



# Air Quality Noise and Vibration



# 4. Environmental Minimum Requirements

## What We Need To Comply With



Code of Construction Practices



# Air Quality

1. The Code of Construction Practice contains an array of measures required of EKFB to control and limit air quality issues to minimise risk of causing nuisance.
2. EKFB will undertake **Dust Risk Assessments** to review activities planned for each area along the route alongside the numbers of households or businesses in close proximity to the works to establish monitoring requirements. This will determine areas as Low, Medium and High risk of air quality nuisance.
3. HS2 initially identified locations where air quality would need to be monitored however as EKFB are developing our construction designs and plans this will increase.
4. EKFB have commissioned Southdowns Environmental Consultants to carry out noise risk assessments and modelling for both temporary and permanent works



# Air Quality

1. The vehicle and NRMM emission standards are incredibly challenging and the exemption regime is very strict.
2. Many SME subcontractors may find it hard to provide EURO VI emission HGVs and EURO 6 Diesel / EURO 4 Petrol Light Duty Vehicles.
3. There are limited Stage IIIB generators on the market and given our rural site locations generators will be relied on heavily.
4. Opportunities – there are a multitude of innovations in emissions standards which EKFB can seek to lead on; e.g. hybrid generators, low carbon fuels, vehicle charge points at depots.

From 2017	From 2020
IIIB <sup>(2)</sup> (or IIIA with approved diesel particulate filter DPF)	IV <sup>(1, 2)</sup>

Vehicle Class & Minimum Vehicle Emission Standard	Target	Requirement
Heavy Goods Vehicles (HGV) – EURO VI	100% from start of works	As far as reasonably practicable; 100%
From 2020; Heavy Goods Vehicles (HGV) – Percentage 'cleaner' than EURO VI (e.g. lower particulate matter emission through alternative fuel)	10%	None
Light Duty Vehicles – EURO 6 Diesel, EURO 4 Petrol	80% from start of works; 100% from 2020	100% from 2020
Ultra-Low Emission Vehicles* Cars	100%	Produce a plan to work towards achieving target percentages
Ultra-Low Emission Vehicles* Vans (Medium Vans, 2,000 to 2,600kgs)	75%	Produce a plan to work towards achieving target percentages
Fleet Average gCO <sub>2</sub> /km Cars	75gCO <sub>2</sub> /km from start of works, decreasing by 5gCO <sub>2</sub> /km every 3 years	
Fleet Average gCO <sub>2</sub> /km Vans	160gCO <sub>2</sub> /km from start of works, decreasing by 20gCO <sub>2</sub> /km every 3 years	



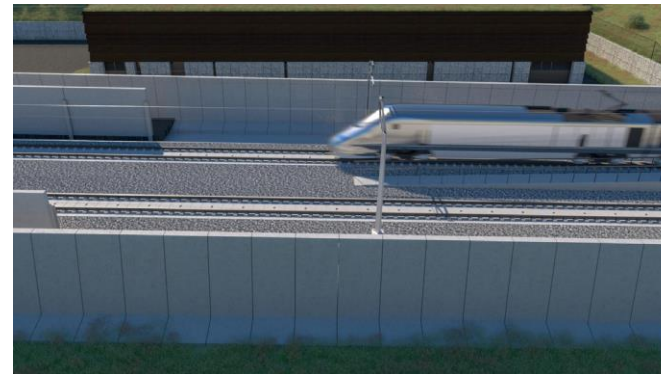
# Noise and Vibration

1. EKFB are required to apply “**Best practicable means (BPM)**” to minimise noise and vibration for neighbouring residential properties and other sensitive receptors during construction.
2. EKFB will assess the need for a **Section 61** using a risk based approach follow best practice guidance.
3. This approach considers both site factors and works information and scores on a **Low, Medium** and **High risk** of impact.
4. For those areas scoring Low a **Statement of Intent** shall be considered. **See example**
5. For Medium and High EKFB shall be considered. The results of the risk assessment will be discussed with the LA and an agreement reached on the appropriate way forward.
6. Noise and vibration will monitored where there is the highest risk of exceedance of the various limits set by HS2 using meters set with alarm notifications.



# Noise and Vibration

1. Noise and vibration limits are set for both the construction and operational phase.
2. The noise modelling will highlight areas where noise barriers will be required.
3. During all phases of construction EKFB/Southdown's Environmental will assess potential construction noise to determine whether specified noise limits will be exceeded and measures will be incorporated so the noise limits are not breached.
4. All works where possible will be undertaken within the set standard working Hours of weekdays - 08:00 to 18:00 Saturday - 08:00 to 13:00. Except in the case of an emergency. All works outside these Hrs will be agreed with the Local Authority EHO prior to commencement



# Calvert Concrete Batching Plant (Update)

**Statement of Intent** accepted for mobilisation of batching plant.

Activities include

- Site clearance of trees, hedgerows, bushes, vegetation and topsoil;
- Creation of compound hard-standing platform;
- Installation of site fencing and site offices;
- Installation of temporary utilities; and
- Installation of FRUMECAR batching plant

Section 61 consent for the operation of the plant is still in progress expected to be submitted Jan 2021

