



SUEZ Advanced Waste Treatment Facility | Part 3A

ANNUAL ENVIRONMENTAL MANAGEMENT REPORT 2020-2021

Prepared for SUEZ Recycling & Recovery Pty Ltd | 12 July 2021





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12 July 2021

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CHAPTER 1

INTRODUCTION

1 INTRODUCTION

1.1 Background

The SUEZ Advanced Waste Treatment (SAWT) facility (the facility) is in the north-west corner of the Elizabeth Drive Landfill (EDL) at 1725 Elizabeth Drive, Kemps Creek in the Penrith local government area (LGA). The site is approximately 40 kilometres (km) west of Sydney central business district.

The site covers approximately 8 hectares (ha) of land in EDL (refer Figure 2.1). There are several sensitive receivers near the east and south of the site and one receiver approximately 1 km west of the site.

An environmental assessment (EA) was prepared in June 2007 to consider the environmental effects of the facility and support the development application.

SUEZ received Project Approval MP06_0185 (Project Approval) for the facility on 15 April 2008 under the now repealed Part 3A of the NSW *Environment Planning and Assessment Act 1979* (EP&A Act) and has been operational since 25 March 2009. Since determination of the original development consent, three modifications have been submitted:

- Modification 1 (MOD 1) – change to operating hours;
- Modification 2 (MOD 2) – increase annual processing capacity; and
- Modification 3 (MOD 3) – upgrades to the maturation pads and process.

SUEZ withdrew MOD 2. MOD 1 was determined on 20 September 2010 and MOD 3 was determined on 24 January 2014.

1.2 Purpose and reporting period

The purpose of this report is to address the requirements specified in Condition 5 of Schedule 4 of the Project Approval (refer Table 1.1). The period of reporting for this annual environmental management report (AEMR) is 29 July 2020 to 14 April 2021.

Table 1.1 Compliance with Condition 5 of Schedule 4 of the Project Approval

Requirement	Reference
Every year from the date of this approval, unless the Director-General agrees otherwise, the Proponent shall submit an AEMR to the Director-General and relevant agencies. The AEMR shall:	
(a) identify the standards and performance measures that apply to the development;	Section 2
(b) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;	Section 3
(c) include a summary of the monitoring results for the development during the past year;	Section 3
(d) include an analysis of these monitoring results against the relevant: <ul style="list-style-type: none">▪ impact assessment criteria;▪ monitoring results from previous years; and▪ predictions in the EA;	Section 3
(e) identify any trends in the monitoring results over the life of the development;	Section 3
(f) identify any non-compliance during the previous year; and	Section 4
(g) describe what actions were, or are, being taken to ensure compliance.	Section 4

1.3 Objective

The objective of this report is to succinctly document the environmental performance and compliance of the SAWT facility for the period 29 July 2020 to 14 April 2021 and describe any corrective actions.

CHAPTER 2

PROJECT OVERVIEW

2 PROJECT OVERVIEW

2.1 The approved development

SAWT has a processing capacity up to 120,000 tonnes per annum (tpa) of mixed waste and 14,400 tpa of biosolids to produce compost, remove recyclables such as wood, paper, plastics and metal from the waste stream for recycling, and remove residual inert wastes for suitable disposal (refer Figure 2.1).

Waste operations are approved for 20 years from the commencement of operations on site. Major components of the approved development are detailed in Table 2.1.

Table 2.1 Major components of the approved development

Aspect	Description
Waste Receipt	Up to 120,000 tpa of mixed waste and 14,400 tpa of biosolids, largely from Penrith and Liverpool LGAs. Waste is transported in domestic waste collection vehicles along Elizabeth Drive and the existing landfill access road.
Receival Hall	The receival hall is ~9.2 metres (m) high, has a floor area of 2,400 m ² and is fully enclosed under negative pressure. Waste delivered to the receival hall is initially sorted and large waste items recovered. Mixed waste and source separated organics are transported separately by conveyor to the resource recovery building.
Resource Recovery Building	The resource recovery building is ~10.5 metres high, has a floor area of 2,130 m ² and is enclosed under negative pressure. Mixed waste and source separated organics are processed separately using: <ul style="list-style-type: none"> trommels; manual sorting; magnetic and eddy current separators to remove metals; and shredders and mixers to prepare for composting. The refined waste streams are transported separately by conveyor to the composting tunnels.
Composting Tunnels	Thirty, 24 m long ventilated and fully enclosed tunnels are used for biological treatment of the separate waste streams. Moisture, temperature and oxygen levels are controlled to maximise rot, prior to transfer to the maturation area via front end loader.
Maturation Area	The external maturation area is used to cure the compost for a few months prior to transfer to the refining building via front end loader. <i>Note: there has been no external maturation activities since the NSW Environment Protection Authority (EPA) banned the restricted use of mixed organic material (MWO) in October 2018.</i>
Refining Building	The refining building is enclosed, ~10.5 m high, with a floor area of 1,020 m ² . It is used for the final refining of the compost, prior to removal via front end loader to the maturation pad for export. <i>Note: there has been no refining activities since the NSW Environment Protection Authority (EPA) banned the restricted use of MWO in October 2018.</i>
Outputs	The facility has the following outputs: <ul style="list-style-type: none"> 25,000-40,000 tpa of compost; 5,000-8,000 tpa of recyclables including wood, paper, plastics and metal; and 35,000-50,000 tpa of residual non-putrescible waste for disposal at SITA's landfill or another suitably licensed facility landfill.
Water Management	Stormwater drainage and pond, leachate ponds, an overflow pond, mains water connection and a self-contained sewerage plant. Leachate is disposed to landfill and stormwater re-used for site operations, supplemented by mains water.
Associated Infrastructure	Office and amenities buildings, electricity connection, sealed internal access road, new weighbridge for exiting vehicles, with the existing landfill weighbridge used for vehicles entering the site.

