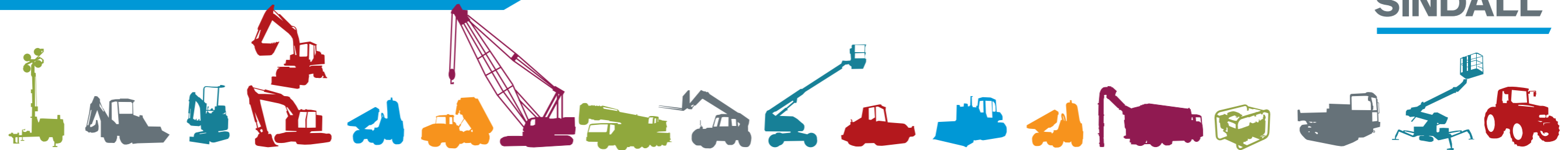


# Plant and Equipment Minimum Standards



	Towable Equipment	180 Degree Excavator	Mini Excavator (up to 8T)	Tracked & Wheeled 360 Degree Excavator (9T and above)	Forward & Side tipping Dumper (less than 6T)	Articulated Dump Trucks (25T and above)	Crawler Crane	Mobile Crane	Telehandler	MEWP	Ride on Cabbed Compaction Roller	Tracked Dozer	Forward and Side Tipping Dumper (6T and above)	Vacuum Extractor. European Suction Excavator ESE 10/16/26/32T	Site Generators	Tracked Dumper	Spider Mewps	Agricultural Tractor
<b>MANDATORY</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Competency	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶
PPM	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶
LOLER/PUWER Legal Standards eg ROPS, FOPS, mirrors, seat belts etc are being met in addition to above	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶
360 degree all round vision (cameras)				▶		▶	▶		▶ <sup>2</sup>		▶	▶	▶			▶ <sup>4</sup>		
Variable track (<3T)			▶															
Mass deployment alarm	▶																	
Anti entrapment device										▶								
Work at height protection				▶		▶	▶											
Collision avoidance system (> 6T)													▶					
Double locking quick hitch (>5T)		▶	▶	▶														
Manual/direct attachments quick hitch (<5T)			▶															
Height and slew restrictors <sup>1</sup>		▶	▶	▶			▶	▶	▶									
Speed restrictors									▶									
Reversing/movement alarms <sup>3</sup>					▶	▶	▶	▶	▶	▶	▶	▶	▶	▶				
FORS compliant (Freight Operators Recognition Scheme). Annual MOT / 12 weekly VOSA inspections														▶				
<b>DESIRABLE</b>																		
Seat belts beacon		▶	▶	▶	▶	▶			▶		▶	▶	▶				▶	▶
Cabbed machine					▶								▶					
Anti entrapment / secondary guarding system / material handling attachments (see appendices in document PET STD1)										▶							▶	
360 degree all round vision (cameras)									▶								▶	
360 degree all round vision (cameras) c/w pedestrian interface system <sup>6</sup>				▶		▶	▶		▶		▶	▶	▶				▶	
110v only outlets / 230v outlets to be blanked off															▶ <sup>5</sup>			
Consideration to use only Stage IIIB engines		▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶		▶	▶	▶	▶

● Environmental Requirements  
London and Greater London Area

Engine minimum must comply with Stage IIIB European Emission Standards and the NRMM (Non Road Mobile Machinery) Emissions Regulations in Central London and Canary Wharf.

Some examples of NRMM equipment include generators, construction machinery, mobile cranes and telehandlers.

From 1st September 2015 NRMM of net power between 37kw and 560kw used in London will be required to meet the standards set out below. This will apply to both variable and constant speed engines for both nitrogen dioxide (NOx) and particulate matter (PM). These standards will be based upon engine emission standards set in EU Directive 97/68/EC and its subsequent amendments. NRMM used on site of any major development within Greater London will be required to meet stage IIIA of the directive as a minimum; and NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IIIB of the Directive as a minimum.

From 1st September 2020 the following apply: NRMM used on any site within Greater London will be required to meet Stage IIIB of the directive as a minimum. NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IV of the directive as a minimum.

This must be read in conjunction with the Plant and Equipment Minimum Standards which are available on IMS: <https://digest.intranet.int/home/ims/4-standards/plant-equipment-and-transport-standards.aspx>

- 1 Subject to risk assessment and dependant on operating parameters
- 2 Rear camera minimum requirement - 360 degree camera desirable
- 3 In built-up areas this may be replaced with a white noise movement alarm
- 4 Machines 11T and over require full 360 degree camera / all machines under 11T reverse camera minimum requirement
- 5 Applies to petrol site generators only with maximum output of up to 10kva
- 6 This technology should be available early 2018

Everyone has the right to be **100% Safe**

Document Reference	Process Parent	Revision Status	Document Owner	Date	Page
PET STD1a	PET PRO	Rev 2	Jonathan Hall	Sept 17	1 of 1