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ENVIRONMENT AND PLANNING
STRATEGY | INFRASTRUCTURE | COMPLIANCE | PROCUREMENT

18 June 2024

Mr Romily Webster
Technical Manager
Re.Group Pty Ltd
Suite 1, Level 27
20 Bond Street
Sydney NSW 2000

By email to: romily.webster@re-group.com
Cc: aaron.azzopardi@re-group.com

Dear Mr Webster,

Re: Best Management Practice Implementation Plan

On 10 November 2023, the NSW EPA imposed a Pollution Reduction Program (PRP) on the Dunmore Organic Recycling Facility (the Dunmore ORF). The Dunmore ORF is located within the Shellharbour City Council (SCC) owned Resource Recovery Centre on Buckleys Road, Dunmore (EPL 12903). Re.Group Pty Ltd (as Re.Grow) operates the Dunmore ORF, under contract with SCC and is therefore obliged, under contract, to implement the PRP for the Dunmore ORF.

Jackson Environment and Planning Pty Ltd (JEP) have been commissioned to develop a Best Management Practice (BMP) Implementation Plan that sets out the proposed infrastructure and performance measures that will be implemented at the Dunmore ORF. This BMP Implementation Plan has also been developed to facilitate consultation with the NSW EPA to ensure that the proposed infrastructure and performance measures are sufficient to satisfy the requirements of the PRP, prior to implementation.

Following implementation of this BMP Implementation Plan, JEP will undertake a site inspection to evaluate and confirm the implementation of the plan. A BMP Implementation Report will then be prepared to demonstrate that the planned infrastructure and performance measures have been successfully implemented.

Table 1 addresses the specific requirements of the PRP by documenting how Re.Grow propose to implement each of the planned infrastructure and performance measures. Reference is made to Figure 1 which shows the proposed changes to the maturation and storage area at the Dunmore ORF.

Table 1. Pollution Reduction Program Requirements and BMP Implementation Plan.

Ref.	PRP Requirement	Response
1	Shaping of windrows to maximise run-off and hence reduce infiltration.	This is appropriate when windrow moisture content is normal (40-60%) or high (>60%). Since Dunmore is generally wet, standard practice will be to shape the windrows to a peak to encourage run-off to the formalized drainage lines (refer to Figure 1). During extended periods dry weather resulting in low moisture content (<40%), windrows may be shaped to encourage infiltration (flat or concave tops). They will still be formed into windrows rather than large 'block' piles.
2	All remaining material on the pad is kept under 60% moisture content (supported by sampling data).	Maturing compost will be monitored and recorded weekly and after daily rainfall >30mm using the 'squeeze test' as detailed in The Composting Handbook (2022) p517 and where suspected to be >60% confirmed on-site using weighing and drying procedure pp517-521. If confirmed to be over 60%, the windrow will be turned, and all drainage lines checked/cleared.
3	The slope and orientation of windrows and/or leachate drains is maintained such that free drainage of leachate to a collection drain is permitted and ponding of leachate is avoided.	Figure 1 shows the proposed layout of the maturation and storage area. The key features of the layout include: - Sufficient storage for 8 windrows up to 40m long - Each batch is a distinct windrow with maximum height 3m, width 6.5m and gap between windrows of 0.5m to maximise passive aeration - Upgraded hardstand to fall evenly from east to west sump and leachate pond - Graded hardstand to drainage line along bund to enable effective drainage of leachate to the leachate pond and to avoid inappropriate ponding. - Store screened product up-slope from all other material on the hardstand - Maintain and repair high traffic areas as required to maintain free drainage
4	Windrows are shaped to maximise run-off and hence reduce infiltration.	Refer to Point 1 above.
5	The maturation pad surface is redesigned and constructed from an inert low-permeability material such as compacted clay, modified soil, asphalt or concrete over a compacted base able to support, without sustained damage, the	The maturation and storage area will be re-instated to ensure the pad can support, without sustained damage, the load of material on it and the load of any machinery used in the composting facility. Re.Grow will resurface the entire maturation pad using a cement stabilised compacted road base.

