resource Management. Council is also required by the Water Supply (Safety & Reliability) Act 2008 and Environmental Protection (Water) Policy 2009 to fully assess the effect of trade waste discharges on the sewerage system and the environment before issuing approvals.

Under the Environmental Protection Act, Council is responsible for any pollution from storm water outfalls under its control. The discharge of trade waste to storm water is prohibited under the Local Government Act 2009. The storm water system must only be used for the disposal of uncontaminated storm water runoff. Legislation governing trade waste discharge and acceptance is in the Water Supply (Safety & Reliability) Act 2008, the Environmental Protection Act 1994; and the Local Government Act 2009.

Trade Waste Approvals:

Council approval must be obtained before trade waste is discharged from any property to the sewerage system. It is the responsibility of the trade waste generator to obtain approval through Council's approval process. However, as the property owner is responsible for bi-annual volumetric consumption charging, the property owner must complete the relevant section of the application forms acknowledging and agreeing to the business use of the premises and subsequent fees and charges associated.

Council grants two types of approval:

- Trade waste permits (Permit) are used to regulate low strength discharges.
- Trade waste agreements (Agreement) are established between Council and businesses, these regulate high strength wastes

Functions of Trade Waste Management Plan:

The function of the plan is:

- to provide local authorities with a planning framework for the management of trade waste, and
- to assist local authorities demonstrate duty of care and due diligence under Queensland legislation.

❖ SOURCE REDUCTION:

- 1) Source reduction involves efforts to reduce [hazardous waste](#) and other materials by modifying industrial production. Source reduction methods involve changes in manufacturing technology, [raw material](#) inputs, and product formulation. At times, the term "pollution prevention" may refer to source reduction.
- 2) Another method of source reduction is to increase incentives for recycling. Many communities in the United States are implementing variable-rate pricing for waste disposal which has been effective in reducing the size of the municipal waste stream.
- 3) Source reduction is typically measured by efficiencies and cutbacks in waste. [Toxics use reduction](#) is a more controversial approach to source reduction that targets and measures reductions in the upstream use of toxic materials. Toxics use reduction emphasizes the more preventive aspects of source reduction but, due to its emphasis on toxic chemical inputs, has been opposed more vigorously by chemical manufacturers.
- 4) Waste Hierarchy which lists the best ways of managing waste from the most to the least desirable. Many of the things we currently throw away could be reused again with just a little thought and imagination.

Conclusions & Recommendations:

Challenges for local and regional authorities the task of implementing the waste hierarchy in waste management practices within a country must be clearly delegated to the different levels of government (national, regional, local) and to other possible actors including industry, private companies and households. Local and regional authorities can be particularly challenged by issues when applying the waste hierarchy approach. A coherent waste management strategy that must be set up and implemented. It would involve including management plans at all different management levels.

- Separate collection and sorting systems for many different waste streams would have to be established
- New or adequate treatment and disposal facilities being established.
- An effective horizontal co-operation between local authorities and municipalities and a vertical co-operation between the different levels of government, local to regional and when beneficial, also at the national level being established;
- Finding financing for the establishing or upgrading of expensive sustainable waste management infrastructure to address the needs of managing waste.
- A lack of data available on waste management strategies must be overcome and extensive monitoring requirements must be met to successfully implement the waste programs.
- The effective enforcement and control of sound business plans and practices be established and applied to maximize benefits to the environment and human health.
- A lack of administrative capacity at the regional and local level. The lack of finances, information, and technical expertise must be overcome for effective implementation and success of the waste management policies.

References:

- 1) http://en.wikipedia.org/wiki/file:Waste_hierarchy.svg
- 2) http://www.gladstone.qld.gov.au/c/document_library
- 3) <http://www.unitywater.com/Sewerage/New-Trade-Waste-Policy-in-2012.aspx>
- 4) <http://www.water.nsw.gov.au/Urban-water/Country-Towns-program>
- 5) <http://www.eea.europa.eu/soer/synthesis/synthesis/chapter4.xhtml>
- 6) The ISO 14000 EMS standards
- 7) The Australian EMS standards
- 8) The Australian EMS standards (reference details to come)
- 9) Department of Primary Industries (1995) Model Trade Waste Policy. DPI, Brisbane, Queensland.
- 10) <http://www.barwonwater.vic.gov.au/vdl/A2164917/Trade%20Waste%20Management%20Policy.pdf>