Aspect	Description
Odour Management	Semi-enclosed biofilters.
Hours of Operation	<p>Waste Receipt, outdoor operations and product dispatch:</p> <ul style="list-style-type: none"> Monday-Friday, 6 am-6 pm; Saturday, 8 am-5 pm; and Sunday, 8 am-4 pm. <p>Outdoor operations:</p> <ul style="list-style-type: none"> Monday-Friday, 6 pm-10 pm; and Public holidays, 7 am-4 pm. <p>Indoor operations: Monday-Saturday, 7 am-11 pm.</p> <p>Emergency: Anytime.</p>
Traffic	Approximately 236 vehicle movements a day.

2.2 Current activities

The site has been receiving up to 120,000 tpa of mixed waste to remove recyclables such as wood, paper, plastics and metal from the waste stream for recycling, and remove residual inert wastes for suitable disposal.

Compost has been produced in the composting tunnels, however, due to the EPA's ban on the use of MWOO, this compost has been transported to EDL for disposal. There has been no storage of compost on the external maturation pads and the refining building has not been used.

2.3 Approvals, licences and permits

Approvals, licences and permits held or applicable to the reporting period are described in Table 2.2.

Table 2.2 Approvals, licences and permits

Type	Reference	Description
Approval	MP06_0185	Project Approval under section 75J of the EP&A Act.
Approval	MP06_0185-Mod-1	MOD 1 under section 75W of the EP&A Act.
Approval	MP06_0185-Mod-3	MOD 3 under section 75W of the EP&A Act.
Licence	Environment Protection License (EPL) 12889	Environment Protection Licence granted under section 55 of the NSW <i>Protection of the Environment Operations Act 1997</i> (POEO Act).

2.4 Environmental performance criteria

Environmental performance criteria in Table 2.3 have been sourced from the facility's approvals, licences and permits listed in Table 2.2.

Table 2.3 Environmental performance criteria

Aspect	Source	Criteria	Requirement
Waste management	EPL 12889	Limit on waste types	<p>The site may only receive the following waste types:</p> <ul style="list-style-type: none"> general solid waste (putrescible); general solid waste (non-putrescible); and biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3, in accordance with the criteria set out in the biosolids guidelines.

Aspect	Source	Criteria	Requirement
	MP06_0185; EPL 12889	Limit on input	The site must not receive more than: <ul style="list-style-type: none"> 120,000 t of general solid waste; and 14,400 t of biosolids.
	EPL 12889	Limit on waste storage	The authorised amount of waste permitted on site at any one time cannot exceed 32,100 t.
Odour	MP06_0185	Limit on odour	The site must not cause or permit the emission of any offensive odour from the site.
Dust	MP06_0185	Limit on dust	The site must minimise and prevent the emission of dust.
Noise	MP06_0185; EPL 12889	Limit on noise	Noise generated by the site must not exceed the limits in the tables below:

Location	Day L _{Aeq} (15 min)	Evening L _{Aeq} (15 min)	Night L _{Aeq} (15 min)	Night L _{Amax}
McGarvie Smith Farm	42	39	35	n/a
1745 Elizabeth Drive	41	40	37	47
1669A Elizabeth Drive	38	38	35	n/a
Caretakers Residence 1669A Elizabeth Drive	41	42	38	53

Location	6am to 7am, Monday to Friday L _{Aeq} (15 minute)
McGarvie Smith Farm	39
1745 Elizabeth Drive	40
1669A Elizabeth Drive	38
Caretakers Residence 1669A Elizabeth Drive	42

Water quality	MP06_0185; EPL 12889	Pollution of water	<p>The site must not cause or permit any waters to be polluted.</p> <p>“waters” mean the whole or any part of—</p> <p>(a) any river, stream, lake, lagoon, swamp, wetlands, unconfined surface water, natural or artificial watercourse, dam or tidal waters (including the sea), or</p> <p>(b) any water stored in artificial works, any water in water mains, water pipes or water channels, or any underground or artesian water.</p>
	EPL 12889	Discharge water quality limit	Surface water may discharge from the site only from one location, EPL monitoring point 1. Water discharged from Point 1 must always comply with the concentration limits in the table below:

Aspect	Source	Criteria	Requirement		
			Pollutant	UoM	Limit
			Ammonia	Mg/L	0.9
			pH	pH	6.5-8.5
			Total suspended solids (TSS)	Mg/L	50

