



LONDON LOW EMISSION
CONSTRUCTION PARTNERSHIP

11th July 2017

SUPPORTED BY
MAYOR OF LONDON



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THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA





LONDON LOW EMISSION
CONSTRUCTION PARTNERSHIP

Industry Outreach

- Raising awareness of industry impacts on local air quality
- Encourage uptake of 'cleaner' mitigation measures
- Present case studies with cost benefit for low emission solutions

Testing

- Measure 'real world' emissions
- Emission reduction trials
- Improve pollution monitoring and quality of data

NRMM

- LEZ enforcement
- Policy support
- NRMM database

Key Progress since last meeting

- Industry Seminar
- New functionality to NRMM v2.0 web site
- Outreach
- New abatement measures activity – Lewisham CLP, generator SCR/DPF
- Generator PEMs tests analysed
 - Implications for hybrid power generations

10:30	Welcome	Adam Webber
10.35	Review of previous meetings minutes	David Green
	INDUSTRY OUTREACH PROGRAMME	
10.40	Industry Outreach Meetings and Media	Daniel Marsh
10:50	NRMM Seminar feedback	Daniel Marsh
	ABATEMENT MEASURES PROGRAMME	
11:00	Abatement Projects	David Green
11:05	LLECP PhD	David Green
11:10	Generator PEMS results and assessment of hybrid power efficacy	Carl Desouza
	LOCAL AUTHORITIES SUPPORT PROGRAMME	
11:25	Lewisham ESC CLP	Daniel Marsh
11:35	NRMM Website update	Daniel Marsh
11:40	MRMM Officer Support	Rachel Sadler
11:55	AOB / Date of next meeting	All
12:00	Finish	All

LAEI PM₁₀ emissions (t/annum) 2010



Industry Outreach Programme

01/02/2017	Building.co.uk	"Fighting for air: Pollution from on-site machinery"
01/02/2017	Construction News article	"Impact on emissions reductions on the industry"
01/03/2017	Environmental Scientist (IES Journal)	"Controlling non-road mobile machinery emissions in London"
03/03/2017	BBC London, Toxic London	(18:30 news > 1 million viewers!)
17/03/2017	Natwest/Lombard ContentLive	"Dust busting: ULEZ and the construction sector"
20/04/2017	Guardian online edition - Joey Gardiner	"How to stop the construction industry choking our cities"
01/04/2017	Health and Safety Magazine	"Diesel debate doesn't need hot air"
08/05/2017	Evening Standard	"Luxury flat building boom besides the Thames 'is in breach of toxic air limits"
23/05/2017	ICE Clean Air Task Force	Contribution to industry practices paper Presentation to LCATF group
20/06/2017	Costain/GHD	Improving London's air quality - meeting the challenge (Smart Seed)
05/07/2017	Fleet Renewables	Innovation for low emission construction vehicles

Guardian sustainable business Redesigning Cities

How to stop the construction industry choking our cities

Building firms need to start treating diesel emissions in the same way as asbestos, says air pollution expert



London's mayor Sadiq Khan has said he intends to fine construction firms over air quality.

215 16
Joey Gardiner

Thursday 20 April 2017 12:54 BST

Poor air quality, with diesel the biggest culprit, is the cause of 40,000 deaths in the UK each year.

But while cars and lorries have attracted most of the contribution of other polluters to the problem, part of the problem is on-site machinery.

According to the most detailed air-quality study in the UK, the Atmospheric Emissions Inventory, construction sites as a whole emit approximately 7.5% of damaging nitrogen oxide (NOx) particle emissions (PM10) and 1.4% of emissions of the particles (PM2.5).

While a small amount of this (about 1%) is dust from site demolition, the vast majority comes from the thousands of generators and other machines operating on sites.



