

ATTACHMENT I.1
EXISTING ENVIRONMENT & IMPACT OF THE ACTIVITY – ATMOSPHERIC
EMISSIONS

*For inspection purposes only.
Consent of copyright owner required for any other use.*

I.1 Assessment of Atmospheric Emissions

The only potential environmentally significant effects on air quality from Goff Recycling Ltd's proposed operations are dust, odours and noise. Existing dust and odour emissions at the site are dealt with separately below. Existing noise emissions are dealt with in section I.6 of this licence application.

I.1.1 Dust

Due to the quantity and nature of waste that is proposed to be handled at the site, there is the potential for dust generation, especially in dry weather through waste unloading, sorting and vehicle movements. Background dust deposition monitoring has been carried out at the site at the following four site boundary locations (Map I.1.1).

- A2-1 site entrance
- A2-2 site boundary
- A2-3 site boundary
- A2-4 site boundary

Dust deposition was monitored over a 35-day period from 15th February 2005 to the 21st March 2005 during normal site operations. The monitors were collected at the end of this period.

The dust measurements are below:

Table I.1.1 Dust deposition results

Ref	Dust Monitor Location	Dust Deposition (mg/m ² /d)	Dust Deposition (mg/m ² /hr)
A2-1	Site entrance	204	8.5
A2-2	Site boundary – Site Yard	105	4.4
A2-3	Site boundary – Rear Left Corner	151	6.3
A2-4	Site boundary – Rear Right Corner	126	5.3

The EPA landfill Monitoring Manual states that a soiling rate of 10 mg/m²/hr can pose a nuisance. TA Luft limits suggest a figure of 0.35g/m²/d (14.6mg/m²/hr) to protect against considerable disadvantage or substantial impairment from dust deposition.

The above results show that all the dust-monitoring locations were lower than both the EPA and TA Luft dust deposition limits. As expected the highest figure was located at the entrance to the site, this is due to the proximity and volume of vehicle movements to the dust monitor.

A review of dust deposition rates at similar sites handling larger quantities of construction and demolition waste indicate dust deposition rates of between 4 and 172 mg/m²/hr without causing nuisance conditions or complaints from neighbours.

Proposed dust mitigation measures and dust monitoring programmes are discussed in Sections F.1 of this application.

I.1.2 Odour

The proposed waste facility is situated in a business park adjacent to a country road.

Odour problems from waste facilities are usually caused by the decomposition of readily degradable organic waste. Goff Recycling Ltd. proposes to handle domestic waste, which contains approximately 40% organic waste, at their facility.

Goff Recycling Ltd. also accepts and handles dry, solid, non-hazardous commercial, industrial, construction and demolition and dry household waste at the waste transfer and recycling facility. These waste streams usually contain very little biodegradable material, and hence odours are generally not an issue with these wastes.

The three nearest residential properties to the site are summarised below:

Residential Dwelling name	Distance from site boundary
Holiday Home	20m south of the site
Holiday Home	25m south of the site
Murphy's House	25m south-west of the site

Therefore the nearest residential property to the site is approximately 25 metres away from the facility boundary. Odour from the facility operations should not cause nuisance conditions at these nearby sensitive locations. There were no detectable odours discovered at the nearest residential dwelling during site monitoring. Further odour mitigation measures and odour monitoring are discussed in Sections F.1 of this application.