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22 February 2019

Nikki Matthews
Department of Planning and Environment
320 Pitt Street
Sydney NSW 2001

Re: SSD 7733: Response to EPA and Council submissions on the Response to Submissions

Dear Ms Matthews,

This letter is in response to your email dated 6 February 2018 regarding the response to submissions (RTS) for the Penrith Waste Recycling and Transfer Facility (SSD 7733) (the application). In that email you provided submissions on the RTS from:

- NSW Environment Protection Authority (EPA);
- Penrith City Council (Council);
- Sydney Water;
- Office of Environment and Heritage; and
- Roads and Maritime Services (RMS).

No submission provided an objection to the application. However, the Department has requested feedback regarding:

- EPA's recommended conditions; and
- Council's concerns regarding trucks leaving the site, traffic volume, the recommendations of the Enhanced Preliminary Contamination Assessment (EPCA) and landscaping.

The Department has also requested:

- clarification of what is proposed with respect to the EPCA and its recommendations; and
- identification of the dangerous goods and hazardous materials storage location on a plan.

Responses to the EPA, Council and Department comments are provided below. A remediation management plan (RMP) for the site is provided in Appendix A and updated site plan in Appendix B.

1 EPA Conditions

In its letter dated 1 February 2019, the EPA issued Conditions of Approval for the application. EMM believes that the conditions are reasonable and acceptable, with the exception of condition L2.1 (waste types to be accepted by the site), L2.2 (maximum waste permitted on the site), O2.6 (water sprinklers within the shed) and O2.8 (quick shut roller doors). These conditions are discussed below.

1.1 Condition L2.1 - Waste types

Condition L2.1 recommends the waste types that be permitted to be accepted by the facility. This includes:

- building and demolition waste;
- virgin excavated natural material (VENM);
- paper or cardboard;
- garden waste;
- wood waste;
- household waste from municipal clean up that does not contain food waste.

This list is extracted from RTS Section 1.3.2i, which lists the primary pre-classified waste types that will be accepted by the facility. However, it omits 'mixed pre-classified waste' from the list of pre-classified wastes. As described in RTS Section 1.3.2i (and in the Environmental Impact Statement (EIS)), a far broader range of wastes is proposed to be accepted by the facility. The EPA has not provided a reason for the very substantially limited waste types that may be accepted by the facility.

The restrictive EPA condition would provide no mechanism for the acceptance of any soil or other excavated material that is not VENM. Specifically, as the 'building and demolition waste' pre-classified material definition excludes excavated soil associated with construction and demolition works.

As described in the EIS, and RTS Sections 1.3.2i and 4.4.2, the application is for all waste classified as 'general solid waste non-putrescible' (GSW non-putrescible) under EPA's *Waste Classification Guidelines* (the guidelines). Steps five and six of the guidelines provide robust and accepted methods to identify waste types that are not pre-classified (eg excavated material that is not VENM). The RTS and supporting reports assessed this outcome and did not identify any issue with the general acceptance of GSW non-putrescible.

It is also noted that the excavated natural material (ENM) and excavated public road material resource recover orders (RRO) issued by the EPA specifically apply to the recovery and recycling of excavated materials. Other RROs allow the production of materials that are, in part, originated from excavated materials. Further, wastes that would normally be accepted as building and demolition waste (ie metal or bricks) not associated with a building and demolition waste would not be able to be accepted based on the EPA feedback.

The existing EPLs 4806 (Veolia's Camellia Recycling Centre), 12588 (Suez's Ecolibrium facility), 20427 (Solo's Gateshead facility) and 20974 (Glenfield Resource Recovery) are contemporary examples of existing facilities that are all permitted to recover or process and store general waste. These facilities are all able to receive GSW (non-putrescible), with no further classification, within their general tonnes-per-annum limit.

Restriction of this facility to only receive the materials listed in the EPA submission will severely impact the viability of the facility by putting it at a marked disadvantage against competitors. Further, it will be out of step with other Benedict facilities which are able to receive a wide range of materials, including excavated materials, that meet the requirements of the guidelines.

The EPA has not identified the reason why GSW non-putrescible should not be accepted, the EPA guidelines support acceptance and recovery of GSW non-putrescible, and the EIS and RTS assessed the impacts of accepting GSW non-putrescible. Therefore, the consent should allow for the acceptance of GSW non-putrescible, as defined in Schedule 1 of the *Protection of the Environment and Operations Act*.

Simply put, many co-mingled Demolition and Construction waste material loads have a soil component in them and to exclude those loads because they contain a soil fraction is impractical and overly restrictive.

