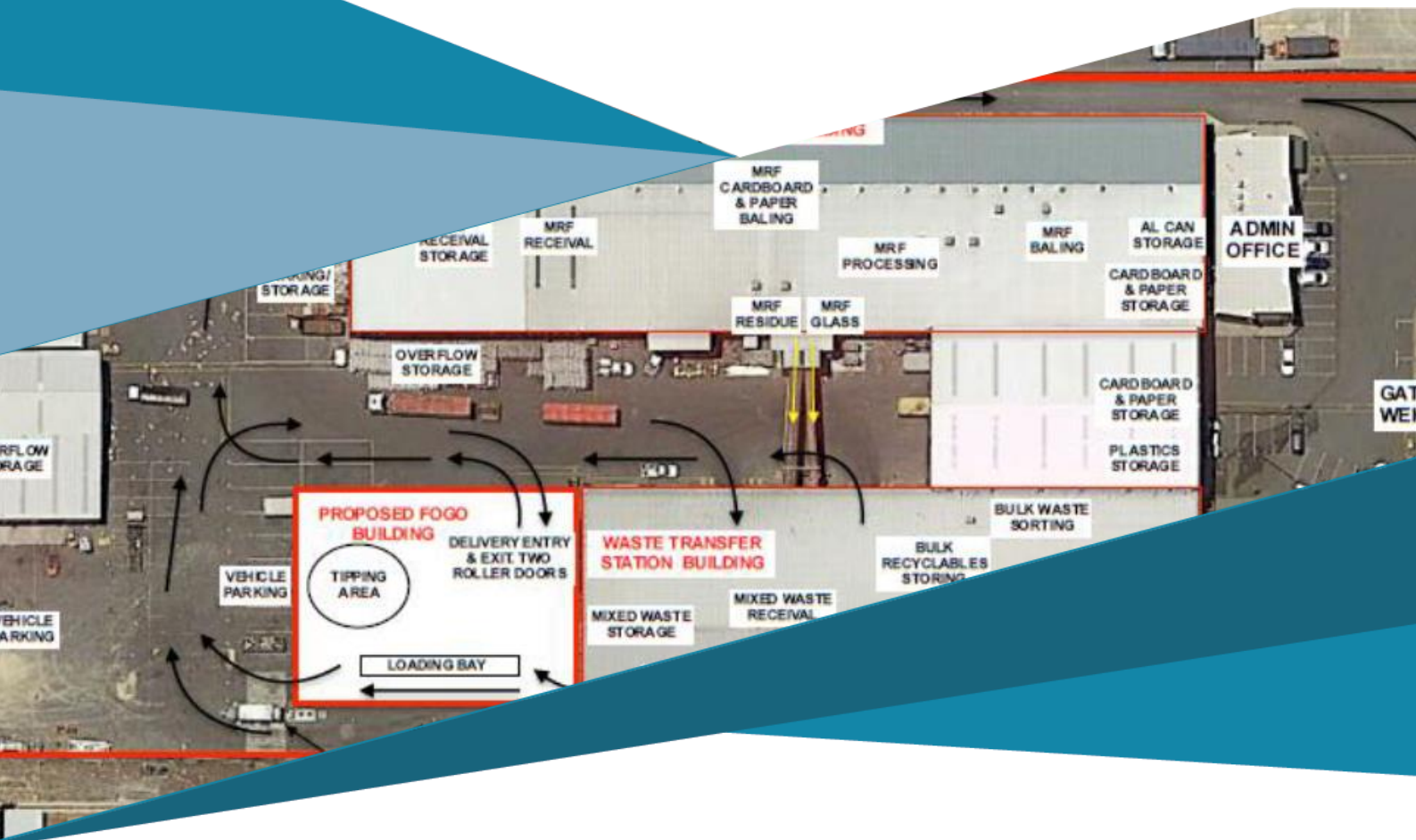




## Appeals Convenor's Report to the Minister for Environment

Appeal against Conditions of Works Approval W6539/2021/1  
Bibra Lake Recycling & Recovery Park, Bibra Lake



<b>Appellant</b>	PMR Quarries Pty Ltd t/a WA Limestone
<b>Instrument holder</b>	Suez Recycling & Recovery (Perth) Pty Ltd
<b>Authority</b>	Department of Water and Environmental Regulation
<b>Appeal No.</b>	055 of 2021
<b>Date</b>	May 2022

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**Acknowledgement of Country**

The Office of the Appeals Convenor acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders past, present and emerging.

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# 1 Executive summary

## 1.1 Decision under appeal

Suez Recycling & Recovery (Perth) Pty Ltd holds Works Approval W6539/2021/1 authorising the expansion of the solid waste facility at Bibra Lake Recycling and Recovery Park, 65 Howson Way, Bibra Lake, approximately 15 kilometres (km) south of Perth. Figure 1 below shows the location of the premises.

**Figure 1** Premises location



Source: whereis.com

The premises operates under licence L8798/2013/1, with capacity of no more than 200 used tyres (Category 57) and 270,000 tonnes per annum (tpa) of solid waste which is stored or sorted pending final disposal or re-use (Category 62), see Section 3.2 for further background information.

The Department of Water and Environmental Regulation (DWER) granted works approval W6539/2021/1 in November 2021, authorising construction works relating to the receipt, stockpiling and removal of up an additional 50,000 tonnes per annum (tpa) of food organics and garden organics (FOGO) material at the premises. The proposal will increase the premises production capacity for Category 62, to 320,000 tpa in total. During time limited operation of 180 days, the premises can accept 15,000 tonnes of FOGO material.

