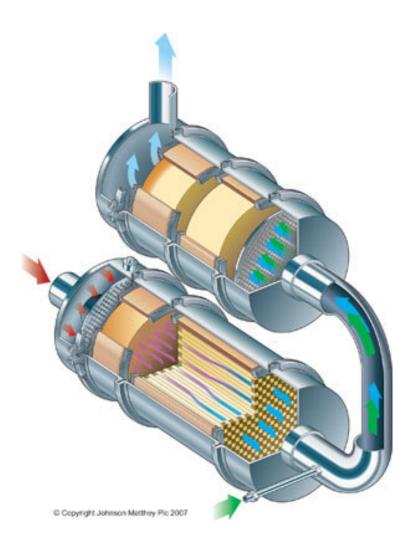


LONDON NRMM LEZ

Since the introduction of tighter emissions standards for new vehicles and the vehicle LEZ implementations in London, air quality in the capital has improved. However, as emissions from vehicles have gone down, the proportion coming from construction machinery has increased and the mayor decided to tackle these emissions by introducing the London nrmm LEZ in 2015. Up until 2020, machines working on major developments within greater London need to meet EU Stage IIIA levels, while those working on those sites in the Central Activity Zone or Canary Wharf have to meet Stage IIIB limits. These limits only apply to machines between 37 and 560 kW although it is good practice to apply the limits to all sites and machines.

From 2020 these requirements will tighten to Stage IIIB for Greater London and Stage IV for the Central Activity Zone and Canary Wharf and will apply to all sites. The Mayor's guidance on meeting these requirements is to either reorganise the fleet to use a machine that meets the required standard, obtain new equipment that meets the standards, fit a different engine that meets the standards to an existing machine, or retrofit an approved exhaust aftertreatment device registered on the EST scheme. As Stage IIIB legislation is tighter for both NOx and PM, retrofit for both these pollutants should be considered but, if it is not possible to retrofit for both pollutants, then just particulate retrofit is acceptable. Generally, SCR is needed to significantly reduce NOx emissions and retrofit SCR is more difficult to implement for individual machines.



For constant speed engines (eg generators) there were no EU Stage IIIB or Stage IV limits set so there is currently a block exception for these types of engine. From 2020, these constant speed engines will need to meet EU Stage V emissions standards in the CAZ/CW. This effectively means the use of both a particulate filter and an SCR system. The Johnson Matthey range of DPFs are approved for London nrmm LEZ and are registered on the EST scheme.

HS2 generally follows the London nrmm LEZ requirements but is one EU emissions stage stricter.

Area	London SPG Stage Requirements	HS2 Requirements		
From 2015	From 2020	From 2017	From 2020	
Central Activity Zone (includes Euston)	IIIB	IV	IV(1, 2)	V
Rest of Greater London	IIIA	IIIB	IIIB(2)	IV(1, 2)
Rest of country	Not applicable	Not applicable	IIIB(2)	IV(1, 2)

Other cities in the UK are looking at the London nrmm LEZ scheme and are considering whether to implement similar requirements.