

DOC24/362098-5

Jonathon Christie Newcastle City Council

Via email:

27 May 2024

EPA response – Gateway Determination of Planning Proposal Proposed rezoning at 505 Minmi Road Fletcher (PP-2021-2262)

Dear Mr Christie,

The NSW Environment Protection Authority (EPA) would like to thank Newcastle City Council (Council) for providing us the opportunity to comment on the draft planning proposal to amend Newcastle Local Environment Plan 2012 (NLEP 2012) (Proposal).

The EPA understand that the Proposal is in the latter stages of the planning process, however our feedback on this, and similar planning proposals within the vicinity of Summerhill Waste Management Centre (SWMC), has not been previously sought. We are interested in this proposal because we regulate SWMC under environment protection licence 5897 (EPL 5897) for the activities of landfilling and resource recovery of waste.

The EPA understands the Proposal is for the rezoning of land from C4 environmental living to R2 low density residential and C2 environmental conservation zone at 505 Minmi Road, Fletcher NSW 2287. If approved, it would enable the development of approximately 150 residential dwellings.

From our review, the Proposal:

- will locate residential receivers in proximity to SWMC, a landfill and resource recovery facility managed by Newcastle City Council (Council) and regulated by the EPA under (EPL 5897). This facility generates odour, sub-surface landfill gas, noise and air emissions.
- did not consider the risks associated with sub-surface landfill gases generated by SWMC and gases associated with coal mine workings.

SWMC provides an important waste management service for the community of Newcastle. Waste management facilities like SWMC emit odour, sub-surface gas, noise and air emissions. Controls are used to mitigate these issues, but even with these in place, it can be difficult to prevent adverse impacts beyond the boundary. Thus, locating residential receivers in close proximity to SWMC may lead to community complaint, increase regulatory oversight and pressure on the operator of SWMC to mitigate adverse impacts.

The EPA has considered details of the Proposal as provided by the proponent and include comments, including recommended actions and studies for Newcastle City Council (Council) to consider on odour, air, noise, water and contaminated land, in **Attachment A**.

Additionally, the EPA acknowledges the Traditional Custodians of Fletcher, the Awabakal people. We encourage meaningful engagement with the Aboriginal community in developing and

implementing the proposed amendment to the NLEP 2012. The Proposal would be strengthened by considering ways to achieve this in greater detail.

If you have any further questions about this issue, please contact Kim Stuart, Senior Environmental Planning & Assessment Officer, Strategic Planning Unit on environmentprotection.planning@epa.nsw.qov.au.

Yours sincerely

JACQUELINE INGHAM Unit Head Strategic Planning Unit

Attachment A

Land use conflict and required studies

The Hunter Regional Plan 2041 (Regional Plan) is a 20-year land use plan consisting of 9 objectives with associated performance outcomes to ensure planning proposals for the Hunter region appropriately consider and manage growth.

Strategy 1.5 under performance outcome 5 of Objective 1 of the Regional Plan states that local strategic planning should consider existing waste management centres and ensure sensitive land uses do not encroach on these areas or limit their future expansion.

The Proposal acknowledged that SWMC was within the broader vicinity of the proposed residential development but considered Objective 1 of the Regional Plan did not apply because:

- of its distance from the proposed residential development; and
- the strict environmental controls that it operates under.

As such, noise, air and odour assessments were not undertaken nor were the risks associated with the sub-surface gas generated by SWMC considered within the contamination assessment.

From our review, the proposed residential development will be located within approximately 140 metres of the boundary of SWMC. <u>Table 1 of NSW Department of Planning and Environment's EIS Practice Guideline: Landfilling</u> (1996) (EIS Guideline) states that locating residential development within 250 metres of a landfill boundary is in inappropriate. This is a position supported by the EPA and referred to within EPA's <u>Environmental Guidelines</u>, <u>Solid waste landfills</u> (second edition, 2016) (Landfill Guideline).

Locating sensitive receivers close to landfills, can result in impacts to amenity and cause land use conflict. Addressing impacts retrospectively following development can be challenging, expensive and lead to community complaints.

To consider the impacts from existing land uses (such as SWMC) and inform appropriate land use, transitional zonings, buffer distances and design choices, the EPA recommends the following actions and studies be undertaken by the proponent:

1. Land uses be informed by current and future operations of the SWMC

The proponent should consult with the section within Council responsible for managing SWMC about current and proposed operations at the landfill and demonstrate how this has been considered in the proposed land uses.

2. Noise and vibration assessment

A noise and vibration assessment should be prepared in accordance with the <u>NSW Noise</u> <u>Policy for Industry</u> (EPA, 2017).

