

Awaba Organics  
Resource Recovery  
Facility (ORRF)  
Modification  
(Windrow Turning)  
DA/1940/2013/B



# Existing operation

Existing facility consists of the following:

- Internal access road
- Weighbridge, car park, office, education centre and amenities
- Organics receival hall
- Tunnel modules and biofilter
- Aerated Static Pile (ASP) and Static Pile (SP) composting areas
- Compost storage, screening and product loading areas
- Leachate holding and treatment dam
- Approved capacity of 44,000 tpa



6/04/2022



# Background

Date approved	DA number	For
26 June 2014	DA/336/2013	Earthworks and Clearing for ORRF (Stage 1 Works)
9 October 2014	DA/1940/2013	Construction and operation of the ORRF
5 May 2015	DA/336/2013/A	Earthworks and Clearing for the ORRF (Stage 1 Works) - Amendment
13 October 2016	DA/336/2013/B	Earthworks and Clearing for the ORRF (Stage 1 Works)
11 September 2017	DA/1940/2013/A	Modification to increase the capacity of the ORRF from 30,000 to 44,000 tonnes per annum, and to change the technology used at the ORRF.

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# Proposal overview



- Current constraints related to the effective operation of Mobile Aerated Floor (MAF) system, particularly in regard to odour
- Disassembly of MAF
- Existing organic material relocated from the existing piles to a new triangle-shaped open windrow to suit a windrow turner.
- Curing pad would accommodate up to 10 windrows (6m wide x 90m long) and 5 windrows (6m wide x 50m long).
- Receiving, decontamination, shredding and the first phase of composting remain unchanged.

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## Proposal details

- Turning of a windrow several times a week, dependant upon weather conditions, temperature and moisture content;
- Turning frequency reduces as composting process reaches and progresses through to maturation
- Moisture can be added to reduce dust.
- Windrows monitored for temperature and moisture content
- Depending on the length, density, moisture content and water demand, a windrow turning event will take approximately 10 minutes.



## Air quality/ odour / dust

- Odour assessment included review of 2016 and 2019 odour reports.
- Windrow turner will achieve a reduction in odour generation compared to ASP and SP due to improved aeration and process control.
- Proposal expected to facilitate an improved environmental outcome, particularly surrounding odour emissions, through improved capability and capacity in process control and windrow stockpile management relative to current conditions.
- The expected overall site-wide reduction in odour emissions is expected to be up to 41% better than existing operation.
- Dust impact – intended to be managed as part of Conditions 14 and 31 of Development Consent DA/1940/2013/A.

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# Noise

- Existing MAF fans would be replaced with a windrow turner as part of the proposed modification.
- Nearest receivers
  - ✓ Residential receivers 1.1km 77east of the site on Clover Close within the Leisure Life Village in Toronto.
  - ✓ Non-residential receivers: Awabawac Park (passive recreation) 380m south, Newcastle Lake Macquarie Clay Target Club (active recreation) 790m south-east, Toronto Seventh-day Adventist Church (place of worship) 940m east and Toronto Adventist Primary School (educational institute) 950m east
- Modelling shows proposal is expected to increase noise levels by up to 5 dBA at nearest receivers.
- However predicted noise levels are below the operational noise criteria during all assessment periods.

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# Leachate management

- No change to size of existing curing pad or capacity of facility or quantity of organics processed.
- No increase in leachate expected as a result.
- The water balance model confirms the ability of the storage to keep sufficient available volume to capture the design storm event with ability to pump to sewer as need arises.
- No changes needed to existing leachate management system approved under DA/1940/2013/A and developed at the site as it is considered best practice and there have been no conformances under EPL.

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## Consultation and exhibition

- Proposal notified to those land owners notified as part of original application. Public consultation period extended until 18 April (from 7 April).
- Environment Protection Authority (EPA), Transport for NSW (TfNSW), NSW Rural Fire Service (NSW RFS) and Subsidence Advisory NSW (SA NSW) consulted.
- Responses received from TfNSW, NSW RFS and SA NSW who support the proposal with no concerns raised.
- EPA have verbally advised REMONDIS there would be no requirement for an updated EPL.

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## Conditions of consent review

Several conditions imposed under Development Consent DA/1940/2013/A would need to be modified as part of the proposal including:

- Condition 2 – References to drawings are to be updated to reflect revised drawings illustrating new windrows presented in SEE.
- Condition 13 - Condition to be modified to reflect the updated noise assessment prepared by GHD.

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