

**GREATER  
LONDON  
AUTHORITY**

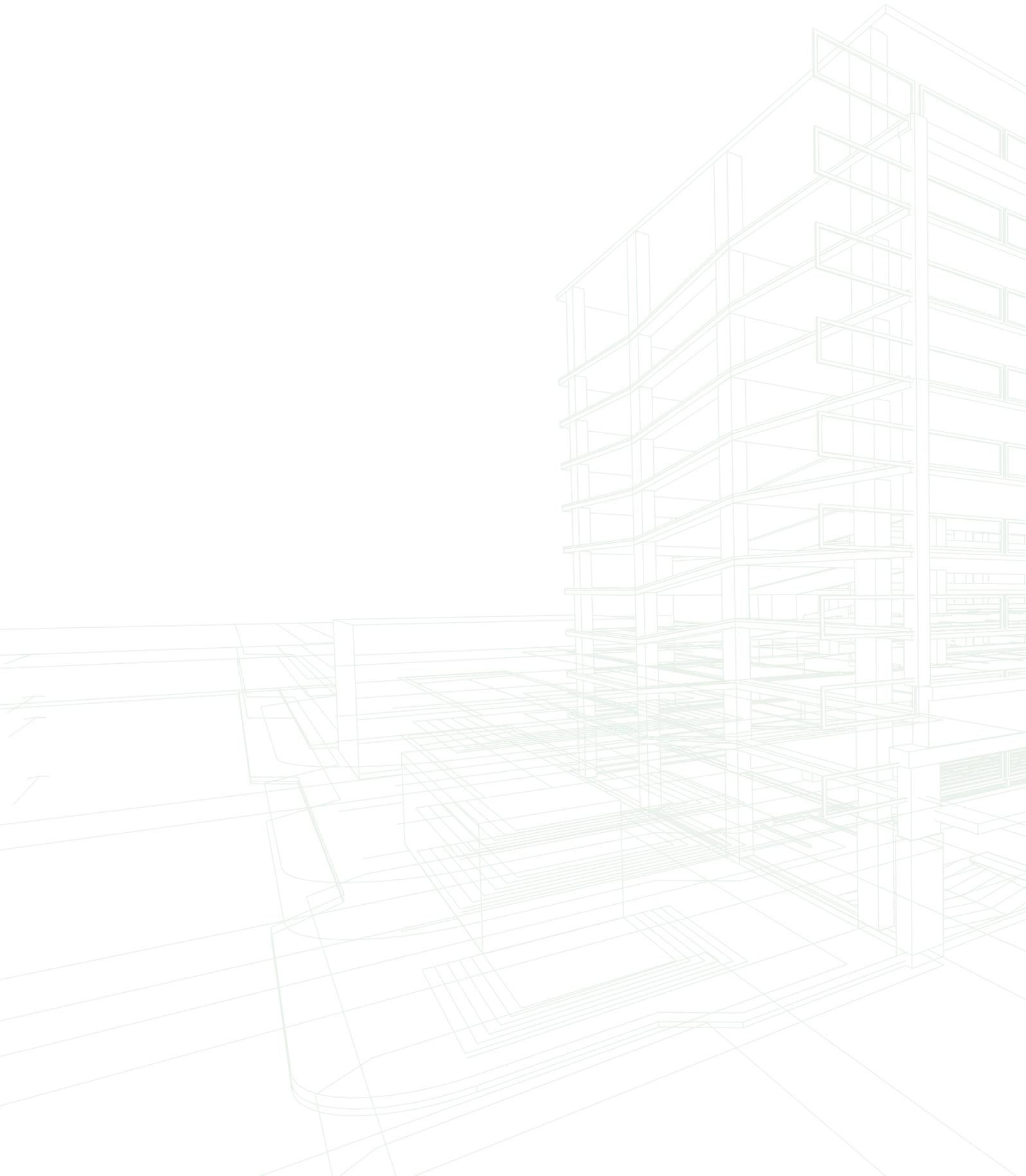
  
**LONDON LOW EMISSION  
CONSTRUCTION PARTNERSHIP**

SUPPORTED BY  
**MAYOR OF LONDON**



# Non-Road Mobile Machinery (NRMM) Practical Guide

September 2017



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# Section 1: Introduction

## 1.1 Purpose

This document contains guidance on the processes and procedures that should be in place on all relevant development sites, including the recommended practices, documentation, considerations and planning conditions.

It can be used by both regulators and developers to better understand what is expected of sites.

## 1.2 Background

For a number of years, many diesel road vehicles have had to meet emissions standards to avoid being charged for travelling within the London Low Emission Zone (LEZ). It is also

important to take action to reduce emissions from non-road mobile machinery (NRMM) in order to protect and improve the health of Londoners. The London Atmospheric Emissions Inventory estimates that in 2013, NRMM used on construction sites was responsible for 7% of NOx emissions, 8% of PM10 emissions, and 14.5% of PM2.5 emissions in London.

PMs and NOx also contribute to poor respiratory health. Ensuring that NRMM used on site meets cleaner emissions standards also helps to protect the health of site workers who use and work in close proximity to these machines.

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

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# Section 2: The Requirements

## 2.1 Definition of NRMM

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

The Emissions requirements are only applicable to NRMM that is powered by diesel, including diesel hybrids.

**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
- Other construction machinery

## 2.2 Where do the NRMM emissions standards apply?

Currently the NRMM emissions standards apply to all Major Development Sites in Greater London, and all sites within the Central Activity Zone or Canary wharf (CAZ/CW).