Fighting for air: Pollution from on-site machinery

23 February 2017 | By Joey Gardiner

PRINT EMAIL SHARE f in Pin it COMMENT

Sadiq Khan is on a crusade to improve London's air quality. Joey Gardiner reports on the high levels of pollution from on-site machinery that pose to workers, and the pressure being put on



Most popular Most commented Most emailed

- 1 MPs call for end to dominance of large housebuilders
- 2 CPD 4 2017: Insulated suspended floor systems
- 3 CPD 7 2017: Reinsman demolition

London News
Evening News: 08/03/2017

DANIEL MARSH
Air quality analyst, Kings College London


BBC LONDON bbc.co.uk/london

16:16 / 26:46 MORE TO WATCH


Active promotion through the boroughs

The image shows a screenshot of a Twitter post from Brent Council (@Brent_Council). The tweet text reads: "Brent Council has signed up to the London Low Emission Construction Partnership (@ConstructDustUK): ow.ly/VBcU30b2WlIQ." Below the text is a graphic for the "LONDON LOW EMISSION CONSTRUCTION PARTNERSHIP" featuring an orange stylized logo. The tweet has 1 retweet and 2 likes. The background shows the Twitter interface with navigation icons and a blurred profile picture of Brent Council.

Home Moments Notifications

Brent Council  @Brent_Council [Follow](#)

Brent Council has signed up to the London Low Emission Construction Partnership (@ConstructDustUK): ow.ly/VBcU30b2WlIQ.



RETWEET 1 LIKES 2

5:00 AM - 21 Apr 2017

Tweet your reply

Trends

© 2017 Twitter About Help Center Terms Privacy policy Cookies Ads info

@ConstructDustUK



Cleaner machinery for London – February 2017

NRMM Seminar for Industry

- ⦿ 122 registered attendees (135 places available)
- ⦿ Approx 100 industry users turned up
- ⦿ 8 presentations and discussion forum
- ⦿ Networking event
- ⦿ Interest in having a developers forum to feedback into the NRMM process
- ⦿ Many **Thanks** to all LLECP members who attended and helped!

NRMM seminar feedback survey

- ① *“Very useful and comprehensive event”*
- ② *“The event was useful as it was informative”*
- ③ *“The most informative part of the session was the questions and answers at the end”*
- ④ *“More information around the actual NRMM regs and around enforcement would have been more useful”*
- ⑤ *“Generally it was a good and useful event but as a Sustainability Manager a couple of the presentations were more technical than I was expecting”*



London Low Emission
Construction Partnership
Website and social media



LLECP Meeting Minutes

This section of the LLECP website is not for public access or linked through to the main site and is for archiving the presentations given at each of the LLECP group meetings for member reference. These meetings are held quarterly and are attended by representatives of the LLECP member boroughs, GLA, TfL and King's College London.

4th June 2014

10th July 2014

2nd October 2014

13th January 2015

Quick links

About

Read more about the project.

Advice

Health advice for construction dust.

Resources

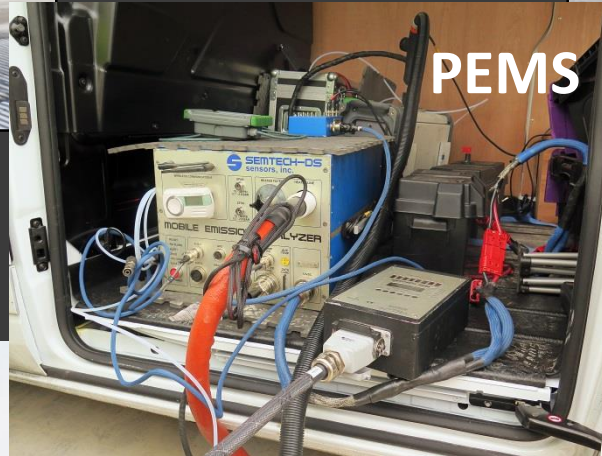
Useful resources to download.

