

ORDER BOILED DOWN

Ontario's Technical Standards and Safety Authority (TSSA) recently released a Director's Public Safety Order addressed to G1, G2 and G3 Certificate Holders, regarding mandatory inspections of natural draft boilers with draft hoods. This Order has been under review for

almost a year now and was developed with industry consultation. While the supporting material provided by TSSA is extensive, you may be wondering what this means to you, a contractor holding a gas ticket in Ontario.

The documentation provided by TSSA (<http://www.tssa.org/viewNews.asp?ID=72>) shows that the purpose of the order is simple:

"the key contributing cause of [carbon monoxide] incidents is that many boilers are not being maintained in accordance with the boiler manufacturer's instructions."

"It is no wonder there are spillages. We are not giving the equipment a fighting chance."

The typical natural draft boiler installed in Ontario was probably installed 20 or more years ago. While many have continued to perform reliably over the years and should do so for some time, there are also others that have not been properly maintained.

NEGLECT CAUSES RESTRICTIONS

People tend to forget about the atmospherically vented boilers installed in their basements. As such, this equipment is often neglected. Slowly but surely, as the components wear down, slight imperfections or combustion irregularities build up, causing restrictions in the flueways. These restrictions produce poor combustion, which in turn leads to more deposits and even greater restrictions. Sooner or later, the boilers just cannot exhaust properly.

Add to this scenario the fact that many older homes have undergone significant renovations. Homes have become tighter, restricting the free air flow serving the combustion appliances in the house. As stated in the Order:

"a significant contributing factor...has been negative pressure within the home caused by exhaust systems, wood burning fireplaces, or other appliances that can pull the boiler's flue products into the indoor air."

New windows and doors, along with bathroom exhaust fans and huge range hoods sucking everything right out of

the kitchen, are just compounding the problem.

Older atmospheric boilers rely on the buoyancy of the heated air for uptake into the chimney. In many cases, this uptake occurs with negative pressure of much less than an inch water column (W.C.). Imagine then what happens when you reduce the passageway that the products of combustion naturally use. Compound that with air actually being drawn away from the boiler area by fans and restrictions for combustion air. These two mitigating factors can easily result in the exhausted air being drawn back into the house.

It is no wonder there are spillages. We are not giving the equipment a fighting chance. We are expecting the natural laws of physics to overcome

tiny passageways and huge mechanical fans. This boiler Order is in fact an excellent way to present a preventive maintenance option to the homeowner.

CUSTOMER RESPONSE

Even though it expires May 1, 2006, this Order really is a red flag that is being raised on the greater issue of poor maintenance and house depressurization. Both of these issues also extend to other fuel burning appliances, be it water heaters, furnaces or gas fireplaces. We have to stop thinking of mechanical equipment as stand-alone items and start thinking of it as part of a complete home operating system.

So what are homeowners going to think when this information is presented to them? You were called in to relight a pilot on an old boiler and now you are presenting them with this Order requiring a maintenance bill on top of the service call. Remind your clients that maintenance is always a good thing and that this Order is a proactive measure being taken by a concerned industry.

Consider the analogy: You do not expect your car to continue to operate reliably indefinitely without maintenance. Sooner or later repairs will have to be done, but regularly scheduled maintenance can extend the time between repairs. The same applies to heating equipment, whether it be a boiler, furnace or water heater.

Equipment that is not part of this Order should still be maintained. It may not experience the same problems right now, but certainly it will experience them eventually. Be proactive. Explain this to the homeowner so they fully understand it.

OTHER JURISDICTIONS

The impact of this Order on Ontario's mechanical contractors will be significant. How the Order will be viewed by

regulating bodies in other provinces remains to be seen. It is certain that as other jurisdictions hear about this initiative, they will review their own history of incidents and may determine that further investigation is merited. It may even escalate into a more extensive investigation, beyond what has already occurred in Ontario.

Of even greater concern is that there may be limited industry involvement, as up to 12 other provincial/territorial jurisdictions put their own spin on events. In the near future, there could be 13 different orders, asking for 13 different calls to action, impacting all contractors across this country.

The reality for Ontario's gas technicians is that a simple service call to relight the pilot may become a two-hour mandatory cleaning. Effective immediately, if you are on TSSA's list, your workload has increased dramati-

cally. Considering that most technicians are already running at 150 per cent or more, the question becomes where they will find the additional time? As it stands right now, there are not enough technicians in this industry. Increasing the workload will inevitably mean longer wait times for less critical calls.

As the industry strives to do its best under the circumstances, this action will create a greater awareness of industry needs. That awareness, along with initiatives that foster interest in education and training, may increase the likelihood of a greater number of technicians entering the mechanical industry. These new tradespeople will be there for future mandatory testing and service that may become standard for all fuel burning appliances.

If it works as planned, this Order will result in the identification of a lot

of equipment that is overdue for maintenance. If the end user is aware that their family's safety comes first and foremost with the Order, I cannot imagine too much opposition to its undertaking.

HPAC

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