From 1st September 2020 the NRMM emissions standards will apply to all sites in Greater London.

## 2.3 Definition of a major development

Major development sites are defined in the London Plan as a residential development of 10 or more dwellings, or having an area of 0.5 hectares or more where number of dwellings is not known; or any development carried out on a site having an area of 1 hectare or more, or floor space of 1000 square metres or more.

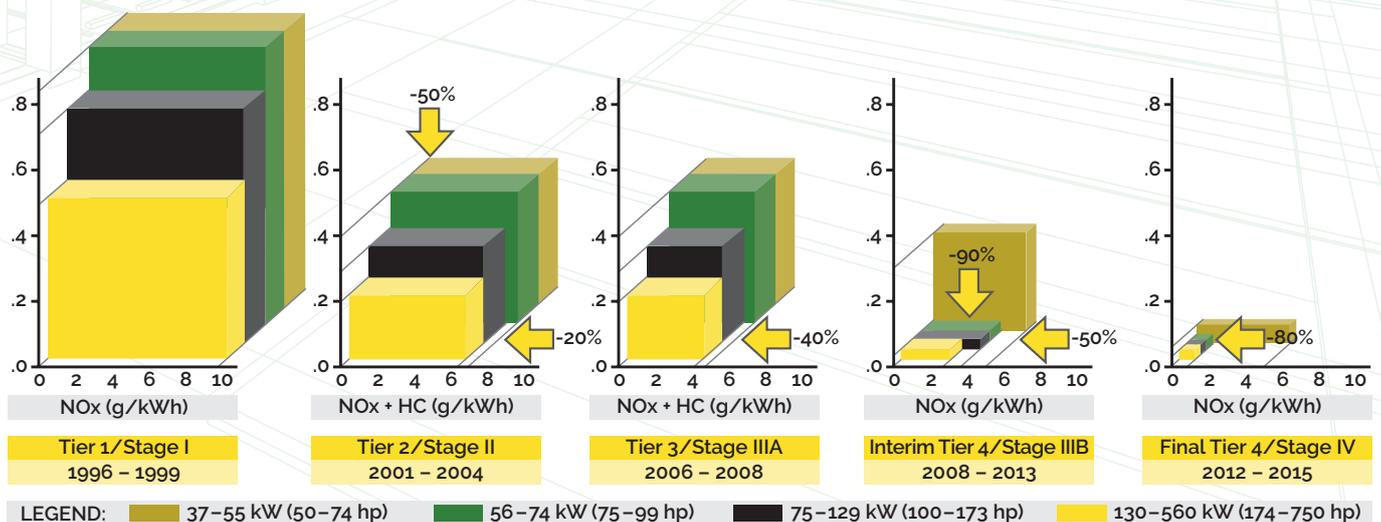
## 2.4 What are the requirements?

Currently NRMM on major construction sites within Greater London are required to meet Stage IIIA of EU Directive 97/68/EC as a minimum; and NRMM on all sites within either the Central Activity Zone or Canary Wharf (CAZ/CW) are required to meet Stage IIIB of EU Directive 97/68/EC as a minimum.

From 1st September 2020 NRMM on all sites within Greater London will be required to meet Stage IIIB of EU Directive 97/68/EC as a minimum; and NRMM on all sites within either the Central Activity Zone or Canary Wharf (CAZ/CW) will be required to meet Stage IV of EU Directive 97/68/EC as a minimum.

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

Although the requirements do not apply to all sites, and only 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.



## 2.5 Model Planning Condition

The NRMM regulations affect all development sites within the Central Activity Zone (CAZ) or Canary Wharf and all major development sites within Greater London. Planning conditions should be placed on those sites in order to help mitigate the impact of developments on air quality and safeguard the health of site workers.

Model Condition:

'NRMM used on any site within the CAZ or Canary Wharf is required to meet Stage IIIB of EU directive 97/68/EC as a minimum, and NRMM used on the site of any major development within Greater London is required to meet Stage IIIA of EU directive 97/68/EC as a minimum.'

---

## Section 3: Recommended management procedures

Here is a recommended site procedure that works in most situations, however sites are free to adapt this procedure for their site. The procedures should still ensure that the site is compliant, and that centralised records of the relevant emissions information are being kept and can be made available on site.

Sites must additionally ensure that the online register is kept up to date.

### 3.1 Roles and Responsibilities

On each site the Primary Contractor should nominate a person to manage the NRMM requirements. It is their responsibility to ensure that the site is compliant, which includes:

- a) Ensuring that all relevant site workers are aware of the requirements, carrying out their roles and adequately equipped to do so.
- b) Keeping all relevant machinery emissions information and documentation centralised on site
- c) Ensuring that the NRMM online register is kept up to date (<http://nrmm.london/>)

Each sub-contractor should nominate 1 person to be responsible for ensuring that the NRMM they are bringing to site is compliant and provide the Primary Contractor with the relevant details for each machine.

### 3.2 Sub-contractors checks

The maximum amount of time an item of non-compliant NRMM can stay on site without an exemption is 5 days, therefore NRMM should be checked by the sub-contractor, and the primary contractor notified within the first 5 days of its arrival.

An example of the type of form that can be used to record NRMM details when it arrives is shown in Appendix 1. For guidance on how to find the relevant emissions information on the engine, and how to confirm engine emissions stage, see Sections 4.3 - 4.6.