Construction authorised by the works approval relates to an extension to the western building on site for the purposes of handling FOGO waste. Construction activities include<sup>1</sup>:

- Tilt-up concrete walls
- Rapid closing doors
- Graded floor to sealed sumps
- Eight whirly bird ventilators
- Fire management infrastructure.
- Existing waste transfer building: two eastern roller doors will be replaced with rapid opening and closing doors.

<sup>1</sup> DWER (2021) Works approval W6539/2021/1.

Beyond the time-limited operation authorised by the works approval, the works approval holder will require further approval, in the form of an amended licence granted under Part V of the *Environmental Protection Act 1986* (EP Act), to authorise emissions associated with the continued operation of the FOGO facilities.

## 1.2 Grounds of appeal and appellant concerns

The appellant is PMR Quarries Pty Ltd t/a WA Limestone, operating several premises in the area, including three immediately adjacent to the premises.

Broadly the appellant submitted that odour emissions and litter were not being managed at the existing premises, and that DWER had failed to take this into consideration of its assessment of the works approval. The appellant challenged the adequacy of the risk assessment undertaken by DWER and considered that the conditions of the works approval were inadequate to control odour and fugitive litter emissions from the premises.

Noting the appeal right is limited to the conditions of the works approval, the appeal is considered to raise two grounds relating to odour emissions and litter. The appellant's concerns regarding the ongoing operation of the premises (complaints), cumulative impacts, consistency with guidance documents and the precautionary principle have been considered under the two main grounds of appeal.

Ground	Main concerns the appellant submitted, and outcome sought
Odour	Odour emissions have not been adequately assessed by DWER and controls to mitigate odour are insufficient. DWER did not consider complaints regarding the existing facility or cumulative impacts and its assessment was not consistent with relevant guidance documents. The appellant sought for further conditions to control odours and address uncertainties regarding potential odour impacts.
Litter	DWER did not consider wind-blown waste in its assessment and have not included conditions relating to management of litter on the works approval. Litter is inadequately managed at the current premises, and the expansion of the premises will increase the impacts, which are already unacceptable to surrounding land users. The appellant sought for the works approval to include conditions to manage litter.

The appellant also raised concerns about a previous amendment to the licence, which is outside the scope of appeal. This has been briefly addressed in Section 3.5 as 'other matters'.

## 1.3 Key issues and conclusions

From the appellant's concerns we have identified two issues at the heart of the appeal. We summarise our conclusions for these issues below. Section 2 of this report then details our reasoning and Section 3 provides supporting information.

### **Are odour emissions adequately managed by the conditions of the works approval?**

While overall our conclusion is that odour emissions have been adequately assessed by DWER, we accept that uncertainties remain regarding odour emissions from the FOGO waste. We understand that the odour field assessments to be conducted during time limited



operations will aim to clarify and inform the future licence of the whole premises. We note complaints data, DWER site investigations, compliance reporting and odour field surveys will be required to inform DWER decisions regarding implementation of additional controls, so that the amenity of other land users is not compromised.

Noting the importance of adequate information, we consider that amendments to the conditions of the works approval are required to strengthen data collection and reporting requirements during time limited operations, assisting informed decisions regarding future licence amendments. We also considered that building doors should be closed when not in use by vehicles, to help reduce potential odour emissions during time limited operations noting that was a key concern of the appellant regarding the existing premises.

On this basis, we have recommended that the appeal be allowed to the extent that conditions of the works approval are amended to:

- Include a requirement to record the GPS location and date when undertaking the odour field surveys.
- Ensure that building doors remain closed at all times unless vehicles are entering or exiting the building to deliver or remove waste.
- Require monitoring and recording of each load of FOGO waste received and removed from the premises.
- Require the report on time limited operations, to include a summary of the complaints received and also the volumes of FOGO accepted and removed from the facility.

In relation to existing complaints, we understand that DWER has added the premises to the next compliance inspection program schedule.

### **Is litter adequately managed by the conditions of the works approval?**

We note that DWER did not assess litter in its Decision Document. In response to the appeal, DWER presented its risk assessment of wind-blown wastes, which determined a risk rating of Low. We consider this assessment to be reasonable noting the waste characteristics and the operational controls that have been proposed (condition 6 of the works approval).

We understand that the appellant's concerns have originated from current activities at the site, authorised under the existing licence (L8798/2013/1). We understand that the licence has requirements relating to management of wind-blown waste. While compliance with the licence is outside of the scope of the appeal which relates to the works approval, DWER has been made aware of these concerns and the appellant is encouraged to lodge future complaints with DWER.

In the assessment of the future licence amendment application, we note that DWER will assess the activities undertaken under the works approval and review the effectiveness of the current licence conditions that relate to wind-blown waste and apply controls where required.

## 1.4 Recommendation to the Minister

We recommend that the appeal be allowed to the extent that the conditions of the works approval are amended as follows:

1. Condition 12 is amended to include **condition 12(g) A summary of complaints received under condition 13.**
2. GPS coordinates and the date should be included in condition 10 as follows : ...
  10. An OFA report prepared pursuant to condition 9 is to include: ...
    - (c) the following details for each single measurement: ...
      - (ii) location (**GPS coordinates**), **date** and time; ...
3. Condition 6 (Table 2), which relates to operation of infrastructure at the building extension, is amended to include: **Ensure that building doors remain closed at all times unless vehicles are entering or exiting the building to deliver or remove waste.**
4. The time period in Condition 8 (Table 4), is amended to: **During time limited operations and at a frequency of each load arriving at the premises.**
5. New condition is added to the works approval under the heading 'Monitoring during time limited operations' to record FOGO leaving the premises:

**The works approval holder must record the total amount of waste removed from the premises, for each waste type listed in Table 5, in the corresponding unit, and for each corresponding time period set out in Table 5.**

**Table 5: Waste removed from the premises**

Waste type	Unit	Time period
Food organics and garden organics (FOGO)	Tonnes	During time limited operations and at a frequency of each load leaving the premises

6. In order that the above information is reported to DWER, it is recommended that condition 12(b) is amended to also include a summary of the waste volumes removed.

