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20/10/12

Dear Sir/Madam

As a visitor to Stockton please accept this submission of objection regarding Incitec Pivot's proposed ammonium nitrate plant on Kooragang Island (SSD-4986).

In my opinion the proposal creates an unacceptable risk to nearby residents and Incitec's Environmental Impact Statement does not address my concerns of explosive risk, noise, air and water pollution and possible impacts to house values.

Newcastle and the suburbs that surround the Port are demanding responsible planning decisions and the mere thought of two ammonium nitrate plants, operating side-by-side just 800 from residents is a planning disaster.

The direct impacts from Incitec's proposal for me and my family include:

Potential for explosion

Incitec's EIS fails to adequately address my concern around the potential risks of storing 20,000 tons of ammonium nitrate (maximum storage capacity combining Orica and Incitec). It is well known an ammonia nitrate explosion involving 300 tons of ammonium nitrate in Toulouse, France, killed 31 and injured many thousands within a 5km radius in 2001.

I am aware that ammonium nitrate is an oxidising agent, not an explosive, however, it can be turned into an explosive both quickly and easily by shock waves, foreign matter, heat and pressure. Whilst the risk of explosion is small, the impact of an explosion would be catastrophic and despite slogans in Incitec's EIS of "world's best practice" accidents do occur, take for instance Orica's Hexavalent Chromium leak in 2011. There have been many accidental explosions of ammonium nitrate worldwide including at factories, in storages and during transport.

One of the fundamental responsibilities of any Government is the welfare and protection of people and this proposal undermines the safety of around 50,000 residents within a 5km radius. Government should note that if Incitec proceeds there is enough explosive power on Kooragang Island to match the Hiroshima atomic bomb (Hiroshima used 18,000 tons of TNT which is comparable to the 21,000 tons proposed by Incitec and Orica's current capacity).

The Department of Planning must also acknowledge that the South Australian Government is trying to shift Incitec's storage of AN in Port Adelaide due to explosion risk for residents, which is outlined by a SA WorkCover report. Such a massive concentration of ammonium nitrate storage with 800 m of residents is not acceptable to the communities that surround the proposal.

The analysis in the Risk Assessment does not include worst case scenarios as required and frequency analysis does not consider adequately the actual accidental explosions worldwide and provide a more realistic frequency assessment. The explosive potential of ammonium nitrate is shown in Figure 1 including actual events.

Figure 1: Explosive Potential of Ammonium Nitrate

Quantity (tonnes)	TNT equivalent (tonnes) (0.32/0.7)	Area Affect (km radius)	Effects
300	9.6/210	5	Toulouse explosion, killed 31, injured 14,000, damaged 30,000 houses, 5 km damage radius
2,300	736/1,610	50	Texas City explosion, killed 700, injured 15,000, windows shattered 60 km away
11,000	3,520/7,700	Unknown >> 50 km	
20,000	6400/14,000	Unknown >> 50 km	Hiroshima atomic bomb equated to 18,000 t of TNT
Closest residents to the proposed Incitec plant on KI 0.8 km, 3 km from Newcastle CBD, approximately 50,000 people within 5 km of the proposed plant			

Air Pollution

I'm deeply concerned that Incitec's plant will only add to already deteriorating air quality. Stockton residents experience high levels of coal dust from PWCS and NCIG, diesel particulates from industry and nitrous oxides from Orica's plant.

Two large scale ammonium nitrate plants, operating so close to residents creates an

especially high concentration of NO_x gases that are detrimental to respiratory health, especially the young and elderly.

Orica's expansion and Port Waratah Coal Services' T4 proposal, further impacts future air-quality and Incitec's Air Quality tests does little to abate my concerns regarding air pollution.