### 3.3 Site NRMM inventory spreadsheet

After being checked by the sub-contractor, the NRMM emissions information should be passed to the Primary Contractor, who will keep the relevant information for all NRMM on site centralised on their own spreadsheets. An example spreadsheet that could be used is shown in Appendix 3. It is optional for sub-contractors to keep similar spreadsheets of their own.

### 3.4 Primary contractor checks

The information provided by the sub-contractors should be checked by the Primary Contractor at least once per month, this could be included in the site monthly/weekly environmental audits. These checks should be documented on the site NRMM inventory spreadsheet.

For guidance on how to find the relevant emissions information on the engine, and how to confirm an engines emissions stage, see Section 4: Inspections and Assessing compliance.

### 3.5 Managing non-compliant NRMM

If during any of these checks an item of NRMM is found to be non-compliant, the contractor should remove it from site within 5 days of its arrival. If this is not possible then the primary contractor should apply for a 30 day exemption, explaining why the item of NRMM cannot be removed within the 5 day deadline. The application should include your intentions for the machine, for example when you plan to remove it from site or install a retrofit (see Section 4.6 for more information regarding retrofits).

While the exemption request is awaiting approval the exemption is active, but be aware that these applications may be refused and sites should be prepared to remove the machine as soon as possible in those cases.

It is also recommended that sites keep a record of actions taken to address any instances when non-compliant NRMM arrives on site. An example incident report sheet is shown in Appendix 4.

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## Section 4: Inspections & Assessing compliance

### 4.1 Health and Safety

Site health and safety procedure must be followed at all times during NRMM inspections. If for health and safety reasons a particular item of NRMM on site cannot be inspected, the person carrying out the inspection should ask to see the appropriate documentation for that machine. If there is reason to believe that the item of NRMM is non-compliant, or the appropriate documentation is not available, an inspection should be carried out as soon as possible at a time when it is safe to do so.

### 4.2 Local Authority Inspection

It is recommended that these inspections are arranged in advance. The inspecting officer should view all areas of site where NRMM could be found, checking whether the NRMM on site is compliant and that the relevant emissions information matches up with site records.

An example inspection form is available in Appendix 2. This is primarily for local authority use, but sites can also use this if they wish to do so. Most sites prefer to record their own checks on their NRMM inventory spreadsheets (Appendix 3).

## 4.3 Reading engine Type Approval plates

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 exact location of the Type Approval Plate varies from one machine to another.

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)

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

Using the tables below, an engines EU Emissions Stage and Power Band (kW) can be identified from the encoding letter in the Type Approval Number. Note that Encoding letters D and K indicate Power Band 19kW – 37kW which is currently outside of the kW threshold of the requirements.

Encoding Letter	EU Emissions Stage
A-C	EU Stage I
D-G	EU Stage II
H-K	EU Stage IIIA
L-P	EU Stage IIIB
Q-R	EU Stage IV

		Power Band (kW)				
		19≤ kW <37	37≤ kW <56	56≤ kW <75	75≤ kW <130	130≤ kW <560
Emissions stage	I	*	C	C	B	A
	II	D	G	G	F	E
	IIIA	K	J	J	I	H
	IIIB	*	P	N	M	L
	IV	*	*	R	R	Q

\* no encoding letter assigned

Example Type Approval plates with explanations of what information can be gathered from them are available in Appendix 5.

## 4.4 Difficulty locating Type Approval plates

If you are having trouble finding a Type Approval plate you should get in touch with the machine supplier who may be able to tell you where it is located on the machine.

If no Type Approval Number is evident on the machine, or it cannot be read for any reason, then appropriate documentation should be kept as evidence of the engines compliance. This can be either:

- A Type Approval Certificate issued by an approval authority; or
- A Declaration of Conformity from the manufacturer; showing the Type Approval Number for that engine.

Example Type Approval Certificates and acceptable Declarations of Conformity from the manufacturer are shown in Appendix 6.

If no Type Approval Number is evident on the machine, or it cannot be read for any reason, and suitable documentation is not available, the machine is non-compliant in both Greater London and the Central Activity Zone / Canary Wharf.

## 4.5 Exemptions

There are cases where items of NRMM may be exempt from certain requirements. Note that all NRMM between 37kW and 560kW should be registered online regardless of any exemptions that may apply.

**Block Exemptions** currently apply to truck-mounted cranes and constant speed engines. This excuses them from Stage IIIB emission requirements only. This exemption is automatic and does not need to be applied for online. For more information on how to identify constant speed engines see Section 4.3.

**Viability Exemptions:** If no viable retrofit is available and the supply of compliant equipment is limited, you can apply for a viability exemption online. The machine will still have to meet the next best possible emissions stage. This exemption lasts for 1 year, after which time you will need to re-apply for the exemption.

**Short-term Exemptions:** Short term exemptions are available in cases of emergencies, allowing non-compliant NRMM to be on site for 30 days.

## 4.6 Retrofits

There are a variety of retrofit abatement technologies available to reduce emissions to the required level. The most common method of retrofitting involves the installation of a diesel particulate filter (DPF) or catalytic convertor to the exhaust system of the NRMM. All diesel engines are potentially suitable for retrofit to mitigate particulate emissions but space within the engine compartment and cost may both be limiting factors.