1.2 Condition L2.2 – Maximum capacity

Condition L2.2 recommends a maximum of 1,000 tonnes of waste be kept on site at any one time. The EPA has not provided a reason for this maximum.

The maximum stockpile volume of the site is discussed in the RTS, but in terms of cubic metres, not tonnes (eg RTS Table 1.3). The site, as designed, has approximately 1,089 m^3 in product stockpiles, with a further 725 m^3 in tipping areas.

The EPA's proposed restriction of 1,000 tonnes is not an appropriate maximum, as it would severely restrict the facility's ability to accept heavier materials (ie excavated materials or aggregate/road base) associated with infrastructure. At 1,000 tonnes, due to heavy waste density, the stockpiles would be approximately half-full, with no ability to accept materials at the tipping area.

If a maximum tonnage of waste is required for the site, we believe that 1,500 tonnes is more appropriate. This would allow stockpiles to be filled near capacity with heavier materials, with a clear tipping area.

1.3 Condition O2.6 – Internal dust suppression

Condition O2.6 relates to sprinklers operating within the proposed shed, requiring "water sprinklers in the enclosed building must be utilised at all times when handling, sorting, loading and unloading activities are being undertaken inside the building."

As discussed in RTS Section 3.3, for clarity, it is proposed to install and use a water misting system in the shed. Misting sprays are operated to suppress dust without producing runoff and the water flow can be adjusted to achieve this result.

We request that the words 'water sprinklers' are replaced with 'misting sprays.'

1.4 Condition O2.8 – Quick shut roller doors

Condition O2.6 relates to quick shut roller doors and the vehicle entrance and exit, requiring that they be kept closed at all times except to permit the ingress or egress of a vehicle. Relevant assessments (eg noise and air quality) have assumed the doors were open during business hours, with active management measures at the boundary (ie misting sprays). As shown in the RTS, all relevant environmental criteria will be met with open doors.

Quick shut roller doors may also cause unintended impacts for the site and surrounding sites. As explained in Section 2.1 of the traffic assessment provided with the RTS, approximately 428 vehicle movements are expected per day. If auto-shut doors are required at the site entrance and exit, that will mean those doors will each open and close approximately 214 times per day. This may result in acoustic issues within and around the site. The condition will also require a custom made and purpose-built roller door product that will require additional maintenance over the long term.

Keeping doors open during operational hours will have benefits for the site, including natural lighting for site employees, natural ventilation, temperature control and general worker amenity. EMM recognises that operation of the doors could be a long-term management measure, should monitoring show that air quality and noise models were inaccurate. Monitoring of specific performance criteria via the requirements of the consent and EPL would trigger a review of the management measure if relevant criteria were exceeded.

Given the complications of the condition and the practical benefits of leaving door operation to the applicant, it is therefore requested that the condition be removed.

2 Penrith City Council

Council responded to the RTS in its letter dated 11 January 2019, The Council response has been extracted below, with responses provided as appropriate.

2.1 Traffic management and infrastructure works

2.1.1 RMS review

In its submission, Council stated:

> The additional information was provided during the Christmas / New Year period and as such Council' Traffic Engineering Team have not as yet been able to assess in detail, the additional traffic modelling and supporting information submitted. As such Council requests the Department as the consent authority ensure that the additional traffic modelling and supporting information is referred / supported by the Roads and Maritime Service and that the capacity of the local network is not adversely affected by the proposal.
>
> It is not clear if the RMS has been consulted on the proposed alternative traffic routes outlined for light vehicle movements, and Council's recommendations for upgrading the western leg of the intersection in association with the proposed intersection upgrade for the other intersection legs. The additional information from the applicant suggests that the RMS has not requested infrastructure upgrades and that signal phasing adjustments would suffice, however this should be further verified and confirmed direct with the RMS.

All issues raised by the RMS in its original submission regarding the EIS have been addressed in RTS Section 4.7. We understand that the RTS, including the updated traffic impact assessment, has been provided to the RMS and that the RMS provided no additional comments to the RTS.

2.1.2 Truck swept paths

In its submission, Council stated:

> The applicant has not sufficiently addressed the concerns raised by Council regarding the proposed heavy vehicle swept paths and driveway access arrangements. The information submitted suggests that the southern parking lane is not affected by manoeuvring into and out of the site, however any crossing of the centre line of the road for manoeuvring is not supported. Further, the suggestion for no stopping signage to address the resulting impacts of manoeuvring is also not suitable as this would require Local Traffic Committee endorsement and a resulting loss of on street parking. This would suggest that the scale of vehicles servicing the development may not be suitable with respect to the site location and existing road conditions without excessive widening of driveway and loss of landscaping opportunities.