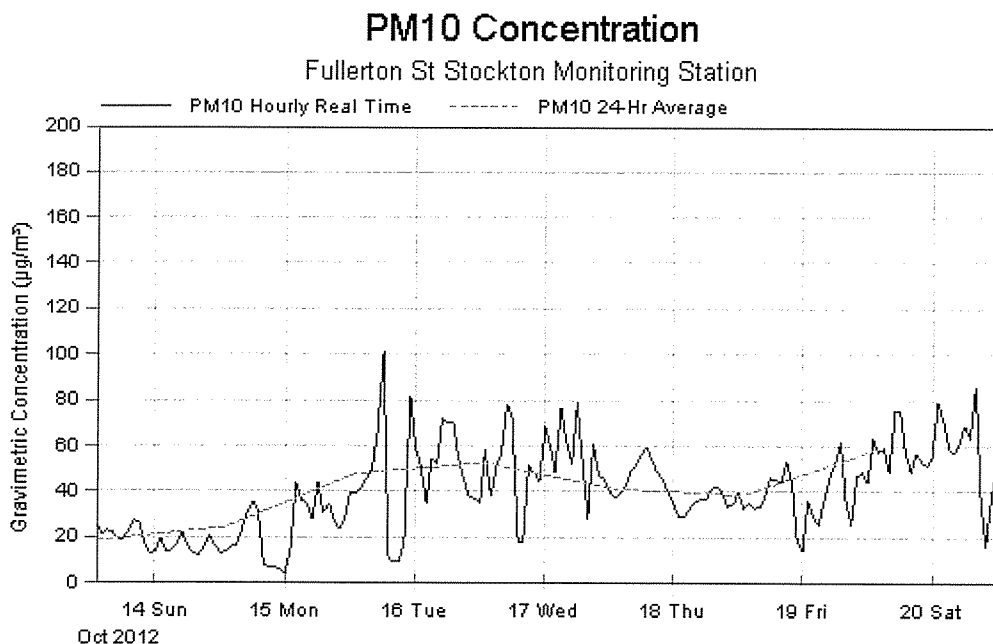
From air quality data from Orica's monitoring sites including the latest continuous monitoring station at Stockton show that already fine particles are at dangerous levels (Figure 2 and 3).

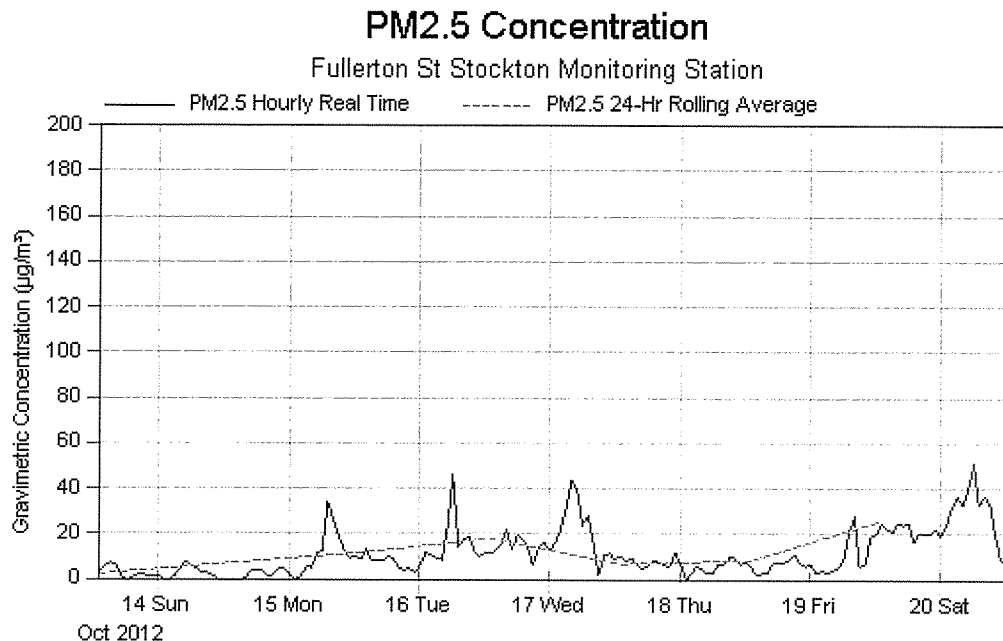
Despite the station having only operated for a week there is a worrying trend in particle levels. Currently after one week the 24 hr rolling average for:

- PM 10 is 57.9 ug/m³ and above the NEPM standard of 50 ug/m³ with a maximum 1 hr value 100 ug/m³
- PM_{2.5} is 26.5 ug/m³ above the target value of 25 ug/m³ with a maximum 1 hr value 50 ug/m³

A trend is evident with PM 10 and PM 2.5 particles increasing significantly as soon as the wind direction turns into a direction between west and north which brings pollution from Kooragang Island onto Stockton. These results are troubling to the community and this further indicates the need to reduce fine particles in Stockton rather than adding further fine particle pollution with the proposed Incitec plant.

