New South Wales Government
Independent Planning Commission

PAUL MCDONNELL		**OBJECT**	Submission ID: 216801
Organisation:	*N/A*	Key issues:	*Other issues*
Location:	*Australian Capital Territory 2906*		
Attachment:	*Attached overleaf*		

Submission date: 11/21/2024 5:06:17 PM

My submission is as a former resident of Moss Vale who maintains a relationship with the area and family and friends who reside therein and my concern for their and the local environments safety and continued good health as well as my and my families safety when visiting.

I object to the proposed Moss Vale Plastics Recycling and Reprocessing Facility because the suitability of the site has been incorrectly assessed in the Environmental Impact Statement by GHD and incorrectly relied upon by the NSW Department of Housing, Planning and Infrastructure.

My complete submission is contained in the attached document, â€˜the submission'.

SUBMISSION

My submission is as a former resident of Moss Vale who maintains a relationship with the area and family and friends who reside therein and my concern for their and the local environments safety and continued good health as well as my and my families safety when visiting.

By way of background I have over 20 years working in risk and safety management for the Royal Australian Navy. I have worked both as a Safety and Risk Manager, then as a Safety and Certification Regulator's technical expert. My last role was as the Assistant Director Navy Safety Policy. In my employment I have exercised safety management and risk management process and procedure over large complex combat capability systems and shore based training and support infrastructure.

I object to the proposed Moss Vale Plastics Recycling and Reprocessing Facility **because the suitability of the site has been incorrectly assessed** in the Environmental Impact Statement by GHD and **incorrectly relied upon by the NSW Department of Housing, Planning and Infrastructure.**

Further the process followed may not meet with all of the regulatory requirements of law.

I formed my objection on the evidence presented to risk assess whether the proposed facility was a 'potentially hazardous industry' or 'a potentially offensive industry' in the Environmental Impact Statement by GHD and against the requirements of SEPP33. Further I have concerns with whether the process has met with other requirements noted in the online Planning Portal.

I offer through the following discussion that the assessment was flawed and did not correctly follow the SEPP33 process or other requirement.

The Commission webpage informs '*Prior to the application's referral to the Commission, the Applicant should provide all information (such as supporting material, studies and reports) required by the Department to undertake its whole-of-government assessmen*t'. I note to the Commission the Certificate signed by a representative of GHD is it an independent certification.

What constitutes a whole of goverment assessment is unclear, that said the online Planning Portal informs 'The State Significant Development Guidelines provide a detailed explanation of the SSD process and set out clear expectations about the quality of environmental assessment documentation'.

Any actual quality checks, process or procedure performed is not apparent through the documents provided apart from the brief summary from the Department's review of the EIS etc.

The Departments SSD Review informs in the preface, that it is a record of assessment and evaluation of the proposal.

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development (SSD) application for the Moss Vale Plastics Recycling Facility located at 74-76 Beaconsfield Road, Moss Vale, lodged by Plasrefine Recycling Pty Ltd. The report includes:

- an explanation of why the project is considered SSD and who the consent authority is
- an assessment of the project against government policy and statutory requirements, including mandatory considerations
- a demonstration of how matters raised by the community and other stakeholders have been considered
- an explanation of any changes made to the project during the assessment process
- an assessment of the likely environmental, social and economic impacts of the project
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice, and provides a view on whether the impacts are on balance, acceptable
- an opinion on whether the project is approvable or not, along with the reasons, to assist the Independent Planning Commission in making an informed decision about whether development consent for the project can be granted and any conditions that should be imposed.

Extract 1: Department of Planning, Housing and Infrastructure Review

The document contains no fact checks of any assessment or claim relating to the SEPP33 requirement to risk assess to determine if the proposal is a potentially hazardous or offensive industry.

The **Department clearly states the position that the EIS did not identify a potentially hazardous or offensive industry** and appears by the **Department wording to place total reliance on the GHD statement in the prepared EIS.**

and/or adverse impact on offsite receptors.

The EIS did not identify any potentially hazardous or potentially offensive development. As such, the Department has not recommended any specific hazard related conditions, other than standard requirements to ensure the Applicant complies with all relevant requirements in relation to the storage of chemicals, fuels or

oils used onsite and that should any dangerous goods be brought onto the site, they are stored below the thresholds in the Applying SEPP 33 guidelines.

Extract 2: Department of Planning, Housing and Infrastructure Review

From the Commission website, '*The Commission does not undertake the whole-of-government assessment of development applications – this is carried out by the Department on behalf of the Commission*'.

