

29 June 2015

Secretary  
NSW Department of Planning & Environment  
GPO Box 39  
Sydney NSW 2000

**ATT: Chris Ritchie – Manager, Industry**

**Re: State Significant Development (SSD-5041) – Updated Specialist Reports – Kings Park Waste Metal Recovery, Processing and Recycling Facility**

## **1. Introduction and Overview**

Mecone Pty Ltd (Mecone) act on behalf of Sell and Parker Pty Ltd (Sell and Parker) in relation to State Significant Development Application SSD-5041, which seeks approval to increase the capacity of the existing waste metal recovery, processing and recycling facility at 45 Tattersall Road (Lot 5 DP 7086), Kings Park, from 90,000 tonnes per annum (tpa) to 350,000 tpa under Section 78A of the Environmental Planning and Assessment Act 1979 ("EP&A Act").

The purpose of this letter is to advise of revised environmental mitigation measures proposed to the project, principally in response to concerns raised by the NSW EPA ("EPA") and other stakeholders on the environmental impact of SSD 5041 submitted to the Department of Planning and Environment (DP&E). The letter will also describe the key findings of the amended specialist reports, in order to demonstrate that the concerns raised by the EPA in their letter "*Refusal to grant General Terms of Approval*" ("refusal letter") dated 22 April 2015, have been comprehensively addressed, and that an improved environmental outcome can be achieved through the implementation of the revised mitigation measures.

The amendments to the project, whilst resulting in an improvement to its environmental performance, do not represent a substantive change to the overall waste metal recycling facility and the processes described in the originally submitted SSD application.

## **2. Background**

### **2.1 Summary of proposed development**

Approval is being sought for an increase in the capacity of the existing waste metal recovery, processing and recycling facility at 45 Tattersall Road from 90,000 tpa to 350,000 tpa. To increase the capacity it is proposed that the site be reconfigured and expanded to the adjoining lot (23-43 Tattersall Road).

The proposed expansion would enable Sell and Parker to better utilise the existing plant and equipment in a manner which can respond to increasing demands, including community expectations for efficient and effective metal resource

recovery and recycling facilities. This project has significant State and regional benefits, and represents one of only two hammermills operating within the Sydney basin.

## 2.2 Approval process

Director General's Requirements (DGRs) were issued in relation to the proposal (SSD-5041) on 22 December 2011, which guided the preparation of an Environmental Impact Statement (EIS) to assess the potential impacts of the proposed activity. Revised DGRs were subsequently issued on 23 December 2013 in response to amendments to the Project and its property description.

Sell & Parker engaged Environmental Resource Management (ERM) to prepare an EIS to assess the potential environmental effects of the proposed activity, which was submitted to the Department on 17 March 2014.

Public exhibition of the project commenced on 27 August 2014, and ended on 10 October 2014. Nine (9) submissions were received during this period from relevant State agencies and community stakeholders, including the EPA, Office of Environment & Heritage, Roads and Maritime Services, NSW Office of Water, and Blacktown City Council.

ERM on behalf of Sell & Parker – provided a response to state agency and community submissions (Response to Submissions) on 7 January 2015, including updated supporting information on the following matters:

- Additional Traffic Information;
- A revised Air Quality Assessment and Benchmarking Study;
- A revised Environmental Risk Assessment; and
- Additional documentation relating to Breakfast Creek and the Riparian Zone.

Further correspondence was provided to DP&E on 22 January 2015 to address matters raised in a late submission made by an adjoining business owner, which related to the character of the immediate area, concerns regarding Sell & Parker's compliance with previous Council consent conditions, and air quality.

## 2.3 Request for further additional information

Following ERM's response to submissions (RTS), state agencies have provided further correspondence, indicating whether their issues had been satisfactorily addressed. In their correspondence dated 16 February 2015, the EPA indicated it remained unwilling to grant general terms of approval for the proposed expansion, citing concerns regarding water balance and discharge; and air quality issues in relation to hammermill operations, oxy cutting, speciation of dust, dust and odour and best practise.

Further, the EPA remained of the view that additional information in relation to potential air and stormwater impacts had not been provided. In a letter dated 24 February 2015, ERM provided a further response to the EPA, clarifying various aspects of technical reports. Despite this, in a letter dated 22 April 2015, the EPA reiterated its reasoning for refusing to grant general terms of approval for the proposed expansion. This letter can be found in **Appendix 1**. In its correspondence, EPA summarised its position as follows:

*"The EPA is of the clear position that the hammermill at the premises is currently not operating in an environmentally satisfactory manner and improvements are required to prevent ongoing pollution incidents*

occurring at the current scale of processing. As a result, the EPA cannot support the proposed increase in processing unless and until there is a clear, timely and legally enforceable proposal to address these environmental impacts.