It is otherwise recommended that the appeal be dismissed.

If the Minister agrees with this recommendation, the exact wording of the conditions is a matter for DWER when giving effect to the Minister's decision under section 110 of the Act.

## 2 Reasons for recommendation

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### 2.1 Are odour emissions adequately managed by the conditions of the works approval?

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While overall our conclusion is that odour emissions have been adequately assessed by DWER, based on the available evidence, we consider that amendments to the conditions are required to strengthen data collection and reporting requirements which will ensure informed decisions regarding future licence amendments. We also recommend that building doors should be closed when not in use by vehicles, to help reduce potential odour emissions. We explain the reasons for our recommendations below.

#### Appellant's concerns

The appellant considered that conditions 1 and 9 of the works approval are not sufficient to manage odour emissions from the premises on the basis that:

- Odour complaints: complaints have been lodged with the proponent regarding odour emissions from the existing premises which have not been taken into consideration for the works approval.
- Odour assessment: cumulative impacts were not considered. The assessment of odours was inadequate and applicable guidance documents were not adhered to.
- Conditions of the works approvals: the infrastructure requirements are inadequate to control odour emissions and prevent impacts to human health. The precautionary principle should be applied requiring further infrastructure as the Air Quality Science Branch had reservations regarding the management of odour.
- Odour monitoring: the odour monitoring required is subjective and has not considered complaints that have been submitted to the proponent to date in relation to the existing licence. Current odour emissions from the premises are not controlled and surrounding businesses experience regular and obvious odour emissions from the proponent's existing operations.

#### Odour Complaints

Fundamental to its appeal, the appellant asserted that the poor management of odour emissions from the existing premises have not been considered by DWER or the proponent in expanding this facility through the works approval. The appellant provided numerous complaints from 2020 to 2022 that had been sent to the works approval holder.

In response, DWER advised that the premises is currently licensed as a Category 57 and 62 prescribed premises, being a waste transfer station accepting tyres, mixed domestic waste, construction and infrastructure waste and recyclables under Licence L8798/2013/1. Condition 3 of the Licence requires that: *The licence holder shall ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort, or amenity of any person who is not on the premises.*

DWER advised that matters of compliance with the licence are managed separately by in accordance with DWER's *Compliance and Enforcement Policy* (2021). We understand that the premises was last inspected by DWER as part of the Landfill levy program on 22 May 2020 and DWER advised that no issues were identified at the time of the inspection with respect to the conditions referenced above.

With respect to complaints that have been lodged by the appellant, the DWER advised that since 2017 it has received one complaint only, from a member of the public. This complaint



(Ref: ICMS 60946) was received on 19 March 2021. DWER advised that it is not aware of any other complaints relating to the premises, including those referenced in the appeal.

Notwithstanding, DWER acknowledged the appellant's concerns and based on the intelligence provided, premises will be added to the next compliance inspection program schedule. We note that condition 18 of the licence, requires the licence holder to record complaints.

In responding to the appeal, DWER encouraged the appellant to report any complaints through the online reporting form at [www.der.wa.gov.au/your-environment/reporting-pollution](http://www.der.wa.gov.au/your-environment/reporting-pollution) to assist DWER in understanding the frequency and nature of impacts that the appellant experiences.

DWER referred to the *Compliance and Enforcement Policy (2021)*: *The Department will receive, record and acknowledge all reports, and assess the risk posed to public health, the environment and water resources. Based on this assessment, the department will determine an appropriate level of response. In line with its compliance priorities, resources are allocated according to risk. The department's compliance activities are aimed at protecting public health, the environment and water resources. Compliance information will be monitored and analysed. Where appropriate, it will drive regulatory changes such as licence amendments and improvements to policies and plans.*

In relation to this works approval, we note that condition 13 of the works approval requires that the works approval holder maintains a record of any complaints received during commissioning and time limited operations.

DWER advised that it will utilise information obtained during time limited operations (e.g., odour field assessments) to review the appropriateness of the works approval's controls and inform the need for further controls on the licence if risk is determined to be greater than previously determined. We consider that it is important that DWER also considers any complaints made during time limited operations when revisiting the risk assessment for ongoing operations.

To ensure that any complaints are used to inform the assessment of odour management methods, we recommended that the compliance report required under condition 12 (see section 3.3 for full condition), is amended to include condition 12(g) a summary of complaints received under condition 13. In relation to existing complaints, we understand that DWER has added the premises to its next compliance inspection program schedule.

## **Cumulative Impacts**

The appellant considered that DWER should have assessed the cumulative emissions from this premises and the works approval holder's nearby organic waste facility (450 metres east from the premises, Licence L8127/2006/3). The appellant considered that this approach would be consistent with the DWER (2019) Guideline: Odour emissions, EPA (2016) Environmental Factor Guideline: Social Surroundings and DWER (2018) Regulatory best practice principles (2018).

