

Household Waste Recycling

Angus Council Environmental Management (Waste) appointed The Airshed to conduct environmental noise and air quality impact assessments for a proposed household waste recycling centre adjacent to Dragon Farm, Padanaram, off the A926. The aim of the project was to consolidate existing facilities in Forfar and Kirriemuir, generating up to 550 additional vehicle movements per day.

The proposed development was 65m from the nearest noise sensitive receptor. Local residents in Padanaram were concerned that noise, dust and traffic from the facility could affect local amenity.

Noise impacts were predicted using a computer based noise prediction model (SoundPlan 7.4) in accordance with ISO 9613, based on a sound survey at the existing waste recycling site at Forfar. The impacts were assessed in accordance with the Scottish Government's Technical Advice Note on Planning and Noise and BS 4142:2014.

A baseline sound survey was conducted over four consecutive days at the nearest receptor along with detailed weather measurements to obtain typical existing ambient and background sound exposure during the daytime (07:00 – 19:00). The results from the baseline survey at the nearest existing sensitive receptor indicated that the typical daytime background was 41 dB LA₉₀. The dominant noise in the study area was from road traffic.

The results from the prediction exercise indicated that sound from the proposed development had the potential to adversely affect the residential amenity of existing dwellings. The proposed mitigation measures therefore included design layout, procurement specifications for new plant and the erection of acoustic barriers.

When assessed using the method recommended in the Scottish Government's TAN, the residual impact was predicted to be of Neutral/Slight Adverse significance, subject to the successful implementation of the proposed mitigation measures. Noise from the installation was predicted to be of Low adverse impact at sensitive receptors in terms of BS 4142:2014.

A computer based dispersion model (ADMS Roads) was used to predict road traffic emissions using five years of hourly sequential meteorological data. Impacts were assessed in accordance with the non-statutory guidance published by the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK).

The assessment concluded that air quality impacts from the proposed development would be of negligible significance in terms of the IAQM/EPUK assessment framework. Adverse impacts from dust and odour were also considered. Dust and odour affecting off-site amenity were considered to be unlikely.

