**From:** Jim Van Valkenburgh [mailto:jim@frolingenergy.com]

Sent: Tuesday, December 03, 2013 4:50 PM

**To:** Bernstein, Barbara **Cc:** Mark Froling

Subject: Re: Staged boilers text

Barbara,

Because of his long experience in wood pellet boiler rooms I really want Mark to answer these questions, so I have copied him on this reply. Mark....

My short answers are:

- 1) If CO meters are required by code for woodstoves or oil boilers, then it would not hurt to have them installed for wood pellet boilers.
- 2) To my knowledge, per ton of pellets burned, a 200,000 BTU/Hour Froling or OkoFEN pellet boiler creates less than 5 gallons of ash. (think of a common 5 gallon bucket). It is not much. This is not a toxic material so it can be used in many ways in gardens or on lawns.

Again, Mark will have more complete answers to these questions. Have you asked Scott Nichols?
Glad to assist.

Jim

On Tue, Dec 3, 2013 at 1:49 PM, Bernstein, Barbara < Barbara.Bernstein@puc.nh.gov > wrote:

Jim,

Two questions for today:

- 1. Is there any need for the installation of a CO meter in the same room as the wood pellet boiler? And
- 2. How much ash is generated per ton of wood pellets? Have you been in the loop on the NH DES rules that are currently being discussed regarding the disposal of ash?

Thanks so much for your guidance and assistance.

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