Council's original submission dated 4 August 2017 raised the concern that trucks turning left out of the site would "take up the full road width kerb-to-kerb, which is unsafe and would also eliminate parking on both sides of the street." Council requested that driveways "be widened to ensure that swept paths can be safely accommodated from/within the travel lanes."

As discussed in RTS Section 4.2.1iv, the driveways have been widened to allow left-hand turns within the travel lanes of the road reserve and not impacting the southern car parking area. While trucks would cross the centre of the road, there is no centre-line or other lane marking outside of the site. Sightlines would also be maintained to the left and right of the site for trucks leaving the site under the current design.

It is also noted that all industrial sites within the industrial precinct are capable of accepting 19 m single-articulated vehicles, all fronting on a similar 12-m-wide-road. The site offers a more generous onsite turning area than many of these properties, with the proposed weighbridge set back from the property boundary by approximately 8 m, providing additional turning room and view distance as trucks approach the road.

Council's underlying position that a 19 m vehicle should not be accepted at any of the surrounding IN1 General Industrial zoned properties in the industrial precinct does not appear to be in keeping with the objective of the IN1 General Industrial zone to provide a wide range of industrial and warehouse land uses.

The modelled swept path shows that a B99 (ie a 2-m-wide vehicle) can travel westbound and remain outside of the truck's swept path. While trucks would turn beyond the centre of the road, there are no lane markings on the road outside of the site. The widest portion of the swept path is opposite of an existing driveway where no parking is currently permitted. As such, while trucks would cross over the centre of the road, this would not impede the flow of traffic and would be undertaken safely.

With respect to signage, Council's submission dated 4 August 2017 made no mention of signage requirements. The EIS and swept path diagrams provided with the EIS clearly identified the need for a limited amount of street parking to be removed to allow for vehicles to leave the site. While two street parking spaces would be lost, the site would allow for all employees, customers and site visitors to park on-site.

As identified by Council, there is an option to widen the driveways and reduce the landscaping at the front of the site. While not the preferred option, the applicant remains open to widening the driveways, should this be a requirement.

EMM understands that an SSD consent would override Council's requirement for parking signage to be approved by a Council committee. Therefore, EMM recommends a condition that parking signage be installed in accordance with the RTS swept path diagrams, with the applicant to bear the cost of installation.

2.1.3 Heavy vehicle traffic

In its submission, Council stated:

> The additional information submitted indicates that the proposed development represents an increase of 65% heavy vehicle traffic which is a significant increase and suggests that the site may not be suitable for the scale and nature of the proposed development.

Potential impacts of the application on the surrounding road network were assessed in the RTS and the supporting revised traffic report. Impacts were shown to be acceptable, with the levels of service at major intersections remaining satisfactory.

2.1.4 Issue resolution

In its submission, Council stated:

> If the application is supported, it should be demonstrated that the above issues have been resolved and/or suitable intersection upgrades are included within the scope of works to ensure a satisfactory service level is provided without adverse impact on the local road network.

As described above, we believe Council's remaining traffic management issues have been addressed in the RTS.

2.2 Environmental management and remediation

2.2.1 Remediation consent

In its submission, Council stated:

> The applicant has now submitted an 'Enhanced Preliminary Contamination Assessment'. In addition to the information previously provided, this report now also documents the findings of a targeted sampling program. This Assessment concludes that "the site is suitable for the proposed use; however, some remediation works are recommended on site associated with potential contamination pathways". As put forward in Council's

> previous submission, the report does not acknowledge that should remediation be needed, that consent is required for those remediation works as all remediation work in the Penrith Local Government Area is Category 1 work in accordance with SEPP 55 – Remediation of Land and SREP 20. A number of recommendations are made in the report, and some of these do include the removal of any material found to exceed the relevant criteria. This removal of contaminated material would constitute remediation, and a Remediation Action Plan would need to be prepared and consent would need to be obtained to carry out the remedial works.

Clause 11(4) of *Sydney Regional Environmental Plan No 2-Hawkesbury-Neapean River* (SREP 20) defines remediation of contaminated land as (emphasis added):

> Removing soil or other deposits from, or otherwise remediating, contaminated land. For the purposes of this definition, contaminated land means land on which hazardous substances occur at concentration levels above background levels, **where an assessment (carried out in accordance with guidelines circulated to councils by the Department) has indicated the substances pose, or are likely to pose, an immediate or long-term hazard to human health or to the environment.**

As described in RTS Sections 4.1.10 and 4.2.2, neither the original PCA or EPCA found it likely that any substance would pose an immediate or long-term hazard to human health or to the environment. As such, the recommendations of the EPCA do not classify as 'remediation of land' for the purposes of SREP 20. Instead, they outline the requirements of an unexpected finds protocol to be developed as part of a CEMP.

