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OBJECT

Submission ID: 217916

Organisation: N/A	Key issues: <i>Social impacts, Land use compatibility (surrounding land uses), Other issues</i>
Location: Queensland 4030	
Attachment: N/A	

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My extended family have lived in the Moss Vale region for over 50 years. They are experiencing severe stress due to the Plasfina refinery. In my opinion this is because the engineering studies and community engagement have fallen short of basic practice. NSW is Australia's premier state, so I am perplexed how this situation has arisen. I was born, raised, studied and worked in Sydney and I am an unwavering Blues supporter. I have always believed NSW to be the state that seeks best practice, while also striving to be world leading, for example how good was Sydney Olympics. Or the NSW planning HIPAP which is used and referenced globally.

I read the NSW Department of Planning recommendation report and was disturbed by the apparent deferral to other Departments for details that a reasonable person would expect to have been resolved prior to this stage in the planning process (eg Fire, EPA, road approval, trade waste, the list goes on).

As a chartered chemical engineer (MIChemE) and a registered professional engineer of Queensland, I am familiar with the design and operation of process industries. Notwithstanding the personal family connection, I make this submission with concern for the reputation of the engineering profession and process industry. The professional bodies Institute of Chemical Engineers (IChemE), whom I am a member, and Engineers Australia, works tirelessly advocating to its members the importance of building trust to create social licence to operate. A central pillar is understanding and meeting the expectations of the general public and balancing the benefits and risks (generally the benefits should grossly outweigh the risk or dis-benefit). It is central to Engineers Australia code of ethics that this be navigated with integrity and honesty. Clearly the community outcry of the past months, and the almost endless list of ill defined conditions listed in the planning recommendation demonstrates the Plasfina facility has fallen woefully short of basic practice.

Such poorly planned projects that fail to earn the public's trust and upon inspection uncover a lack of integrity or worse inadequate detail (either by omission or incompetence) seriously jeopardise the reputation of engineering, and process industries. The consequence of this can be profound, and the world is full of examples where betrayal of the public's trust has caused abhorrent outcomes. To name a few, lead in petrol, asbestos, persistent organic pollutants (POPs), etc. Further, poor decisions ultimately risk progress of sound projects and over time, for every unit of trust lost, many multiples of inefficiency, and burden is placed onto our society. For the sake of brevity I have not elaborated here, rather it is my hope and assumption the IPCC are learned, wise and have acquired knowledge of this topic for this point to be understood and noted.

It is a thinly veiled logic for the NSW Planning Department to approve the development because the area is zoned industrial and there are no regulations for plastics recycling, particularly air particulates and POPs. It is the planning department's duty to uphold and demand good practice from applicants, invoke the Precautionary Principle to prevent a foreseeable crisis when applicants fail to be responsible actors by not demonstrating risks are managed to tolerable levels and lastly rebuild and maintain the trust of Moss Vale community and society as a whole. The approach to date by Plasfina has been to respond reactively, they have not planned with foresight, which is lazy and cheap, or blatantly disrespectful to Planning NSW and the community. I like to call this design by Request For Information, or in other words the developer does bare minimum and avoids complexity by requesting (or waiting for) detail and direction from the approver (or in this case the community). This results in the approver/community doing the heavy lifting through the generation of voluminous feedback/comments/guidance beyond what would have been expected at the outset. This approach works in the developer's favour despite the approver/community becoming frustrated, because the



developer only expends time and money on the responses, and not on extras even if the extras are important. Unfortunately if the approver is uninformed or inexperienced they may not seek sufficient detail and clarification on important points and essential aspects are overlooked. For applicants only interested in minimal effort rather than successful outcomes, it saves them cost, time and avoids uncovering aspects that could scuttle the approval. This at the expense of the approver and community.

It is the developer/applicant who must demonstrate to the community and Planning NSW the activity is safe with no health risk. As described in the preceding paragraph it would appear that Plasfine has not accepted that responsibility. The regulation and planning gaps are being viewed as convenient by Plasfine, this is misinformed. There are federal and state laws that require reasonable and practical and general environment duty, that place the onus on the person/company undertaking the activity. In fact safety legislation calls out the need for a grossly disproportionate approach, where the benefit must outweigh the risk by a grossly disproportionate amount for an activity to proceed or control to not be in place. I have not yet heard or read a case that shows the benefit grossly disproportionately outweighing the health and safety of the Moss Vale community. Rather the opposite, and recent reading that there is no safe limit for POPs and by extension plastic particulates.