As DWER (2019) Guideline: Odour emissions, states, 'this Guideline aligns with the EPA's Environmental Factor Guideline – Social Surroundings', the appellant considered that cumulative impacts of the two facilities should have been assessed by DWER. In response DWER considered that the EPA's guideline promotes an objective to 'protect social surroundings from significant harm', recognising the importance of ensuring that social

surroundings are not significantly affected through the implementation of a proposal or scheme under Part IV of the EP Act.

In asserting that cumulative impacts should have been considered, the appellant also referred to DWER (2018) Regulatory best practice principles, where principle 1 states 'DWER will make regulatory decisions proportionate to the level of risk posed to public health, the environment and water resources with consideration of cumulative impacts'.

In response, DWER advised that this principle is regarded in the context of risk, whereby DWER regulates to ensure there is not an unacceptable risk of harm to public health or the environment. In the context of this document, DWER advised that cumulative impacts relate to emissions to the environment in a particular receiving environment, rather than the cumulative activities of a number of premises occupied by an individual works approval holder.

DWER advised that cumulative impacts were considered in the context of the combined odour emissions resulting from the existing activities and proposed activities. DWER considered that the combined emissions are mitigated through the controls specified for the premises, which are proportionate to the level of risk posed to the environment and public health resulting from the FOGO activities.

Condition 10(e) of the works approval, which relates to the submission of the Odour Field Assessment (OFA) report, requires map(s) depicting the assessment area, odour sources at the premises and other potential odour sources (if relevant). Furthermore, condition 9 of the works approval requires the OFAs to be consistent with the DWER Guideline: Odour Emissions, which sets out requirements for consideration of cumulative impacts. Therefore, we anticipate that the OFA assessment will identify other sources if they are considered relevant.

### **Odour Risk Assessment**

The appellant was of the view that DWER's assessment of odour emissions was insufficient as it was not consistent with relevant guidance documents and did not include relevant analysis scenarios.

Specifically, the appellant asserted that DWER's assessment should be consistent with EPA (2005) Guidance for the Assessment of Environmental Factors Separation Distances between Industrial and Sensitive Land Uses and DWER (2019) Guideline: Odour emissions.

In response, DWER advised that as outlined on the EPA website, Guidance Statement 3 provides advice on the use of generic separation distances (buffers) between industrial and sensitive land uses to avoid conflicts between incompatible land uses.

We understand that DWER follows a risk-based approach in the assessment of the application for the works approval consistent with its Guidance Statement: Risk Assessments, Part V, Division 3, *Environmental Protection Act 1986* (2017) and the Guideline: Odour Emissions (2019). DWER acknowledged that for this premises the receptors occur within an industrial area context and therefore impacts considered to be reasonable, are higher than they would be for a residential area.

In the Decision Report, DWER identified the sources of odour emissions to be the receipt, short-term handling for FOGO, FOGO waste to transfer offsite, with air/windborne pathway causing impacts to health and amenity. The following human and sensitive receptors were identified by DWER for the purpose of assessing odour emissions:

- Industrial and commercial premises including cafes and recreation centres – Immediately adjacent along all boundaries. Nearest café located 400 m south-west.
- Residential subdivision – 1 km from the premises boundary Spearwood north-west and south-east.

The Decision Report also details the proponent's proposed controls relating to odour emissions, which include (see Section 3.2 for full list):

- FOGO handling will occur within a purpose-built fully enclosed extension.
- Automated rapid closing doors and building doors to one door open at a time.
- No sorting or decontamination will occur at the premises.
- Minimised stockpiles with reduced surface area.
- Eight whirly bird ventilators within the roof structure to enable the release of air to minimise external odour spikes.
- Regular washing down of the tipping floor to remove organic waste build-up on the concrete floor.

The OPAM odour assessment report (OPAM Consulting, 2021) advises that the current premises appears to have an odour footprint of about 600 to 700 m which is greater than the recommended distance of 200 m. The odour assessment also stated that no complaints had been received in relation to odour emissions (note: the complaints reporting has been discussed in detail earlier in this report).

In assessing odour emissions risks relating to the works approval application, DWER considered the information within the OPAM report and updated proposal information (following a request for further information on 9 August 2021) provided by the works approval holder. DWER sought technical advice from the Department's Air Quality Sciences Branch. A summary of the key advice is outlined below:

- Three elements of the proposal are key to reducing the emission of odour sources from the FOGO waste storage and handling activities. These include:
  - reduction of proposed volumes of FOGO materials from 100,000 tpa to 50,000 tpa;
  - implementation of a staged approach to increasing FOGO waste over a number of years, allowing time for feedback from the community stakeholders in relation to potential odour emissions; and
  - a commitment to install further controls on the FOGO waste handling shed including an active air extraction system and roof-top stack if odour impacts are different to those that have been predicted.
- The inclusion of additional controls by installing whirly bird ventilation within the roof structure (in-place of the originally proposed continuous ridge ventilation) to enable passive, wind-driven ventilation was noted, however, the impact of this change on the reduction of emissions is difficult to assess without further detailed information.
- The effectiveness of fast-acting doors as an odour containment measure in the absence of any active building air extraction and odour control systems is not clear.
- Further controls may be required to be operated in conjunction with the fast-acting doors to reduce the odour emissions from the existing (non-FOGO) operations to levels that are reasonable at neighbouring commercial/industrial receptors.

We understand that the volumes of FOGO to be accepted has been significantly reduced from initial volumes of 100,000 tpa. The proponent has advised of the following approximate volumes: 10,000 tpa (2022), 15,000 tpa (2023), 25,000 tpa (2024) and 40,000 to 50,000 tpa (2025). During time limited operations (180 days) authorised by this works approval, condition 7 restricts the waste acceptance to 15,000 tonnes.

