Non-Road Mobile Machinery (NRMM)

1. WHAT

NRMM is defined as any mobile machine or vehicle that is not solely intended for carrying passengers or goods on the road.

Examples of NRMM include, but are not limited to: Access platforms, Dumpers, Piling rigs, Excavators, Bulldozers, Forklifts, Compressors, Generators, Mobile cranes, Concrete pumps, Mobile crushers, Telehandlers, Rollers and Other construction machinery

There are legal emissions requirements which apply to NRMM that is powered by diesel, including diesel hybrids.

2. WHY

Pollutant emissions from combustion engines installed in NRMM significantly contribute to air pollution by emitting carbon oxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), and particulate matter.

The objective is to progressively reduce the pollutant emissions and to phase out equipment with the most polluting engines.

Emissions from these engines are regulated by 'NRMM Regulation': Regulation (EU) 2016/1628

In London Atmospheric Emissions Inventory estimates that in 2013, NRMM used on construction sites was responsible for a significant proportion of harmful emissions in London. These emissions contribute to poor respiratory health.

Ensuring that NRMM used on site meets cleaner emissions standards helps to protect the health of site workers who use and work in close proximity to these machines and the general public.

To address the contribution made by non-road mobile machinery on London's air quality, the Greater London Authority have established emissions standards for London.

3. WHERE

The 'NRMM' Regulation covers the UK.

NRMM on major construction sites within:

- *in the Central Activities Zone and Opportunity Areas, including Canary Wharf (CAZ/OA & CW) - All machinery should meet at least stage IV of EU Directive 97/68/EC as a minimum*
- *You can find more detail about London's Opportunity Areas on our Opportunity Areas webpage.*
- *in Greater London - All machinery on sites should meet at least stage IIIB of EU Directive 97/68/EC as a minimum*
- *When you are registering a new site (see 4 below), you will be able to drop a pin on the site location to identify which zone your site is in. see link for interactive map.*

Important Notes:

Stages IIIB and IV have not been defined for machines with constant speed engines, such as generators. This means that these machines will need to meet stage V.

Stage IV has also not been directly defined for variable speed engines smaller than 56 kW. In most cases these engines will need to meet stage V if they are in the Central Activities Zone and Opportunity Areas (OAs).

Requirements apply to NRMM of net power between 37kW and 560kW, it is good practice to apply the same standard to all sites and all categories of NRMM.

Currently McLaren Projects in London are classed as major development projects under the legislation and therefore this guidance applies to all London Projects.

At present the requirements only apply to NRMM of net power between 37kW and 560kW. The net power range will be annually reviewed by the GLA.

4. PROCEDURE

4.1 Standard McL NRMM compliance checks applicable to all projects:

Simple checks that all projects can do to assist in evidencing NRMM compliance include:

- Stated requirement in Subcontracts for NRMM to meet NRMM regulations by purchase / lease or hire from reputable companies / manufacturers (see SHE requirements for Subcontractors standard document).
- Ensure subcontractors are undertaking daily and weekly checks of NRMM as per SAF 70 Subcontractors SHE pack requirements.
- Query any plant which appears to be modified, retrofitted and / or is producing excessive or visibly dark smoke and remove from site where compliance cannot be verified.
- Where suspect NRMM is identified, the request for maintenance records in these circumstances may satisfy the Project that regular inspections are carried out on NRMM including checks on emissions.

4.2 Additional specific requirements for London projects:

4.2.1 Subcontractors

Must provide evidence of compliant plant via:

- Completion of NRMM ENF011 assessment form prior to plant arriving on site and obtain authorisation from McLaren to proceed.
- Including copies of NRMM ENF011 assessment in SAF70 Sub -contractors SHE Pack.

Non compliant plant must be removed or ‘made’ complaint (within 5 days) or project must apply for exemption if this is not possible. See NRMM for more detailed guidance on exemptions.

Non conforming plant instances must be recorded via the SAF 82.