There is no statement of due diligence being undertaken by the Department or the Commission as it relates to the accuracy and veracity of the analysis work by GHD to determine a potentially hazardous or offensive development.

Fact: There is no evidence that the Department tested the EIS claim that the industry is potentially hazardous or offensive.

The online Planning Portal informs *'In NSW, all environmental impact statements (EIS) for state significant development (SSD) and state significant infrastructure (SSI) projects need to be reviewed by a Registered Environmental Assessment Practitioner (REAP)'.*

Fact: There is no evidence offered in the SSD Review by the Department that there has been a review by a Registered Environmental Assessment Practitioner.

That is not to say this hasn't occurred, rather there is a possible absence of the review in the evidence available in the portal for public review. Further, GHD's author of the EIS is a Registered Environmental Assessment Practitioner (REAP). The certificate at the front of the EIS clearly states the EIS was prepared by the author. Per the guidance note 1 in the document titled *Registered Environmental Assessment Practitioner Guidelines* states '*For projects other than SSD and SSI, the person preparing the EIS must provide the declaration*'. The guidance informs '*REAPs provide a quality assurance review of EISs for State significant projects*', '*in the form of a signed declaration that the EIS meets certain requirements around compliance, completeness, accuracy and legibility*'.

Fact: the author can not have made a declaration because the project is a NSW State Significant Development, therefore one must assume in the absence of a declaration that the Departments process have not been followed.

I offer through the following discussion that the preliminary risk screening for a potentially hazardous and offensive industry was flawed and did not correctly follow the SEPP33 process.

GHD stated a SEPP 33 preliminary risk screening was undertaken and have assessed that the facility would not be a potentially hazardous industry. The basis of the confirmation is described in Section 14 Hazards and Fire Risks. The applicant indicates the analysis followed the SEPP 33 guidance. In fact the assessment did not strictly follow SEPP 33 and the applicable guidance documents supporting the SEPP 33 process, because it did not consider the hazard associated with storing the substance plastic.

Extract 3: Applying SEPP 33 Pg1 Scope & Application

At Extract 4 GHD describes the preliminary risk screening. GHD has performed risk screening for hazardous chemicals and dangerous goods and fails to include the substance plastic, a critical omission when determining a 'potentially hazardous industry'.

Extract 4: GHD Plasrefine Recycling Pty Ltd Moss Vale Plastics Recycling and Reprocessing Facility EIS

An issue here is determining what is a hazard and what is the risk (safety risk). The assessment
may confuse between the two terms. The assessment also does not differentiate on class/type of hazard, I.e. environmental hazard, health hazard etc.

Fact: GHD only considered chemicals and dangerous goods it did not consider the substance Plastic.

The assessment has not identified substances which would be potentially hazardous to the locality as required by SEPP33. The 20,000 tonnes of stored plastic(a substance)

when ‘in the absence of locational, technical or operational controls may present an off-site risk or offence to people, property or the environment’.

Note in the absence of any definition I could find for a ‘substance’ in the EPA ACT and associated documents for the purpose of this submission I have adopted the WHS ACT 2011 definition ***A ‘substance’ is any natural or artificial substance, whether in the form of a solid, liquid, gas or vapour.*** Therefore plastic would be a potential hazard to the locality.

I offer here a logical definition of hazard drawn from what must be considered under SEPP33 and the NSW Work Safe definition of a hazard; as ‘things and situations that could harm people, the locality and property’.

Therefore people, locality and property, is what must be considered under the definition per the goal of SEPP33. Therefore the 20,000 tonnes of stored plastic (the substance) is what needs to be considered against the three hazard classes of people, locality and property.

Step 1. Application of the hierarchy of control for a hazard requires the hazard to be eliminated to remove the unwanted consequence of a hazard event to people, locality and property.

Elimination of the hazard would remove the 20,000 tonnes of plastic. Per the application elimination is not possible otherwise there would be no application or need to assess the risk.

Normally the next step would be to reduce the risk through substitution, isolation or engineering controls. The requirement to do this under the SEPP33 could be argued as not being required because the process assumes that ‘in the absence of locational, technical or operational controls may present an off-site risk’ etc.

With the controls absent, does the substance, 20,000 tonnes of plastic, on site pose an off-site risk?

Example Risk statement; The substance , 20,000 tonnes of plastic, stored on the proposed site combusts (a situation), could potentially harm people, the locality and property.