However, in the interests of resolving this matter, EMM has prepared a remediation management plan (RMP), which is provided in Appendix A. The RMP outlines the steps to be taken for:

- cleaning of the existing slab;
- emptying, cleaning, inspection and decommissioning of oil sumps;
- testing and potential removal of site soils if required; and
- management of any other unexpected finds during construction.

EMM requests that the RMP be cited in a condition to give certainty to the site establishment and construction process.

2.2.2 Additional testing

In its submission, Council stated:

> Given the limited sampling program (only one sample from areas observed to be impacted by staining), it is still considered that further sampling should be undertaken on site, particularly in those areas identified in the recommendations of the report. Should contaminated materials be found on site, then this application should also seek consent for remediation works. SEPP 55 requires the consent authority to be satisfied that the site is or can be made suitable for the proposed use and whilst the 'Enhanced Preliminary Contamination Assessment' has confirmed that the site can be made suitable subject to the implementation of a number of recommendations, these recommendations may require additional works that have not been considered as part of the application.

The sampling program focused on the areas of the site most likely to contain contamination for the purposes of validating the findings of the PCA and EPCA. This method is supported by the SEPP 55 Guidelines. The EPCA provided a conservative unexpected finds protocol to ensure that if contamination is identified on the site during establishment or construction, it be identified and appropriately disposed of promptly. This is further detailed in the RMP.

A condition requiring that the recommendations of the EPCA and RMP are implemented will ensure that the applicant handle and dispose of soils appropriately without the need for additional approvals.

2.2.3 EPA Approval

In its submission, Council stated:

> It is understood that the NSW Environment Protection Authority as yet has not supported the proposal. Given that it is a scheduled activity; the EPA should be satisfied with the proposal such that an Environment Protection Licence can be issued. Should the EPA not support the amended proposal, it is recommended that the application should not be favourably determined.

The EPA has issued draft conditions of approval for the application. It is noted that the EPA has not raised concerns with the EPCA and required that it be implemented at the premises.

2.3 Landscape and streetscape

In its submission, Council stated:

> The amended landscape plan and planting detail has provided additional planting to address Council's comments however the retention of trees in the front setback should be preserved. There is nothing to suggest that the proposed planting cannot be designed with the retention of existing vegetation in this setback which is assist to screen and ameliorate the presentation of the development from the public domain. It is again noted that this could be addressed through conditions of consent if the application was supported.

The new site design provides a fully enclosed building to address EPA's concerns raised in its submission on the EIS. This will require the existing shed and exterior walls to be demolished and for a new shed to be established in their place, as well as a new exterior driveway and drainage. The bulk of the vegetation in the site is in the exit driveway footprint. Remaining trees either overhang the walls and would require significant pruning, would likely interfere with the new exterior wall of the shed or would be impacted by the installation of new site drainage. As such, removal of these trees is required.

However, the proposed landscape plan at RTS Appendix J will increase the amount, diversity and quality of vegetation at the site, enhancing environmental and visual amenity in the area.

3 Department of Planning and Environment

The Department has requested that additional information be provided regarding the recommendations of the EPCA. As discussed above, an RMP (Appendix A) has been prepared to describe works to be undertaken on site.

The Department has also requested that the site plan be updated to clearly identify the storage location of dangerous goods and hazardous materials. This location is described in Section 4.1.10 (ii) of the RTS. The site plan has been updated to identify this area (Appendix B).

4 Closing

We thank the Department for providing the opportunity to respond to the EPA and Council submissions on the RTS and hope that this letter aids in the assessment of the application. In summary, EMM requests that:

- EPA conditions be amended to:
  - reflect the waste types proposed to be accepted in the EIS and RTS;
  - allow a maximum of 1,500 tonnes of waste on the site at one time;
  - reflect that water misters will be used inside the shed; and

- remove the requirement for quick-shut doors;

- a condition is included requiring that the RMP implemented during construction; and
- certainty be provided for either a wider driveway or no-stopping signs at the exit driveway, with a preference for no-stopping signs.

Should the Department have any further questions, I can be reached via email or at 9493 9515.