3. Air quality and impact assessments

Air quality and odour impact assessments should be prepared in accordance with the <u>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</u> (EPA 2022) and <u>Technical framework: Assessment and management of odour from stationary</u> sources in NSW (DEC, 2003). The air quality and odour impact assessments should include:

- an air and odour dispersion modelling to predict any potential air quality and odour impacts.
- odour surveys to evaluate and ground truth the results of the air and odour modelling.
- the results of the odour surveys and air and odour modelling to identify air quality
 mitigation measures that can be applied to prevent and manage air and odour related
 land-use conflicts.

4. An updated contaminated land assessment

The EPA understands that a preliminary contamination assessment completed for the Proposal found that it would be suitable for residential development. However, the assessment is over 10 years old, and it did not consider the risks associated with sub-surface landfill gases generated by SWMC and gases associated with coal mine workings.

SWMC is a large putrescible and non-putrescible landfill located within approximately 140 metres of the Proposal area. The facility's putrescible landfill cells are located over 1 kilometre southeast of the Proposal area, and a capped construction and demolition landfill cell is located within approximately 300 metres.

Subsurface gas monitoring results from the capped construction and demolition landfill cell dated from February 2024 showed elevated levels of carbon dioxide ranging from 9.5% to 13.7%. Council has advised that the capped cell was previously subjected to coal mining and the presence of sub-surface gases are from coal seam sources not the landfill. Regardless of the source of the gas, carbon dioxide is an asphyxiant and a toxic gas that is significantly denser than air. Toxic effects may become noticeable at 2% v/v and severe at 5% v/v, so further consideration of carbon dioxide is required prior to rezoning.

Given the proximity to the landfill, including this capped construction and demolition landfill cell, the EPA recommends that, prior to finalising a decision on the proposed rezoning, Council require the Proponent to submit an updated preliminary site investigation (PSI) for contamination which covers the entire Proposal area. The PSI should:

- consider the presence of SWMC and any mine workings in the area and investigate any risks associated with hazardous sub-surface gas at the Proposal area.
- consider any recent activities that may have impacted the Proposal area (including illegal dumping or migration of contaminants from adjacent sites).
- be drafted in accordance with the <u>Consultants reporting on contaminated land -</u> <u>Contaminated Land Guidelines</u> (EPA, 2020) and other relevant guidelines made or approved by the EPA under section 105 of the <u>Contaminated Land Management Act</u> (CLM Act).
- be written by, or reviewed and approved by, a consultant certified by either the Environment Institute of Australia and New Zealand Certified Environmental Practitioner (Site Contamination) (CEnvP (SC)) or Soil Science Australia - Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) schemes.

We note that under the Newcastle Development Control Plan 2012, The Technical Manual Contaminated Land Management for Newcastle City Council, and any relevant updated documents, Council may consider the engagement of an auditor, should the findings of the PSI indicate that there is sufficient contamination risk to warrant a Detailed Site Investigation and a site audit.

Other considerations:

- for future development applications, Council should ensure that the processes outlined in the State Environmental Planning Policy (Resilience and Hazards) 2021 are followed to assess the suitability of the land and any remediation required in relation to the proposed use.
- persons undertaking development on the Proposal area must ensure that any development does not result in a change of risk in relation to any pre-existing contamination at the Proposal area so as to result in significant contamination (note that this would render the Applicant the 'person responsible' for the contamination under section 6(2) of the CLM Act).
- the EPA should be notified under section 60 of the CLM Act for any contamination identified which meets the triggers in the <u>Guidelines for the Duty to Report</u> <u>Contamination</u> (EPA, 2015).

5. Water management strategy

Stormwater discharges from areas of increased residential density have the potential to impact on local surface water and groundwater quality. A water management strategy should be prepared for the Proposal to:

- demonstrate how the Proposal will be designed and operated to protect the <u>NSW</u>
 <u>Water Quality and River Flow Objectives</u> (Objectives) for receiving waters where they
 are currently being achieved or contribute towards achievement of the Objectives
 over time where they are not being achieved (see Hunter River Table of Contents).
- propose practical, reasonable and cost-effective measures to further minimise and mitigate impacts from land-use activity having regard to the above document and <u>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</u> (ANZG, 2018) the <u>Risk-Based Framework for Considering Waterway Health Outcomes in</u> Strategic Land-Use Planning Decisions (OEH and EPA, 2017).
- assess and mitigate any stormwater related impacts during construction having regard to the <u>Managing Urban Stormwater: Soils and Construction</u> (Landcom, 2004).
- provide a long-term strategy for the management of surface water and groundwater.