



Department initiated Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L7060/1997/13
Licence Holder	Peel Resource Recovery Pty Ltd
ACN	149 428 697
File Number	DER2014/001334-1
Premises	Cross Resource Management 70 Stanley Road WELLESLEY WA 6233 Legal description – Part of Lot 601 on Deposited Plan 417253 As defined by the coordinates in Schedule 2 of the Revised Licence
Date of Report	05 February 2021
Decision	Revised licence granted

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an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L7060/1997/13 is held by Peel Resource Recovery Pty Ltd (Licence Holder) for the Cross Resource Management (the Premises), located at 70 Stanley Road, Wellesley.

This Amendment Report documents the assessment of potential risks to the environment and public health from boundary changes, excavation of previously filled areas and the acceptance, handling and disposal of silica fume waste the Premises. As a result of this assessment, Revised Licence L7060/1997/13 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Amendment summary

This amendment is the result of a referral and recommendation from DWER's Compliance and Enforcement Division following an inspection of the premises conducted on 14 May 2020 in relation to the following matters:

- Premises boundary:
 - A review of L7060/1997/13 has identified a 'lot on plan' change for the premises from Lot 43 on Plan 17161 to Part of Lot 601 on Deposited Plan 417253. This new Lot extends beyond the initially approved licensed premises boundary. As a result of this change, GPS coordinates are required (Schedule 2 in Licence) to clearly define the approved licensed premises boundary.
 - The Licence Holder has provided an updated site map and coordinates indicating that the landfill phase 3 and tyre monofil have expanded beyond the areas originally approved in Licence L7060/1997/13. The Delegated Officer advises the Licence Holder that the expansion of these areas requires an amendment to Licence L7060/1997/13 to be submitted to the department with all applicable supporting information.
- Excavation of previously landfilled areas:
 - DWER's Compliance and Enforcement Division (C&E) have advised that inspectors observed completed/closed landfill phase 2 cell being excavated for the purposes of soil re-use. Given the history of the site and the uncertainty over the waste landfilled in this area, further controls have been requested to ensure potentially hazardous materials are not disturbed. The Delegated Officer notes that waste buried onsite has been approved for final disposal and any excavation of previously landfilled waste will require a licence amendment submission to DWER with all applicable supporting information.

- Acceptance, handling and disposal of silica fume waste:
 - C&E inspectors have observed the use of large amounts of silica fume waste accepted onsite from Simcoa Operations Pty Ltd. This material was observed to be used as landfill cover with large amounts of airborne dust observed to be generated and dispersed beyond the premises boundary. C&E have requested that controls have been requested to ensure dust generation, including that from silica fume materials is appropriately controlled. The Department of Mines, Industry Regulation and Safety (DMIRS) has advised DWER that the fume will likely cause irritation to human skin, eyes and the respiratory system due to its inherently small particle size and high pH and should be buried as standard daily practice.

As a result of the above, the Department has initiated an amendment to Licence L7060/1997/13 to incorporate the following changes:

- To update changes to the premises address:
 - Part of Lot 601 on Deposited Plan 417253.
- The addition of appropriate dust management conditions to prevent emissions discharging across the prescribed premises boundary.
- The addition of an appropriate condition to prevent the disturbance of previously landfilled areas for the purposes of soil reuse without prior approval from DWER.
- The addition of an appropriate control to ensure silica fume waste is landfilled on the same day of receipt and not used as a cover material.
- The addition of GPS coordinate points in Schedule 2 of the Licence to clearly define the approved prescribed premises boundary.

2.3 Administrative changes

The obligations of the Licence Holder have not changed in updating the Licence. The department has not undertaken any additional risk assessment of the Premises related to these changes.

