

**Submission  
No 63**

## **INQUIRY INTO 'ENERGY FROM WASTE' TECHNOLOGY**

**Name:** Name suppressed

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Partially  
Confidential

I write this submission with frustration that we, living in Western Sydney, must now submit once again, why waste to energy is not good. The fact that we have to continue to prove to the NSW parliament that the application to build the World's largest Incinerator so near to our homes, is dangerous and harmful to our lives and health is beyond belief. Over 1,000 submissions of objection have already been sent to Anthony Roberts at the Department of Planning stating that we DO NOT want this incinerator here at Eastern creek - a mere 800m from our homes and 5km from Sydney's drinking water supply. Why would a government even consider an application to build something so hazardous and untested in Australia, so close to homes, a water supply and 3 major Food distribution centres (Aldi and Woolworths 800m away and Coles less than 400m away from the proposed Incinerator). Rest assured that all the fresh fruits and vegetables and cold products despatched from the distribution centres will be laced with dioxins and nano particles detrimental to all peoples health - these products will be brought to and sold at a supermarket near you. ALL of Sydney will be affected by this untested unsafe Incinerator especially given the proponent's record of breaching EPA guidelines over and over again.

How can an untested, unsafe Incinerator, the World's largest, be even considered to be built near residential areas. We are fighting for our lives, our health, our homes - do we out west not matter? We are all hard-working family orientated people who want what you want for your family, a safe environment. The Air Pollution out west reaches dangerous levels and now you want to add a Waste Incinerator, which will spill out dangerous, hazardous chemicals, near our homes and which we will breathe every time we open a window or door. Do you want us to walk around with masks like China? At a recent Press Club broadcast I heard the Premier Gladys Berejiklian say that she listens to what the people of Sydney have to say and acts accordingly. Well the people of Sydney are talking - is anybody listening? No matter where we live in Sydney all lives must matter - so NSW parliament stop this Incinerator from being built by rejecting and refusing to grant the application. Donations to Parties should not be a deciding factor over the life, health and well-being of people. This is Morally wrong!

Right now Western Sydney recycles 62% and this is increasing. Waste Incineration will stop people from recycling and more waste will occur. This Incinerator is going to burn Industrial waste and goodness knows what else will be 'hidden' between the waste as no one can monitor what comes in as waste 24/7. Incineration is a very bad idea. If this is 'safe' and not a health risk as the proponent has stated, then let him build it near his home. Our lives are at risk - that should be the priority.

I quote the following reasons from companies who have done extensive research as to why Waste to energy does not work: - (all are attached for further information)

*EnergyJustice.net* says the following:

**MYTH 1: Waste incineration is a source of renewable energy.**

**FACT: Municipal waste is non-renewable, consisting of discarded materials such as paper, plastic and glass that are derived from finite natural resources such as forests that are being depleted at unsustainable rates.**

Burning these materials in order to generate electricity creates a demand for "waste" and discourages much needed efforts to conserve resources, reduce packaging and waste and encourage recycling and composting. More than 90% of materials currently disposed of in

incinerators and landfills can be reused, recycled and composted. (Might I add that Industrial waste which will be burned at this Incinerator will emit dangerous carcinogens).

**MYTH 2: Modern incinerators have pollution control devices such as filters and scrubbers that make them safe for communities.**

**FACT: All incinerators pose considerable risk to the health and environment of neighbouring communities as well as that of the general population.** Even the most technologically advanced incinerators release thousands of pollutants that contaminate our air, soil and water. Many of these pollutants **enter the food supply and concentrate up through the food chain.** Incinerator workers and people living near incinerators are particularly at high risk of exposure to dioxin and other contaminants.

**Trash incineration releases 28 times as much dioxin per unit of energy than coal, twice as much carbon monoxide, 3.2 times as much nitrogen oxides (NOx), 14 times as much mercury, nearly six times as much lead and 20% more sulfur dioxides.**

In newer incinerators, air pollution control devices such as air filters capture and concentrate some of the pollutants; but they don't eliminate them. The captured pollutants are transferred to other by-products

such as fly ash, bottom ash, boiler ash/ slag, and wastewater treatment sludge that are then released

into the environment. However, even modern pollution control devices such as air filters do not prevent the escape of many hazardous emissions such as ultra-fine particles. Ultra-fine particles are particles produced from burning materials (including PCBs, dioxins and furans), which are smaller in size than what is currently regulated or monitored by the U.S. EPA.

