

10.0 Conclusion

10.1 Summary

This Environmental Assessment has been prepared under the requirements of Part 3A of the Environmental Planning and Assessment Act 1979, as amended, and has considered the Director-General's Requirements of 28 December 2005.

This EA has demonstrated that the proposed project satisfies the relevant legislative requirements of Commonwealth, State and Local Government. The land on which this project is proposed to be constructed and operated has been rezoned to permit AWT.

There is a demonstrable need for the SAWT-BIOWISE facility and the range of compost products that will be produced. Both Federal and State Governments have either set targets for, or made expressions of preference for, resource to be recovered from waste in the most practicable way.

The SAWT-BIOWISE facility will be located at a currently approved waste management facility, Elizabeth Drive Landfill, operated by a multinational waste management company with a good environmental record and many years experience. The technology to be used has been proven elsewhere and its use has been proven to reduce the amount of waste disposed of to landfill. Additionally, the composting process at a facility of this size has been shown to offer savings in terms of greenhouse gases emitted to atmosphere, in the order of 90,000-100,000tCO₂ –e per year.

The most significant impact and parts of the operation of the SAWT-BIOWISE have been discussed as being:

- Leachate;
- Surface water;
- Flooding;
- Flora and fauna;
- Odour;
- Dust;
- Noise;
- Traffic; and
- Visibility.

10.1.1 Surface Water and Leachate

Badgery's Creek forms the western and part of the northern boundary of the proposed project. The SAWT-BIOWISE facility will not come within 50m of the Creek and the Department of Natural Resources have agreed that this will be acceptable.

Surface water from the site itself will be managed by the use of stormwater and leachate ponds. Leachate ponds will accept all water that has been in contact with waste, whilst the stormwater ponds will be for clean water only. However, the SAWT-BIOWISE is considered to be a net user of water and will therefore use this available water with preferential use of leachate first, then any other available stormwater.

10.1.2 Flooding

The SAWT-BIOWISE facility will be developed just outside the 1 in 100 flood zone, as determined by former NSW Department of Water Resources, now NSW Department of Natural Resources, in 1990. An appropriate bund around the facility will be constructed to carry part of the access road and this will also act as a further barrier to any potential flooding as an additional safety measure.

10.1.3 Flora and Fauna

The SAWT-BIOWISE Site is not considered to be a critical habitat for any Threatened or Endangered Species and no significant impacts to locally or regionally significant native vegetation and flora are expected to occur as a result of the proposed project. No threatened flora species have been found on the site.

10.1.4 Odour

The operation of likely sources of odour at the facility, have been modelled. The conclusions of this modelling are that the facility will meet the more-stringent goal of four odour units at surrounding residences. This is assisted by the fact that the SAWT-BIOWISE buildings will be fully-enclosed under negative pressure, with all emissions passing through biofilters. The outdoor area will only be used for compost that has already undergone initial degradation and is maturing.

10.1.5 Dust

The operation of likely sources of dust at the facility, have been modelled. The conclusions of this modelling are that the potential main source of dust will be the internal haul road. It is proposed that this haul road is sealed. Dust monitoring will be performed and the use of other dust mitigation measures, such as the use of water sprays, has been discussed in this EA.

10.1.6 Noise

The operation of likely sources of noise at the facility, have been modelled. The conclusions of this modelling are that the facility operating at full capacity under neutral weather conditions will meet the relevant noise criteria. Under adverse weather conditions the facility will marginally exceed the criteria, but at only two residences and for 2% of operating time. This is assisted by the fact that the SAWT-BIOWISE buildings are fully-enclosed with most noise-generating activities being within the buildings. Mitigation is available to those residences so affected and such resources have been discussed in this EA.

10.1.7 Traffic

Traffic flows on and off the site will increase with the introduction of the SAWT-BIOWISE. However this increase is anticipated to be within the permitted traffic movements of the site's existing Development Approval.

10.1.8 Visibility

Modelling the facility has demonstrated that only a small part of the SAWT-BIOWISE facility will be visible from any of the residences in the area. The restoration of the landfill will continue at the southern end, and will, within approximately 5 years, shield the SAWT-BIOWISE facility entirely from view.

In summary, the proposed SAWT-BIOWISE facility will be in a suitable location, has a demonstrated need, has few environmental impacts, and is able to mitigate against the few impacts it may encounter.