In updating the Licence, the CEO has:

- updated the format and appearance of the Licence;
- revised Licence condition's numbers and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of Licence conditions as they relate to this Revised Licence are detailed in Section 5.1 Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 1 below. Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Lift-off from stockpiles and/or stored product, earthworks, vehicle movements	Air/windborne pathway	The Licence Holder has confirmed that silica fume waste materials are immediately buried in the landfill upon receipt at the site and not used as cover material.
Release of potentially hazardous substances e.g. asbestos fibre	Excavation of previously landfilled areas/Earthworks	Air/windborne pathway	-

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Industry: Putrescible landfill site (Shire of Harvey)	Immediately adjacent and to the north of the Premises boundary
Industry: Transport company (Agspread Bulk Haulage)	Immediately adjacent and to the west of the Premises boundary
Industry: Transport and earthmoving company (B & J Catalano Pty Ltd)	Immediately north-west of the Premises boundary
Special residential development	400m to the west of the Premises boundary
Residential development	360m to the south-west of the Premises boundary
Special rural development	260m to the south-west of the Premises boundary

Environmental receptors	Distance from prescribed activity
Shallow groundwater	Sandy soils - shallow aquifer (2 – 4 mBGL)
Brunswick River	250 metres south of the Premises boundary
Conservation category geomorphic wetland - Dampland	90m east of the eastern Premises boundary
Conservation category geomorphic wetland - Floodplain	Immediately adjacent to southern Premises boundary
Peel Harvey Environmental Protection Policy (EPP)	Premises falls within the policy area

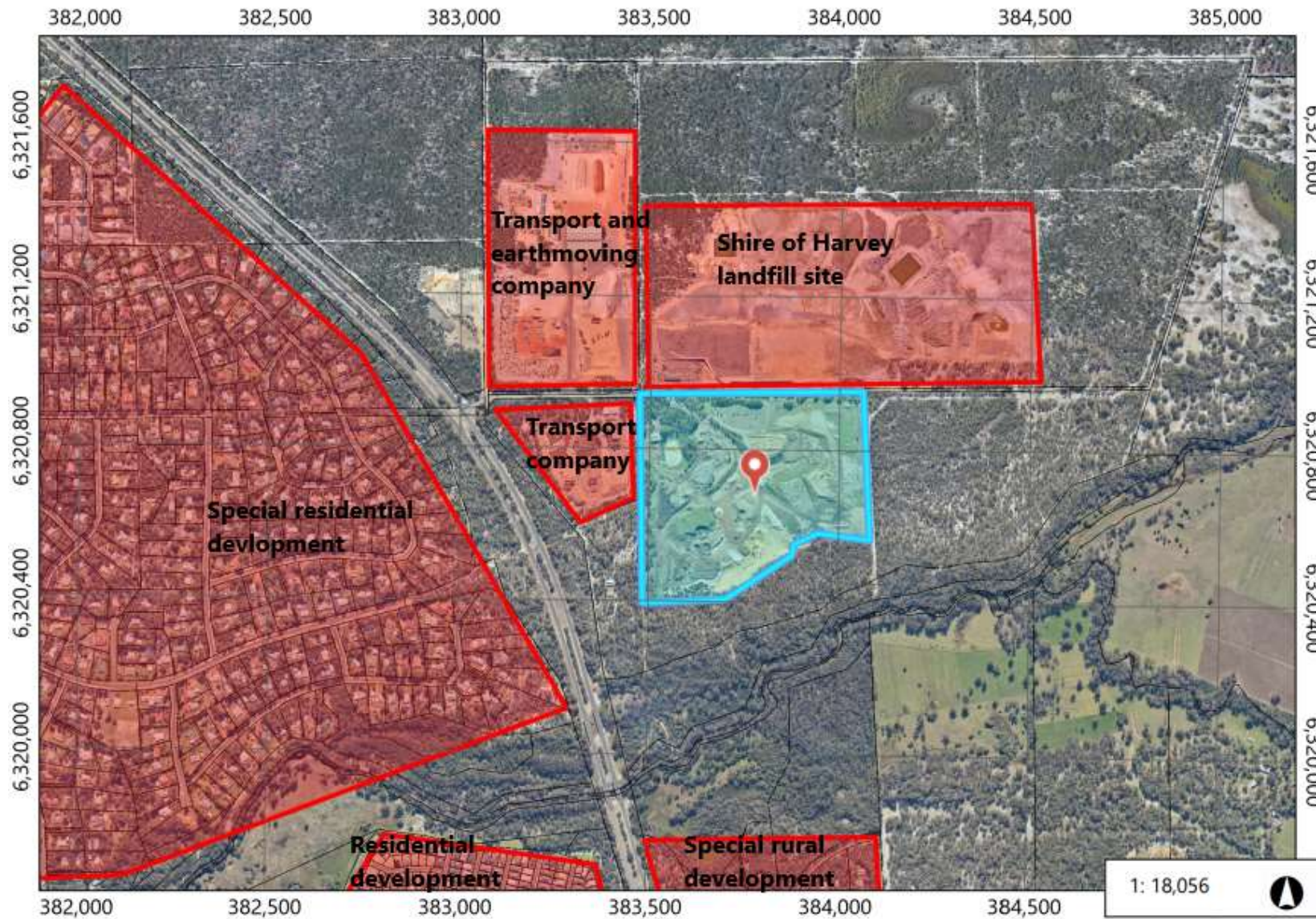


Figure 1: Licensed Premises (blue) proximity to human receptors identified in Table 4 (red)