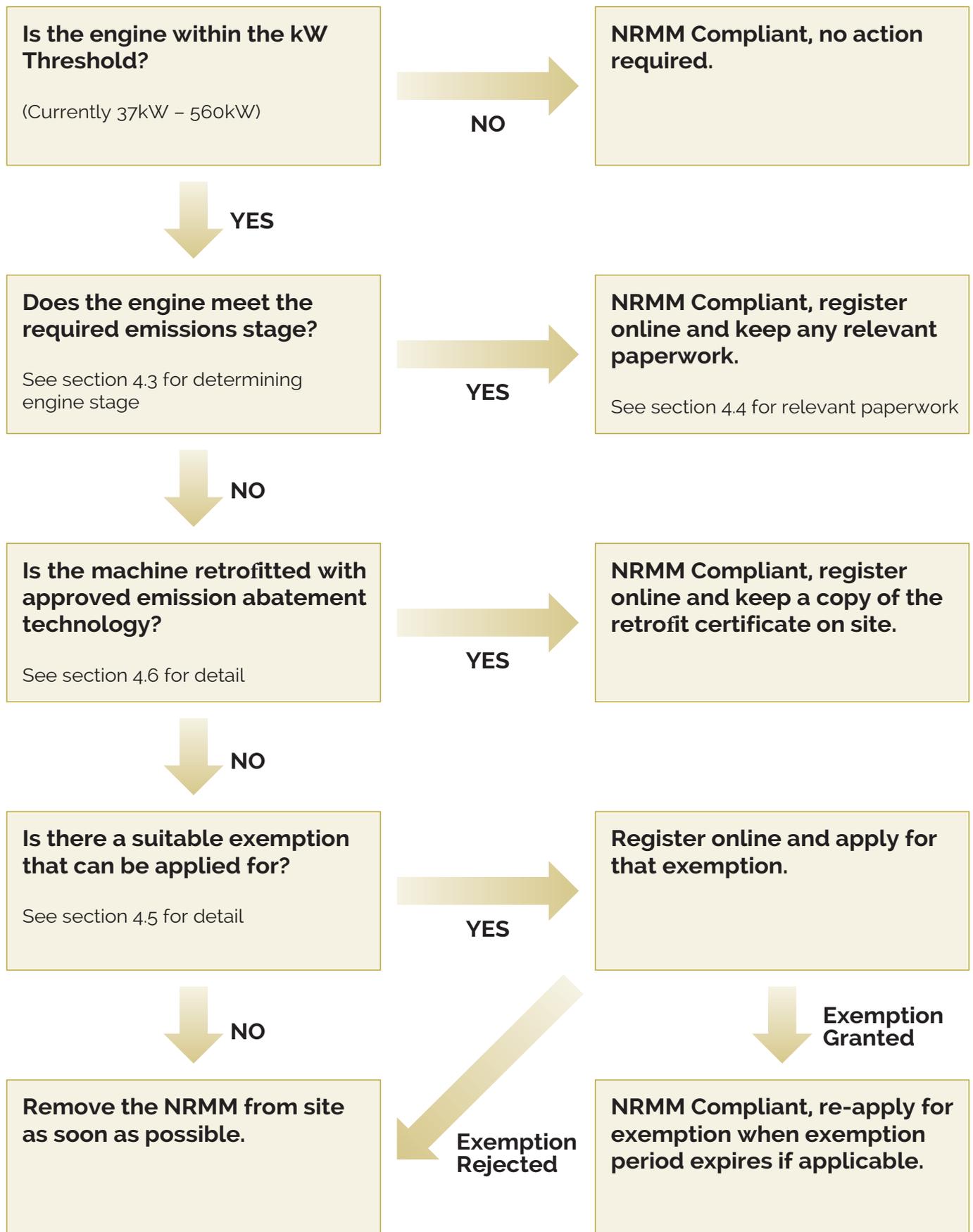
Only retrofit technology that has been registered and endorsed by the Energy Saving Trust NRMM certification scheme should be fitted to machinery to ensure the retrofit is correctly specified and fitted in order to prevent engine damage or any risk to the operator. A list of suppliers and endorsed products can be found at:

<http://www.energysavingtrust.org.uk/business/products/emissions-reduction-systems>

Retrofit suppliers should issue a certificate for each individual retrofit with appropriate identifying information. It is strongly recommended that sites keep copies of all the certificates for retrofits on their site as a record of compliance and to aid inspections. It is recommended that you take these certificates with you when you carry out inspections on site to help identify which certificate is for which retrofit.

Examples of acceptable retrofit documentation are shown in Appendix 7.

## 4.7 Compliance Flowchart



# Appendix 1: Example Arrival Form

## NRMM Arrival Form

(Complete and pass to primary contractor within 5 days of NRMM arriving on site)

Contractor:	
Machine type	
Supplier	
Date of Arrival	
Plant ID	
Engine Power (kW)	
Engine Manufacturer	
EU Type Approval Number	
EU Emissions Stage	
Retrofit Details*	

Date Checked	
Checked by	
Signed	

\*If the machine has been retrofitted with emission abatement technology, the certificates for those retrofits should be provided to the Primary Contractor with this form.