2.5 Environmental monitoring requirements

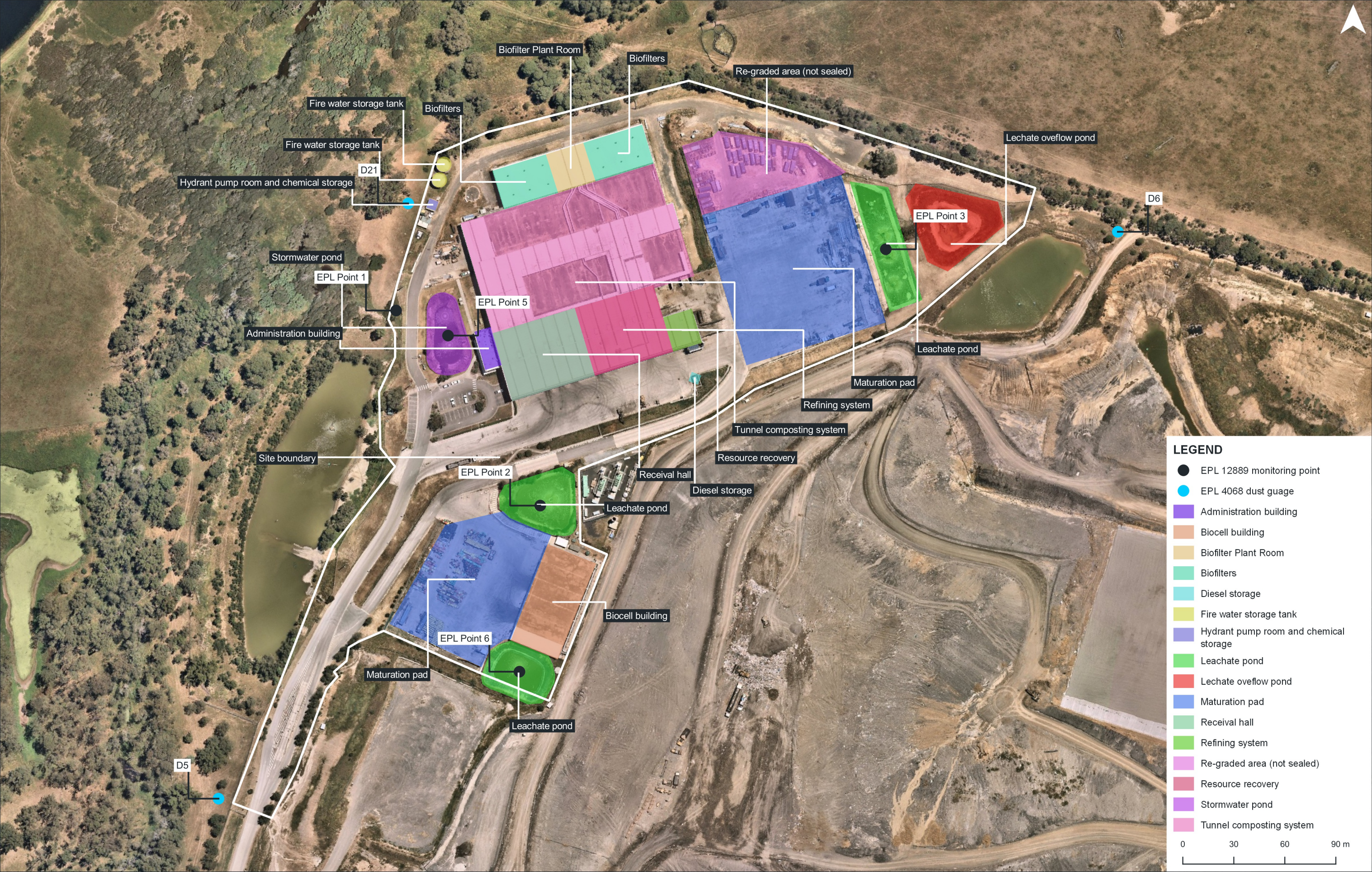
Environmental monitoring requirements in Table 2.4 have been sourced from the facility's approvals, licences and permits listed in Table 2.2.

Table 2.4 Environmental monitoring requirements

Aspect	Source	Criteria	Requirement
Waste	MP06_0185	Waste inputs	The site must monitor the following incoming requirements of waste: <ul style="list-style-type: none"> quantity; type; and source of waste.
		Waste outputs	The site must monitor the following outgoing requirements of waste: <ul style="list-style-type: none"> quantity; type; and quality of the outputs.
Noise	MP06_0185	Operational noise monitoring	Monitor operational noise in accordance with the approved SAWT environmental management plan (EMP), which stipulates a frequency of every five years. Operational noise monitoring was last conducted on 11 November 2020.
Water quality	EPL 12889	Discharge water quality	EPL monitoring point 1 must be sampled during discharge at least four times per year for ammonia, biochemical oxygen demand (BOD), conductivity, oil and grease, pH, total organic carbon and TSS. Analysis results from EPL monitoring point 1 should take into consideration this location's concentration limits stipulated in EPL 12889.
		Leachate water quality	Leachate dams (EPL monitoring points 2,3 and 6) must be sampled once per year and analysed for ammonia, BOD, chemical oxygen demand (COD), pH and TSS.

Figure 2.1
Site location plan

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CHAPTER 3

ENVIRONMENTAL PERFORMANCE

3 ENVIRONMENTAL PERFORMANCE

The whole site is inspected every week and month in accordance with the *SAWT Monitoring and Measurement Procedure* (PROC007) to verify the performance of environmental controls and management measures.

The *Kemps Creek SAWT Weekly Checklist* (FORM026.4.21) and *Compost Facilities Monthly Checklist* (FORM026.3.2) inspections document the regular checks SAWT makes to ensure environmental controls are functioning and demonstrates the sites compliance with its environmental performance criteria.

3.1 Waste management

Prior to delivery of waste, it is a requirement that the consignor of the waste has assessed the waste in accordance with the *NSW Waste Classification Guidelines*.

All waste deliveries are via a weighbridge, where an operator records the details and weight of the vehicle. Deliveries are received via the receival hall, where loads are visibly inspected prior to input into the recovery process.

Waste that does not meet the categories listed in the EPL is not accepted on site. There is currently no stockpiling of waste on site.

3.1.1 Waste monitoring

SAWT uses a tracking system called 'Mandalay' to track all incoming and outgoing wastes. Mandalay keeps record of the following information:

- source of waste;
- incoming/outgoing;
- date and time;
- customer number and name;
- delivery vehicle details;
- waste type; and
- quantity of waste.

SAWT did not accept any biosolids in the previous reporting period and received ~83,000 t of general solid waste. A review of information from Mandalay for this reporting period shows SAWT has not accepted any unapproved waste types and is below the annual tonnage limit for general solid waste and biosolids (refer Table 3.1).

Table 3.1 Incoming quantity over time

Waste type	Limit (t)	29/07/2018 - 28/07/2019	29/07/2019 - 28/07/2020	29/07/2020 – 14/04/2021
General solid waste	120,000	100,041	83,113	76,487
Biosolids	14,400	11,069	0	0

As SAWT is regulated by an EPL, all information pertaining to incoming and outgoing waste quantities is reported in an annual return submitted to the EPA after the EPL anniversary date (29 July).

3.2 Odour

SAWT manages odour in accordance with the odour management plan (OMP). The OMP is not a requirement of any approvals, licences or permits, but has been developed to ensure compliance with the odour performance criteria.

Potential odour sources, ranked in order of inherent risk, are:

1. Maturation pads – notably, these maturation pads have not been used to store compost material since the EPA banned the restricted use of MWOO in October 2018.
2. Bio-filters.
3. Waste receipt and storage in the facility.
4. Leachate and stormwater dam.
5. Refining.
6. Drying tunnels.