Based on this information, we note that the Delegated Officer determined the consequence of odour emissions from the proposal to be Major (potential high-level impact to amenity at the local scale) while the likelihood of the risk event occurring was found to be Possible. The resulting risk rating was deemed by DWER to be High. DWER stated that the risks of emissions from prescribed premises were assessed in accordance with the Guideline: Risk Assessments (DWER, 2020).

The appellant contended that DWER had failed to consider that the expanded facility will generate increased emissions above the current odour emitted from existing premises. In response, DWER acknowledged the difficulty in extrapolation of existing odour footprints in considering changes or increases to waste throughput at waste facilities, and that the nature of predictive odour impact assessments always include a degree of uncertainty.

DWER also acknowledged that there was uncertainty relating to the predictability of actual odour emitted by the FOGO waste, due to: variance in decomposition rates and waste composition (e.g., amount of putrescible food waste relative to garden waste); and variance in meteorological conditions (e.g., wind direction and temperature). DWER considered that these variables potentially affect the intensity of odour sources and the nature of the pathway between source and receptor.

Notwithstanding the uncertainty presented by the odour assessment (discussed above), and the predictability of odour source characteristics and the nature of the pathway, DWER advised that the premises did not necessarily present an increased risk of odour emissions from the proposed operations, compared to current activities at the premises.

Noting the uncertainty in relation to odour emissions, DWER applied conditions to the works approval that aim to monitor, understand and manage odour emissions (discussed in detail below) during time limited operations. With regards to odour complaints from the existing premises, we would encourage the appellant to formally submit any complaints to DWER for investigation.

We understand that DWER will revisit the risk assessment as part of the licence amendment application which will include consideration of the odour field surveys and any complaints received. We note that this may require additional controls to ensure that odour levels that are reasonable at neighbouring commercial/industrial receptors. The works approval holder is aware of these potential additional measures, as highlighted in its commitments in the Decision Report.

## **Conditions of Works Approval**

In determining conditions on the works approval, DWER advised that it sought to validate some of the assumptions made in the OPAM report and the controls proposed in the application. Based on the Decision Report, we understand that the following conditions relate to the management of odour in the works approval:

- Condition 1: design and construction / installation requirements, including rapid opening/closing doors, eight whirly bird ventilators within the roof structure and replacing two eastern roller doors in the existing waste transfer station with rapid opening and closing doors.

- Conditions 2 and 3: compliance reporting relating to condition 1.
- Condition 6: Infrastructure FOGO waste must be removed as soon as possible, within 24 hours or 48 hours in the event of a public holiday, putrescible waste is not to be stored onsite for longer than 48 hours.
- Conditions 7 and 8: limited to 15,000 tonnes of FOGO during time limited operations.
- Conditions 9 and 10: the requirement to conduct odour field assessments (OFAs) during time limited operations. A minimum of three OFAs will be required to characterise odour plume extents in the directions of receptors most likely to be impacted by odour during meteorological and operational conditions that are most likely to cause impacts at these receptors. Following the completion of the OFAs, an OFA report will be required to be submitted to DWER to providing details and results of the assessment.
- Conditions 11 and 12: compliance reporting, including conditions 8 and 10.
- Conditions 13 to 15: records and reporting (general), including complaints.

#### Conditions 1, 9 and 10: Odour Modelling and Infrastructure

The appellant contended that there was no evidence that the proposed controls (condition 1 (Table 1)) would prevent excessive waste odour from escaping the proposed FOGO building and existing premises and therefore the precautionary principle should be applied.

The appellant also objected to the use of OFAs (condition 9) on the basis that odour is subjective, and odour monitoring may not be sufficient to verify the minimal controls proposed by the works approval holder. In this regard DWER advised that OFAs have been a useful ongoing monitoring tool for other licensed waste facilities in both metropolitan and regional areas. The need for OFAs as an ongoing validation and monitoring tool will be considered by DWER as part of the subsequent licence amendment process for the premises, expected to occur following the commencement of time limited operations.

If the implementation of these conditions (including the OFAs) during time limited operations, finds that the controls are inadequate to control odour emissions, DWER can implement further regulatory controls as part of the licence application assessment, which may include infrastructure, equipment and process management upgrades and improvements.

DWER considers that the proposed operational controls and regulatory controls within the works approval are sufficient to mitigate the risk of unreasonable odour during time limited operations, noting that the OFAs will be undertaken to verify this determination.

We considered that the verification of odours through time limited operations (180 days with a throughput of 15,000 tonnes) to be reasonable on the basis that DWER will consider complaints data, DWER site investigations and the odour field assessments to inform DWER decisions regarding implementation of additional controls if required.

To provide clarity around the data collected in the OFAs it is recommended that condition 10, which requires an OFA report prepared pursuant to condition 9, is amended (in bold) as follows:

10. An OFA report prepared pursuant to condition 9 is to include: ...
  - (c) the following details for each single measurement:
    - (i) odour intensity levels and odour characters;
    - (ii) location (**GPS coordinates**), **date** and time;



- (iii) field survey odour panellist identification; and
- (iv) details of waste storage volumes held and/or transferred through the site during the assessment period.

The appellant noted that the DWER Odour Guideline for Prescribed Premises states 'Applicants are encouraged to consider a range of odour control technologies and management to mitigate the impact of odour from their operations.' The appellant also noted DWER Air Quality Sciences Branch's reservations about the proposed management measures including:

- Further controls may be required to be operated in conjunction with the fast-acting doors to reduce the odour emissions from the existing (non-FOGO) operations to levels that are reasonable at neighbouring commercial/industrial receptors.
- The effectiveness of fast-acting doors as an odour containment measure in the absence of any active building air extraction and odour control systems is not clear.

