

E.1 Emissions to Atmosphere

Point Emissions to Atmosphere

The current licence authorises five point emission sources comprising the biofilters on Building 4 (A2-1), biomass furnace (A2-2), two gas engines (AD-4 and AD-5) and the carbon filter at Building 3 (AD-6). Building 4 has not been constructed and the biomass furnace has not been commissioned and therefore there are currently no point emission sources.

As the anaerobic digestion plant will not be installed the gas engines (AD-4 and AD-5) will not be required; however the negative air system and biofilter in Building 4 (AD-1) will be retained. Although it is not intended in the short term to manufacture SRF in Building 3, this may recommence in the medium term and it is intended to retain the biomass furnace (A2-2), the negative air system and the dust and carbon filter in Building 3 (AD-6).

The locations of the furnace stack and odour abatement plant stacks are shown on Drawing No. 3 Proposed Monitoring & Emissions Locations Rev D. Details of the stack heights, maximum flow rates and efflux velocities for each emission point are presented in the table below.

Emission Point Details

Emission Point	Biofilter A2-1	Biomass Furnace A2-2	Carbon Filter A2-6
Stack Height above Ground Level(m)	16	16	14
Temperature (K)	293	523	293
Efflux Velocity (m/s)	18.76	20.23	<15
Max Flow (Nm ³ /hr)	96,764	21,670	35,523

The emissions will comply with the limits specified in Schedule B.1.1, B.1.2 and B.1.4 of the current licence.

Potential Fugitive Emissions.

The potential emissions to air from the waste activities that are and will be carried out include dust, vehicle exhausts and odours.

Dusts are associated with the location and type of waste processing and associated vehicle movements. The primary source of dust emissions will be processing the IBA which will be carried out inside the building. A secondary source is vehicle movements on the paved yards during dry periods and the processing of wastes. PANDA cleans the yards daily using a road sweeper and regularly damps down the yards during dry periods, using hoses. All waste processing is carried out inside the buildings.

Vehicle exhausts contain a range of compounds that affect air quality, for example nitrous oxide, carbon monoxide, methane, carbon dioxide, benzene and particulates. The diesel fuelled heavy goods vehicles based at the facility are fitted with Selective Catalytic Reduction (SCR) systems. A diesel fuel additive (AdBlue) is used in the SCR to reduce the nitrous oxide levels in the exhaust gases.

Odours are associated with the types of wastes accepted, the type of processing carried out and the time the wastes are retained on site. The current activities are not a source of odour nuisance and the IBA is unlikely to be a significant source of malodours.

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