Other example hazards likely to present a risk includes dust in the form of micro particles of plastic (milling operation of PVC, handling, sorting, vibrating plastics), a locality hazard as the site lies within the Sydney Water Catchment and contamination of potable water is a significant risk.

Consequence must be considered to determine if the proposal is a potential hazardous or offensive industry. A simplistic consequence profile can be easily constructed from the anecdotal evidence of past plastics recycling fires.

Harm people = radiant heat, smoke, toxic emissions lead to injury or death.
Locality = destruction by fire or emissions including micro plastics dioxins etc, damage to living organisms, contamination of water resources, increased air pollution.
Property = destruction or damage to property by fire.

The significance of the risk needs to be examined to determine if under the revised SEPP33 definition Extract 5, would after analysis be deemed significant risk to human

health, life or property; or to the biophysical environment. I note that the term significant risk is not defined.

Extract 5. Environment Planning And Assessment ACT 1979 State Environmental Planning Policy No.33 Hazardous And Offensive Development Revised Definition ‘hazardous industry’.

This submission will not establish qualitatively the chance of the 20,000 tonnes of plastic combusting and causing harm. Rather I intend only to demonstrate that recycling plants for plastic have had and probably will continue to have hazardous events that result in fires or other form of release of the harmful substance.

Anecdotal Plastic Recycling Facility Fires in Australia and an Indicative Indication of Known World Wide Fires

13 July 2017 Coolaroo recycling
9 June 2022 Melbourne Close the Loop Factory Fire
15 Nov 2022 Kilburn Plastics Recycling Centre Fire
26 December 2022, the Hume Material Recovery **Facility** (MRF) Canberra ACT.
https://www.cityservices.act.gov.au/__data/assets/pdf_file/0007/2202892/Fire-Investigation-Report-Hume-Recycling-Facility-INC-018769-26122022_Redacted.pdf

98 plastic recycling fires across the world can be found at
https://www.google.com/maps/d/u/0/viewer?ll=29.64294855176178%2C-92.41699249999999&z=4&mid=1z-AJVimlDbLKMd9Xn78UNJhk5NaxzDsf

The EIS prepared states ‘Fire hazards are assessed in detail in Section 14.2.3’. There is no assessment of fire hazards in the section. The rudimentary hazard scenarios in Table 14.2 (Extract 6) offer little confidence in the completeness or veracity of the hazard identification process and how a competent hazard analysis influences design and fire detection and suppression requirements.

Fire hazards are assessed in detail in section 14.2.3. It is also noted that the plastics recycling and reprocessing facility site is not located on bush fire prone land and therefore the risks associated with bush fire are considered to be low.

Table 14.2 Potential hazards and identified safeguards

Hazard scenario	Causes	Consequences	Identified safeguards
Vehicle interaction	Vehicle/loader movements in the vicinity of staff	Personal injury	– Traffic management plan including standard traffic rules, signage etc. – Site speed limits to be imposed and monitored – Site layout to minimise vehicle reversing – Designated pedestrian areas – Driver competency – Workplace Health and Safety plan – Safe Work Method Statements (SWMS) – Machine inductions/licensing – Reversing alarms – Fixed mirrors – High visibility personal protective equipment
Natural hazards	Flooding, earthquake, lightning	Personal injury Possible fire	– Buildings designed to appropriate codes – Housekeeping standards – Site drainage
Fire	Arson, electrical fault, incompatible materials	Asset damage Personal injury Fatality	– Site security (fencing and CCTV) – Fire protection system (see section 14.2.3) – Housekeeping standards – Inspection and maintenance regime
Entanglement	Personnel caught in rotating or moving equipment	Personal injury Fatality	– Isolation procedures – Guarding – Interlocks – Emergency stop systems
Fall from heights	Working at height, working adjacent to	Personal injury Fatality	– Working at heights procedures – Working at heights training

Extract 6 : EIS Table 14.2 Potential Hazards and identified safeguards.

Apart from the three causes for fire nominated in Table 14.2, no other cause is nominated or considered. For example, hot work, vehicle exhaust emission, contaminated plastic bales, smoking, dust, vehicle fire, electrical arcing etc. The intent here is to demonstrate that the robustness and veracity of the hazard identification process is inadequate to properly identify the hazards. Further the EIS contains statements such as the note leading to Table 14.2 in relation to bushfires. Because the site is not on bush fire prone land, shouldn't automatically mean the risk to the plant is low. Bushfire conditions vary from year to year. Further there was nothing noted in the design requirements to ensure ventilation intakes etc could be closed should the plant be threatened by an ember attack from a bushfire however low the risk.