# Appendix 5: Example Type Approval Plates

Power output: **55.4 Kw**

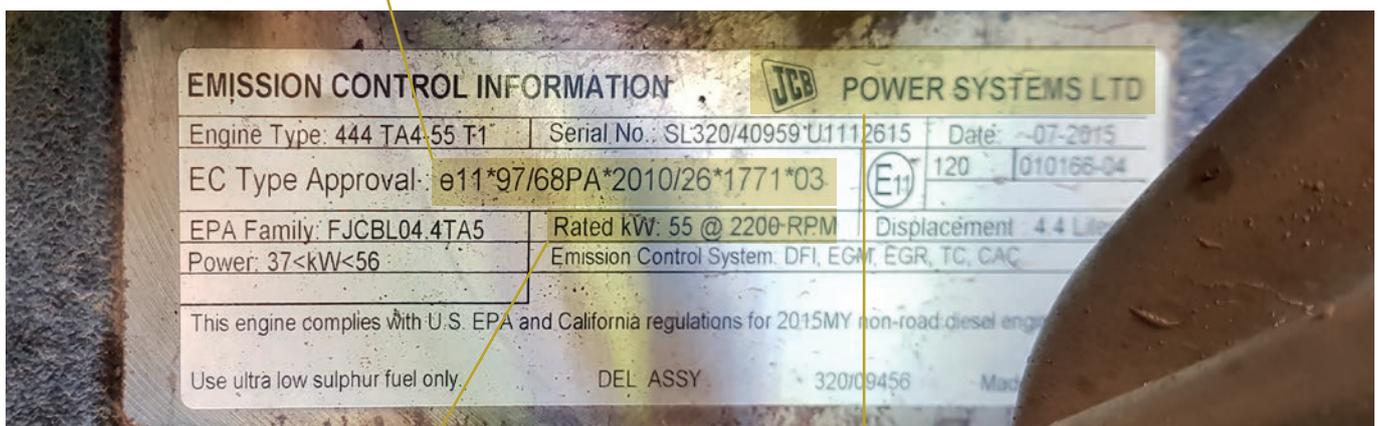


Manufacturer: **Deutz**

Type Approval Number:  
**e1\*97/68PA\*2012/46\*0699\*04**

Manufacturer	<b>Deutz</b>
Power Output (kW)	<b>55.4</b>
Type Approval Number	<b>e1*97/68PA*2012/46*0699*04</b>
Comments	<b>Stage IIIB variable speed engine</b>

Type Approval Number:  
**e11\*97/68PA\*2010/26\*1771\*03**



Power output: **55 Kw**

Manufacturer: **JCB**

Manufacturer	<b>JCB</b>
Power Output (kW)	<b>55</b>
Type Approval Number	<b>e11*97/68PA*2010/26*1771*03</b>
Comments	<b>Stage IIIB variable speed engine</b>

Type Approval Number:  
**e1\*97/68GA\*2001/63\*0141\*00**

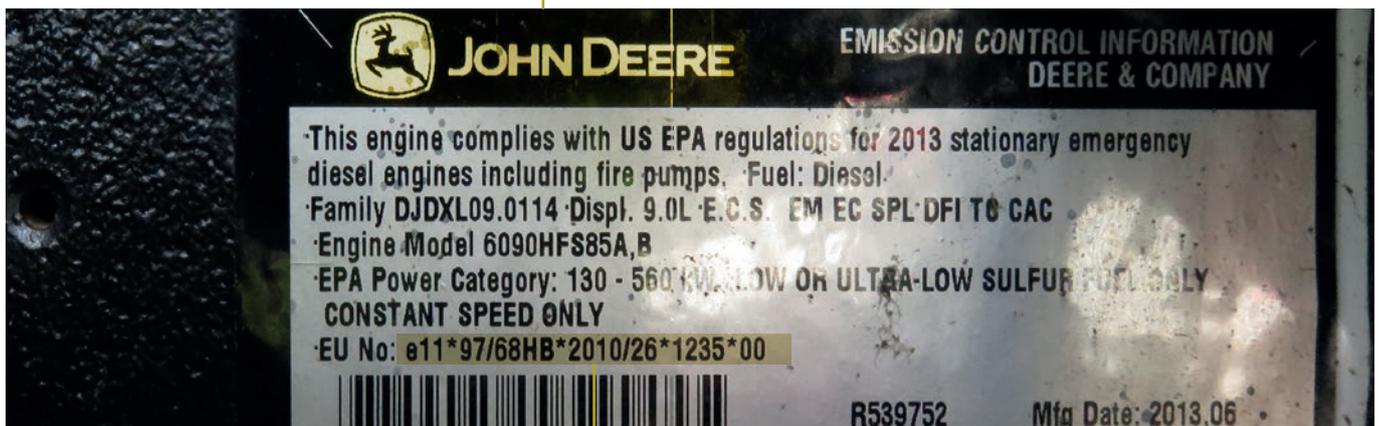
Manufacturer: **Kubota**

Power output: **44 Kw**



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

Manufacturer: **John Deere**



Type Approval Number:  
**e11\*97/68HB\*2010/26\*1235\*00**

Power output:  
**Not shown, check VIN plate**

Manufacturer	<b>John Deere</b>
Power Output (kW)	<b>Not shown, check VIN plate</b>
Type Approval Number	<b>e11*97/68HB*2010/26*1235*00</b>
Comments	<b>Stage IIIA constant speed engine</b>

# Appendix 6: Suitable Documentation for Type Approval Number

## Type Approval Certificate issued by the VCA

Approval Authority for UK

Type Approval Number specified

Identifying information for the engine

Location of Type Approval plate on engine



**VCA Headquarters**  
 1 The Eastgate Office Centre  
 Eastgate Road  
 Bristol, BS5 6XX  
 United Kingdom

Switchboard: +44 (0) 117 951 5151  
 Main Fax: +44 (0) 117 952 4103  
 Email: [enquiries@vca.gov.uk](mailto:enquiries@vca.gov.uk)  
 Web: [www.vca.gov.uk](http://www.vca.gov.uk)