<http://www.llecp.org.uk/LLECP-Meeting-Minutes>



Abatement Measures Programme

Emission reduction trials



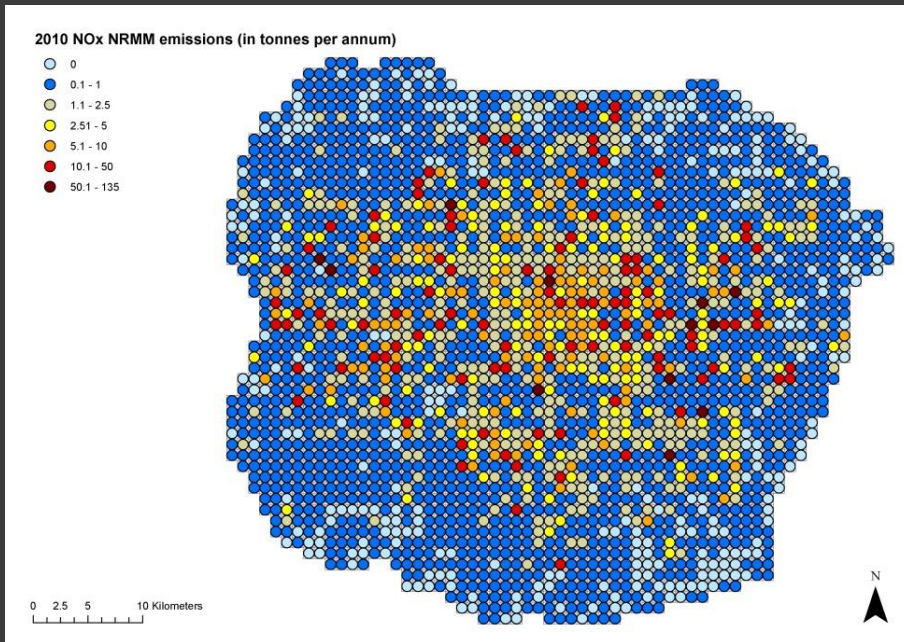
LLECP PhD

Characterising Non-Road Mobile Machinery

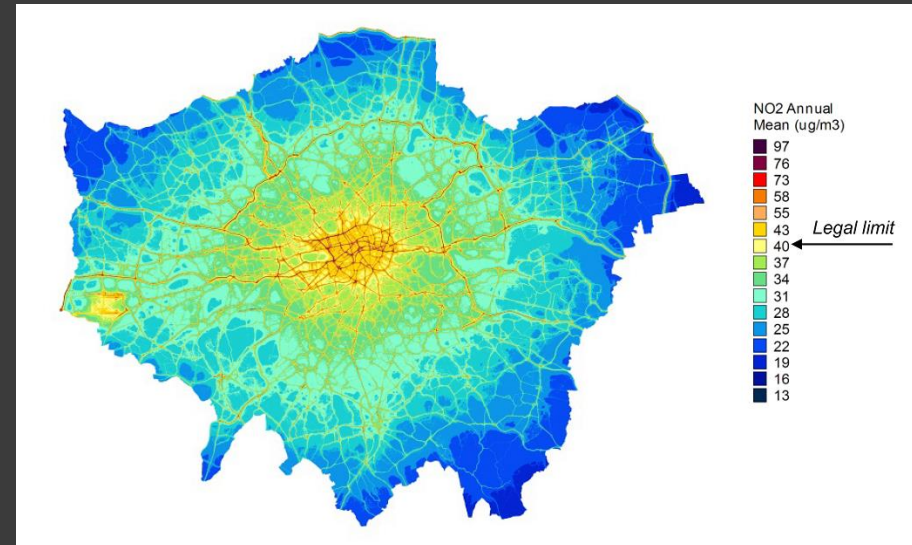
Emissions through Portable Emissions

Testing and Emissions Inventory Development

London Atmospheric Emissions Inventory