The referenced Technical Report No. 5 Fire and Incident Management Review(Extract 7) talks to the safety of stockpiles with regard to self 'heating', combustion. The report excludes the need to consider this because the waste is limited to plastics. Although recognised by industry as a safe method for storage of plastic, fires in bales still occur.

2.4.21 Self-heating stockpiles

Requirement - Any stockpile prone to self-heating is to be monitored and rotated as necessary to dissipate any hotspots.

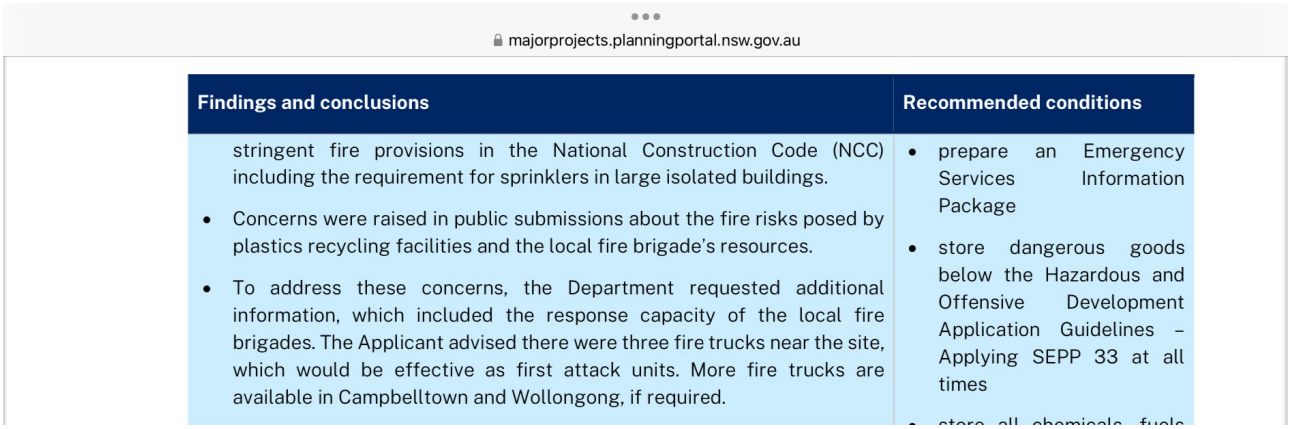
Considering the type of waste is limited to plastics only, there are no self-heating stockpiles identified at the plastics recycling and reprocessing facility.

Extract 7: Technical Report No. 5 Fire and Incident Management Review

Plastic bales entering the recycling plant generally have not yet been cleaned and contain residual contents, which are contaminants. These contents may include yoghurt, butter, food, fruit juice, detergents, chemicals, batteries, ammunition etc.

Decomposition of these residual contents can potentially cause the production of gases such as ethanol, methane and hydrogen sulphide. The gases produced are not only toxic, but extremely flammable posing a fire hazard. The decomposition of residual content could under certain circumstances produce sufficient quantities of hydrogen sulphide. Should favourable conditions then cause ignition there is a significant potential for a severe fire to develop.

Similarly degradation of a battery (especially lithium) often results in self combustion. A combusting battery would be an ignition source for a bale of plastic. Once ignited it would spread quickly throughout the stockpile. From the information in the EIS Table 14.3 the size of a stockpile is approximately 112 tonnes of baled plastic. Looking at the recent Hume ACT Recycling Plant Fire, a fire involving over 100 tonnes of plastic substance, the potential for exacerbation of the incident is considered high to extremely high. The Hume fire had available to it a significantly higher number of ACT Fire & Rescue specialist appliances than is available in the immediate vicinity of Moss Vale. The Hume fire burned for several days. The EIS doesn't nominate whether specialist fire appliances need to be available in the near vicinity of the plant. Instead the Department sought advice on the requirement and acted on the advice of the Applicant, an unqualified response, stating three fire trucks nearby would be effective first attack units. There is no professional fire fighting expertise to underpin the statement, yet the findings and conclusions of the Department is that it will be okay. How does the Department qualify the quality and veracity of the claim? Simply it does not.



Extract 8: Department of Planning, Housing and Infrastructure Review

Technical Report No. 5 Fire and Incident Management Review (The Report), does not appear to consider the heat buildup generated under the smoke layer, which will preheat other stockpiles of plastic, thereby facilitating easier ignition and fire spread. I note here in my submission the requirement to install a smoke management system, the purpose of which is generally to maintain a clear airspace to aid with personnel evacuation to safety. The Hume Fire report discusses in detail the effect of the heat build-up significantly exacerbating the fire event.