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THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY Rev 10/03

COMMUNICATION CONCERNING THE APPROVAL GRANTED TO AN ENGINE TYPE OR FAMILY OF ENGINE TYPES WITH REGARD TO THE EMISSION OF POLLUTANTS PURSUANT TO DIRECTIVE 97/68/EC, AS LAST AMENDED BY DIRECTIVE 2006/105/EC

---

Type-Approval No. **e11\*97/68LA\*2006/105\*1257\*01**

Reason(s) for extension (where appropriate): To cover:

- 1) Corrected NRTC results
- 2) Updated report for same and was multiple filters

**SECTION I**

0. GENERAL

0.1 Make (name of undertaking): Cummins Inc.

0.2 Manufacturer's designation of the parent/and (if applicable) of the family engine(s) type(s)<sup>(9)</sup>: **E313 (QSB6.7)**

0.3 Manufacturer's type coding as marked on the engine(s):  
**Location: valve cover**

Method of affixing: metal or mylar plate – adhesive backed

0.4 Specification of machinery to be propelled by the engine<sup>(2)</sup>: non-road

0.5 Name and address of manufacturer:  
 Cummins Engine Company  
 500 Jackson St.  
 Columbus, Indiana 47202-3005  
 USA

Name and address of manufacturer's authorised representative (if any): Not applicable

0.6 Location, coding and method of affixing of the engine identification number: valve cover – metal or mylar plate – adhesive backed

USK212720

an executive agency of the Department for Transport



# Caterpillar Declaration of Conformity

**CATERPILLAR**

## Engine Emission Data

For Emissions feedback and questions contact: [engine\\_certification@cat.com](mailto:engine_certification@cat.com)  
[Need Emission Replacement Label? Click Here!](#)

### Emissions Definitions

This emissions data is Caterpillar's best estimate for this rating. If actual emissions are required then an emission test needs to be run your engine.

Engine Emissions Data	
Engine Serial Number	2DC1476
Engine Model	C3.8
Engine Arrangement	345-3615
Labeled Model Year	2013
Build Month Year	02/2013
Emissions Family Code (EPA)	DKBXL03.8AKD
Emissions Family Code (EU)	CKBXL03.8AKD
EU Approval Number	e1*97/68NA*2010/26*0653*02
R120	000110
Certification: EPA Tier	Int. Tier4
Certification: Canada	
Certification: EU Stage	Stage3b
Rated Power @ RPM	72.1KWat2400rpm

As Shipped Engine Data	
DPF SN	3MVA081B10
ECU SN	11H0372DC1476

Caterpillar Confidential: Green  
Content Owner: [REDACTED]  
Web Master (s): PSG Web Based Systems Support  
© Caterpillar Inc. 2015 All Rights Reserved.  
[Data Privacy Statement.](#)

Declaration from the Manufacturer

Identifying information for the engine

Type Approval Number specified

# Type Approval Certificate issued by SNCH

Approval Authority  
for Netherlands



GRAND-DUCHÉ DE LUXEMBOURG  
Ministère du Développement durable  
et des Infrastructures  
Département des Transports  
L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE  
CERTIFICATION ET D'HOMOLOGATION

Registre de Commerce: B 27180



L-5201 Sandweiler

Référence: e13\*97/68PA\*2011/88\*0003\*01

Annexes: - Rapport technique  
- Fiche de renseignements du constructeur

Sandweiler, le 14 janvier 2014

## CERTIFICAT DE RECEPTION CE PAR TYPE EC TYPE-APPROVAL CERTIFICATE

Communication concernant <sup>(1)</sup> / Communication concerning the <sup>(1)</sup>:

- la délivrance d'une réception / type approval
- l'extension d'une réception / extension of type approval
- le refus d'une réception / refusal of type approval
- le retrait d'une réception / withdrawal of type approval

d'un type de moteur / famille de moteurs, en ce qui concerne les émissions de polluants,  
en application de la Directive 97/68/CE, modifiée en dernier lieu par la Directive 2011/88/UE.  
of an engine type or family of engine types with regard to the emission of pollutants pursuant to Directive 97/68/EC,  
as last amended by Directive 2011/88/EU.

Type Approval  
Number specified

Réception par type N°:  
Type-approval number:

e13\*97/68PA\*2011/88\*0003\*01

Motifs de l'extension (le cas échéant):  
Reason for extension (where appropriate):

see: List of modifications, Appendix 0 of technical report.

### PARTIE I PART I

0. Généralités:  
General:

0.1. Marque de fabrique (nom de l'entreprise):  
Make (name of undertaking):

YANMAR CO., LTD.

