

16 September 2020

Ms Susan Fox  
Senior Environmental Assessment Officer  
Department of Planning, Industry & Environment  
Locked Bag 5022  
PARRAMATTA NSW 2124

Dear Ms Fox

**Canterbury Bankstown Council Submission - Exhibition of Environmental Impact Statement (EIS) - Chullora Materials Recovery Facility (SSD-10401)**

Thank you for the opportunity to comment on the exhibition of the Environmental Impact Statement on Chullora Materials Recovery Facility (MRF) at 21 Muir Road, Chullora.

Council has reviewed the Environmental Impact Statement (EIS) prepared by Arcadis Australia Pacific Pty Limited (dated 6 August 2020) and the supporting technical reports and makes the following comments:

**1. Flood affectation and associated studies**

The subject site at 21 Muir Road, Chullora is affected by medium and high Stormwater Flood Risk. The affectation covers approximately 80% of the site.

Council is currently assessing DA-366/2020 as part of stage 0 site preparation works that relates to this SSD.

The assessment of the DA has raised the following concerns to the applicant:

***Flooding – Comparison with Council Flood Study - Civil Engineering & Overland Flow/Flood Report for Early Works Development Application, Revision C, prepared by Costin Roe Consulting dated 7 May 2020 provides commentary that the study has been validated against Council’s Rookwood Road Flood Study.***

*However, it is not clear if specific flood levels, depths and flows were appropriately compared and validated at points of interest. It is requested that the Flood Report be amended to provide tabulated comparisons of the flood levels/depths and flows at points of interest.*

***Flooding – Building Representation - Civil Engineering & Overland Flow/Flood Report for Early Works Development Application, Revision C, prepared by Costin Roe Consulting dated 7 May 2020 Figure 7.3 Existing Flood Extent and Levels***

*appears to show the demolished buildings represented by impervious blockages for the Pre-Development scenario.*

*With consideration of the importance of the flood storage within this area, it is noted that the buildings are likely to be pervious to flow and will provide a degree of flood storage. Water can enter through openings such as windows, doorways, vents and vehicle accesses.*

*The primary concern is that the Post-Development flood mitigation measures have been based on a Pre-Development scenario which is not appropriate.*

*It is requested that the Applicant undertake the hydraulic modelling with the building features represented as high roughness elements consistent with Table 9.1. Adopted TUFLOW Element Roughness Values.*

***Flooding – Flood Hazard*** - Civil Engineering & Overland Flow/Flood Report for Early Works Development Application, Revision C, prepared by Costin Roe Consulting dated 7 May 2020 does not provide sufficient details on the pre-development and post-development flood hazard in accordance with industry guidelines (e.g. NSW Floodplain Development Manual or ARR2019).

*Council is concerned that there may be adverse flood hazard as a result of the development. This includes areas downstream of the crossings at Muir Road.*

*It is requested that the Flood Report be amended to include flood hazard maps and an assessment of the residual flood risk. Preferably, the flood maps will be provided as per the H1-H6 categories as per Section 7.2.7. General Flood Hazard Curves of ARR2019.*

***Flooding – PMF Flooding Assessment*** - Civil Engineering & Overland Flow/Flood Report for Early Works Development Application, Revision C, prepared by Costin Roe Consulting dated 7 May 2020 is noted to have undertaken the assessment only for the 1% AEP (100 year ARI) flood event.

*It is noted that the changes to the site may cause impacts in events greater than the 1% AEP up to the PMF. In particular, Council is concerned about adverse changes to evacuation routes and flood-prone sites (i.e. larger PMF extent).*

*It is requested that the Applicant undertakes the PMF assessment and provides the relevant flood level/depth, hazard and afflux maps to support the application.*

***Flood Report*** – The flood report should include calibration and validation of flood level and flow data with RMSE to show accuracy of the presented flood model.

*For emergency management plan and configure appropriate evacuation route it is not enough to assess and present only 1% AEP flood event. It is recommended*

*that the flood report should include assessment and present flood map including flood level and flow data up to probable maximum flood (PMF) event.*

*The flood report did not include flood hazard map. It is recommended to provide flood hazard map with updated flood risk categories and flood hazard curves of Australian Rainfall and Runoff guidelines 2019.*

## **2. Biodiversity and conservation of biological diversity**

The northwest corner of the site contains a small patch of *Cooks River / Castlereagh Ironbark Forest* which is listed as an Endangered Ecological Community (EEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act). Construction and Operational Management Plans should identify appropriate mitigation measures to avoid direct/indirect impacts to the EEC.

The Biodiversity Development Assessment Report (BDAR, dated 31 July 2020) assumes that all biodiversity values will be removed (except for the above patch of threatened species community) as part of the development application (DA-366/2020) for stage 0 site preparation works associated with this SSD.

The BDAR cannot be supported by Council until consent has been provided by Council for DA- 366/2020.

