

Buying a new boiler soon? Some new rules will probably affect you.

In January 2018 some new rules were laid before Parliament that will limit the emissions from all boilers, engines and turbines that have a nett rated thermal input of between 1MWth and 50MWth, regardless of the fuel that is burned. This means that if you plan to purchase a new boiler that is rated above about 1.3 tonnes steam per hour, or a generator able to deliver above approximately 450kVA of electricity, you will need to consider these new emissions limits as part of your purchasing strategy.

Newly installed Medium Combustion Plants (MCP) put into operation on or after 20th December 2018 will have to comply with lower emissions limits for NO_x, SO_x and dust, be registered with the Environment Agency in England (other agencies will deal with similar rules in Wales, Scotland and NI), and measure and record their emissions, hours run and fuels used in accordance with a strict regime of monitoring. There are few exceptions to these rules. And if you operate a diesel engine of any size for any activity other than strict emergency use there are further emissions controls being introduced alongside those for boilers.

So combustion plant projects currently being planned now will have to take this into account; only if you can complete the installation and register the plant before 20/12/18 will you be able to operate outside the new rules, and then only for a limited period, because all existing plants rated above 5MW will need to follow these new rules from 1/1/24, and smaller units rated from 1-5MW will have to be registered by 1/1/29.

It will be the plant operator's responsibility to register their plant with the relevant authorities, and owners of new plants will have to be able to prove that they actually operated the plant before 20 December 2018 for it to qualify as an existing MCP. Our advice is for all plant owners and operators to keep good purchasing and commissioning documentation that clearly demonstrates the relevant dates; 'put into operation' means fully commissioned and actually operating.



The legislation will be part of the Environmental Permitting Regulations, so combustion plant users who currently have permits from the EA and other regulators will be familiar with the general principles and will simply get a revised permit when the MCPs on their site are due to be included, either when they buy a new one (permitted from first operation), or ask to include an existing >5MW unit (in 2024) or a <5MW unit (in 2029). Nothing for them to be too concerned about as they will know the rules and understand the permitting process, and, with a few exceptions, the ELVs are not expected to be an issue.

However, for combustion plant users that are currently not subjected to a permitting regime, this process is going to come as a bit of a shock. Firstly, the new rules are planned to be published under the snappy title of The Environmental Permitting (England and Wales) (Miscellaneous Amendments) Regulations 2018, so they will not be immediately obvious to

the casual reader. Thousands of relatively small steam and hot water boilers in hospitals, hotels, education establishments, laundries, bakeries and myriad other industries could be affected, but do the owners and operators of these boilers know what is coming?

MCP users who are aware of the forthcoming legislation may well be prepared and take the necessary action - they will have been to seminars, listened to their suppliers and industry contacts, and heard the messages from the press & trade associations and organisations like the Combustion Engineering Association. However, they represent a very small percentage of the anticipated 30,000 MCPs currently installed in the UK.



Most combustion plant users will have no idea about permitting or forthcoming emissions legislation; they may be aware that street level NO_x and particulates are constantly behind major news stories, but might think this is only relevant to road transport and not be aware of the new MCP rules.

Manufacturers will clearly be able to help, since most have been widely consulted so far and have contributed to the process. A few have decided to use the MCP Directive as a platform for reviewing their product range and modernising their equipment, and others have made small adjustments to their range, but for the most part under the current proposed ELVs UK manufacturers and agents are fairly comfortable with their offer.

There is, however, one situation where the proposed emissions limits could become very difficult to meet, and that relates to local Air Quality Management Areas (AQMA). You can search the Defra list (defra.gov.uk/aqma/list) to see if there is one near you. Many towns and cities in the UK have declared specific areas as suffering from poor air quality, sometimes just a few streets and sometimes the whole town, and when an MCP (new or existing) is to be registered in an AQMA, the Environment Agency are intending to inform the Local Authority, and the Local Authority will have to consider whether or not the emissions limits in the Directive are suitable or they need to be tighter.

Proposed rules require the measurement and control of NO_x, SO_x and dust, with CO being measured but not yet given limits. MCPs in towns and cities with AQMAs may well be subjected to emissions limits of those pollutants that are unachievable with certain fuels or without additional abatement.

So if you are planning to buy a new boiler any time soon, talk to your Local Authority and your boiler supplier now so that you don't end up trying to burn the wrong fuel or with a large bill for emissions control equipment on a boiler that cannot meet specific emissions limits. Natural gas and light oils are probably going to be acceptable in most cases; other fuels may be harder to manage and require special treatment, if they are allowed at all.

For more information and regular updates please see the CEA website.

Paul Whitehead – 1/12/17