The proposed development will increase the amount of material being processed per annum by 389%, with an increased rate of processing and an increase of hours of operation, however, there are no improvements to the air polluting processes, being primarily the hammermill and the oxy-cutting, have [sic] been proposed.


Further, Sell & Parker have advised the EPA that the proposed development will breach air quality guidelines, and this means that the proposal will have impacts on the local community.

Sell & Parker have outlined a wide range of toxic water contaminants that may enter the stormwater system from the site activities but have failed to adequately characterise them or describe how the impacted water will be treated to mitigate the risk of those contaminants."

Discussions have taken place with EPA to address the ongoing concerns raised above, including a meeting on 18 May 2015, which was also attended by representatives of the DP&E (as well as the EPA). As a result of these discussions, the proposed changes to the project and environmental mitigation measures herein described, are considered to satisfactorily address the outstanding matters.

### **3. Key Changes to the Project and Environmental Mitigation Measures**

In response to the concerns raised by the EPA, Sell & Parker have commissioned various specialist environmental consultants to prepare the following supplementary reports, which identify and assess the amendments and revised mitigation measures to the project:

- Stormwater Management Plan (SWMP) – **Appendix 2**;
  - Air Quality Assessment – **Appendix 3**; and
  - Health Risk Assessment – **Appendix 4**.
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A summary of the amended and/or supplementary reports, along with the key changes proposed is provided below.

#### **3.1 Stormwater Management**

##### *Changes to processes on site*

The concept drainage and stormwater management plan for the site is shown in Figure 3 of Annex A to the SWMP, which can be found in **Appendix 2** of this letter. The Plan sets out the key management processes and infrastructure improvements to the site, which will provide a modern, best practice stormwater management system for the facility.

Of particular relevance to this letter, the stormwater plan has been developed to achieve the following objectives:

- Provide for a system that aims to maintain regulatory compliance under a predictable range of weather and operational conditions;
- Include provision for sustainable re-use of water to the extent practicable;

- Provide for appropriate retention and treatment of contaminated stormwater suitable for controlled release to Breakfast Creek;
- Minimise the amount of water requiring treatment by separation of "clean" and "dirty" catchments with separate routing and discharge; and
- Minimise inputs of pollutants to 'dirty' stormwater by improved containment and management of potentially contaminating activities.

A number of new systems and processes are proposed to achieve these objectives. This includes modifying existing building roof drainage to allow drainage of all clean areas to stormwater drains along Tattersall Road, or into Breakfast Creek via dedicated underground drains. Roof water is proposed to be directed first to rainwater storage tanks, with overflow to stormwater drainage once full.

All other areas (excluding the access road and car park, which are part of the clean area) is to be classed as "dirty" water, and will drain via dish and grated drains through the new treatment and retention system. This will include wheel wash water from the wheel wash.

"Contained areas" are designated areas on the site that have the potential to generate highly contaminated liquids, and includes areas such as the oil drainage pad used for draining fuel and oil from incoming vehicles, the proposed new truck wash, and the hazardous goods store and drum wash. All these areas are to be roofed, with water generated directed to the "dirty" catchment. This water will be removed off-site for treatment by a licensed contractor, or discharged to the sewer under agreement Sydney Water, if appropriate.

A detailed analysis of the proposed drainage and stormwater infrastructure systems, including the primary and secondary, and tertiary treatment systems that are proposed can be found in Section 5.2 of the SWMP.

Proposed stormwater discharge limits and monitoring processes are discussed in Section 5.3, with management measures for pollution prevention in Section 5.4 of the SWMP.

### **Key changes to waste management processes**

- **Indoor drainage bay:** a new roofed, bunded area will be provided in the expanded facility where drainage of oils and fuels from incoming scrap vehicles and machinery will be carried out. Currently this activity is carried out in an open site area. This new addition to the project will allow for the improved containment of spills and prevent the wash off of oil into the drainage system. Waste oils and other liquids from the drainage bay will be contained in drums or IBCs and sent off-site for licenced recycling, treatment and/or disposal. Bulk storage areas for fuels, oils and chemicals will be contained within an impervious bund. Refer to Section 5.4.1 of the SWMP for a detailed description of the proposed amendments.
- **Improved waste management:** Rather than floc from the hammermill being stockpiled in a roofed bay and removed for disposal periodically, in the expanded site the floc will travel by a covered overhead conveyor to Building 'C' where it will be further processed to remove additional metals, before being loaded into trucks for disposal. This amended process will eliminate the risk of floc entering the stormwater system on-site.
- **Bunding of oxy-cutting pad:** To prevent the risk of explosion, oxy cutting cannot take place on a concrete surface, and current activities occur in an area with soil covering underlying concrete. In the expanded site, the oxy cutting area will be on a coarser surface (such as sand), and will be contained within bunds or sandbags to prevent wash-off during rain. This amended process will reduce rust and sediment loading on-site.

