

What is Cleaner Production?

The United Nations Environment Programme (UNEP) defines Cleaner Production as *“the continuous application of an integrated environmental strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment”*.

Council encourages Industrial or Commercial Businesses to manage their daily operating costs, increase saleable products and profit margins whilst using fewer raw materials. Cleaner Production aids organisations to comply with environmental legislation. Adopting a Cleaner Production approach, can reduce liability, regulation, monitoring cost and enhance control over your business.

Cleaner Production Benefits

Cleaner Production can lead to economic savings by:

- Reducing or eliminating wasted raw material; or
- Reducing water and energy consumption; or
- Reducing or eliminating liquid and solid waste disposal costs.

Cleaner production helps reduce the cost of trade waste. Working towards cleaner production will greatly help you to comply with stricter environmental legislation. It will also bring the benefits of reduced liability, reduce regulation, reduced monitoring costs, potentially reduced licensing charges and better control over your business.

For generators, an effective Trade Waste Cleaner Production program should include:

- A description and a clear objective of achievable targets for discharge quantity and quality;
- Assessing how materials enter your business and are processed up to delivery to customers (flow diagram);
- Examination of waste prevention and recycling options including conservation of water;
- A program involving the development of waste reduction and pre-treatment aimed at reducing contaminant levels in waste and wastewater (an action program may be required, detailing expected outcomes, timelines and milestones); and
- Provisions for monitoring, recording and reporting waste quantity and quality for continual improvement and to reduce waste costs.

Becoming an Eco Efficient Mechanical Workshop Business in Logan

Trade waste effluent from motor trades may contain petroleum hydrocarbons, solids, metals and chlorinated solvents and phenols. These substances can affect the health and safety of Council sewer workers, damage our infrastructure network, affect treatment processes and the ability to produce quality recycled water and biosolids. Some of these chemicals have the potential to cause explosions.

Who can adopt cleaner production practices?

Any industrial or commercial business that manufactures parts or services automobiles including washing automobiles can adopt cleaner production industry practices. Cleaner production strategies can be employed by businesses involved in:

- Motor Vehicle Dismantling and Used Part Dealing
- Car Retailing and Wholesaling
- Motor Cycle Retailing
- Trailer and Other Motor Vehicle Retailing
- Passenger Car Rental and Hiring
- Automotive Body, Paint and Interior Repair
- Automotive Repair and Maintenance
- Automotive wash bay services
- Boat repair and maintenance

When to adopt cleaner production?

Strategies to prevent or reduce waste entering the sewer system are encouraged in the planning and designing phase of the setup of any mechanical repair business. By implementing strategies at an early stage there are long-term economic savings in reduced conveyance and treatment costs for your business.

The installation of a properly sized, approved best practice pre-treatment device, together with an acceptable maintenance program in accordance with the conditions of the trade waste approval shall be deemed to provide a satisfactory effluent with respect to the general limit parameters of the sewer admission limits unless the trade waste generator is requested to develop an effluent improvement program.

Housekeeping tips for the mechanical workshop industry

Introducing certain internal practices can improve the quality of your trade waste effluent. Removing solids, oils and grease from your effluent stream at the source helps prevent your pre-treatment system being overloaded. This will also help reduce the number of blockages and overflows within your property. Waste and associated costs can be minimised at the following stages of workshop operations.

Damaged vehicle entry to the workshop

Motor oil, radiator fluid, brake fluid, battery acid and fuel can leak from damaged vehicles before repair work.

- Wipe up spills immediately, place trays under leaking parts.
- Don't allow fuel, coolant or oil to enter your pre-treatment system.
- Collect and store brake fluid, motor oil and fuel in drums for off-site removal.
- Collect and store used radiator fluid for off-site removal.
- Store batteries in a bunded area where waste and spills drain to a blind pit.

Parts and engine washing

- Wash small parts in a solvent based recycling parts washer.
- Use a pressure cleaner and quick break detergent to wash large parts and engines.
- Avoid using caustic solutions in the wash bay area.
- Ensure used chemicals from the washing bath are collected and disposed off-site by a registered transporter.



Floor wash-down

- Use bunds to prevent wash water leaving wash area.
- Wash the floor with a quick break detergent and pressure cleaner. Hose in the direction of the collection pit in the wash area.

Wash bay operation

- Should be roofed and have a constructed bund.
- If not roofed, bays are to have a constructed bund and a diversion valve for storm/rain water runoff.
- Should have either a trade waste meter or hour run meter installed.
- Coalescing plate separator (CPS) or vertical gravity separator (VGS) units to have no less than 1500L/hour flow rate.
- Keep wash bay clear of any debris. Shovel dirt or clumps of mud off the wash bay floor and place into bin.
- Store chemicals or liquid product (oils and greases) away from inside the wash bay bunded area.
- Ensure installation of a strainer prior to a collection sump and have it regularly cleaned.
- Sludge in CPS units should be monitored regularly and units serviced monthly. Servicing should include removal of the coalescing plates for cleaning, this will be carried out in the wash down area.
- A contract should be arranged with an approved licensed liquid industrial waste contractor for the desludging and pump out of the holding tank. The desludging should be carried out every six months.
- Only quick-break detergents and degreasers should be used in conjunction with the CPS or a VGS.
- Equipment should not be rinsed of caustic solutions in the wash down area.
- Dockets issued by the licensed liquid industrial waste contractor for the removal of the oil waste and sludge should be kept on site for inspection by Council's Trade Waste Officer.
- Holding tanks associated with the wash bay should be fitted with a high level alarm.

Join the "Logan Business Eco-Efficiency Program"
<http://www.environment.gov.au/archive/settlements/industry/corporate/eecp/industry.html>

Logan City Council acknowledges the support of the Eco-efficiency Group who have provided information included in this fact sheet. <http://www.ecoefficiencygroup.com.au/>

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