

After the chemical collection event, the waste collected is sorted into 42 different types. Paints, lead acid batteries (car and truck), oil, gas cylinders and old fuel and hydrocarbons make up the majority of the waste collected. The remainder consists of small volumes of items such as cleaning products and pesticides.

Chemicals are recycled or treated and disposed of safely. If a container is considered to be unsafe, the material is repackaged for safe handling.

The waste chemicals are placed in sealed containers for transportation by a licensed transporter and are taken to a specialist waste treatment facility for final treatment. The type of treatment depends on the physical and chemical characteristics of the material and is summarised below. Every effort is made to reuse chemicals or to recycle them. As a last resort, a small amount of chemicals are stored in secure landfills, in accordance with the NSW Office of Environment and Heritage requirements.

Remember, it is much better for the environment if we can all reduce the amount of waste chemicals generated, rather than develop complex and expensive systems to deal with them.

Name	Treatment
Acids	Acids are made neutral using alkali waste and are disposed of at a specialist waste facility.
Aerosols	The aerosols are crushed under controlled conditions, allowing the propellants to be filtered and any chemical wastes to be captured for further treatment. The metal containers are then recycled.
Alkali based products	Alkalis are made neutral using acid waste and are disposed of at a specialist waste facility.
All types of paints	Paints are mixed with other waste solvents and used as an alternative fuel in cement kilns
Arsenic based products	Arsenic material is stabilised, made inactive and enclosed in a cement-based material. This is then disposed of in a licensed landfill.
Automotive products (oils, grease, coolants)	Oils are recycled into base oils or are used to make fuel oils.
Batteries – lead acid	Lead acid batteries are sent to recyclers where the lead and acid are recovered and recycled.
Batteries – nickel cadmium and nickel hydride	These batteries are collected, sorted and shipped to processing facilities in France, Korea and Singapore. These facilities are amongst the world's specialist metal recovery companies. A large amount of cadmium and nickel is recovered for use as raw materials by the metal industry.
Batteries – normal single use	The batteries are collected and shipped to a central location for sorting. The sorted batteries are sent to an Australian processing facility for recovery of all metals including zinc and silver.
Cyanide	Cyanides are chemically broken down into inert bi-products.
Fire extinguishers - non halon	Steel is recycled from fire extinguishers. Gases and products captured and reused or disposed of in licensed waste services.
Fluorescent tubes	Fluorescent lamps and tubes contain mercury. The items are recycled with full metal recovery, reuse of the glass and recovery of the mercury and phosphor powder.
Gas cylinders	Any remaining gas is recovered from the cylinders and the steel is sent for recycling.
General household chemicals (eg cleaners)	Chemicals are treated and then disposed of via a permitted trade waste line or landfill.

Name	Treatment
Halogenated solvents	These wastes are mixed with other waste solvents and used as an alternative fuel.
Heavy metals	Heavy metals are stabilised, made inactive and enclosed in a cement-based material. This is then disposed of in a licensed landfill.
Low level radioactive items (eg smoke detectors)	The materials are disposed of in an appropriately licensed landfill.
Old fuel and hydrocarbons	These wastes are mixed with other waste solvents and used as an alternative fuel in cement kilns.
Organochlorine pesticides, PCB materials and halon fire extinguishers	These materials are collected and shipped to a specialist treatment facility in Australia. Treatment is via either Base Catalysed Dechlorination, allowing for recovery/reuse, or High Temperature Plasma Arc where temperatures exceed 3,000°C, breaking down the waste into atoms and ions totally eliminating the contaminant. Containers are recycled where feasible.
Pesticides - non organochlorine	Pesticides are flammable and are treated to remove toxic agents. After treatment they are collected, emptied from containers and used as a fuel in industrial burners such as cement kilns.
Pharmaceuticals	Pharmaceuticals are destroyed at high temperatures and disposed of by a licensed waste service.
Photographic chemicals	Chemicals are treated to a high standard and then disposed of via a permitted trade waste line.
Reactive substances (eg oxidising agents and peroxides)	Reactive substances are chemically treated to stabilise them and make them inactive. They are then recycled for use in industry or disposed of by a licensed waste service.
Toxics (eg Strychnine and other poisons)	A combination of incineration, chemical treatment and fuel blending is employed to safely manage the broad list of items within this category.

For more information about the treatment and disposal of chemicals, visit the Chemsal website at www.chemsal.com.au.

For more information call the Environment Line on 131 555 or visit www.cleanout.com.au

Disclaimers

This information was believed to be correct at the date of its publication.

This information is for general information purposes only and should not be relied upon for legal advice.