0.2. Appellation du constructeur du type du moteur  
représentatif et (le cas échéant) des types des  
moteurs de la famille <sup>(1)</sup>:  
Manufacturer's designation of the parent- and (if applicable) of the  
family engine(s) type(s) <sup>(1)</sup>:

Type du moteur représentatif:  
Parent engine type:

4TTWPC

Type de la famille:  
Family engine type:

YD3300DTCPEC

Types des moteurs de la famille:  
Engine types within the family:

4TTNAC, 4TTPAC, 4TTQAC, 4TTSAC, 4TTVAC,  
4TTWAC, 4TTNACJ

Identifying  
information for the  
engine

# Komatsu Declaration of Conformity



Declaration from the Manufacturer

Komatsu UK Ltd.  
Durham Road, Birtley  
Chester-le-Street  
Co. Durham DH3 2QX

Telephone: 0191 410 3155  
Fax: 0191 492 4242

## Declaration of Conformity

### The undersigned, Manufacturer :

KOMATSU UK Ltd  
Durham Road, Birtley  
Chester-le-Street  
Co. Durham DH3 2QX, UK

### Declares in accordance with Directive 2006/42/EC Annex II, Part 1, Section A that the machinery listed below:

Machine designation	Komatsu Hydraulic Excavator
Type	PC490LC-10
Serial number	K60148
Construction year	2015
Engine type	SAA6D125E-6A

Identifying information for the engine

### Conforms to the requirements of the following EC Directives:

<b>Machinery Directive</b>	<b>2006/42/EC</b> and amendments
<b>Electromagnetic Compatibility Directive</b>	<b>2004/108/EC</b> and amendments
<b>Outdoor noise Directive</b>	<b>2000/14/EC, 2005/88/EC</b> & amendments
<b>R&amp;TTE Directive</b>	<b>1999/5/EC</b> and amendments

### Harmonised standards:

EN 474-1:2006+A4:2013 EN 474-5:2006+A3:2013

### Additional requirements from Directive 2000/14/EC and amendments, if applicable:

Conformity assessment procedure	<b>Annex VIII</b>
Engine power according Directive 2000/14/EC	270 KW @ 1900 rpm
Guaranteed sound power level	107 dB/1pW
Measured sound power level	102 dB/1pW
Certificate number / issue and expiration date	0888-OND-009/8 Jan2015/Dec2015
Notified Body	MIRA Ltd, Nuneaton, CV10 0TU, UK

### Type Examination Certificates, if applicable :

Certificate Number	Issue date	Notified Body
e11*97/68LA*2010/26*1073*00	09/07/2010	VCA, Bristol, BS5 6XX, UK

Type Approval Number specified

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes all components which are added, and/or operations carried out subsequently by any third party.

### Name and address of the person authorized to compile the technical file :

Komatsu UK Ltd,  
Durham Road, Birtley  
Chester-le-Street  
Co. Durham, DH3 2QX, UK

### On behalf of the manufacturer,

Name(1), Function(2), Signature(3), Place(4) Date: 19/09/2015

(1) [Redacted]  
(2) Quality Manager

(3) Signature: [Redacted]  
(4) Birtley

Registered Office:  
Komatsu UK Ltd,  
Durham Road, Birtley,  
Chester-le-Street,  
County Durham, DH3 2QX  
VAT No GB 440 9386 41  
Registered No. 1948743 England



KLET001

# Appendix 7: Suitable Retrofit Certificates

Green Urban and this particular product are both approved by the Energy Savings Trust.

Note that there are other approved companies and products available.

Identifying information about the NRMM chassis is optional, as retrofits can be moved between machines. If this is included in the certificate, a new certificate will need to be issued if the retrofit moves to a different machine.

Identifying information that can be found on the product and is specific to each retrofit.




Certificate of Installation			
<b>NRMM Company No. CN-1502 Cert No. CCERT26</b>			
<b>Customer Details:</b>			
<b>Name</b>	Trafalgar Demolition Ltd		
<b>Street</b>	[REDACTED]		
<b>Town</b>	London		
<b>County</b>			
<b>Postcode</b>	[REDACTED]		
<b>Equipment Details:</b>			
<b>Make</b>	Takeuchi	<b>Chassis Reference</b>	175301278
<b>Model</b>	TB175	<b>Hours Worked</b>	4676.3
<b>Engine</b>	Yanmar 3.3Ltr	<b>Engine Power</b>	48.2Kw
<b>Exhaust System Part Number</b>	GU-ASSY-SYS-FIL-088	<b>Exhaust System Serial Number</b>	5298
<b>Exhaust Filter Part Number</b>	Fil-B20	<b>Exhaust Filter Serial Number</b>	2926
<b>Emission Reduction Details:</b>			
<b>Pre Smoke Test Opacity (l/m)</b>	0.4	<b>Post Smoke Test Opacity (l/m)</b>	0.09
<b>Particulate Standard Achieved</b>		Stage 3b	
<b>Installation Details:</b>			
<b>Installed By</b>	[REDACTED]		
<b>Installation Date</b>	30/05/2017		

GU-AS1-F09-A

**Machinery Certificate of Compliance for Non-Road Mobile Machinery (NRMM) Retrofit Programme**



Pollution abatement system manufacturer's declaration of installation

Certificate no.	<b>PCERT45</b>	Date of issue	<b>06.04.2016</b>
-----------------	----------------	---------------	-------------------

Vehicle/Machine Details

Machine type	<b>4 Tool Compressor</b>	Model/series	<b>7/71</b>
Manufacturer	<b>Doosan</b>	Machine serial no.	<b>521663</b>
Engine manufacturer	<b>John Deere</b>	Engine model	<b>4045DF270E</b>
Engine serial no.	<b>CD4045G075125</b>	Engine EU Stage (e.g. IIIA)	<b>Stage 2</b>
Engine power (kW)	<b>60 kw</b>	Engine displacement (cc)	<b>4.5 ltr</b>
Vehicle registration mark (if applicable)	<b>BB806026</b>	Machine hours at fitment	<b>2617</b>
Machine owner details	<b>Byrne Bros (formwork) Ltd</b>		

Identifying information about the NRMM engine is optional, as retrofits can be moved between machines. If this is included in the certificate, a new certificate will need to be issued if the retrofit moves to a different machine.