**These particles can be lethal, causing cancer, heart attacks, strokes, asthma, and pulmonary disease.** It is estimated that airborne particulates cause the deaths of over 2 million people worldwide each year.

U.S. regulatory agencies have found that **incinerators are prone to various types of malfunctions, system failures and breakdowns**, which routinely lead to serious air pollution control problems and increased emissions that are dangerous to public health.

**MYTH 3: Modern incinerators efficiently produce electricity.**

**FACT: All incinerators are a massive waste of energy.** Due to the low calorific value of waste, **incinerators are only able to make small amounts of energy** while destroying large amounts of reusable materials. While older incinerators generate electricity at very low efficiency rates of 19-27%, a recent UK study<sup>15</sup> found that conversion efficiencies of **new incineration technologies are even lower.** Conversely, zero waste practices such as recycling and composting serve to conserve three to five times the amount of energy produced by waste incineration.

**MYTH 4: Incinerators provide jobs.**

**FACT: Recycling creates 10-20 times more jobs than incinerators.**

**MYTH 5: Incinerators are an affordable option.**

**FACT: Incinerators are the most expensive method to generate energy and to handle waste, while also creating significant economic burdens for host cities.** According to the U.S. Energy Information Administration Annual Energy Outlook 2010, the projected capital cost of new waste incinerator facilities is \$8,232 per kilowatt hour. That is twice the cost of coal-fired power and 60 percent more than nuclear energy. Waste incinerator operations and maintenance costs are ten times greater than coal and four times greater than nuclear.

**MYTH 6: Incinerators are compatible with recycling.**

**FACT: Incinerators burn many valuable resources that can be recycled and composted, and incinerators compete for the same materials as recycling programs.**

**MYTH 7: Countries like Denmark that are expanding incineration have the highest recycling rates and they only burn materials that cannot be recycled.**

**FACT: Countries and regions in Europe that have high waste incineration rates typically recycle less.** Data for household waste from Denmark in 2005 clearly shows that regions with expanded incineration have lower recycling and regions with lower incineration do more recycling. It's worth noting that Denmark's recycling rate is well behind other regions of Europe such as Flanders in Belgium, which recycles 71% of municipal waste. According to Eurostat in 2007, Denmark generates some of the highest per capita waste in the EU (over 1762 lbs. each year) and over 80% of what is burned in Danish incinerators is recyclable and compostable. A 2009 study reported that Europe throws away resources worth over \$6 billion dollars every year by burning and burying materials that can be recycled.

**MYTH 8: Modern European incinerators produce clean energy, less pollution**

**FACT: Waste incinerators in the EU continue to pollute the climate and cause significant public health risks,** while burning billions of dollars-worth of valuable, non-renewable resources. A recent public health impacts report states that modern incinerators in the EU are a major source of ultra-fine particulate emissions.

*In 2009, the Advertising Standards Agency in the UK banned the SITA Cornwall waste company from distributing its booklet on incineration for, among other things, making unsubstantiated claims that the UK Health Protection Agency stated that modern incinerators are safe (this is exactly what we are being told by the proponent)*

Another report taken from Eco-Cycle quotes the following:

This report analyzes the three primary technologies commonly known as “waste-to-energy” (incineration, conversion technologies like pyrolysis and gasification, and anaerobic digestion) and their potential application in the U.S.

**Eco-Cycle says:**

**Our conclusions:**

1. Waste-to-energy is 50% more expensive than land-filling and poses an unjustified financial risk.
2. Waste-to-energy would only meet 1-3% of our electricity needs while stopping all future recycling and composting growth.
3. Waste-to-energy **would produce myriad health and environmental risks that make a facility nearly impossible to site in any U.S. community.**
4. Waste-to-energy is a **waste OF energy** because recycling conserves three to five times more energy than WTE generates because manufacturing new products from recycled materials uses much less energy than making products from virgin raw materials.

**Economic Issues**

Waste-to-energy is not financially competitive.

Waste-to-energy is a costly investment.  
Incineration is the most expensive method for generating electricity.  
Waste-to-energy is a risky investment.  
Conversion technologies—pyrolysis, gasification and plasma arc—are an **unproven approach**.