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the Licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Licence L7060/1997/13 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. prescribed premises activities associated with categories 13, 62 and 63 defined under the EP Regulations.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3: Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of Licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
Lift-off from stockpiles and/or stored product Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Human and environmental receptors listed in Table 2	Refer to Table 1	C = Moderate L = Possible Medium Risk	N	<u>Condition 3,</u> <u>Table 2, (vii)</u> <u>Condition 10</u> <u>Condition 11</u>	An inspection conducted by C&E identified silica fume waste materials being used a landfill cover. The material was observed to be generating significant amounts of airborne dust blowing onto areas surrounding the site. Advice sought from DMIRS indicates that silica fume is likely to cause irritation to human skin, eyes and the respiratory system due to its inherently small particle size and high pH. The Delegated Officer considers the implementation of additional dust management and landfill cover controls necessary to prevent potential health and amenity impacts on nearby human and environmental receptors.
Excavation of previously landfilled areas	Release of potentially hazardous substances e.g. asbestos fibre release				C = Major L = Rare Medium Risk	N	<u>Condition 5</u>	An inspection conducted by C&E identified that the completed/closed landfill phase 2 cell was being excavated for the purposes of soil re-use. Given the history of the site and the uncertainty over the waste landfilled in this area, further controls have been requested from Compliance and Enforcement to ensure potentially hazardous materials are not disturbed. Any proposed disturbance or excavation will need to be submitted to DWER in the form of a Licence amendment with all applicable supporting information. The Delegated Officer considers that the likelihood of potentially hazardous materials e.g. asbestos fibres being released due to the excavation of waste is rare, but given the extremely significant consequence of possible impacts, additional controls are required.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
<p>Licence Holder was provided with draft amendment on 27/10/2020 (HPCM A1947440).</p>	<p><u>Premises boundary</u></p> <p>The Licence Holder has provided an updated site plan and GPS coordinates for the premises boundary, tyre monofil and landfill phase 3 areas.</p> <p><u>Excavation of landfilled waste</u></p> <p>The Licence Holder has requested further consideration and changes to the proposed condition 5 which prohibits the excavation or uncovering of previously landfilled areas at the premises. The Licence Holder advises that the excavation of inert type 1 waste is now economically viable to reprocess and reuse.</p> <p><u>Silica fume waste</u></p> <p>The Licence Holder has committed to burying silica fume materials as a standard daily practice. (HPCM DWERDT370349).</p>	<p><u>Premises boundary</u></p> <p>The coordinates provided by the Licence Holder on 18/11/2020 encompass an expansion to the prescribed premises boundary, tyre monofil and landfill phase 3 area. These expanded areas have not been assessed and licensed by DWER. Any expansion to areas previously approved in L7060/1997/13 will require the Licence Holder to submit a licence amendment application to DWER that includes all applicable supporting information.</p> <p>The applicant has provided revised GPS coordinates on 19/01/2021 for the prescribed premises boundary, tyre monofil and landfill phase 3 area that cover the areas previously approved in L7060/1997/13. The prescribed premises boundary coordinates have been added into Schedule 2 of the Licence. The coordinates provided for the tyre monofil and landfill phase 3 area have not been added into the Licence as DWER is aware that the Licence Holder has already expanded works beyond the previously approved boundary of these two areas.</p> <p><u>Excavation of landfilled waste</u></p> <p>Consistent with other landfills in the state, the department considers landfilled waste at the premises to have been accepted for final disposal. Whilst appropriate resource recovery is a broadly supported option, excavation of these areas would require an application for amendment so that the scope of the activity proposed, specific details regarding the controls and risks involved and adequate regulation under licence can be implemented.</p> <p><u>Silica fume waste</u></p> <p>Noted.</p>

