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Air Quality Screening Assessment

Planning application to construct a replacement Waste Transfer Station at land off Newyear's Green Lane in Harefield, London Borough of Hillingdon

1 Introduction

West London Composting Ltd (WLC) is proposing to construct a replacement Waste Transfer Station (WTS), hereafter referred to as 'the Proposed Development,' at their existing waste management site on High View Farm, Newyears Green Lane, Harefield, UB9 6LX, in the London Borough of Hillingdon (LBH), hereafter referred to as 'the Site.' The replacement WTS will be capable of accommodating a throughput of 50,000 tonnes per annum of waste and will operate in conjunction with the existing waste management operation.

2 About the Proposed Development

The proposal is to demolish the existing building on Site which currently serves as the WTS and rebuild a new building to act as the new WTS. Activities in the new building will only consist of manual sorting, separation, storage, bulking up and transfer off site for further recovery/disposal, there will be no shredding of wastes.

External storage of waste will be restricted to asbestos, tyres and metal waste in enclosed skips.

The Site currently operates under an Environment Agency environmental permit and will require a variation to the permit (applied for) in order to operate with the increased throughput. As part of the application to vary the permit a Dust and Emissions Management Plan, and Odour Management Plan have been submitted; if approved, the Environment Agency is responsible for enforcement of the permitted operations.

Currently, the traffic movements associated with the existing WTS are an Annual Average Daily Traffic (AADT) flow of 6, mostly Heavy Duty Vehicles (HDVs), (2,304 per annum), which is predicted to increase by 14 mostly HDVs (5,116 per annum).¹

¹ i-Transport LLP (2025) Newyears Green Lane, Harefield, Highways Statement, West London Composting Ltd, Ref: BT/BB/IT200598-001A R, 20 January 2025

3 Air quality in LBH

In 2003, LBH Council declared an Air Quality Management Area (AQMA) over the bottom two thirds of the borough, for annual mean and hourly average nitrogen dioxide (NO₂).^{2,3} The Site is not in the AQMA, it lies over 800m to the north of the AQMA.

LBH does not undertake automatic monitoring of ambient air quality outside the AQMA; it undertakes passive monitoring of NO₂ using diffusion tubes both inside and outside the AQMA. The nearest monitoring locations to the Site are H36, H37 and H43, all of which are roadside sites in the town of Ruislip; they are 2.3km, 2.0km and 3.2km respectively from the Site. Annual mean concentrations in 2023, the latest year reported in the LBH Annual Status Report (ASR),³ were between 24.1µg/m³ and 29.7µg/m³, which is less than 75% of the UK's annual mean objective for NO₂ of 40µg/m³. Air quality in the area of the Site, which is less built up than Ruislip, would be expected to be lower than those monitored values, and can be described as good with respect to the UK objective value.

4 Air quality impact of traffic

4.1 Screening criteria

The Highways Agency, Design Manual for Roads and Bridges (DMRB) methodology⁴ provides the following screening criteria for the determination of potential air quality impacts as a result of vehicle exhaust emissions:

- Daily AADT flows change by 1,000 or more;
- Daily HDV AADT flows change by 200 or more;
- Daily average speed changes by 10km/hr or more; or
- Peak hour speed changes by 20km/hr or more.

Should changes be lower than these criteria, then the DMRB considers air quality impacts associated with a scheme to be negligible, and no further assessment is required.

The EPUK/IAQM planning guidance⁵ provides further indicative screening criteria whereby, in respect of changes in road traffic. Outside an AQMA, an air quality assessment, which would include exhaust, brake and tyre wear, may be required where proposals will:

- Cause a significant change in Light Duty Vehicle (LDV = cars and small vans <3.5t gross vehicle weight) traffic flows on local roads with relevant receptors i.e. a change of LDV (Light Duty Vehicle) flows of more than 500 AADT; or
- Cause a significant change in HDV flows on local roads with relevant receptors i.e. a change of HDV flows of more than 100 AADT.

² Defra, UK-Air, AQMA details, Available at: https://uk-air.defra.gov.uk/aqma/details?aqma_ref=28 [Accessed 08 April 2025]

³ London Borough of Hillingdon (2024) Air Quality Annual Status Report for 2023, Date of publication: May 2024

⁴ Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1, HA 207/07, Highways Agency, May 2007

⁵ Moorcroft and Barrowcliffe. et al. (2017) Land-use Planning & Development Control: Planning for Air Quality. v1.2. Institute of Air Quality Management (IAQM), London. Environmental Protection UK (EPUK) and IAQM

4.2 Traffic generated by the Proposed Development

The Site lies outside the LBH AQMA and the increase in traffic of 14 AADT is much lower than the EPUK/IAQM guidance level of 100 AADT for HDVs and much less than the DMRB level of 200 AADT for HDVs. The increased traffic volumes are therefore unlikely to have significant air quality effect on receptors and no further assessment is required.

4.3 Air Quality Neutral Traffic Emissions Benchmark

The benchmark trip rate for an industrial site in outer London is 6.5 trips/m² GIA/yr.⁶ The proposed building has a gross internal area (GIA) of 1,500m² and the total AADT for the Proposed Development will be 7,420, which equates to 4.9 trips/m² GIA/yr. The Proposed Development is therefore air quality neutral with respect to the trips benchmark.

5 Air quality impacts of construction

LBH has standard wording for the planning conditions on applications including construction and/or demolition activities. The 'Conditions - Reducing Emissions from Demolition and Construction' require the applicant to comply with the Greater London Authority Supplementary Planning Guidance on 'Control of Dust and Emissions from Construction and Demolition SPG' which includes conditions on the Non-Road Mobile Machinery (NRMM) to be used on site.

WLC will comply with the standard planning conditions, registering NRMM used on the online register at <https://nrmm.london/> and using control measures to reduce dust nuisance to levels that are not significant.

⁶ Mayor of London, London Plan Guidance, Air Quality Neutral, February 2023, Table 4.1