### **Environmental Issues**

Waste-to-energy is not safe or pollution-free.  
Waste-to-energy emissions and by-products are neither benign nor insignificant.  
Waste-to-energy is a deterrent to recycling and composting.  
Waste-to-energy cannot co-exist with Zero Waste.  
Waste-to-energy is not climate-friendly.  
Waste-to-energy is not renewable energy.  
Waste-to-energy is a waste OF energy.

25% of the processed waste (by weight) exits the facility as ash, meaning an incinerator does not eliminate the need for a landfill. - unquote

So many accidents have occurred around the world - and rest assured when this happens here out west (and it will happen) it will be catastrophic for us living so close to the proposed site. We CANNOT allow this to happen. Build this out of Sydney far from homes . Nick Greiner pulled a submission to build a waste incinerator near Cowra because it was near the Murray River! - Well this one is 800m from our homes, 5km from Sydney's drinking water supply, 400m & 800m from Food and Cold Storage Distribution centres of Coles, Aldi and Woolworths, near hospitals and schools etc. This is detrimental to our health. Is anyone listening?

Once again, another research company, **The National Toxic Network of Australia**, states

### **Burning waste for energy doesn't stack- up**

The incinerator industry is now compelled to make claims that the electricity it produces is renewable and green to attract subsidies and credits for 'green' energy. It is unlikely that the industry would be able to remain financially viable in any sense unless they can access these funds. However, regulators and legislators are taking a closer look at these claims in some countries and **exposing the false nature of these arguments.**

**Australians have fought for decades to keep incinerators out of their communities because of their long history of pollution, poor performance and financial failures.** Most waste incinerators operating in proximity to communities in democratic countries around the world have been the subject of great controversy and public protests. The fact that they operate does not mean they are socially acceptable or result in any environmental or social benefits. **However, they can make proponents very wealthy.**

The USEPA have undertaken comparative studies of modern MSW incinerators and other forms of electricity generation which revealed that **incinerators are the dirtiest electricity production** option releasing more CO<sub>2</sub> than coal fired power stations per unit of energy generated.

Potentially hazardous wastes that might be found in municipal solid waste Items in the municipal waste stream that exhibit characteristics that could, under some circumstances, be described as hazardous include:

- \*lead acid batteries, mobile phones, televisions and computers that can contain toxic and eco-toxic heavy metals, such as lead, nickel, copper and cadmium, chromium and mercury;
- \*pesticide, paint and household chemical containers, which can contain toxic, ecotoxic and poisonous materials;
- \*car parts, which can contain toxic, ecotoxic and poisonous components;
- \*tyres, which can catch fire thus leading to toxic emissions;
- \*domestic smoke detectors, which contain small amounts of radioactive material;
- \*copper chrome arsenate treated timber.

(Source: Productivity Commission (2006), Waste Management, Report no. 38, Canberra.p.6)

The result is that most modern waste incinerators are still significant sources of hazardous air toxics emissions that are difficult to control. Some of the pollutants such as mercury, dioxins and polycyclic aromatic hydrocarbons (PAHs) **can travel great distances and contribute to contamination on a global level as well as contaminating local soil and produce.**

Persistent pollutants such as acid gases, nitrogen oxides (NO<sub>x</sub>), sulphur oxides (SO<sub>x</sub>) are highly toxic and impact on public health at a local and regional level around individual incinerators.

A 2013 study investigating health impacts from MSW incineration and hazardous waste treatment plants in Spain concluded,

**“Our results support the hypothesis of a statistically significant increase in the risk of dying from cancer in towns near incinerators and installations for the recovery or disposal of hazardous waste”.**

Dioxins are highly toxic at extremely low levels (effects have been reported in the parts per quadrillion range) making claims of ‘low dioxin emissions’ from incinerators somewhat meaningless.

**Incinerator proponents commonly claim that dioxin emissions were only ever a problem with ‘old’ incinerators and that ‘new’ incinerators have overcome these problems.**

However, there is no definition of new or old incinerators and most current proposals are merely variations on the same technologies that have been in use for decades. What has changed is the *branding* of these technologies. Proponents are now well aware that the public has a very negative perception of any technology called an incinerator and associate it with dioxin pollution.