Ref.	PRP Requirement	Response
	load of material on it and the load of any machinery used in the composting facility.	
6	The maturation pad is able to support all structures, machinery and vehicles as applicable and allow access to any utilised part of the processing site, irrespective of the weather conditions; vehicles may include: a. Transport vehicles used for the delivery of organics and the transport of finished products; b. Mobile equipment used in all phases of all the processes operated on the site; and c. Fire-fighting vehicles and equipment.	Refer to Point 5 above.
7	The quantity of organics received for processing each year should be based on either current trends, where available, or on production plans for the forthcoming year. (Jackson report)	Re.Grow will process up to 25,000 tonnes per year at the facility. This is based on an average 2083 tonne/month processing capacity and a minimum 14-day cycle within the tunnels. At capacity, controlled maturation of material in windrows will be 4 weeks duration to satisfy a minimum 6-week composting process. Up to 3 batches can be stored in the pre-screening area (an additional 3 weeks at capacity).
8	A management procedure has been developed for improved composting on the maturation pad. This should include clear specifications or the maximum size and location of windrows and stockpiles. (This plan should include access for windrow turning equipment).	With assistance from JEP, Re.Grow will develop and implement an management procedure suitable for inclusion in their existing management system. We have calculated the following areas / volumes for each activity on the maturation and storage area are required.