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 5: Consolidation of Licence conditions in this amendment

Existing condition	Condition summary	Revised Licence condition	Conversion notes
N/A	Premises details	N/A	Change of lot and plan number: Lot 43 on Plan 17161 to: Lot 601 on Deposited Plan 417253.
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.
1.1.1 1.1.2	Interpretation and definitions	N/A Interpretation section, Definitions and Table 9	Redundant condition. Revised to current licensing format. New terms added to definitions table.
1.1.3	Australian or other standard	N/A Interpretation section	Redundant condition. Revised to current licensing format.
1.2.1 Table 1.2.1	Waste acceptance	Condition 1 Table 1	New numbering.
1.2.2	Non-conforming waste	Condition 2	New numbering.
1.2.3 Table 1.2.2	Waste processing	Condition 3 Table 2	New numbering.
1.2.4	Landfilling activities	Condition 4	New numbering.
N/A	Landfill earthworks	Condition 5	New condition added to ensure previously landfilled waste is not excavated or uncovered.
1.2.5 Table 1.2.3	Cover requirements	Condition 6 Table 3	New numbering. Additional control to ensure silica fume waste is landfilled on the same day of receipt. Table note 1 has also been added to ensure inert waste type 1 waste is free from non-biodegradable plastics and/or other contaminants.
1.2.6	Security measures	Condition 7	New numbering.
1.2.7	Wind-blown waste	Condition 8	New numbering.

Existing condition	Condition summary	Revised Licence condition	Conversion notes
1.2.8	Asbestos management	Condition 9	New numbering.
N/A	Dust control	Condition 10	Additional control added into the Licence to ensure visible dust is prevented from crossing the boundary of the premises.
N/A	Dust management	Condition 11	Additional controls added to ensure dust generated is managed appropriately.
2.1.1	Sampling requirements	Condition 12	New numbering.
2.1.2	Monitoring timeframes	Condition 13	New numbering.
2.1.3	Monitoring equipment calibration	Condition 14	New numbering.
2.1.4	Calibration reporting	Condition 15	New numbering.
2.2.1 Table 2.2.1	Monitoring of inputs and outputs	Condition 16 Table 4	New numbering. Inert Waste Type 1 (silica fume) added to waste inputs.
2.2.2	Record-keeping criteria	Condition 17	New numbering.
2.3.1 Table 2.3.1	Process monitoring	Condition 18 Table 5	New numbering.
2.4.1 Table 2.4.1	Monitoring of ambient groundwater quality	Condition 19 Table 6	New numbering.
3.1.1	Records	Condition 20	New numbering.
3.1.2	Annual Audit Compliance Report	Condition 21	New numbering.
3.1.3	Complaints management system	Condition 22	New numbering.
3.2.1 Table 3.2.1	Annual Environmental Report	Condition 23 Table 7	New numbering.
3.2.2	Additional criteria – Annual Environmental Report	Condition 24	New numbering.
3.3.1 Table 3.3.1	Notification requirements	Condition 25	New numbering.
Schedule 1: Maps	Premises map	Figure 1	Addition of Figure number. Addition of numbered GPS coordinate markings.
Schedule 1: Maps	Map of active landfilling areas	Figure 2	New numbering.
N/A	Premises boundary coordinates	Table 10	Addition of GPS coordinate points for the premises boundary.

Existing condition	Condition summary	Revised Licence condition	Conversion notes
Schedule 2 Notification and forms	N1 form	Schedule 3: Notification and forms	N1 form updated into new format.

References

1. DER July 2015. *Guidance Statement: Regulatory principles*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au
2. DER, October 2015. *Guidance Statement: Setting conditions*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au
3. DER, August 2016. *Guidance Statement: Licence duration*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au
4. DER, November 2016. *Guidance Statement: Environmental Siting*, Perth, Western Australia. Accessed at www.dwer.wa.gov.au
5. DER, February 2017. *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth. Accessed at www.dwer.wa.gov.au
6. DWER, June 2019. *Guideline: Decision Making*. Department of Water and Environmental Regulation, Perth. Accessed at www.dwer.wa.gov.au
7. DWER, June 2019. *Guideline: Industry Regulation Guide to Licensing*. Department of Water and Environmental Regulation, Perth. Accessed at www.dwer.wa.gov.au