Yours sincerely

Taylor Richardson
Senior Planner
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Appendix A

Remediation management plan

Penrith Waste Recycling and Transfer Facility

Remediation Management Plan

Prepared for Benedict Recycling Pty Limited (Benedict Recycling)
February 2019

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Penrith Waste Recycling and Transfer Facility

Remediation Management Plan

Report Number

J16099 RP#1

Client

Benedict Recycling Pty Limited (Benedict Recycling)

Date

22 February 2019

Version

v1 Final

Prepared by

Daniel Condon
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22/02/19

Approved by

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22/02/19

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1 Introduction

EMM Consulting Pty Ltd (EMM) was engaged by Benedict Recycling Pty Limited (Benedict Recycling) to prepare a Remediation Management Plan (RMP) detailing soil management requirements for the proposed site redevelopment works for 46–48 Peachtree Road in Penrith, NSW, legally described as Lot 45 in DP 793931.

This RMP follows enhanced preliminary contamination assessment (enhanced PCA) (EMM 2018) undertaken for the site and defines the plan for the remediation recommended by the enhanced PCA. It relates to the testing and management of any site soils that are found to be potentially contaminated and contractor health and safety requirements for handling soils at the site. This RMP also defines the responsibilities for environmental management requirements and minimum controls needed to comply with requirements as outlined by the document.

1.1 Background

Recent soil sampling and investigation works at the site, as described in the enhanced PCA have determined the following:

- there is low potential for significant and/or widespread chemical soil contamination arising from historical land use activities on site;
- the concentrations of chemical contamination detected in soil on the site would not present an unacceptable risk of exposure to human health;
- the groundwater level at the site is expected to be at 6.6–8.1 m below ground level (bgl), with no proposed activity is likely to intersect groundwater. Therefore, the proposal presents a low risk for contamination of groundwater; and
- there is unlikely to be a risk from vapour intrusion for the site, given the low level of potential contamination and distance to groundwater.

However, the enhanced PCA notes that there is uncertainty around the contamination status of soils in the immediate vicinity of an oil sump located on the eastern boundary of the site. The enhanced PCA recommends a testing and remediation plan in the event of contamination identification. As such, there is a need for an RMP to be in place should there be a requirement for the excavation of any contaminated material that is encountered during future works at the site.

1.2 Roles and responsibilities

Table 1.1 provides details of roles and responsibilities for each consultant and contractor participating in the implementation of the works.

Table 1.1 Roles and responsibilities

Role	Consultant/Contractor	Responsibility
Site Principal	Benedict Recycling Pty Ltd	Site supervision and control; Site Safety; Provision of Safe Work Method Statements supplied by contractors working at the site.

Table 1.1 Roles and responsibilities

Role	Consultant/Contractor	Responsibility
		Implementing the environmental control measures stated in this RMP. Community correspondence.
Environmental Consultant	EMM Consulting Pty Ltd	Responsible for superintendence of RMP and other documentation requirements to assist Site Principal and provide remediation works advice during the project. Responsible for management and implementation of validation sampling, inspections, soil tracking and final site condition reporting.
Excavation Contractor	TBC	Undertaking excavation of soil based on the direction of the Environmental Consultant. Provision of dedicated machinery and staff for the duration of the project. Completing all works in a safe and environmentally sensitive manner. Implementing the environmental control measures stated in this RMP. Provision of SWMSs supplied by contractors working at the site.
Cartage and Disposal Contractor	TBC	Provision of EPA Licenced transport vehicles for the off-site transport of Prescribed Industrial Waste (PIW) – contaminated soils. Provision of documented consignment notes for PIW for each nominated licenced waste facility. Provision of completed waste transport certificates for each load of PIW.

2 Remediation and soil management

2.1 Initial soil investigation

On the 3 August 2018, a soil sampling investigation program was implemented by EMM at the site as part of the enhanced PCA. The purpose of the program was:

- assessing the likely nature and extent of potential contamination in the identified areas of concern;
- assessing whether identified contamination presents an unacceptable risk of exposure to human health and/or the environment, in the context of the proposed industrial/commercial land use scenario;
- providing advice on whether the land is suitable (from a contamination perspective) for the proposed industrial/commercial land use scenario; and
- providing preliminary recommendations on additional contamination assessment, management or remediation (if required).

In order to address the requirements of the Department of Planning and Environment (DPE), survey site selection was targeted at the most likely areas of soil contamination on the site, as well as areas which will experience some disturbance as part of the proposal, and therefore potential areas of contact for construction workers.