Note: Impact of COVID-19

COIVD-19 has caused disruptions to construction sites and to supply chains. This could make it more difficult for construction and hire companies to prepare for the new NRMM Low Emission Zone standards which came into effect in September 2020.

In response, a time limited exemption from the new standards for a period of 6 months between the 1st September 2020 and the 28th February 2021 has been brought into effect.

Information on who is eligible for an exemption can be found in the updated policy on the website.

***If you are eligible for time limited exemption (COVID-19) and your machinery is already on** site and registered it will automatically be put your forward to be considered for an exemption. You will receive an email confirming each exemption granted for machinery already on site, but this may take a few days after the beginning of September. Please be reassured no enforcement action will be taken whilst exemptions are being considered.*

***If you are registering a new piece of machinery from 1st September 2020** and would like to apply for the COVID-19 exemption, please select "Time limited exemption (COVID-19)" from the "Reason for exemption" options during the registration process. These exemption requests will be considered in the usual way.*

4.2.2 McLaren Project Team

Site team member to be nominated to coordinate NRMM requirements for the project SAF 47. They are responsible for:

- Registering and keeping the project NRMM Online register up to date as plant arrives and leaves site.
- Ensuring subcontractors complete NRRM ENF011 assessment form prior to plant arriving on site and obtain authorisation from McLaren to proceed.
- Ensuring subcontractors include copies of NRMM ENF011 in the weekly Subcontractor SAF70.
- Facilitating visits by Local Authority EHO's. The Local Authority will usually arrange inspection in advance with the site.

  Local Authority NRMM visits must be recorded on the SAF 50 and a copy sent with the monthly report to the SHEQ department.

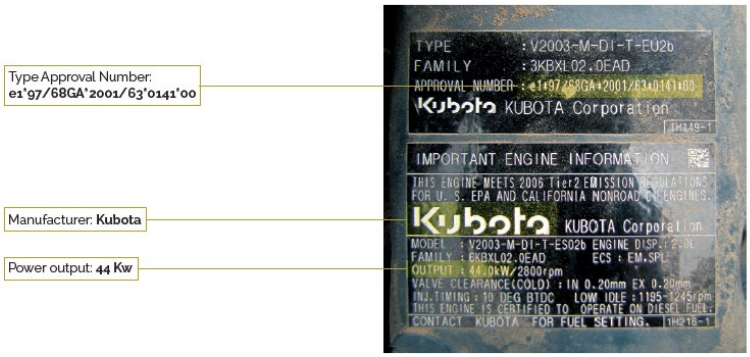
4.3 Inspecting plant – information notes

- Ensure safe to do so i.e. safe access to plate
- Approved engines must have an EC Type Approval Number. The type approval number should be permanently fixed and durable for the lifetime of the engine.
- The number takes the following format:

e11*97/68AB*2004/26*XXXX*YY
(Note that this is an example and not a real Type Approval Number)

e11*	the member state authority that tested the engine
97/68	the original EC base legislation the approval is for
A	the encoding letter of the EU Emissions Stage
B*	variable speed (A) or constant speed (B) engine
2004/26*	the latest level of the legislation that the approval relates to
XXXX*	the identification number of the manufacturer or importer
YY	indicates if the approval has any revisions

Example plate:



Manufacturer	**Kubota**
Power Output (kW)	**44**
Type Approval Number	**e1*97/68GA*2001/63*0141*00**
Comments	**Stage II variable speed engine**

To establish the engine type you will need to find the first of the two letter code within the approval number on the engine plate. The first letter is the Engine Emission Category:

- Codes A to G do not meet the standards
- Codes H to K meet stage IIIA
- Codes L to P meet stage IIIB
- Codes Q to R meet stage IV

- If the Type Approval plate can not be found get in touch with the machine supplier to tell you where it is located or provide appropriate documentation (see NRMM guidance document for more details). Where this can not be resolved by the project, contact your SHEQ Representative for assistance.

https://nrmm.london/sites/default/files/NRMM-Practical-Guide.pdf