The outstanding biodiversity related matters that need to be addressed in DA 366/2020 include the following:

- *The Flora and Fauna Assessment (Arcadis, 2020) does not provide any information regarding the assessment of the human-made structures onsite for microbat habitat. Aerial imagery indicates that many of the structures within the Proposal area are dilapidated and may contain small holes suitable for microbat roosting habitat. Further assessment of these structures is required.*
- *It is noted that hollows were only recorded if they were greater than 5cm in width. Whilst this methodology is consistent with the Biodiversity Assessment Methodology, this approach is not adequate to assess the site for some threatened species previously recorded in the locality, including the Little Lorikeet (*Glossopsitta pusilla*) which has been documented to use hollows that are 3cm in width.*
- *The 15 m riparian corridor must be re-vegetated with species that conform to the Cumberland Riverflat Forest (plant community type 835). A vegetation management plan (VMP) must be prepared and submitted to Council for approval.*

Further to the issues raised in the DA, a landscape plan was not included in DA-366/2020 and it was understood that this information is to be supplied as part of the EIS. A landscape plan is required for the landscaped areas outside of the riparian corridor and incorporate species from the Castlereagh Ironbark Forest community (plant community type 725).

The Biodiversity Assessment Methodology (BAM) candidate species report and Biodiversity Assessment Methodology (BAM) predicted species report are yet to be finalised and submitted to Council.

### **3. Site Contamination**

The EIS identifies that the previous contamination assessments undertaken in 1996, 2016, 2018 and 2019 have indicated that elevated concentrations of contaminants were present in several isolated locations in soil, groundwater and sediments on the Chullora RRP site.

The EIS mentions that any potentially contaminated lands will have been excavated or capped as part of the proposed flood mitigation works under DA 366/2020 which is yet to be approved.

The Detailed Site Investigation titled “Stage 2 Contamination Assessment – 15 Muir Road, Chullora” prepared by ERM Services Australia Pty Ltd, dated 18 January 2019 needs to be reviewed by a NSW Environment Protection Authority Accredited Site Auditor.

A Site Audit Statement and Site Audit Report must be provided to Council from the Site Auditor as part of the development application lodged for stage 0 site preparation stating that the abovementioned Detailed Site Investigation has sufficiently determined the nature and extent of contamination and advise Council as part of applicant’s response to the EIS submissions report which is the next stage. The Site Audit Statement and Site Audit Report must include any restrictions or management requirements for the site for Council’s review and consideration.

### **4. Traffic and Heavy Vehicle Routes**

Overall, the applicant seeks to establish a Resource Recovery Park at 21 Muir Road in Chullora and is proposing to develop and operate the first phase of the Chullora RRP as a Material Recycling Facility (SSD-10410) with a material handling capacity of up to 172,000 tonnes per annum. The second phase of the Chullora RRP includes construction and operation of Resource Processing Facility (SSD-10443) with a material handling capacity of 250,000 tonnes per annum. Both the facilities would be operating simultaneously and share site infrastructure following the completion of construction works. The combined material handling capacity of the site is 422,000 tonnes per annum (incoming to

the site). It must be acknowledged that all materials that enter the site must be removed, either in the form of recycled materials or fuel for the Botany Cogeneration Plant and /or the Resource Processing Facility or somewhere else. Therefore, the total tonnage accessing and leaving the site is significantly higher than 422,000 tonnes per annum and perhaps near 844,000 tonnes per annum.

**Traffic Management Plans:** Given the amount of material entering and leaving the site, Council considers a simplistic summation of the number of 'trucks' is insufficient, as axle loads can vary greatly dependent on the type of truck and trailer configuration adopted.

A detailed Construction Traffic Management Plan and Operational Traffic Management Plan are required to provide details on the types of vehicles being utilised, with the tare and gross vehicle mass determined. This information is then to be incorporated into equivalent axle impact report of the receiving road network to better understand implications on road surfaces.

**Operational Heavy Vehicle Routes:** The Heavy Vehicle Routes must be determined and approved by the relevant authority for accessing the site, given the fact that two facilities will be operating simultaneously sharing the site resources once constructed.

## 5. Fire Safety Strategy and Fire Safety Design

The Fire Safety Strategy (dated 27 May 2020) proposes that fire safety compliance for the proposed structure will be achieved via Deemed-to-satisfy (DtS) Provisions and Performance solution in accordance with A2.1 (3) of the Building Code of Australia (BCA) 2019.

The proposal appears capable of complying with the requirements of the BCA subject to performance solutions at the construction design and approval stage.

Council notes that the proposed structure has several non-compliances to BCA which needs to be assessed by a Fire Engineering Solution. The Fire Engineering Solution needs to be prepared with an agreement between Fire Safety Engineers, PCA and Fire and Rescue NSW (FRNSW) in accordance with Section 144 of EP&A Regulation 2000.