SAWT implements a process of continuous improvement in odour emission management. Outputs from this continuous improvement process has resulted in the following additional odour emission controls:

- Remote control doors – to minimise opening times and prevent vehicles from falsely triggering sensors, all rapid roller doors have been upgraded with remote controls.
- Leachate dam levels – to maintain low water levels in the leachate dams, excess leachate is disposed offsite to an external licensed treatment facility. This ensures the leachate dams have sufficient capacity for typical rain events and reduces the risk of the leachate dams becoming an odour source.

3.2.1 Odour impact assessment criteria

The *Approved Methods and Guidance: for the Modelling and Assessment of Air Pollutants in New South Wales* (Guideline for Air Pollutants) (Department of Environment and Climate Change, 2005) were referenced in the EA when setting the impact assessment criteria. Based on the recommended odour performance criterion in the Guideline for Air Pollutants, the EA determined an odour unit (OU) of 2 or less was applicable to the facility.

The EA concluded that odour levels were predicted to be under 1 OU at existing residences closest to the facility. Odour levels up to 2 OU would be experienced on small sections of two residential lots along the southern boundary of the Twin Creeks development. Odour levels across all other sections of Twin Creeks would be less than 2 OU. These modelled odour impacts were considered acceptable and it was determined the facility was unlikely to result in offensive odours.

3.2.2 Odour monitoring

There is no requirement in EPL 12889 or the Project Approval to quantitatively monitor odour emissions, however the facility must not cause or permit the emission of any offensive odour.

Key odour monitoring is:

- Daily and weekly check of controls on potential odour sources.
- Daily odour tours of surrounding areas to verify if odour emissions are leaving the site (*Daily Odour Checklist*, FORM026.4.69).

A random selection of completed records (daily odour checklists and weekly checklists) from the reporting period were reviewed to verify compliance with the environmental performance criteria.

SAWT has attempted to ascertain the source of detected odours in the area based on the site's operating conditions, wind direction and other odour sources in the area. Notably, most of the sampled records indicate no odours have been emitted from this site. This information correlates with the current operating conditions of SAWT, with no composted material stored on the external maturation pads and is supported by the low number of odour complaints in the reporting period.

3.2.3 Odour complaints

One odour complaint was recorded during the reporting period. Following an investigation, this odour complaint was deemed to not be attributable to SAWT and the EPA considered the matter closed. Details of the complaint are in Table 3.2.

Table 3.2 Odour complaints during the reporting period

Incident date	Reported by	SAWT response	Attributable to SAWT	EPA response
28/01/2021	General public to EPA	All rapid roller doors were operational and remained shut unless a vehicle passed through the door. No trucks entered or exited the facility following weighbridge closure at 5pm. No product was stored outside on 28 January 2021.	No	EPA considers the incident closed.

This low number of odour complaints continues the downward trend visible in Figure 3.1.

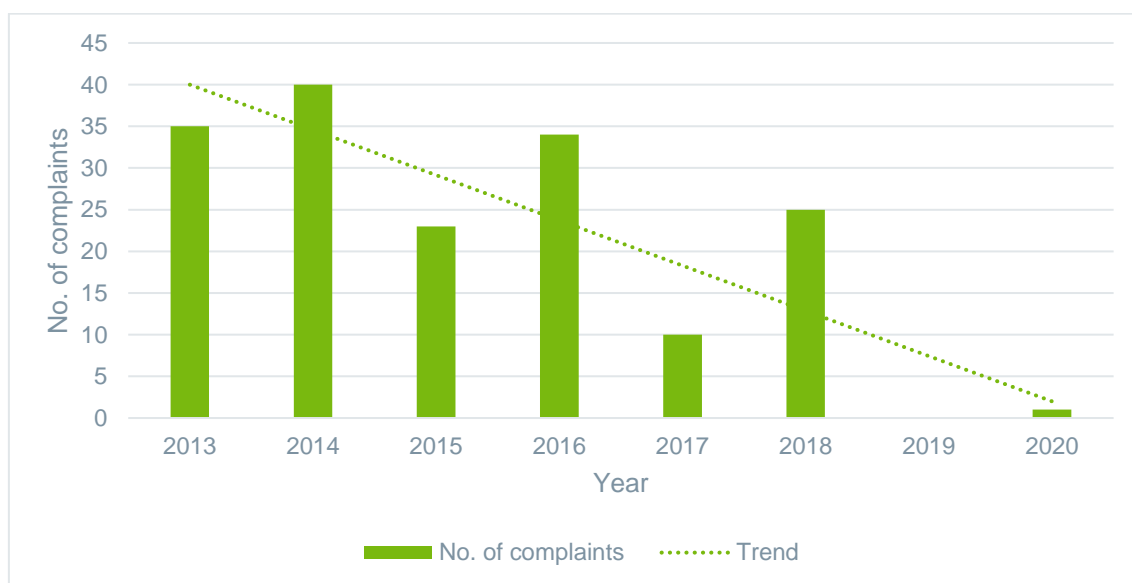


Figure 3.1 Odour complaints over time

3.3 Water quality

The site manages its water quality by separating clean stormwater runoff from contaminated leachate.

The leachate management system collects leachate from the composting systems and maturation pads and directs this to the leachate ponds (four in total). Each of the four leachate ponds is inspected weekly to ensure there is sufficient capacity to hold any additional runoff from rain.

Leachate can be transferred between ponds as required to maintain the appropriate freeboard. Overflow from the leachate ponds is directed to a leachate overflow pond, which is maintained dry wherever possible. Leachate in the overflow pond cannot be discharged from site and is collected and disposed offsite as liquid waste at a suitably licensed facility.

The stormwater management system collects clean water from roof runoff, clean hardstand areas, access roads and grass areas and directs this water to the stormwater pond. Water from the stormwater pond is re-used for dust suppression and other site operations.