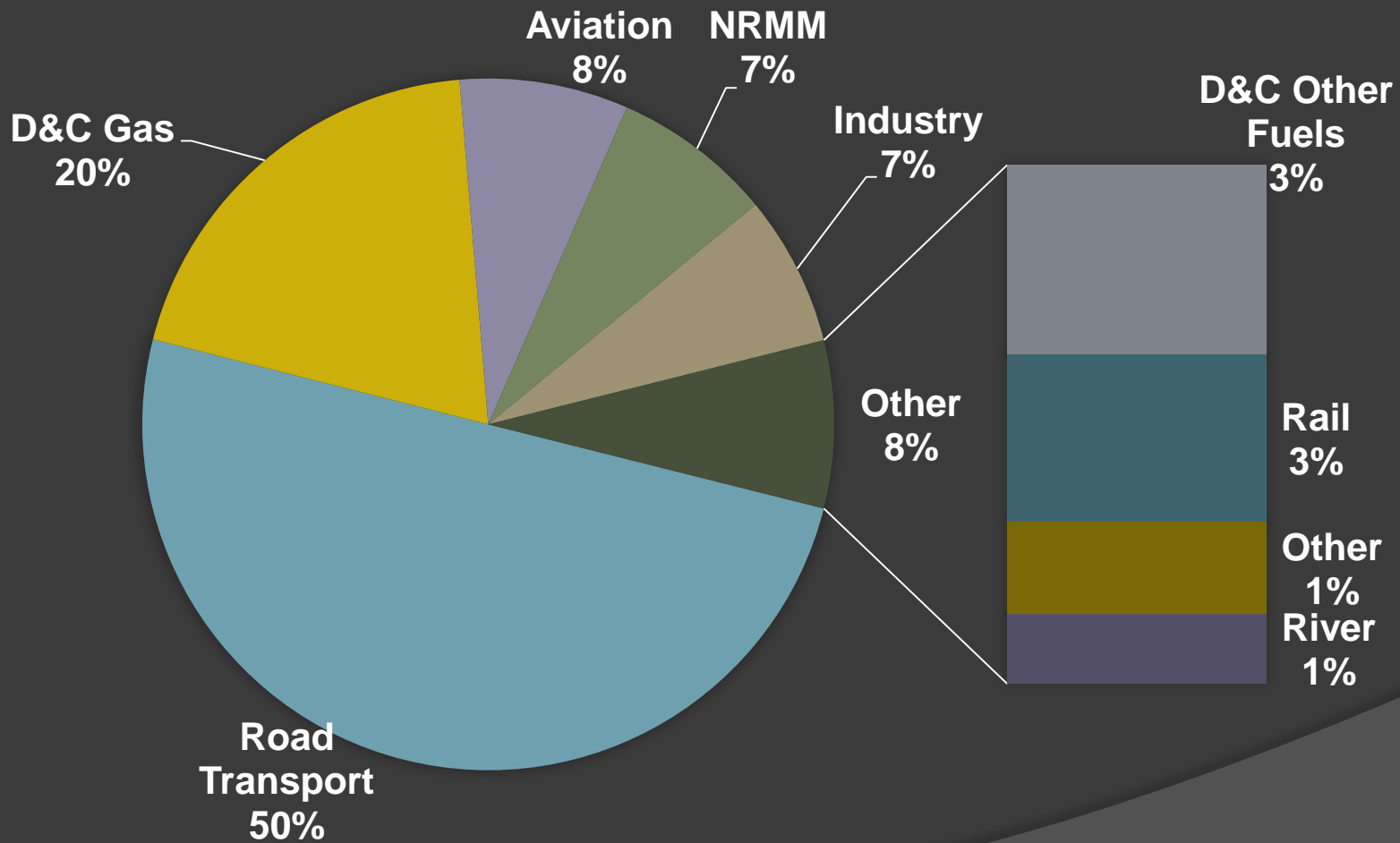


NRMM NO_x Emissions Inventory



Concentrations of NO₂ annual average

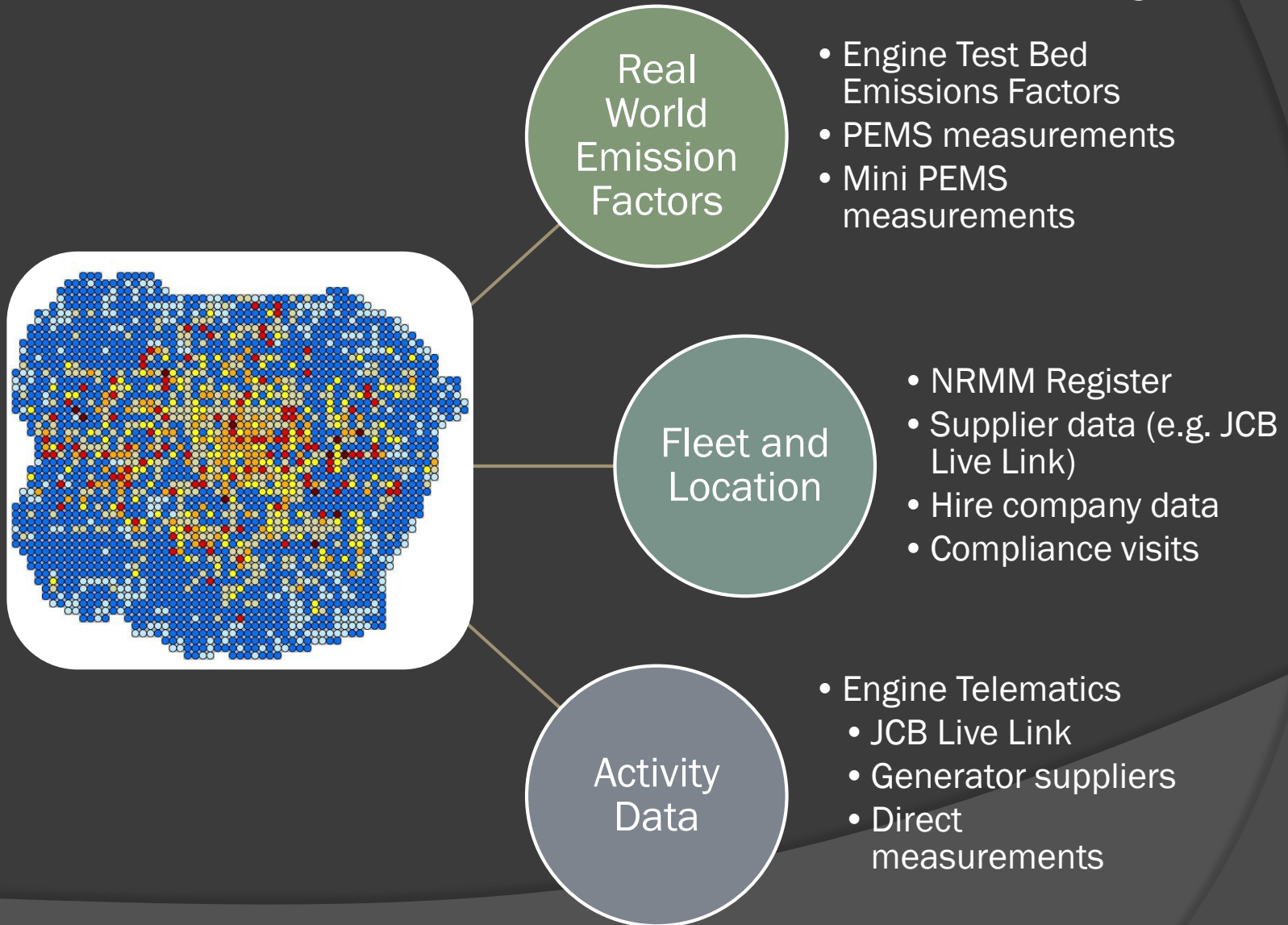
NO_x Emissions Inventory



Current approach to NRMM Inventory

- National Atmospheric Emissions Inventory (NAEI) constructed by Ricardo
- London Atmospheric Emissions Inventory (LAEI) adapted by Aether
- Top down approach
- NAEI
 - Fuel consumption is calculated from Digest of UK Energy Statistics (DUKES)
 - Usage is split by fleet composition data from DfT
- LAEI
 - Based on a proportion of NAEI emissions, determined by employment in the construction sector and distributed geographically using the London Development Database (LDD).