These were the new driveway area at the front of the site and excavation areas associated with stormwater infrastructure installation within the site. Opportunistic sampling was used within the concrete slab area, focusing on areas where soil could potentially be accessed.

2.2 Contaminants of potential concern (COPCs)

Based on the soil sampling and analysis undertaken on the 3 August 2018 EMM advise that total petroleum hydrocarbons (TPHs) and total recoverable hydrocarbons (TRHs) are the primary COPCs within sub-surface soils at the site. In particular, within the top soil horizon around site 1.

EMM note that, whilst elevated, these levels of TPHs and TRHs fall below the criteria relevant to this assessment:

- Health based investigation levels (HILs) commercial / industrial land use, listed in Table 1A(1) in NEPM (2013); and
- Health screening levels (HSL) for HSL&D (commercial / industrial) listed in Table B4 of Friebel and Nadebaum (2011), are adopted for this assessment.

Table 2.1 – Summary of TPH and TRH results

Analyte	Units	Site and depth				
		S1 0-10 cm	S2 0-20 cm	S2 30-50 cm	S3 0-15 cm	S3 15-30 cm
Total Petroleum Hydrocarbons						
C10 - C14 Fraction	mg/kg	250	*<50*	*<50*	*<50*	*<50*
C15 - C28 Fraction	mg/kg	6460	*<100*	*<100*	*<100*	*<100*
C29 - C36 Fraction	mg/kg	2110	*<100*	*<100*	*<100*	*<100*
C10 - C36 Fraction (sum)	mg/kg	8820	*<50*	*<50*	*<50*	*<50*
Total Recoverable Hydrocarbons						
>C10 - C16 Fraction	mg/kg	690	*<50*	*<50*	*<50*	*<50*
>C16 - C34 Fraction	mg/kg	7770	*<100*	*<100*	*<100*	*<100*
>C34 - C40 Fraction	mg/kg	780	*<100*	*<100*	*<100*	*<100*
>C10 - C40 Fraction (sum)	mg/kg	9240	*<50*	*<50*	*<50*	*<50*
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	690	*<50*	*<50*	*<50*	*<50*

2.3 Remediation works

Table 2.1 above indicates that at the sampling locations at the site, adopted threshold levels for selected laboratory analytes were not exceeded. S1 is the only site with recorded levels of TPHs and TRHs observed in the top 10 cm of sub-surface soil.

There was an 'oily sheen' observed on a concrete slab and oil material sitting on the concrete surface in some areas. The oil is being collected in a large oil sump and has also filled a small sump located within the shed area. The oil was not observed to be leaving the site and is considered to be a residual waste from the current occupiers. While the site is sealed with concrete there was an area observed where the concrete slab is damaged and compromised.

EMM present the following actions relating to remediation works on the site:

2.3.1 Oil sump remediation

EMM advise that the following actions be undertaken in relation to the two oil sumps that was observed onsite during the previous site investigation:

- draining and cleaning of the sumps by a suitably qualified contractor;
- inspection of the interior of the sumps for contamination pathways;
    - if no pathways are identified, backfill sumps with concrete and leave in place;
    - if pathways are identified, remove the sump structures and remediate as described below;
- removal of all sump structures (steel and concrete);

- assessment of the soil condition directly underneath and surrounding both oil sumps to ensure that contaminations is not present within the soil. This should be done by a suitably qualified environmental consultant by visual inspection for any odours or staining/discolouration and screening of soils with a Photo Ionisation Detector (PID) for the potential presence of VOCs; and

- should contamination be suspected within the surrounding soil then further soil testing, analysis and on-site remediation or off-site disposal as described in Chapter 4.

2.3.2 Oily sheen on slab

EMM advise that the following actions be undertaken in relation to the areas that were observed to be oily during the previous site investigation:

- cleaning of oily concrete by suitably qualified contractor (ie progressive cleaning in bunded areas and disposal of water at a licensed facility);

- observation of the soil condition directly underneath and surrounding areas of concrete to be removed for site infrastructure and footings to ensure that contamination is not present within the soil. This should be done by a suitably qualified environmental consultant by visual inspection for any odours or staining/discolouration and screening of soils with a Photo Ionisation Detector (PID) for the potential presence of VOCs;

- should contamination be suspected within the surrounding soil then further soil testing and analysis should be undertaken to determine the extent and nature of the contamination.

Throughout any future works at the above locations a suitably qualified environmental consultant should be present onsite to supervise the recommended remedial works detailed above.