The Report also does not consider the fuel load of the 20,000 Tonnes of stored plastic substance. Plastic has a very high heat release rate, with the potential to significantly

impact the spread of fire through the facility. The extract below from the Hume ACT Fire Report supports this view.

Extract 9 ACT Fire Investigation Report Hume Recycling Facility: https://www.cityservices.act.gov.au/__data/assets/pdf_file/0007/2202892/Fire-Investigation-Report-Hume-Recycling-Facility-INC-018769-26122022_Redacted.pdf

Fact: HIPAP 2 Fire Safety; is a Departmental safety planning process for potentially hazardous industry, per the documents executive summary, Extract 10 below.

Executive Summary

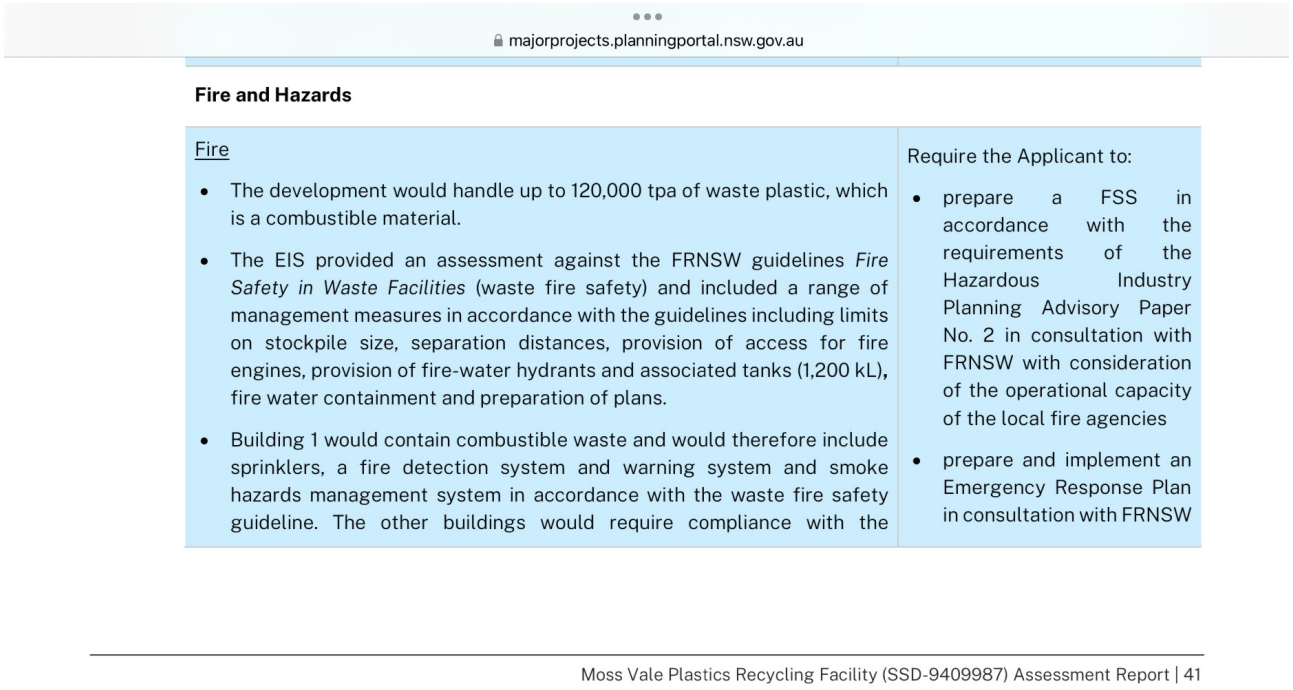
The orderly development of industry and the protection of community safety necessitate the assessment of hazards and risks. The Department of Planning has formulated and implemented risk assessment and land use safety planning processes that account for both the technical and the broader locational safety aspects of potentially hazardous industry. These processes are implemented as part of the environmental impact assessment procedures under the Environmental Planning and Assessment Act 1979.

The Department has developed an integrated assessment process for safety assurance of development proposals, which are potentially hazardous. The integrated hazards-related assessment process comprises:

- a preliminary hazard analysis undertaken to support the development application by demonstrating that risk levels do not preclude approval;
- a hazard and operability study, fire safety study, emergency plan and an updated hazard analysis undertaken during the design phase of the project;
- a construction safety study carried out to ensure facility safety during construction and commissioning, particularly when there is interaction with existing operations;
- implementation of a safety management system to give safety assurance during ongoing operation; and
- regular independent hazard audits to verify the integrity of the safety systems and that the facility is being operated in accordance with its hazards-related conditions of consent.