We consider that complaints data, DWER site investigations and the odour field assessment collected post-commissioning, can inform DWER decisions regarding implementation of additional controls if required. We also note that Air Quality Science Branch have been involved with the requirements of the OFAs and presume this would continue in the assessment of the OFAs and recommending any future controls.

The appellant also raised concerns that the heavy haulage entrance at the existing waste transfer station building is a direct source of odour emissions. We understand that the two eastern roller doors in the existing waste transfer station will be replaced with automated rapid opening and closing doors (condition 1).

In responding to the appeal, DWER advised that the operation of rapid operating doors will significantly decrease the airflow released from the building through the door openings, in turn reducing the likelihood of odour emissions affecting the identified receptors due to the pathway existing only during those times when a door is open.

We note that the works approval limits building doors to one door open at a time within the building extension (condition 6). Noting the importance of the doors, and the expectation that doors would only be open for vehicle movements, it is recommended that the condition 6 (Table 2) of the works approval is amended to include the requirement: **Ensure that doors must remain closed at all times unless vehicles are entering or exiting the building to deliver or remove waste.**

#### Conditions 6 to 8: Management of FOGO materials

The appellant questioned whether the storage of materials in the summer had been considered in the odour assessment, specifically when temperatures are higher, and decomposition can be accelerated releasing odours.

The OPAM report identified that stockpiles may be abnormally odorous following a period of high temperature, which may cause faster degradation of the organic material. In this case, additional transfer trailers will be organised by the operator to remove the whole waste mass offsite as soon as possible.

The Decision Report identified the removal of waste as soon as possible as a control for odour emissions. We note that condition 6 (Infrastructure and equipment requirements during time limited operations), requires that FOGO waste must be removed as soon as possible, within 24 hours or 48 hours in the event of a public holiday, putrescible waste is not to be stored onsite for longer than 48 hours.

Conditions 7 and 8, limit the receipt of 15,000 tonnes of FOGO during time limited operations. However, in relation to recording volumes and timing of waste material arriving at the premises, it is noted that condition 8 does not state the frequency of monitoring only that the time period is during time limited operations (180 days). Such information is important for both the OFAs and for verification of condition 6 (waste must be removed within 24 to 48 hours).

We note that condition 8 states:

**Monitoring during time limited operations**

- 8. The works approval holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 4, in the corresponding unit, and for each corresponding time period, as set out in Table 4.

**Table 4: Waste accepted onto the premises**

Waste type	Unit	Time period
Food organics and garden organics (FOGO)	tonnes	During time limited operations

We also note that the works approval does not require a record of the waste leaving the premises. Again, we consider that it would be difficult to determine if the waste materials had been on site for longer than 24 hours based on the absence of this data. Such data would also be important for interpretation of the OFAs.

Therefore, to strengthen the data collection regarding FOGO wastes entering and leaving the premises, we recommend that:

- The time period in Table 4, is amended to During time limited operations and at a frequency of each load arriving at the premises:

**Table 4: Waste accepted onto the premises**

Waste type	Unit	Time period
Food organics and garden organics (FOGO)	Tonnes	During time limited operations <b>and at a frequency of each load arriving at the premises</b>

- A new condition is added under the heading ‘Monitoring during time limited operations’:

**The works approval holder must record the total amount of waste removed from the premises, for each waste type listed in Table 5, in the corresponding unit, and for each corresponding time period set out in Table 5.**

**Table 5: Waste removed from the premises**

Waste type	Unit	Time period
Food organics and garden organics (FOGO)	Tonnes	During time limited operations <b>and at a frequency of each load leaving the premises</b>

In order that the above information is reported to DWER, it is recommended that condition 12(b) is amended to also include a summary of the waste removed under the new recommended condition above.

## 2.2 Is litter adequately managed by the conditions of the works approval?

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Our conclusion is that based on the available evidence, we accept DWER's advice that wind-blown wastes are not anticipated to be an issue for FOGO waste materials and find that the operational controls that are required by the works approval are adequate. We explain our reasons below.

### Appellant's Concerns

The appellant objected to the lack of conditions on the works approval to control litter emissions from the premises. The appellant submitted that litter escapes from the open doors at the existing premises and accumulates along nearby fence lines. The appellant considered that this increase to the throughput as proposed in the works approval, would increase litter escaping the premises, which is impacting the human health of surrounding land users, noting that birds are attracted to the litter.

The appellant considers that the existing premises is not complying with L8798/2013/1 (condition 9) and that complaints made to the works approval holder have not been addressed.

### Assessment and Management of Litter

#### Works Approval

In response, DWER acknowledged that the assessment of risk relating to wind-blown waste was not documented within the Decision Report.

In accordance with Guidance Statement: Risk Assessments, Part V, Division 3, *Environmental Protection Act 1986 (2017)*, DWER identifies risk events have the potential to occur where a receptor can be exposed to the emission through an identified actual or likely pathway. Had wind-blown waste been documented as a potential risk event in relation to expanded FOGO operations, DWER advised that the consequence would be considered Minor, with low level impact to amenity at a local scale, and the likelihood would be considered Rare, with the risk event only occurring in exceptional circumstances given the waste characteristics and the nature of the operational controls that have been proposed. DWER advised that the risk rating is then determined as Low, whereby the risk event is acceptable and generally not be subject to regulatory controls.