**As there are no safe levels for human exposure to dioxins, there can be no truly safe levels of dioxin air emissions from incinerators – even those that meet the regulatory guidelines.**

The incinerator industry also promotes itself as a solution to landfill suggesting that the adoption of waste incineration to produce electricity can replace the need for landfills. This is seriously misleading as all MSW incinerators end up with around 25-30% by weight of the original waste feed being converted to contaminated ash.

Australia has avoided the introduction of waste incinerators in recent decades with the exception of Brightstar Environmental's SWERF plant in Wollongong. This MSW gasification operation **closed after 3 years of trials in 2004 without having become operational and \*with many emission breaches**. The parent company Energy Developments Ltd lost around \$160 million along with the local community investment of \$1.5 million. (\*sounds familiar)

### **Burning waste requires landfill**

While incinerator proponents like to present their technology as a solution to landfill the reality is that incinerators need landfills. Even the industry admits that 30% of the original volume of waste entering an incinerator must be disposed of after it has been burnt. The residual waste from incineration for every 1000kg burned is estimated at 220kg of bottom ash, 30kg of hazardous waste in the form of fly ash and 30kg of metals.

Bottom ash is generally land-filled in municipal waste landfills or special 'monofills' that just contain ash from incineration. **Fly ash contains high concentrations of dioxins, PCB's and heavy metals as well as other hazardous materials.** These have to be land-filled in hazardous waste cells which can require disposal costs up to ten times higher than standard landfill. A municipality that signs up to a waste incinerator also has to meet the costs of maintaining and monitoring a landfill (most of which require expensive groundwater monitoring) if it owns one, or must contribute to the ash tipping fees directly or indirectly through its waste incineration contract. The notion that incinerators 'replace' landfills in terms of cost or environmental impacts **is clearly misleading.**

(Note: Blacktown Council and Penrith Council have opposed this application by the proponent to build the World's Largest Incinerator here at Eastern Creek - if our Councils has opposed it why aren't we being heard? - why is the State Govt considering an application already rejected by our councils? Donations to Parties should NOT be considered over peoples' lives)

**Renewable energy subsidies for waste incinerators should be reviewed and revoked. Waste incineration should be discouraged at all levels of governance as a poor solution to waste in the 21st century.**

The following is quoted from **IPEN - Toxic Ash poisons our food chain**

#### 1.1 KEY FINDINGS OF THE REPORT (April 2017)

- The amount of **dioxins released** (contained) **in waste incineration fly ash is highly underestimated** (its content is 3 – 10-times as much as previously estimated) – the scope of the problem is bigger than previously thought.

• **Fly ash is reused for different purposes on a broad scale**, and is getting **out of control**. This is especially due to its high dioxin content and the manner in which it is disposed of, which does not lead to destruction or irreversible transformation of POPs content in ash – **POPs recycling is occurring on a large scale through ash distribution**. - unquote.

WASTE INCINERATORS are detrimental for Human Life, Families, The Environment. They are a curse to mankind and mankind's right to live a healthy safe life.

**Following is a map showing the accidents that have occurred in so called 'safe' Waste Incinerators in Europe. We CANNOT take the risk here at Eastern Creek - this application MUST be stopped/rejected. The Health and Well-being of all of the families and our water supply is and must be of utmost priority - Our lives are risk - All of the above information is fact and can be checked - see attached. We have the right to live in a safe and healthy environment - it is our God-given right to do so. Both the EPA and NSW Local Health have opposed the application.**

**Map List of Accidents plus Most recent accidents at so called 'safe' incinerators in Europe.**





Esbjerg, Denmark, 28/06/2016



Grenoble France, 09/05/2016



The Office of Environment and Heritage posted the following on 11 May 2017.

Public Service Announcement For Sydney.

Air quality in Sydney today, has exceeded national levels for <math>PM\_{2.5}</math> particulate matter. Anyone with respiratory problems, should stay inside.

You CANNOT IGNORE these facts and the dangers of having a Waste Incinerator so close to our homes and water supply here in Western Sydney. Do the right thing and STOP this application from being granted before a catastrophic accident happens and many lives are harmed.

BEIJING (AP) — A city government in southern China has revoked approval of a planned waste incinerator in response to public opposition and protests by residents. It is the latest of several cases of local authorities bowing to a public outcry over health concerns. - If China can listen to their residents why can't the NSW State Government do likewise. We DO NOT want this Incinerator here at Eastern Creek,