



Case Study: Hewitt Sportsturf

CRT Retrofit helps Hewitt Sportsturf comply with London NRMM Low Emission Zone Emissions Requirements

W E Hewitt & Son Limited has retrofitted three JCB 714 Articulated Dump Trucks with Continuously Regenerating Trap (CRT®) diesel particulate filters (DPFs) from Eminox, making them compliant for use in the London Non Road Mobile Machinery (NRMM) Low Emission Zone (LEZ).

Hewitt Sportsturf specialises in the design, construction and maintenance of natural grass sports surfaces. The company works on a number of high profile sports grounds in London's NRMM LEZ, including Arsenal's new Emirates Stadium and Tottenham Hotspur's White Hart Lane.

Non-Road Mobile Machinery (NRMM), with engines of a net power of 37kW and 560kW, which is used on any major development within Greater London is now required to meet Stage IIIA emissions regulations as a minimum, or retrofit best available technology; whilst NRMM used on any site within the Central Activity Zone or Canary Wharf has to meet Stage IIIB as a minimum. The JCB 714 Articulated Dump Trucks have an engine power of 123 KW and therefore fall within these parameters.

Construction sites and other major venues, such as sports grounds, which use NRMM must comply with these minimum requirements. By retrofitting Eminox CRTs, Hewitt Sportsturf has ensured that its machinery is suitable for use anywhere within Greater London, including the Central Activity Zone and Canary Wharf.

The NRMM LEZ requirements came into force in September 2015, because research by the London Atmospheric Emissions Inventory (LAEI) estimated that diesel engine NRMM used on construction sites in Greater London is responsible for 15% of Particulate Matter (PM10) emissions.

Diesel exhaust emissions, and especially PM10, have been classified as carcinogenic to humans, with an increased risk of lung cancer and other serious health-related conditions. From 2020 any development site in Greater London will be required to meet Stage IIIB, whilst central London and Canary Wharf will need to meet Stage IV.

Ryan Hewitt of Hewitt Sportsturf said; *"The CRT retrofit system from Eminox proved to be an effective and efficient solution to control exhaust emission levels on our JCB 714 Articulated Dump Trucks. Eminox provides an excellent service and quick turnaround, which meant the machines were back in operation much quicker than we had envisaged. Since the CRT system was retrofitted, the trucks have operated trouble-free and we are sure our clients will appreciate that we are doing our part to tackle air pollution in London. We believe that the Eminox CRT represents best available technology for achieving regulatory compliance."*



Eminox is a leading global supplier of Exhaust After-Treatment Systems (EATS) to Original Equipment Manufacturers' (OEMs) for use on buses, trucks and trains. The company is also a major European supplier of emission control systems for retrofitting to vehicles already in service.

The company has been supplying exhaust and emission control systems for the non-road market since 1988 and has successfully retrofitted CRT systems to a range of NRMM, including cranes, dumper trucks, excavators, concrete pumps, piling rigs and wheel loaders. Prices start as low as £5,000 per machine. The Eminox mobile fitters can install systems on London LEZ sites in as little as one day, keeping down-time for construction contractors to a minimum.

The CRTs were retrofitted by Eminox fitters at Hewitt Sportsturf premises, providing a convenient, flexible and practical service that avoided disruption to the company's busy schedule.

The Eminox CRT retrofit system is VERT certified and approved by the Energy Savings Trust (EST) for NRMM. It is renowned for being a robust, reliable system and Eminox can supply spare filters so that machinery can continue to be used while the original filter is being cleaned by its sister company, Ceramex. The filters are designed to be easily accessible and can be removed for cleaning at required intervals, depending on the level of use and type of machine.