## Surface Water Quality and Flow

As described in the introduction to this letter there are a number of changes that are being proposed that will significantly improve processes on-site to prevent pollutants from discharging into on-site stormwater systems, and flows to Breakfast Creek. An updated Stormwater Management Plan has been prepared, and can be found in **Appendix 2**. The stormwater management plan proposes the following additional measures, which are designed to minimise discharge from the potentially contaminated catchments and maximise treatment performance:

- Separate containment and off-site disposal for waste waters in the potentially most contaminated locations ("contaminated drainage" – refer to Figure 3 of SWMP);
- Improvements to the stormwater basin configuration to increase the storage volume over the original scheme, with 8064m<sup>2</sup> of stormwater holding capacity, which will minimise pollutant loading being discharged to Breakfast Creek; and
- A new oversized tertiary treatment plant permitting highest treatment rate achievable at maximum flow. It is noted in the report that this solution (oversized tertiary treatment plant) will permit longer residence times compared to a smaller unit, which should also increase performance on metals removal. It is also noted that the model selected can also be retrofitted with additional filters to improve organics removal if necessary.

As part of the development of a stormwater management plan, Sell & Parker have investigated the potential for discharge of stormwater to the Sydney Water sewer system as an alternative to on-site treatment. The investigation concluded the volume of water Sydney Water would be likely to accept was "insignificant" compared to the total volume required for tertiary treatment, and as a result discharge to the sewer was considered to offer no environmental benefit. As such, the report concluded "this option has been discarded as an option for treating stormwater from the site's "dirty" catchment".

### Summary of Risk Assessment

#### *Risk associated with copper, chromium and zinc discharge*

An assessment of the risk associated with copper, chromium and zinc discharge to Breakfast Creek can be found in Section 3.4.1 of the SWMP. In summary, the report finds that the risk that non-trivial environmental harm could result is considered very low, given that the need for on-site stormwater discharge to Breakfast Creek during low flow conditions is considered unlikely, and that when discharge is required it will always follow high rainfall, which is the same time that the flows at Breakfast Creek will be at its highest.

#### *Risk associate with discharge of untreated stormwater*

It is considered that discharge of untreated stormwater will not occur under normal operating conditions, with the increased stormwater holding capacity providing capacity to retain a 1 in 100 year storm event. In the event an "extreme event" occurs on-site, the retention basin will overflow through the overflow outfall which will be set at the basin's maximum height of 40.30m AHD, which is necessary to prevent flooding of the site. Should such an event occur, it is considered likely that the flows to Breakfast Creek from other sources will also be extremely high, and these conditions will mitigate potential impacts from untreated discharge.

The full assessment can be found in Section 3.4 and 3.5 of the SWMP.

## Water Balance

It is estimated that with an increase to 80 employees on-site, the associated increase in water usage rates can be accommodated through rainwater harvesting and reuse of stormwater from the basin.

Water for on-site processes (such as cooling within the hammermill, and dust suppression within the conveyor) is currently supplied primarily from the stormwater basin, however with expanded operations direct collection from roof water alone will be insufficient, and surface water from the basin will also be used.

As a result of the increased amount of metal processing that will occur indoors, improved containment of the separated water, and improved drainage and hardstanding, the amount of dust suppression required is likely to decrease, and in turn reduce demand on water resource.

A full assessment of water balance, including reuse of water, amended strategies relating to rainwater harvesting, risk assessment for water reuse, drainage design calculations, and the treatment strategies for the proposed stormwater basin can be found in Section 4 of the SWMP.

## 3.2 Air Quality Assessment

An updated air quality assessment has been prepared by ERM to assess impacts to air quality resulting from the proposed expanded operation of the metal recycling facility, and can be found in **Appendix 3** of this letter.