With respect to the specific activities proposed in the works approval application, DWER considered that the introduction of FOGO waste would not create a source for wind-blown waste to a receptor. DWER considered that excessive litter generation from FOGO waste was unlikely due to the composition of the FOGO waste as compared to general putrescible waste. DWER advised that FOGO waste comprises organic food waste and lawn clippings, garden pruning, leaves and weeds and flowers, rather than packaging, papers and other light density materials that are prone to being moved by wind.

We note that condition 6 of the works approval requires that the building extension and vehicles used for FOGO waste handling are maintained and operated in accordance with the operational requirements set out in Table 2. This specifies that FOGO waste must be stored and sorted only within the waste transfer building extension, with all FOGO waste to be received on-site in sealed, compactor vehicles and transfer vehicles removing FOGO to be covered prior to exiting the extension.

As discussed in Section 3.1, no more than one building door (within the extension) is permitted to remain open at any one time, with the building doors comprising automated

rapid opening and closing doors. DWER advised that this significantly reduces the outward-bound airflow through the building, thereby reducing the potential to create a pathway to the receptor. We also note that in relation to odour emissions discussed under Section 2.1, we have recommended that doors are closed when not in use by vehicles entering and leaving the building.

Based on the low expectation for litter emissions from the FOGO waste and the operational controls in the works approval, DWER's rationale for not requiring additional conditions on the works approval appears reasonable.

#### Existing Premises (Licence)

With respect to wind-blown risk events produced through current activities at the existing premises, condition 9 of the existing licence (L8798/2013/1) states:

The licence holder shall take all reasonable and practical measures to ensure that no wind-blown waste escapes from the premises and that wind-blown waste is collected on at least a weekly basis, and appropriately contained.

Matters of compliance with the existing licence for the premises, including wind-blown litter emissions, are managed separately by DWER in accordance with its Compliance and Enforcement Policy (2021). In its assessment of the future licence amendment application following time limited operations, DWER advised that it will assess the activities undertaken under the works approval and review the effectiveness of the current licence conditions that relate to wind-blown waste. DWER considered that where there is evidence of non-compliance, further regulatory controls being applied at the time of assessment.

In response to the appeal, the works approval holder has advised that it is undertaking the following to control litter emissions at the existing premises:

- construction of a purpose-built fence (170 by 6 m high), replacing standard 2.1m high chain-link fencing.
- picking up litter from around the site daily, including from neighbouring sites if required.
- operational and environmental staff conduct regular site inspections which includes litter and odour monitoring.
- in addition to the fast action rapid doors being installed as part of Works Approval W6539/2021/1, four additional fast action rapid doors to retrofit on existing sheds to minimise wind-blown litter and odour during operating hours. These are expected to be installed before end of June 2022.
- Sweeping of the facility using a modified street sweeper unit (minimum once per week).

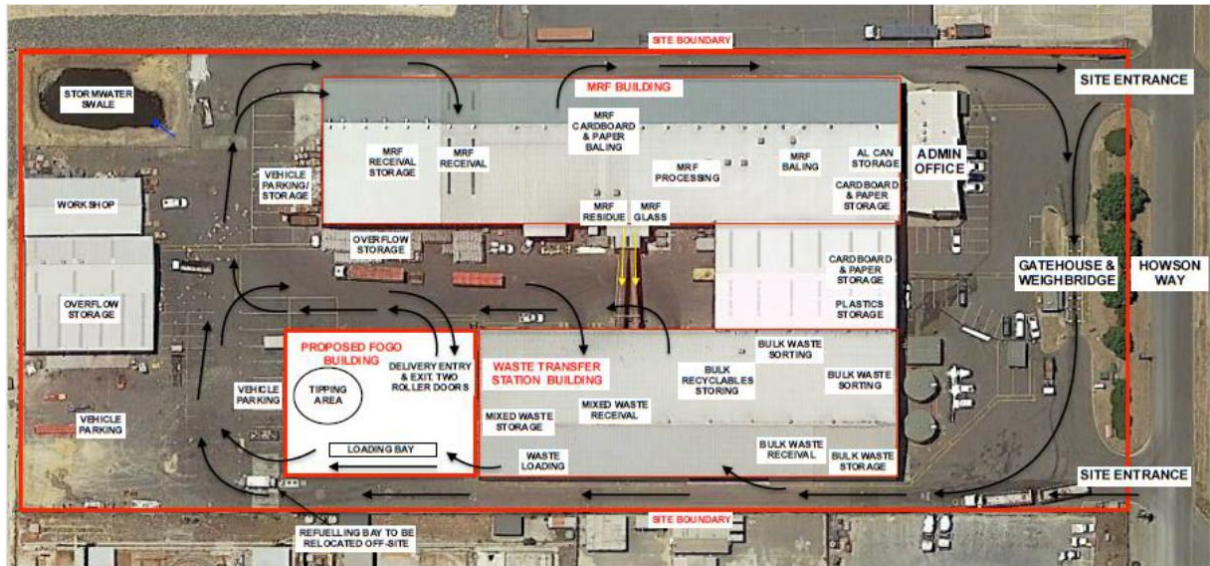
As these matters do not relate to the works approval they are not discussed further.

### 3 Supporting information

#### 3.1 Site layout

Figure 2 below shows the layout of the premises, the red line shows the premises boundary.

**Figure 2** Site Layout



#### 3.2 Background

The works approval holder operates a resource recovery facility on Lot 27 on Plan 3699, 65 Howson Way, Bibra Lake. The premises is approximately 15 km south of Perth and is currently licensed as a Category 57 and Category 62 waste transfer station accepting tyres, mixed domestic waste, construction and infrastructure waste and recyclables (Licence L8798/2013/1). The assessed design capacity for activities relating to Category 62 on the licence is 270,000 tonnes of solid waste per annual period (tyres: has a separate limit of 200 tyres stored on-site at any one time).

