



## B2.2 Emissions

WEL monitoring has been undertaken for rubber fume and general process dust. The monitoring was carried out using cassettes worn by employees, and by some static point monitoring within the building. Monitoring of emissions directly from point sources has not been carried out (Please note that emission points A and C have not yet been commissioned).

### Rubber fume WEL results:

Location/Role	Mass of fume (mg)	Air volume (m3)	Rubber Fume exposure (mg.m3)	Rubber Fume 8-hour TWA (mg.m3)	
Moulder (average of 2 staff)	0.39	0.769	0.5	0.44	
Miller	1.2	0.771	1.56	1.37	
QC (Average of 2 staff)	0.08	0.718	0.22	0.095	
Static (average of 2 points)	0.055	0.658	0.085 (air concentration)		

(Ref: Table 4.1 row 4 advised by EA that emissions below the occupational health exposure limit are acceptable. Rubber fume WEL = 0.6mg/m3)

### Process Dust results:

Location/Role	Corrected Mass of dust (mg)	Air volume (m3)	Dust exposure (mg.m3)	Dust 8-hour TWA (mg.m3)	
Moulder (average of 2 staff)	0.74	0.769	0.965	0.845	
Miller	6.49	0.771	8.42	7.37	
QC (average of 2 staff)	0.24	0.718	0.33	0.29	
Static (average of 2 points)	0.03	0.658	0.05 (air concentration)		

(Ref: Table 4.1, row 2, higher limit level of PG6/28 specified limit of 50mg/Nm3 as 30 minute mean for contained sources as advised by EA.)

### VOC emissions:

Total consumption of compounds containing some VOCs (using 12 month purchases as proxy for usage), was approx. 690Kg in 2022. The majority of solvents used are paints and thinners, used to coat metals prior to rubber bonding. No separate monitoring of solvent emissions has been undertaken.

### **Polyurethane Casting**

Emission Point D is an extraction booth used periodically for polyurethane casting. Product used contains <0.1% free monomer. No blowing agents are used. Moulds are cleaned by polishing with scotch cloth. A small quantity (10ml per time) of cleaner DC flush is used to remove product from surfaces when the booth is being used. The production method is entirely pouring and casting, no spraying or foaming takes place.

Maximum volume of pre-polymer stored on premises at one time: 200Kg

Average annual useage over last 3 years: 390kg

[Following the guidance in PG6/29, could this activity be considered for exemption under Triviality clause 3.10.]

No emission monitoring has been undertaken.

### **B2.3 Current and Proposed technology for preventing/reducing emissions to air**

Rubber fume: unabated extraction via LEV at points A, C and D

VOCs: Paper filtration system within Spray Booth, plus LEV extraction at point B

Process Dust: unabated extraction via LEV at point C

All LEV systems which have been commissioned to date are inspected at the prescribed intervals, by a competent external contractor. Inspection reports are available if required.

### **B2.4 Unintentional Releases**

Emission	Likelihood	Mechanism of unintentional release	Consequence	Mitigation
Rubber fume	Low: fume produced when rubber is heated, during blending and moulding processes.	Fire	Temporary increase in emissions	Flammable storage protocols /electrical safety/fire safety regulations in place on site to reduce likelihood of fire.
VOCs	Low: minimal quantities of solvents kept on site at any one time.	Spill	Ground contamination, VOC release outside Spray booth	Spill kits kept on site, solvents stored in bunded, locked container.
Process Dust	Low: dust generated during defined work processes	None identified.	N/A	N/A

Full COSHH assessments are in place for processes and compounds giving detailed instructions on dealing with unintentional releases, containment measures, safe storage and handling.