<table>
<tr><th>Ref.</th><th>PRP Requirement</th><th>Response</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Activity within Maturation& Storage Area</th><th>Area</th><th>Volume</th><th>Weight</th></tr>
<tr><th>Units:</th><th>m^2</th><th>m^3</th><th>tonnes</th></tr>
<tr><td>Product Storage</td><td>900</td><td>900</td><td>450</td></tr>
<tr><td>Maturation</td><td>2240</td><td>3813</td><td>1907</td></tr>
<tr><td>Storage (pre-screening)</td><td>930</td><td>2790</td><td>1395</td></tr>
<tr><td>Oversize storage</td><td>350</td><td>875</td><td>350</td></tr>
<tr><td>TOTALs</td><td>4420</td><td>8378</td><td>4102</td></tr>
<tr><td>Total Bunded Area</td><td>6500</td><td></td><td></td></tr>
<tr><td>Area required for access</td><td>2080</td><td></td><td></td></tr>
</table>
Windrows in the maturation area will be maximum 40m in length, 3m in height and 6.5m in width. Windrows will be formed and moved “end-on” with a front-end-loader and, if necessary, further shaped with an excavator.
Compost stored in the pre-screening storage area will be formed into maximum 4 m high and 8m wide windrows running north to south. They will be formed “end-on” with a loader from the north. When required, they will loaded into the screen.</td></tr>
<tr><td>9</td><td>A management procedure has been developed for operational control and management of oversize, to avoid stockpiling and resulting fire risk.</td><td>With assistance from JEP Re.Grow will develop and implement an management procedure suitable for inclusion in their existing management system.
Maintaining capacity limits and maximising breakdown through more effective maturation will reduce the amount of oversize produced. Regardless, there will always be some oversize that will require management. Oversize is estimated to be approximately 10% by weight of inputs. Stored oversize will be evaluated for suitability to recirculate and/or rescreen. If not suitable, it will be landfilled.
Re.Grow is exploring other options for oversize management, including:
- Installation of a decontamination line (subject to Council approval); and
- Use of oversize as a base layer in new waste cells in the adjoining landfill (subject to approval from the NSW EPA)
Discussions around these options is ongoing, however implementation may occur after completion of this BMP and resolution of the current PRP.</td></tr>
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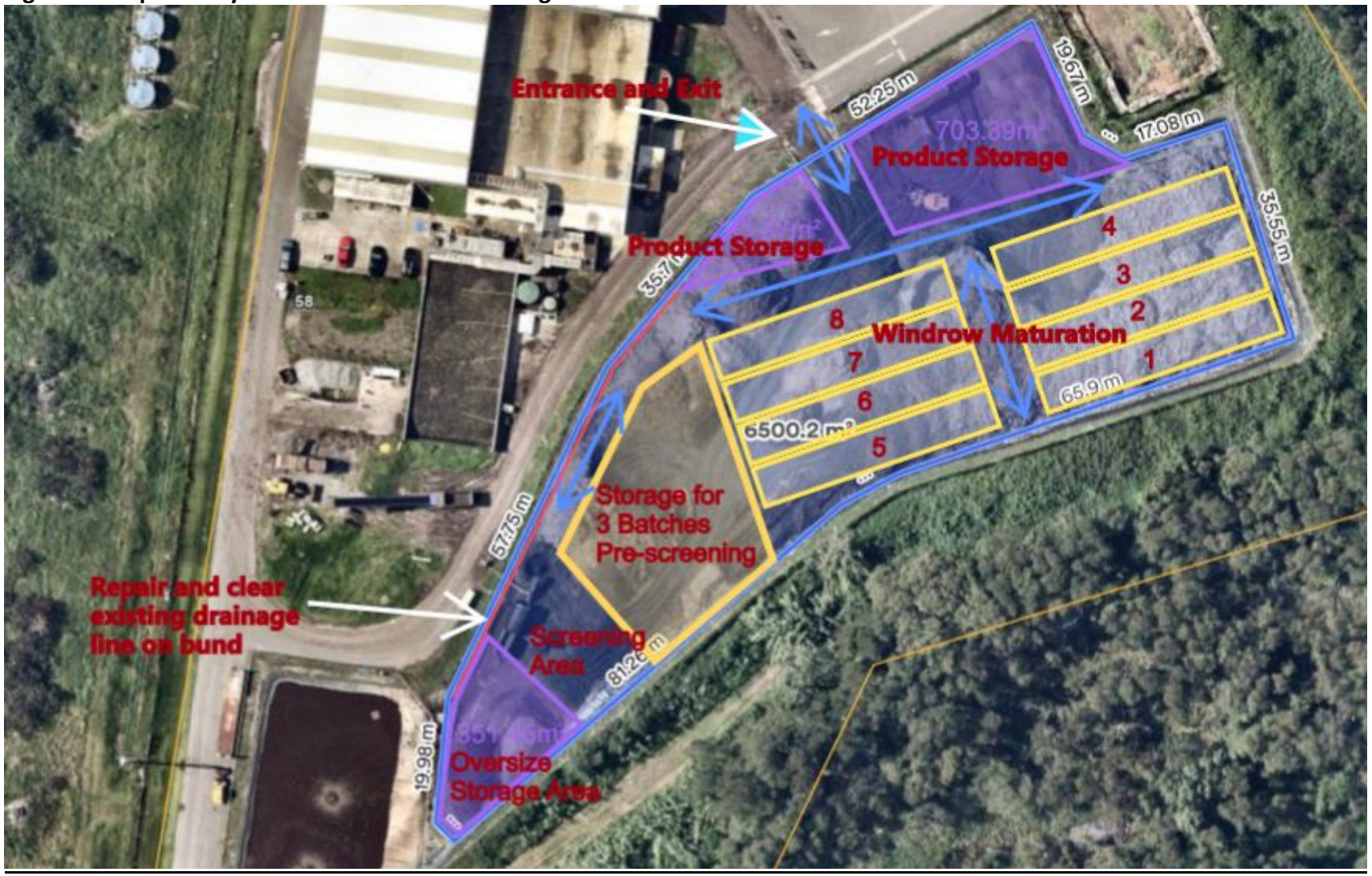
Figure 1. Proposed layout of maturation and storage area and additional infrastructure



We trust that the above BMP Implementation Plan satisfies the requirements of the PRP and NSW EPA. Re.Grow proposed to implement the BMP Implementation Plan between July 2024 and November 2024.

The site inspection will be carried out in November 2024 to evaluate and confirm the implementation of the plan. A BMP Implementation Report will then be prepared to demonstrate that the planned infrastructure and performance measures have been successfully implemented.

If you have any queries in relation to the BMP Implementation Plan, please do not hesitate to contact the undersigned.

Yours sincerely,

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