We note that Decision Report for the existing licence L8798/2013/1, assessed impacts from odour and found the consequence to be Minor, the likelihood to be Rare, with an overall risk rating of Low. On this basis no specified conditions for odour were included on the licence.



### 3.3 Proposed applicant controls

The Decision Report for the works approval, noted the following proposed controls for odour emissions<sup>2</sup>:

Sources	Emission	Potential pathways	Proposed controls
<b>Construction</b>			
Construction of tied-in industrial building	Dust	Air/windborne pathway	Wetting down where necessary.
	Noise		No specific controls proposed.
<b>Operation</b>			
Receipt, short-term handling for FOGO, FO and GO waste to transfer offsite	Odour	Air/windborne pathway	<p>FOGO handling will occur within a purpose-built fully enclosed extension.</p> <p>FOGO will be received on-site in sealed, compactor vehicles and transfer vehicles removing FOGO will be covered prior to exiting the extension.</p> <p>Automated rapid closing doors.</p> <p>Replacing two eastern roller doors in the existing waste transfer station with rapid opening and closing doors.</p> <p>Limiting building doors to one door open at a time.</p> <p>Operating hours: 6:00am-5:00pm on weekdays and 6:00am-1pm on Saturdays.</p> <p>No sorting or decontamination will occur at the</p>
			<p>Premises.</p> <p>Waste to be removed as soon as possible, within 24 hours or 48 hours in the event of a public holiday.</p> <p>Minimised stockpiles with reduced surface area.</p> <p>Eight whirly bird ventilators within the roof structure to enable the release of air to minimise external odour spikes.</p> <p>Regular washing down of the tipping floor to remove organic waste build-up on the concrete floor.</p> <p>In the event that concerning odour emissions are identified, a third-party audit will be carried out.</p> <p>In the event that excessive odour emissions are identified, material will be immediately removed from site and odour suppressors or deodorizers will be sprayed on the tipping floor.</p> <p>In the event that the operation of the FOGO facility results in unacceptable odour emissions in the future, SUEZ will implement an active air extraction system whereby the air is extracted out of the building and expelled via a tall stack.</p>

<sup>2</sup> Adapted from DWER (2021) Decision Report for Works Approval W6539/2021/1

### 3.4 Conditions of works approval

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Section 2.1 (Odour Complaints) discussed condition 12, which is presented as follows in the works approval:

12. The works approval holder must ensure the report required by condition 11 includes the following:
- (a) a summary of the time limited operations;
  - (b) a summary of waste acceptance volumes under condition 8;
  - (c) the OFA report as specified in condition 10;
  - (d) a summary of the environmental performance of all infrastructure as constructed or installed;
  - (e) a review of performance and compliance against the conditions of the works approval; and
  - (f) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

### 3.5 Other matters

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The appellant also raised a concern that a licence amendment, to increase waste acceptance from 120,000 tpa to 270,000 tpa was not assessed by a works approval and an odour assessment not undertaken.

DWER advised that this matter is not within the scope of the works approval determination that forms the subject of this appeal. For context however, DWER advised that the scope of that licence amendment did not involve construction of infrastructure, and the types of waste received differ from that assessed for the works approval that is the subject of this appeal. DWER advised that the additional waste proposed to be received comprised recyclable materials, which are not considered to be high risk sources of odour emissions.

## Appendix 1 Appeal process

### The Minister assesses the merits of a decision

Environmental appeals follow a merits-based process. This means the Minister can consider all the relevant facts, legislation and policy aspects of the decision and decide whether it was correct and preferable.

However, for appeals relating to a works approval, the Minister considers the conditions applied to the works approval, and whether they are adequate or appropriate for the control abatement or mitigation of pollution and potential environmental impacts of the design and construction of the facility.

A merits review cannot overturn the original decision to grant a works approval. But if the appeal is upheld, the licence conditions might change.

### We report to the Minister, as does the decision-making authority

To decide an appeal's outcome, the Minister for Environment must have a report from both:

- the Appeals Convenor [see section 109(3) of the EP Act], and
- the authority that originally made the decision under appeal [see section 106(1)].

To properly advise the Minister in our report, our investigation included:

- a review of the appeal and additional information provided by the appellant
- a review of the works approval holder's response to the appeal
- a review of the works approval and DWER's decision report.
- a review of the section 106 report from DWER
- reviewing other information, policy and guidance as needed
- onsite meetings with the appellant and works approval holder

**Table 1** Documents we reviewed in the appeals investigation

Document	Date
Appellant, supplementary information regarding complaints	Various 2020–2022
DWER, Decision Report Works approval W6359/2021/1	24 November 2021
DWER, Works Approval W6539/2021/1	24 November 2021
DWER, Guideline: Risk assessments, Part V, Division 3, <i>Environmental Protection Act 1986</i>	February 2017
DWER, section 106 response to the appeal	1 March 2022
DWER (2019) Guideline: Odour emissions	June 2019
EPA (2016) Environmental factor guideline: Social surroundings	December 2016
EPA (2005) Guidance for the Assessment of Environmental Factors: Separation Distances between Industrial and Sensitive Land Uses	June 2005
OPAM Consulting (2021) Bibra Lake Recycling and Recovery Park Works Approval Application – FOGO Reveal and Transfer. Odour Risk Assessment. April 2021	April 2021