NRMM Bottom Up Inventory



NRMM Website Update

- New site developed based on wider industry user feedback than first release
- Allows advanced search and data download functions
- Enforcement officer support tools
- Improved system self-checks for non-complaint plant, registered developments with no NRMM, duplication etc



LONDON'S 'LOW EMISSION ZONE' FOR NON-ROAD MOBILE MACHINERY

Since 2008, heavy duty diesel road vehicles have had to meet emissions standards for particulate matter to avoid being charged for travelling within the London Low Emission Zone (LEZ). The Mayor has recently announced his intention to introduce an ultra low emission zone (ULEZ) in central London from 2020. This will require all vehicles to be either zero or ultra-low emission. It is also important to take action to reduce emissions from non-road mobile machinery (NRMM) to protect and improve Londoners health. The latest version of the London Atmospheric Emissions Inventory estimates that in 2013 the NRMM used on construction sites was responsible for 7% of NO_x emissions, 14% for PM_{2.5} and 8% of PM₁₀ emissions in Greater London.

NRMM admin view : Total entries (807)

Advanced Filter ▼

Filter active machinery by date

All Today Range

Filter by Exception Status

No filter

Filter by deletion requested:

CSV Print

Show 25 entries

Search:

Deployment Date	Site Name	Plant Id	Type	Manufacturer	Engine Approval Number	Power Kw	Duration	Exemption Status	Actions
01/01/2017	Brook Building Site	efsfef	Forklift	Zoomlion	32e2	12	27		Item Details Delete Requested
15/11/2016	EarisCourt2015 testing		Forklift - Rough Terrain	brooksie	e11*97/68LA*2010/26*1073*00	33	4		Item Details
01/11/2016	Rowstock Gardens 2016	BR5339	Forklift - Rough Terrain	Terex	e11*97/68LB*2004/26*0324*71	55	60		Item Details
01/11/2016	Canterbury Mills Primary Academy 2016	V3307-DI-T-EU5	Excavator - Trenchers	Kubota	E11*97/68JA*2004/26*0460*00	50	5	None	Item Details
31/10/2016	Chestnut Park Primary School 2016	21973810	Excavator	Komatsu	e11*97/68AB*2004/26*XXXX*YY	149	70	None	Item Details
29/10/2016	EarisCourt2015 KB 490		Excavator	Komatsu	e11*97/68LA*2010/26*1073*00	270	180		Item Details
29/10/2016	EarisCourt2015 KB 490		Excavator	Komatsu	e11*97/68LA*2010/26*1073*00	270	180		Item Details
28/10/2016	Prince of Wales Drive	705	Excavator	Doosan infracore	e11*97/68RA*2012/46*3041*00	86	180		Item Details
28/10/2016	Prince of Wales	624	Dumper	Terex	e11*97/68MA*2012/46*0673*02	90	180		Item Details

Advanced filters active, date range, data download and print options

NRMM enforcement tools

Diary entries

CSV Print

Show 10 entries

Search:

Entry Date	Sitename	Entry	Diary Status	Actions
17/01/2017	1 Angel Court 2015	EC2R 7HJ - City of London site still operating	Closed	edit del
16/01/2017	Test new unregistered site	(missing postcode) - Havering testing 1	Needs attention	edit del
11/01/2017	1 Angel Court 2015	EC2R 7HJ - City of London Mike called regarding requirementss - send info	Closed	edit del
10/01/2017	1 Angel Court 2015	EC2R 7HJ - City of London EC2R 7HJ - City of London - Inside CAZ awdwdwa5	Closed	edit del

Looking Ahead

- NRMM v2.0 website launch
- Generator SCR/DPF Testing
- Lewisham CLP
- JCB PEMs testing
- NRMM activity assessment



London Air Quality Network Conference



KING'S
College
LONDON

London Air Quality Network Conference

13th July, King's College London

register: valentina.lotti@kcl.ac.uk

londonair.org.uk/seminars

Any other business?

- Date of next meeting