

Notice

This Engineering Guide was recently converted to a PC format and it has not been proof read by our engineering staff. Therefore, it is subject to change at a later date.

Ohio EPA

Office of Air Pollution Control

Division of Engineering

Engineering Guide #29

Question:

Once the maximum heat input of a boiler is officially derated by the Ohio EPA, is the owner required to obtain a Permit to Install before the boiler can be operated at a heat input which is greater than the derated heat input? (This question was submitted by Thomas Kinder of the Cleveland Division of Air Pollution Control on August 20, 1981.)

Answer:

When a company requests that the maximum capacity* of a boiler be derated, pursuant to paragraph (B)(3) of OAC rule 3745-17-10, such a request is generally made in order to obtain a less stringent, allowable emission rate (in terms of lbs/106 Btu). If the request is approved by the Ohio EPA, the derated heat input is specified within the Special Terms and Conditions of the Permit to Operate (PTO) for the boiler.

If a company which has obtained a derated heat input for a boiler desires at some future date to use some or all of the remaining capacity of the boiler, a modification of the existing PTO would be required before the company could operate the boiler at a heat input greater than the derated heat input. A Permit to Install would not be required.

In order for the company to receive approval for a modification of the existing PTO, it would have to demonstrate that at the requested, higher heat input the boiler could operate in compliance with the new, more stringent, allowable emission rate. If the company were able to make such a demonstration by means of stack testing, and if the higher heat input were less than the maximum capacity of the boiler, the higher heat input would have to be specified again as a derated heat input within the Special Terms and Conditions of the applicable PTO.

The above explanation is also applicable to a situation where an entire boiler-house has been derated, and the company requests an increase in the maximum permissible heat input for the boilerhouse.

*The maximum capacity of a boiler is defined in paragraph (B) of OAC rule 3745-17-10 as "the equipment manufacturer's or designer's guaranteed maximum heat input, whichever is greater".

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