Overflow from the stormwater pond is directed into EDL's north-western sedimentation dam, which discharges into Badgerys Creek. The point where overflow from the stormwater pond meets EDL's north-western sedimentation dam is EPL monitoring point 1, SAWT's only licensed discharge point.

These areas are inspected daily, weekly and monthly to ensure:

- leachate ponds have sufficient freeboard;
- the leachate overflow pond is dry;
- aerators and other odour source controls are operational; and
- hardstand areas, access roads and grassed areas are free of litter, debris or other fluids or materials that could contaminate stormwater runoff.

3.3.1 Water quality impact assessment

The EA did not establish any formal water quality impact assessment criteria and predicted:

- no impact on the naturally occurring saline groundwater at the southwest of the site.
- the facility would generate leachate which is likely to contain concentrations of pollutants that make the liquid unsuitable for discharge to waterways.

3.3.2 Water quality monitoring

It is a requirement of EPL 12889 that water quality is monitored during operations to ensure the site is compliant with its environmental performance and monitoring requirements. There have only been two discharges via EPL monitoring point 1 during the reporting period. In both instances the sampled water quality exceeded the concentration limits approved in EPL 12889 (refer Table 3.3).

Table 3.3 Water quality analysis results for the reporting period

Record	Ammonia (mg/L)	pH	TSS (mg/L)
Concentration limit	0.9	6.5-8.5	50
Sampled 10/08/2020	1.94	7.46	114
Sampled 22/03/2021	7.38	7.29	427

The background to these discharges is:

- Between 8-11 August 2020, a discharge occurred via EPL monitoring point 1 into EDL's north-western sedimentation dam following successive days of heavy rainfall (refer Figure 3.2):
 - Analysis results received on 19 August 2020 confirmed the stormwater leaving the premises had exceeded the ammonia and TSS concentration limits (refer Table 3.3).
 - On 25 August 2020, SAWT self-reported the exceedance of the concentration limits to the EPA.

- Between 19-23 March 2021, approximately 321 mm rainfall was recorded at the site (refer Figure 3.2):
 - Stormwater discharged from the site on 22 March 2021 via EPL monitoring point 3 and the leachate overflow pond discharged into a stormwater channel on EDL premises.
 - Stormwater from EDL premises and leachate from SAWT co-mingled in the stormwater channel before leaving site through a discharge point licensed to EDL (Point 23 in EPL 4068).
 - SAWT self-reported the discharge on 22 March 2021 and analysis results received on 29 March 2021 confirmed that the stormwater leaving the premises via EPL monitoring point 1 exceeded the ammonia and TSS concentration limits (refer Table 3.3).
 - Analysis results of the water quality discharged via Point 23 are included in Table 3.4.

It is worth noting that the rainfall around 22 March 2021 equated to a 50-year average recurrence interval per the Bureau of Meteorology intensity, frequency and duration chart for this area (refer Figure 3.2). The leachate overflow pond was designed for a 10-year average recurrence interval.

EPL monitoring points 2, 3 and 6 (leachate ponds) must be sampled once per year and analysed for ammonia, BOD, COD, pH and TSS. There are no concentration limits for these monitoring points as they are not designed or intended to discharge off site.

Table 3.4 Water quality analysis results of unlicensed discharge

Location	Ammonia (mg/L)	BOD (mg/L)	Oil & grease (mg/L)	pH	TSS (mg/L)	Total Organic Carbon (mg/L)	Electrical conductivity (µS/cm)
Overflow leachate pond	9.5	3	Not detected	7.77	20	18	629

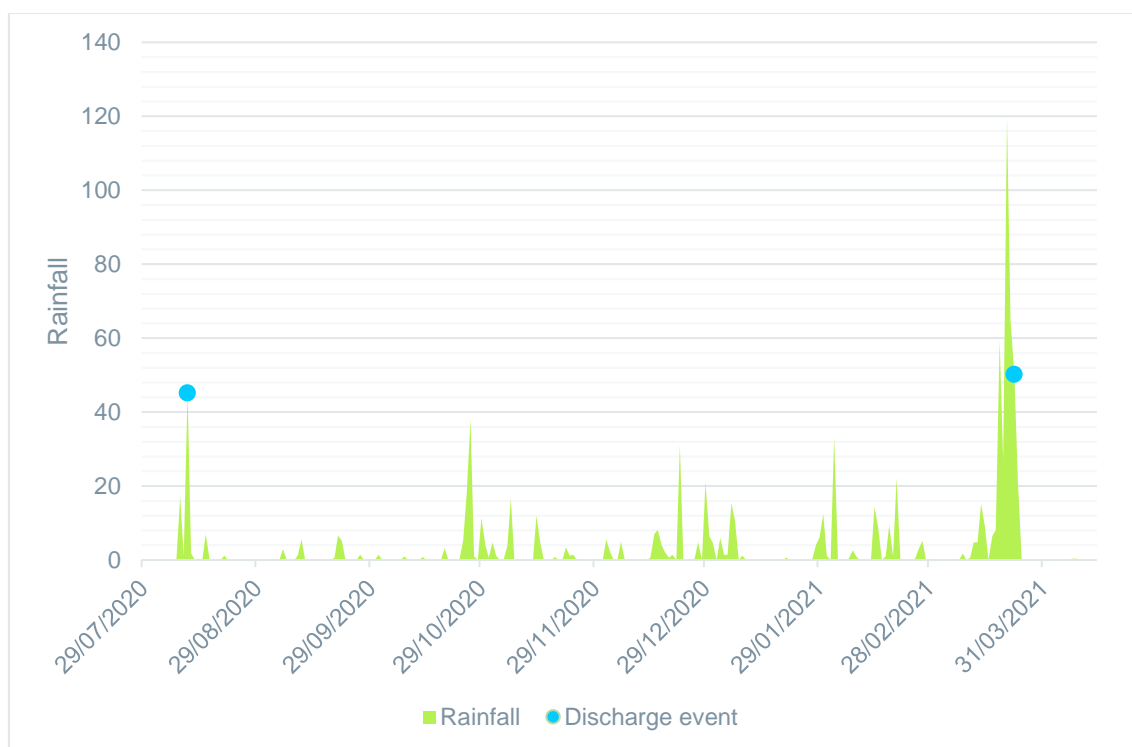


Figure 3.2 Rainfall and reportable incidents

3.3.3 Water quality complaints

SAWT has not received water quality complaints during the reporting period.