3 Unexpected finds protocol (UFP)

EMM acknowledge that there is low potential for significant and/or widespread chemical soil contamination arising from historical land use activities on site. However previous investigations at the site have been limited to areas of highest risk and as such there is the potential for unexpected finds to occur onsite during future excavation works.

Unexpected finds may include:

- areas of soil with historical TPH or TRH contamination;
- underground storage tanks and/or pits; and
- areas of soil with historical dumping of asbestos containing material (ACM).

In the event of an unexpected find the following protocol shall be followed:

1. Immediately cease work and contact the site manager.
2. Site manager to construct temporary barricading to prevent access to the unexpected substance(s).
3. Site manager to arrange inspection by qualified environmental consultant.
4. Environmental consultant to undertake detailed inspection and sampling (if required).
    a) If substance is assessed and not presenting an unacceptable risk to human or environmental health then site manager to remove safety barricades and environmental controls and continue work.
    b) If substance is assessed as presenting an unacceptable risk to human or environmental health, then the environmental consultant is to supervise further remediation/removal of contamination until deemed 'clean-soil.'
5. Environmental consultant will submit the assessment/validation/clearance report to the site manager.

4 Environmental management requirements for contaminated soils

Should unexpected finds of contaminated soil occur during future works the following management requirements have been identified as necessary for works involving any sub-surface excavation of soil:

- occupational Health and Safety;
- isolation and signage;
- personal protective equipment (PPE) and hygiene;
- excavation and stockpiling;
- use of heavy equipment; and
- soil disposal.

4.1 Occupational health and safety

Responsible party: all parties.

All contractors, staff, workers or attendees to the site are required to be inducted by the site supervisor to alert them to site specific risks.

The induction process provides site specific information and site requirements including:

- nomination of a Work, Health and Safety (WHS) Representative for the works;
- discussion of contamination levels and risks associated with sub-surface excavation and contaminated soil at the site;
- Safe Work Method Statements (SWMS) for tasks to be completed at the site;
- works specification;
- site responsibilities;
- emergency procedures;
- site contact details;
- key personnel; and
- key site safety requirements.

4.2 Isolation and signage

Responsible party: principal contractor/WHS representative/excavation contractor

The Principal Contractor is required to control the remediation works area through isolation and security measures using a secure fence with shade cloth or hoarding, and warning signage.

The site owner shall utilise the following controls to ensure the remediation works site is isolated and controlled:

- Ensure the site is secure from public ingress; and
- provide appropriate signs to warn of the construction area.

The site supervisor shall utilise the following controls to ensure the remediation works site is isolated and controlled:

- restrict access for permitted and inducted workers only.

4.3 Personal protective equipment and hygiene

Responsible party: excavation contractor

People working where potentially contaminated soils or dusts may be present need to be provided with adequate Personal Protective Equipment (PPE) to mitigate risk of exposure if contaminated soils are present.

It is advised that the Occupational Health and Safety Representative provides job specific review of prescribed PPE and hygiene requirements for workers working with contaminated soils.

4.4 Excavation and stockpiling of soils

Responsible party: excavation contractor

Where soils impacted with TPH and TRH are to be stockpiled for any period longer than one day, the contractor shall ensure the following controls are implemented:

- Stockpile is constructed with a BentoMat or equivalent base to prevent leaching, with provision for associated leachate collection;
- stockpile is constructed with a waterproof cover with suitable surface water run-off controls;
- stockpile covering material must be sufficiently weighed down with sandbags, star pickets and/or tent pegs to prevent lifting of the cover during windy conditions.
- stormwater egress should be managed via the bunding with haybales; and
- stockpiled soils shall be shaped to avoid pooling and infiltration of water into the stockpile.

4.5 Use of Heavy Equipment

Responsible party: excavation contractor

The following controls are required for excavation equipment used for excavation of potentially contaminated soils:

- after excavation activities have ceased, clean equipment thoroughly; and
- prior to equipment exiting the site, the contractor must allow the site supervisor to check equipment for contaminated soil.

4.6 Soil Disposal

Responsible party: cartage and disposal contractor

Prior to movement of any soils off-site, the site supervisor must:

- supply documentation detailing the classification of the soil based on NSW guidelines to the destination site, end recipient and cartage contractor to the environmental consultant;
- request from the disposal contractor, the nominated disposal site details and undertake checks and logging with this facility regarding volumes and certificate completion;
- undertake a log of truck number plates and load removal times for cross checking; and
- ensure landfill or tonnage dockets are retained and forwarded to all parties after disposal is completed.