### Changes to processes on site

A number of changes have been proposed to reduce the quantity and ability of airborne particulates and odours from exiting the site, including:

- **Enclosed conveyers:** the amended project now commits the enclosing all conveyors, including the conveyor transfer points, preventing dust emissions from these sources. This will include the floc conveyor, which in current conditions has been identified as contributing to groundwater contamination when introduced to stormwater on site;
- **Introduction of sealed surfaces:** the site is now proposed to be totally sealed, with a paved road provided for truck movement on and off site. This will eliminate a large source of particulate matter emissions compared to an unpaved road. A sealed surface will also reduce the emission of particulate matter from the mobile materials handling equipment due to a more consistent driving surface and the ability to select more direct routes across the site;
- **Improved site layout:** a new site design will no longer require trucks to enter the site twice, instead allowing for one main entrance and exit point, reducing emissions from particulate matter from exhaust and reducing any potential emissions from wheel generated dust. It is noted however that emissions from vehicle exhaust are not considered significant (the proposed expansion will not result in a change of traffic conditions of more than 5% net across the expanded site), and as such exhaust emissions were not considered in the assessment;
- **Gas collection system above hammer mill:** a new gas collector "extraction hood" will be installed above the hammer mill exhaust vent, to collect exhaust gases. The exhaust gases will then be passed through a cyclone and a wet scrubber to reduce particulate content of the exhaust air system. The report also notes that the wet scrubber will also reduce odorous emissions. After gases have passed through the cyclone and the wet scrubber, they will be

ducted to a central point on the site and released into the atmosphere from a 15m high stack, increasing vertical velocity and improving dispersion of emissions to the atmosphere;

- **Upgrade in shearing equipment and technology:** install a 1400 tonne capacity shear to replace the current 800 tonne capacity shear. This major upgrade in technology will allow metal up to 100mm thick can be cut using the shear. This will reduce the number of oxy cutters from two to one, and the hours of operation of the remaining oxy cutter from ten hours per day to six hours per day. The report notes that the shear produces minimal amounts of particulate matter as no grinding of metal occurs;
- **Improved oxy cutting conditions:** this activity is now proposed to only be conducted under wet conditions, which will reduce the level of metal fumes and NOX emissions being produced; and
- **Additional equipment upgrades:** the introduction of upgraded equipment on site will conform to the standards of the latest technology, providing further efficiencies.

A detailed discussion of the proposed changes, and an assessment of their impact can be found in **Appendix 3** of this report.

### **3.3 Health Risk Assessment**

Although not required as part of the DGRs, Sell and Parker commissioned ERM to prepare a Health Risk Assessment, to principally address EPA concerns in respect to potential health impacts from air emissions. In summary, the report found that, against Tier 1 screening criteria:

The maximum average 24 hour PM10 concentration together with the maximum measured background concentration, the Tier 1 assessment, resulted in levels that exceeded the assessment criteria. However, the levels are below the WHO interim 24 hour health risk based target when the elevated background levels resulting from the exceptional September 2009 dust storm are excluded. Level 2 assessment resulted in no predicted exceedances other than those drive by the 2009 dust storm. A full assessment of Tier 1 and Tier 2 results can be found in Section 4.3 and 4.4 of the Air Quality Health Risk Assessment in **Appendix 4**.

The report concludes that the site related emissions are unlikely to result in potential for unacceptable health risks. Mitigation measures to address Tier 2 potential impacts, as well as the data collected, can be found in Section 4.4 of the Air Quality Health Risk Assessment.

### **3.4 Noise & Vibration**

Renzo Tonin & Associates have been commissioned by Sell & Parker to provide a supplementary noise and vibration impact assessment based on the proposed changes to the project that are described in this letter. This report is currently being finalised and will be forwarded to DP&E once additional investigations are completed.

#### **4. Conclusion**

It is considered that the refinements to the project and additional mitigation measures identified above (and as further detailed in the attached specialist reports) represent genuine improvements to the environmental performance of the project. Noise and vibration measures are currently in the final stages of investigation, and will be forwarded to DP&E as soon as the updated supplementary report of the study has been completed.

We trust this submission has sufficiently addressed the concerns raised by agencies and respectfully request that the assessment of the SSD be finalised at the earliest opportunity. We would also welcome the opportunity to comment on draft conditions of consent. In the meantime if you have any questions in respect to the above request, please contact me on 8667 8668 or [acoburn@mecone.com.au](mailto:acoburn@mecone.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Adam Coburn', written in a cursive style.

Adam Coburn



Appendix I – EPA Response to Proponents RIN

## Appendix 2 – Stormwater Management Plan





## Appendix 3 – Air Quality Assessment

## Appendix 4 – Health Risk Assessment