Extract 10: HIPAP 2 Fire Safety.

Fact: The Department requires the applicant to implement a Fire Safety Study in accordance with the Hazardous Industry Planning Advisory Paper, Extract 11 below.



majorprojects.planningportal.nsw.gov.au

Fire and Hazards

Fire • The development would handle up to 120,000 tpa of waste plastic, which is a combustible material. • The EIS provided an assessment against the FRNSW guidelines *Fire Safety in Waste Facilities* (waste fire safety) and included a range of management measures in accordance with the guidelines including limits on stockpile size, separation distances, provision of access for fire engines, provision of fire-water hydrants and associated tanks (1,200 kL), fire water containment and preparation of plans. • Building 1 would contain combustible waste and would therefore include sprinklers, a fire detection system and warning system and smoke hazards management system in accordance with the waste fire safety guideline. The other buildings would require compliance with the	Require the Applicant to: • prepare a FSS in accordance with the requirements of the Hazardous Industry Planning Advisory Paper No. 2 in consultation with FRNSW with consideration of the operational capacity of the local fire agencies • prepare and implement an Emergency Response Plan in consultation with FRNSW

Moss Vale Plastics Recycling Facility (SSD-9409987) Assessment Report | 41

Extract 11: Moss Vale Plastics Recycling Facility (SSD-9409987) Assessment Report

Conclusion

This submission discusses the EIS claim the proposal is not a potentially hazardous industry and demonstrates that the **SEPP33 process, was not, correctly followed**. Had the SEPP33 process been followed the proposal would have **been classed as a 'potentially hazardous and offensive industry'** and the site likely would be found unsuitable for the proposed purpose due to it being located in close proximity to residential land and sensitive industry.

This submission also highlights **potentially systemic issues** with the **processes and procedures used** by the Department when processing State Significant Developments. That the **Commission relied wholly on** the robustness and integrity of the **Department's review of the EIS should give rise to a lack of Public confidence in decisions being made by the Commission**.

Support for this conclusion Is drawn from HIPAP 2 Fire Safety (HIPAP20, which the Department states at the Executive Summary, '***has formulated and implemented risk assessment and land use safety planning processes that account for both the technical and the broader locational safety aspects of potentially hazardous industry***' and the Department's recommendation to perform a FSS in accordance with Hazardous Industry Planning Advisory Paper No.2 (HIPAP2) Moss Vale Plastics Recycling Facility (SSD-9409987) Assessment Report, a stringent requirement of a '***potentially hazardous industry***'

Lastly the Department at para 166 (Extract 12), informs it satisfaction that the '***appropriate measures are in place***' to ensure fire safety is a priority '***and any fire can be quickly bought under contro***l'. The matter now is do the Honourable Commissioner's, content themselves that the claim is true and is based on robust, rigorous and quality evidence, having been reviewed and recommended by the Department and strictly in accordance with its policy, processes, procedures and

statutory requirements. I am of the opinion that this statement if left to stand demonstrates the Department lacks the ability to make mature, rational recommendations that are in the interests of the people of NSW.

> 166. As discussed in Section 6.5, the Department is satisfied that appropriate measures are in place for the development to ensure fire safety is a priority and any fire can be quickly brought under control to reduce potential smoke and fire impacts, including on the ABR. These measures would include sizing of the sprinkler systems to ensure any fire can be extinguished quickly and storage of sufficient water onsite for emergency services use during fire events in accordance with the Fire Safety in Waste Facilities (waste fire safety guidelines).

Extract 12: Moss Vale Plastics Recycling Facility (SSD-9409987) Assessment Report

It is very clear to this Author that there are many unknowns remaining with regard to the hazard event of fire. I observed above that there are many other unknowns for other hazards, event triggers and conditions, leading to undesired outcomes that potentially are hazardous industry matters. The PHA presented in the EIA has no methodology, likelihood or consequence criteria for assessing how likely and how severe adverse outcomes would be. The PHA lacks rigour, robustness and quality.

I respectfully observe that the Public of NSW should have little regard for any planning decisions made by the Department, hence also the Commission, if the documents reviewed and the steps taken with this application are a true indication of the planning, assessment and approval process for the many State Significant Developments and indeed any planning approvals with the same degree of integrity and robustness.