Figures 2 and 3: Stockton Monitoring Station PM10 and PM2.5 Graphs





Noise Pollution

Industrial noise, especially night-time noise is already a major concern. Incitec's EIS noise monitoring of the site was conducted when Orica's ammonia plant was not even in operation and proved that Orica is not meeting acceptable noise levels.

Furthermore, Incitec in their EIS, argue that "it is appropriate to relax the recommended levels for suburban areas by 5dB".

Here are some extracts taken from different sections of Incitec's EIS on Noise.

"As the existing level of industrial noise exceeds noise amenity criteria recommended by the EPA's Industrial Noise Policy (INP) by a significant margin, alternate operational noise criteria has been nominated for the Project.

"Whilst the appropriate zoning in Stockton is recognised as suburban, considering the adjoining industrial zoning it must be noted that a suburban/industrial interface exists. The Industrial Noise Policy, does not provide recommended industrial noise levels for suburban/industrial interfaces and therefore it is considered appropriate to relax the recommended levels for suburban areas by 5db.

"Given that IPL and Orica are the only two operators that could materially influence industrial noise, it's is proposed the adjacent sites assume an equal responsibility in achieving the nominated levels."

I find the assertion of Stockton being an 'interface' suburb offensive and the idea for government to 'relax' noise limits completely absurd.

How can industry be trusted when Orica are well above night-time noise limits and Incitec are requesting special considerations?

The NSW Noise Policy requires a level of < 10 dB below the acceptable criteria (40 dB night time noise for suburban areas) where the noise levels already exceed limits and where this is a likelihood of noise levels being reduced in the future (Orica noise reduction program) resulting in a requirement for noise levels from the plant to be < 30 dB which is not the case for this project.

Inadequate consultation

Many residents from Stockton, Carrington, Tighes Hill and Mayfield have been left in the dark on this project. Letter drops and one information session two months after the Orica disaster is not proper consultation for a project of such magnitude and widespread impacts.

Incitec's own 'community perception' survey conducted in April 2012, identified less than a third of residents were unaware of the Project. Another example of poor consultation is residents that live within the outer rim of a 5 km radius have been excluded in any communication material. Suburbs such as Cooks Hill, Newcastle West and East, The Hill and Hamilton South have received no information regarding the proposal.

Now, Incitec has declared a two year delay in making any decision on the Project. This may please IPL's investors; however it prolongs resident uncertainty, stymies local investment and provides Incitec with an extended period to lobby Government ministers.

Traffic Impacts

Traffic is already a major problem as a result of industrial activity on Kooragang Island. Incitec's EIS does nothing to mitigate future traffic problems during construction and its operational phase.

In addition to congestion, the extra diesel truck movements will add to dangerous carcinogenic fine particles and nitrous oxides levels.

Employment and economic impacts in Newcastle and Lower Hunter

If operational, Incitec's plant will employ just 60 people, many of whom will be transfers from the company's Mooranbah ammonium nitrate plant. Considering the risk and impacts the plant brings to tens of thousands of people, 60 jobs are not commensurate with the more obvious and insidious impacts the plant will bring.

Furthermore, Incitec have stated that rising construction costs and a falling coal price has forced a two year delay in making a decision on this Project. These outside economic forces impact the viability and longevity of the plant and should be included in EIS.

Polluting the Hunter river

It's concerning that Incitec will be handed yet "another license to pollute" the Hunter River. If Incitec truly want to build a world-class plant then their EIS should reflect a plant with no effluent into the Hunter River. The river is an important recreational estuary for thousands of fisherman, not to mention that Kooragang is an international recognised RAMSAR wetland.

Excessive industrial development with licenses to pollute the river close to a RAMSAR area is not common sense planning, nor does it position the Hunter River in a positive light to tourists.

As a submission maker, I can confirm that I have not made a political donation totaling \$1000 or more in the past 2 years.

Yours Sincerely,

Marie Jarden

A handwritten signature in dark ink, appearing to be 'Marie Jarden', written over a circular stamp or seal.

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