
Plastic **manufacturing** involves highly toxic substances but the poisons involved in **plastic recycling** are **far worse**.

Plastics are made from Naptha, a distillate of crude oil

The Fluid Catalytic Cracking Handbook published in 2012 explains Naptha is a mixture of compounds some of which are used as paint thinners, dry cleaning solvents and motor vehicle fuel. Environmental contaminants. And the catalysts in the plastic production process are even more potent, persistent and damaging.

But that's just the tip of the toxicity iceberg. You see... plastics for **recycling** have had a vast array of other chemicals added to modify their properties. To make them more flexible, sterile and UV resistant.

The **United Nations** released a Technical report last year called **Chemicals in Plastics**.

Over 13,000 additional chemicals were identified in plastics and 3,200 of these chemicals are identified as being of major concern due to their high toxicity and potential to migrate.

They include flame retardants, UV stabilizers, per- and polyfluoroalkyl substances (PFASs), phthalates, bisphenols, alkylphenols and alkylphenol eethox-e-lates, biocides, metals and metalloids, polycyclic aromatic hydrocarbons, and many others which the UN describes as NIAS - non-intentionally added substances.

Poisonous things we now believe should never have been added to plastics if we intended to recycle them.

The UN report states that Women and children are particularly susceptible to these toxic chemicals. Exposures can have severe or long-lasting adverse effects. Exposures during fetal development and in children can cause neurodevelopmental and neurobehavioural disorders.

This information comes from the UN. Surely it cannot be ignored.

So let's just look at one of the 3,200 hazardous chemicals likely to be released in Moss Vale during plastic recycling. bisphenol-A (BPA).

A study by Maffini et al from Tufts university medical school Boston released in 2006 called *Endocrine disruptors and reproductive health: The case of bisphenol-A*, in the Peer reviewed journal *Molecular and Cellular Endocrinology* states that

The estrogen-mimic bisphenol-A (BPA) is an agent for endocrine disruption. BPA is used in the manufacture of polycarbonate plastics and epoxy. Perinatal exposure to BPA results in *morphological* and *functional* alterations of the male and female genital tract and mammary glands that predisposes the tissue to earlier onset of disease, reduced fertility and mammary and prostate cancer.

bisphenol-A (BPA) is a crystalline solid that will dissolve.

...There are *such strict rules* for waste water in our shire because of our *special place within the Sydney water catchment*. I feel like I'm in a dystopian nightmare where a dictatorial state government would override our local council as they seek to prevent that harm.

A study by Tsai et al in the peer reviewed journal *Chemosphere* examined the emissions from ten plastic recycling plants both inside and at the boundary. They found,

"The melting and powdering processes for treating plastic waste ...generates harmful gas emissions which have potential adverse health impacts for nearby residents. Multiple organochlorinated compounds were measurable in the ambient air emitted from the plastic waste recycling plants.

These gaseous emissions are *large, heavy molecules* that will drift low and not just float away

The Plasrefine site is 1.7 km from St Paul's Catholic Primary School, 1.6km as the crow flies from Argyle St, 1.7km from Moss Vale High and just meters from scores of residential homes and a childcare centre.

Will you, Andrew, Janett and Clare, risk the health and fertility of our children, our friends and our neighbours by locating plasrefine on ***this specific*** site? Or will you ask Plasrefine to relocate away from schools, homes and the town main street and outside the Sydney Water catchment.