3.4 Noise

Operational noise is monitored in accordance with the approved EMP, which stipulates an operational monitoring frequency every five years.

3.4.1 Noise impact assessment criteria

The intrusiveness and amenity criteria from the *Industrial Noise Policy* (INP) (EPA, 2000) were referenced in the EA when setting the operational noise impact assessment criteria.

The EA predicted that noise impacts from the facility on the area surrounding were acceptable, as the noise levels were low enough to ensure future land use conflicts were unlikely.

3.4.2 Noise monitoring

It is worth noting that SAWT and EDL are both within the SUEZ Kemps Creek Resource Recovery Park, but each facility operates under separate approvals and licences which have different performance criteria and noise limits.

Attended operational noise monitoring was conducted on 11 November 2020. One measurement was conducted for each of the identified receivers during the morning shoulder period and day to address waste receipt, outdoor operations, indoor operations and product dispatch activities. In the evening, two measurements were conducted for each receiver to address outdoor and indoor operations. One measurement was carried out for 1669A Elizabeth Drive, Caretakers Residence and 1745 Elizabeth Drive during the evening to address indoor operations.

Table 3.5 summarises the noise monitoring results from 2020 and compares these to the results from 2018.

Table 3.5 Noise monitoring results

Location	Type	Morning Shoulder Period (6-7am)	Day L _{Aeq} (15 min)	Evening L _{Aeq} (15 min)	Night L _{Aeq} (15 min)	Night L _{Amax}
McGarvie Smith Farm	Limit	39	42	39	35	n/a
	Measured 2018	36	37	34	33	
	Measured 2020	<40	<40	<35	<35	
1745 Elizabeth Drive	Limit	40	41	40	37	47
	Measured 2018	32	33	<30	<30	<30
	Measured 2020	<35	<35	<30	<30	<30
1669A Elizabeth Drive	Limit	38	38	38	35	n/a

Location	Type	Morning Shoulder Period (6- 7am)	Day L _{Aeq} (15 min)	Evening L _{Aeq} (15 min)	Night L _{Aeq} (15 min)	Night L _{Amax}
	Measured 2018	40	38	35	33	
	Measured 2020	<35	<35	<35	<30	
Caretakers Residence 1669A Elizabeth Drive	Limit	42	41	42	38	53
	Measured 2018	39	37	33	<30	<30
	Measured 2020	<40	<40	<35	<35	<35

3.4.3 Noise complaints

SAWT has not received noise complaints during the reporting period.

3.5 Dust

SAWT has largely eliminated the generation of dust by sealing all external maturation areas. There is one area, referred to as the re-graded area (~2,700 m²), which is not sealed. This area is mostly used for the storage of equipment and does not receive a significant volume of traffic. This area has a low-risk for emitting dust due to its small size, usage and location.

The facility has been inspected each week and month during the report period. There were no recorded instances where the site has emitted dust.

3.5.1 Dust impact assessment criteria

The Guideline for Air Pollutants were referenced in the EA when setting the impact assessment criteria. The Guideline for Air Pollutants criterion for dust deposition is 4 g/m²/month, which is an annual average of the monthly dust deposition rates.

The EA concluded the facility was unlikely to result in exceedances of the air quality criteria for dust concentration and deposition.

3.5.2 Dust monitoring

There is no requirement in EPL 12889 or the Project Approval to quantitatively monitor dust deposition and there are no emission limitations.

Dust gauges associated with EPL 4068 are analysed every quarter. Analysis results from three dust gauges nearest the facility in the last three quarters are included in Table 3.6.

It should be noted these results are not representative of SAWT activities alone; dust deposition gauges by design capture all particulate matter and are more appropriately representative of locality. The locality around the facility is currently undergoing significant development which would be contributing to dust deposition in the locality (e.g. Western Sydney Airport).

Table 3.6 Dust deposition monitoring

Location	28 August 2020 (g/m ² /month)	26 November 2020 (g/m ² /month)	25 February 2021 (g/m ² /month)	Average (g/m ² /month)
D5 (adjacent access road)	1.97	5	4.4	3.79
D6 (near overflow leachate pond)	2.92	5.9	5.3	4.71
D21 (adjacent SAWT facility)	0.40	3.4	2.0	1.93

Figure 3.3 graphically presents dust deposition results from previous monitoring events.