5 Statement of limitations

This report is based on a site inspection and enhanced contamination assessment conducted by EMM Pty Ltd personnel and information provided by Benedict Recycling Pty Limited and relates only to the site referred to in the scope of works at the date of the report as conditions may change thereafter due to natural processes and/or other site activities. EMM note that previous investigations at the site have been limited and as such there is the potential for unexpected finds to occur onsite during future excavation works. As such, this document should be reviewed and updated subject to the nature of possible unexpected finds during further works on site.

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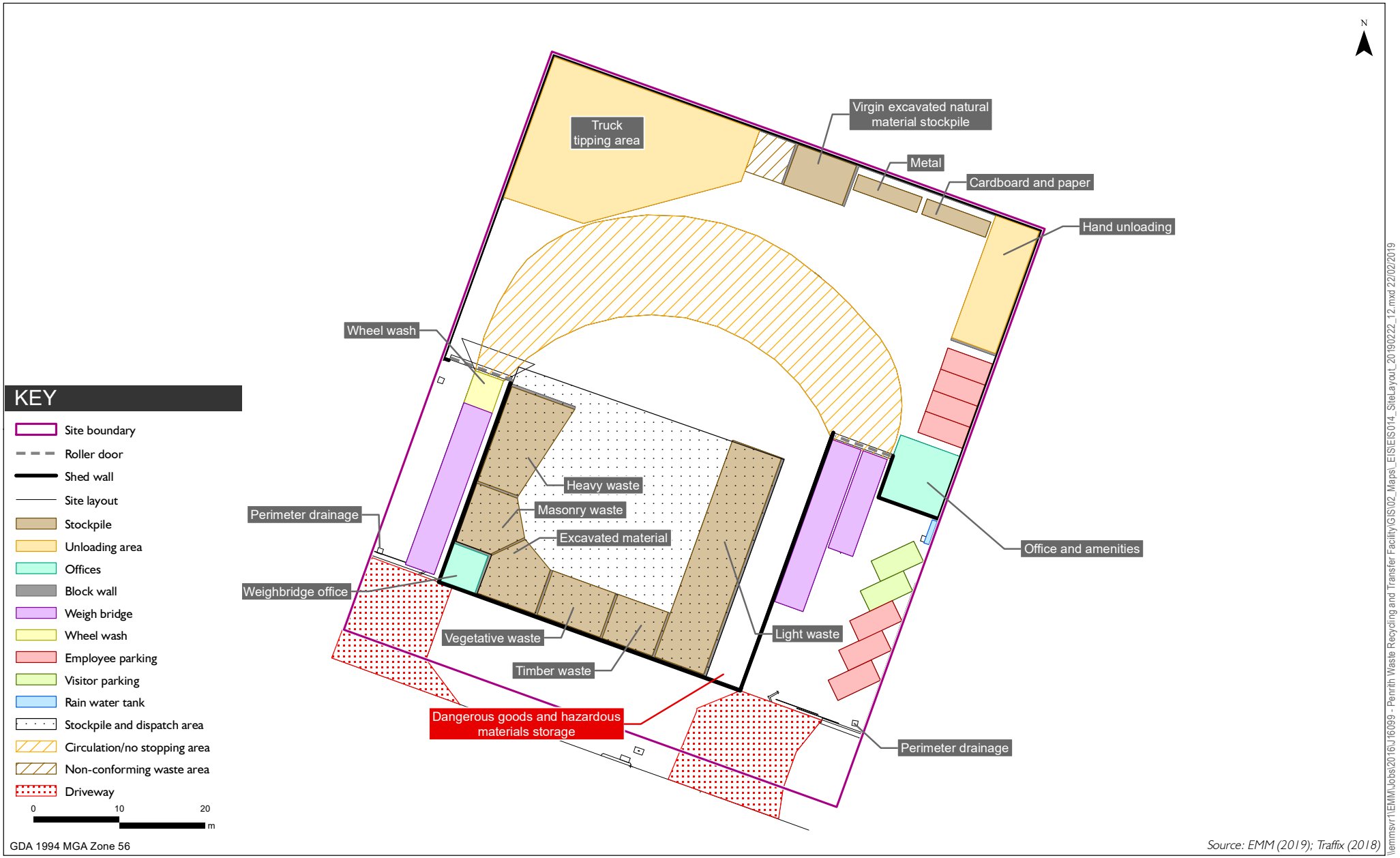
Throughout any future works at the above locations a suitably qualified environmental consultant should be present onsite to supervise the recommended remedial works detailed above.

Appendix B

Hazardous materials location



Site layout

Penrith Waste Recycling and Transfer Facility
Response to RTS Comments
Appendix B