A Fire Engineering Brief and a Fire Engineering Report need to be provided along with FRNSW comments to address the following BCA DtS provisions:

- Clause C2.4
- Clause D1.4, D1.5, D1.9, D2.13, D2.14, D2.15, D2.16, D2.17, D2.18
- Clause E1.3
- Clause E1.10
- Clause E4.5, E4.6
- Clause E2.2

The proposed structure must provide certification from a structural engineer to comply with Section B of BCA 2019 amendment 1. Section C, D & E must comply and provide certification from fire safety engineer, fire services engineer and a mechanical engineer. Section J must comply and provide certification from an energy assessor.

It is noted that as the facility has previously caught fire and burnt down, therefore part of this information should be provided during the assessment phase and form conditions of consent. This is to provide increased certainty that measures have been incorporated to prevent the facility from catching fire again.

## **6. Other Matters**

### **Water Quality and WSUD Principles:**

The subject site is traversed by the Cooks River stormwater canal which consists of a combination of natural channels, naturalised vegetated zones, concrete channels and covered culverts.

The EIS currently proposes rainwater harvesting system which would include two above ground 25 kL rainwater tanks for the collection and storage of rainwater to minimise the water demand for the proposal. However, there is no discussion on incorporating Water Sensitive Urban Design (WSUD) Principles for a proposal that is progressively planned to contain significantly large portion of impervious surfaces for multiple waste processing facilities within a total site area of over 9 hectares. There are opportunities to introduce permeable and semi permeable surfaces for footpaths and also small rain gardens along service roads throughout the development site to reduce and improve stormwater runoff towards Cooks River.

Council recommends the preparation of a Construction Environmental Management Plan (CEMP) and an Operational Environmental Management Plan (OEMP) to identify appropriate Water Sensitive Urban Design Principles in order to improve water quality entering the stormwater canal.

### **Leachate management:**

The EIS mentions that accidental spills and leaks may occur during the operation of the proposal and may have the potential to be transported into the Cooks River and groundwater system if left unmanaged.

The Scoping Report on the Materials Recovery Facility mentioned that both the stages (Stage 1 & 2) of the proposal have potential for spills and leaks from operating machinery to contaminate soil, groundwater and surface water. Additionally, during operation of Stage 1 of the Proposal, waste may generate

small volumes of leachate which, if not contained, has the potential to contaminate the surrounding soils, groundwater and surface water bodies.

A detailed Operational Management Plan needs to identify specific mitigation measures for appropriate leachate management to prevent any leakages or spills.

#### **Waste Management:**

Council is of the opinion that the proposed facility would form a key piece of waste infrastructure for enabling Sydney to achieve and promote the objectives of the NSW WARR strategy and assist with providing a cleaner product for remanufactures due to recent export bans and restrictions.

The proposal presents an opportunity to form an essential link in the circular economy loop of ensuring quality materials are available for further remanufacture and resource recovery instead of landfill.

The EIS includes a brief waste management impact assessment instead of a Waste Management Plan and recommends that a Construction Environmental Management Plan (CEMP) be prepared to provide further details on the appropriate management of waste.

In addition to CEMP, Council recommends preparation of an Operational Environmental Management Plan (OEMP) to address detailed waste management requirements during operational phase of the project.

#### **Odour and Dust Management:**

Ongoing air quality and odour management plans are to form part of any development consent for the development. Council's records indicate a history of odour and dust related complaints from previous waste related uses on the subject site.

#### **Consistency with the proposed 'State-of-Art' vision for the site and Council's Local Strategic Planning Statements (LSPS)**

Council's recently endorsed Local Strategic Planning Statements (LSPS), *Connective City 2036* identifies Chullora as an innovation and high technology employment area with a greater focus on innovation and high technology jobs.

Council requests that the proposal demonstrate how it achieves the vision of the LSPS for Chullora, as detailed in Council's first submission.

It is acknowledged that from a waste resource perspective, the proposal presents opportunities to apply technical and innovation excellence from the onset of site

preparation to the construction of the facility and the ongoing operational management of the waste processing facility, including the ongoing maintenance of the proposed building structure.

Council requests that the proposal provide detailed information on the technical innovations that the proposed facility would incorporate to demonstrate that the proposed vision of 'State-of-art' is achieved. As discussed previously in this submission, the EIS currently provides no information on the implementation of Water Sensitive Urban Design (WSUD) principles which could have been included on various aspects of the site and the proposed facility, both during construction and operational phase. This information is requested to form part of the application prior to issuing a development consent.

In addition, the surrounding uses within the Chullora industrial area includes food manufacturing service. Council also requests that the proposal and any development consent demonstrate protection of these manufacturing services which may have adverse implications due to the nature of the proposed waste facility.

If you would like to discuss this letter further, please contact Council officer Ms Amita Maharjan on 02 9707 9806.

Yours sincerely



**Shona Porter**

**COORDINATOR STRATEGIC ASSESSMENTS**