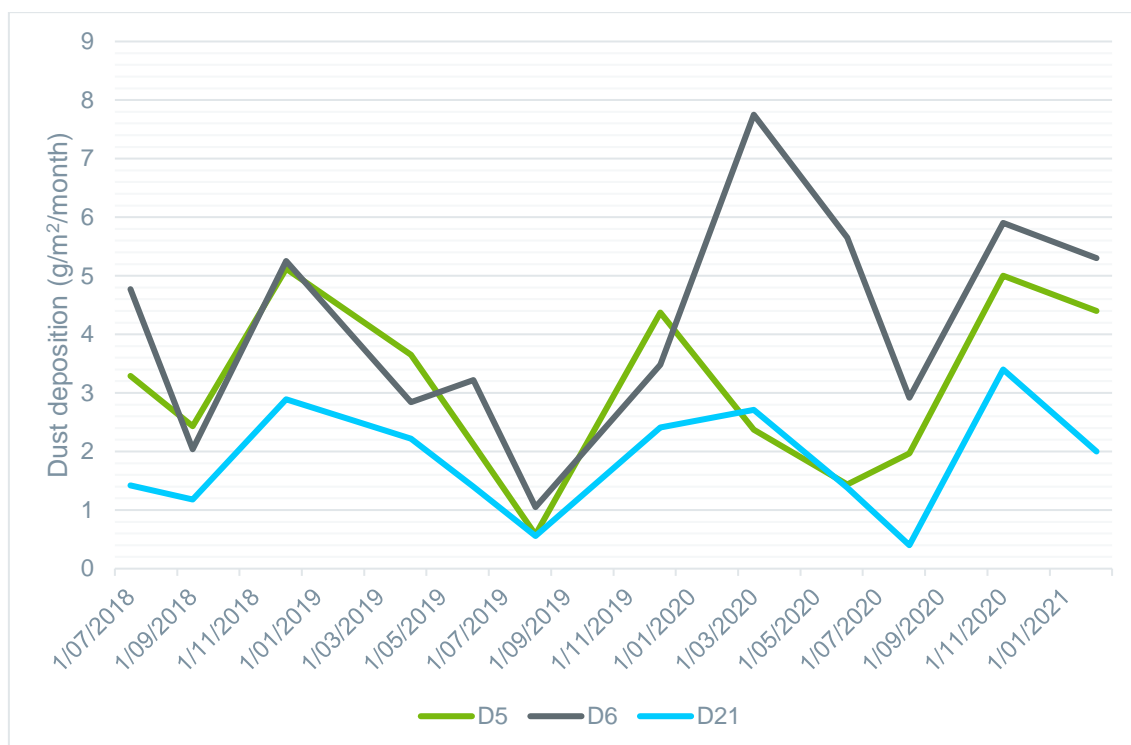


Figure 3.3 Cumulative dust deposition results over time

3.5.3 Dust complaints

SAWT has not received dust complaints recorded during the reporting period.

CHAPTER 4

COMPLIANCE STATUS

4 COMPLIANCE STATUS

An independent environmental audit (IEA), reviewing the period April 2018 to October 2020, was concluded on 2 December 2020. Non-compliance findings of the IEA, and corrective actions being implemented by SAWT are documented in Table 4.1.

Table 4.1 IEA non-compliances

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
2.4	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of: (a) any reports, plans, programs or correspondence that are submitted in accordance with this approval; and (b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.	DPIE has instructed AEMR's to be submitted within 3 months of the end of the reporting period. The annual reporting period ends 29/07 every year which aligns with the annual return period for reporting against the EPL. Therefore, an AEMR for the 2019-2020 period should have been submitted to DPIE by 29 October 2020. No AEMR for 2019-20 has been submitted at the time of this audit.	Inform DPIE of the late submission of the AEMR and request an extension of time.	1. SUEZ requested approval from DPIE to change the reporting period for the annual environmental management report to align with the anniversary date of the Project Approval. DPIE approved this request on 30 June 2021. 2. AEMR for 2019-20 has been sighted and submitted to DPIE.	Closed
3.5	The Proponent shall prepare and implement a Waste Monitoring Program for the project to the satisfaction of the Director-General, prior to the commencement of operation. This program must: (a) be prepared in consultation with EPA by a suitably qualified and experienced expert; and (b) include a suitable program to monitor the: • quantity, type and source of waste received on site; • quantity, type and quality of the outputs produced on site; and (c) outline	The product quality manual prepared for SAWT Kemps Creek would be sufficient to address the monitoring objectives of this condition, but there is no evidence of the EPA having been consulted in the preparation of this document nor is there evidence of DPIE approving this document. The current version of the EMP does not address the monitoring objectives of this condition.	Consult with EPA on the waste monitoring requirements from the product quality manual, document this consultation and the monitoring requirements in the EMP.	SUEZ is updating the EMP, after which EPA will be consulted. Consultation with the EPA will be captured in the future revision.	Open

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
	contingency measures that would be implemented in the event that levels of foreign matter or contaminants in the compost output exceed acceptable levels.				
3.11	The Proponent is required to prepare a feasibility report for the Director-General's approval within 5 years of this approval, outlining options to capture and use greenhouse gas in the generation of electricity. The report must identify which options could be reasonably and feasibly implemented.	SUEZ has not prepared and submitted a feasibility report for DPIE approval. SUEZ has sought clarification from DPIE on this condition but no responses from DPIE to SUEZ's request for clarification were provided. It is noted that the AEMR 2018-19 identified an action for SUEZ to seek a modification to the project approval to remove this condition because the development cannot comply with the requirement.	Prepare and submit a modification to remove the condition about the feasibility report.	SUEZ has engaged an external consultant.	Open
3.20	The Proponent shall prepare and implement a Soil, Water and Leachate Management Plan for the project to the satisfaction of the Director-General. This plan must: (a) be submitted to the Director-General for approval prior to carrying out any development on site; (b) be prepared by a suitably qualified and experienced expert; (c) be prepared in consultation with the EPA, NOW and Council; and (d) include: • a site water	EMP which was originally submitted on 29/04/2009 and approved by DPIE on 30/04/2009, included a soil, water and leachate management plan. The EMP was updated following the last independent environment audit and approved by DPIE on 29/11/2019. The plan however does not identify who prepared this plan (i.e. suitably qualified and experienced expert) and there is no evidence of EPA, NOW or	Include evidence of consulting EPA, DPIE Water and Council in the Soil, Water and Leachate Management Plan. If this evidence is not available, these stakeholders should be provided an opportunity to comment on the current plan, and the plan should be updated and SUEZ attempts at consultation should be documented.	SUEZ is updating the EMP, after which EPA, DPIE Water and local council will be consulted. All consultation will be captured in the future revision.	Open