In my opinion Plasfine have yet to demonstrate that the activity is safe for the community and all reasonable and practical controls are implemented. Or in safety legislation wording risk managed to be so far as is reasonably practical (SFAIRP).

Prior to approving the facility id expect Planning NSW request the following:

- A risk benefit assessment that demonstrates the Plasfine activity being undertaken at Moss Vale is grossly beneficial to society compared to the health and safety of the Moss Vale community.*
- The facility to be planned, designed and operated so to satisfy community impacts through the application of a basic Process Safety Management framework, for example CSA Standard Z767:17 Process Safety Management*
- Bowtie risk diagrams produced with quantified risks and consequences for items that have direct community impact including, water, waste to sewer (note contaminants of concern i.e. PFAS are not removed by sewage treatment), air quality, noise, light.*
- A community impact safety case that demonstrates beyond doubt that the facility does not create a health hazard. And SFAIRP is achievable. Require Plasfine to use of Engineers Australia safety case guidelines or an equivalent of global standing.*
- Use in the safety case Air quality and water quality modelling that applies real world and credible scenarios should the site not operate as intended or failure of key controls. For example what is the air quality impact if fans fail and doors stay open? What is air quality impact should the air treatment not function as intended by the design (i.e. actual real world scenario modelling and not ideal case).*
- The fire impact zone is understood at this stage and not deferred as a condition. The community deserves to know what the fire impact is now. Noting the plastic stickpile is huge. Further the comments in planning recommendation that the smoke will go up is void of engineering discipline. A dispersion model at least would be expected, as well as impact under different conditions, including a worse case scenario where fire response does not function as designed or intended due to mishap or unavailable fire emergency personnel/trucks/infrastructure/water failure/etc.*
- That the stockpile storage of 40,000tonnes of plastic is rejected and reduced to 4,000tonnes. A simple google search will uncover examples of tyre fires (QLD), regulators shutting down facilities with large plastic stockpiles (Vic) due to fire risk. For context the biosolid waste from 500k peoples sewage is in the order of 50,000t/year.*



That is a massive stockpile and cannot fathom how it would fit on the site. This must be addressed before approving the development for the next stage.

-An engineering due diligence audit of the Plasfine submission by an independent engineer with a track record in the review of safety cases.

However, in the event Plasfine is approved despite the many gaps and ongoing reliance on future ill-defined conditions id expect the following:

- The supply chain of where plastic is sourced to be managed using a waste ID tracking system. The plastic source and what it had been in contact with (chemicals name) to be publicly available online to enable the auditing by interested parties. In the case a plastics source is unidentifiable and/or if its prior contact with chemicals unknown, it must be diverted elsewhere.

- A supply chain management plan, where plastic that had been exposed to persistent organic pollutants, pesticides, pharmaceuticals and other known toxic substances is banned.

- A HACCP approach to all feed stock. That feed stocks are routinely tested for contaminants of concern and these results be made publicly available. Any batch that tests positive for banned substances must be disposed elsewhere, a licenced facility that has provisions to manage toxic waste.

-Water quality testing of stormwater, local creek and sewer discharge undertaken weekly by a independent body or university. The results of testing to be made publicly available. NATA accreditation required.

- Air quality monitoring at the site boundary and at the point of discharge to be undertaken weekly by physical in person sampling. In addition to automated air quality monitoring stations providing real time results. These to be managed by independent community organisation. NATA accreditation required.

- similar to above for noise.

- Digital twin of air quality modelling made available in real time via website. Annual audit by independent experts assigned by the regulator or a community committee.

-Status of the facility operation available online in real time. This to show air quality management equipment operation, such as fans, fast acting doors, air treatment, etc. This is to enable community to be informed should the facility operators not operate to design intent.

Thank you for taking the time to read this submission and considering it with the decision. It is my hope NSW leads the Nation in this complex area despite the planning and regulation gaps by pointing to higher statutes and well established principles within the process industry for controversial developments. Further I expect Plasefine to not defer to regulators, and approval bodies for where guidance or rules are unavailable or ambiguous. Rather that they make an effort to earn the community trust and social licence to operate by demonstrating beyond doubt that the community health is not compromised, and the benefits grossly outweigh the risk.