Pollution abatement system details

Manufacturer or supplier	<b>Baumot AG</b>	Energy Saving Trust company approval no.	<b>CN-0901</b>
Part No	<b>BAB 7512/25/70</b>	Energy Saving Trust product approval no.	<b>P CERT 45</b>
Serial number	<b>7512200123</b>		

Beumot AG and this particular product are both approved by the Energy Savings Trust. Note that there are other approved companies and products available.

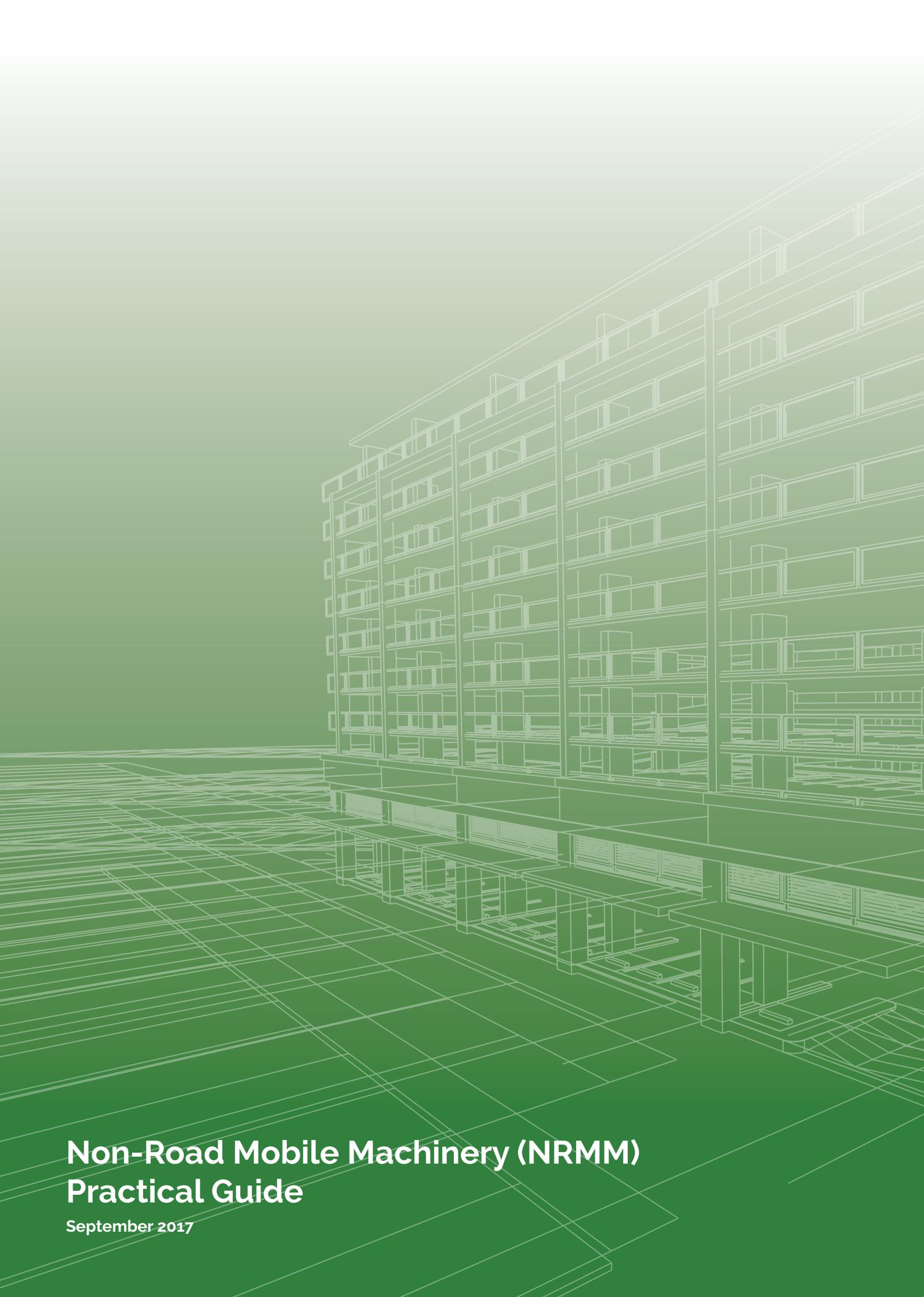
Manufacturer/installer details

Name	<b>BAUMOT UK LTD</b>		
Address	<b>6, Agincourt Street, Monmouth, Monmouthshire, NP25 3DZ</b>		
Telephone no.	<b>[REDACTED]</b>	Fax no.	
Email	<b>[REDACTED]</b>		
Installation date	<b>06/04/2016</b>		

Identifying information that can be found on the product and is specific to each retrofit.

Installation Sign-off

Machine Owner/Operator		Manufacturer (or installer on their behalf)	
Signed	<b>[REDACTED]</b>	Signed	<b>[REDACTED]</b>
Name	<b>[REDACTED]</b>	Name	<b>[REDACTED]</b>
Position	<b>Plant Manager</b>	Position	<b>Engineer</b>
Company	<b>Byrne Bros</b>	Company	<b>BAUMOT UK LTD</b>
Date	<b>06/04/2016</b>	Date	<b>06/04/2016</b>



# Non-Road Mobile Machinery (NRMM) Practical Guide

September 2017