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
	balance; • an erosion and sediment control plan; • a stormwater management scheme; • a surface water, groundwater and leachate monitoring program; and • a surface water, groundwater and leachate response plan.	Council having been consulted in the preparation.			
3.23	The stormwater management scheme must: (a) be consistent with the guidance in the latest version of Managing Urban Stormwater: Council Handbook (EPA); and (b) have sufficient capacity to cater for the 90th percentile 5 day rainfall event.	The stormwater management system included in the EMP does not demonstrate how the scheme is consistent with Managing Urban Stormwater: Council Handbook (EPA) nor does the scheme demonstrate how the system has sufficient capacity for the 90th percentile 5-day rainfall event.	The stormwater management scheme needs to demonstrate (1) compliance with Managing Urban Stormwater: Council Handbook (EPA) and (2) that the system has capacity to handle the 90th percentile 5 day rainfall event.	SUEZ is updating the EMP, after which EPA, DPIE Water and local council will be consulted. All consultation will be captured in the future revision.	Open
3.24	The surface water, groundwater, and leachate monitoring program must: (a) be generally consistent with the guidance in EPA's Environmental Guidelines for Composting & Related Organics Processing Facilities; and (b) include: • baseline data; • details of the proposed monitoring network; and • the parameters for testing and respective trigger levels for action under the surface water, groundwater and leachate response plan (see below).	The EMP (July 2020) does not include a groundwater monitoring program or baseline data.	The EMP needs to be updated to include a groundwater monitoring program and baseline data; or the condition should be modified and the need for groundwater monitoring removed.	SUEZ is updating the EMP.	Open

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
3.25	The surface water, groundwater and leachate response plan must: (a) include a protocol for the investigation, notification and mitigation of any exceedances of the respective trigger levels; and (b) describe the array of measures that could be implemented to respond to any surface or groundwater contamination that may be caused by the development.	The EMP (July 2020) does not include a groundwater response plan, investigation and notification procedures as well as how to respond to surface or groundwater contamination.	The EMP needs to be updated to include surface water, groundwater and leachate response plan that meets the requirements of this condition.	SUEZ is updating the EMP.	Open
4.3	Within 24 hours of detecting an exceedance of the limits/ performance criteria in this approval, or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall notify the Department and EPA of the exceedance/ incident.	SUEZ notified EPA of a pollution incident on 10/02/2020 and only notified DPIE on 4/11/2020. Similarly, one wet weather discharge during the audit period recorded an exceedance of water quality criteria but DPIE was not notified.	Hold an environmental workshop with mandatory attendance by all SAWT employees to identify and explain all environmental commitments of both the EPL and development consent.	Environmental workshop held on 17 February 2021 as a toolbox talk.	Closed
4.4	Within 6 days of notifying the Department and EPA, the Proponent shall provide a written report to the Department and EPA that: (a) describes the date, time, and nature of the incident; (b) identifies the cause, or likely cause, of the incident; and (c) describes what action has been taken to date address the incident, and what actions are proposed to be implemented in the future to either	The written report to EPA for an incident notified on 10/02/2020 was submitted within required notification period, and email correspondence provided by SUEZ demonstrates this. This same written report was provided to DPIE on 4/11/2020, outside the required notification period.	Hold an environmental workshop with mandatory attendance by all SAWT employees to identify and explain all environmental commitments of both the EPL and development consent.		

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
	address the consequences of the incident or avoid a recurrence of the incident.				
4.5	Every year from the date of this approval, unless the Director-General agrees otherwise, the Proponent shall submit an AEMR to the Director-General and relevant agencies. The AEMR shall: (a) identify the standards and performance measures that apply to the development; (b) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; (c) include a summary of the monitoring results for the development during the past year; (d) include an analysis of these monitoring results against the relevant: <ul style="list-style-type: none"> • impact assessment criteria; • monitoring results from previous years; and • predictions in the EA; (e) identify any trends in the monitoring results over the life of the development; (f) identify any non-compliance during the previous year; and (g) describe what actions were, or are being taken to	MP06_0185 was determined on 16/04/2008, therefore the AEMR should be due every April. However, correspondence from DPIE dated 08/07/2020 acknowledged the annual reporting period (EPL) ending on 29/07 every year and instructed AEMR's to be submitted within 3 months of the end of this reporting period (i.e. by 29/10 every year). AEMR 2017-18 covered the period 29/07/2017 to 29/07/2018 and was finalised on 20/11/2019. The AEMR 2018-19 that covered the period 29/07/2018 to 29/07/2019, was finalised on 27/04/2020 and submitted to DPIE on 25 May 2020. AEMR 2019-20 should cover the period 29/07/2019 to 29/07/2020 and was due to be submitted to DPIE on 29/10/2020.	Inform DPIE of the late submission of the AEMR and request an extension of time.	1. SUEZ requested approval from DPIE to change the reporting period for the annual environmental management report to align with the anniversary date of the Project Approval. DPIE approved this request on 30 June 2021. 2. AEMR for 2019-20 has been sighted and submitted to DPIE.	Closed

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
	ensure compliance.				
4.6	The Proponent is to implement continuous improvement in regard to odour emission management. As part of this, the Proponent is to submit a report annually to the Department and the EPA, unless otherwise agreed by the Director-General, outlining new developments in the field of odour control and management relevant to the operation, and detailing practices that have been implemented on the site during the previous year, to reduce odour emissions. The report must identify which practices can be implemented in a cost-effective manner and justify why the remainder are not required	The AEMR includes a section on odour monitoring (s6.6), however the information included does not meet the requirements of this condition. The OMP states continuous improvement must be reported annually to DPIE in accordance with "Environmental auditing and review" in the EMP (s1.10). The EMP, s1.10, states a continuous improvement report must be prepared but does not state the frequency or what this report must address. A Continuous Improvement Report for 2017 was submitted to DPIE in June 2018. No previous or subsequent report has been provided.	Update either the EMP or the OMP to clearly capture the annual reporting need and requirements of this condition.	Odour Improvement Report submitted to DPIE on 1 March 2021 via DPIE planning portal.	Closed
4.10	Within 1 month of the approval of any plan or program required under this consent, or the completion of any independent audit or AEMR required under this approval, the Proponent shall: (a) ensure that a copy of the relevant	The website as accessed on 21 October 2020 did not have the first independent environment audit, 2011.	Upload the first audit.	Website accessed on 6 July 2021; first independent environment audit 2011 is available.	Closed

Approval (ID)	Requirement	Findings	Audit recommendation	Corrective action(s)	Status
	documents is made publicly available on the Proponent's website; and (b) provide a copy of the relevant document/s to any interested party upon request.				



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