

By Dave O'Neil, Fire Prevention Officer
Windsor Fire & Rescue Services

Editor's Note: IKECA welcomes this contribution from an AHJ with one of the most stringent programs in Canada.



Windsor, Ontario is the Southernmost city in Canada and has a population of 225,000 persons. We have approximately 700 restaurants that have commercial kitchens

that produce grease-laden vapors and are governed by NFPA 96. Once per year all restaurants in our municipality are inspected through our business license program. Our Fire Prevention Division is detailed with the following responsibilities: public education, fire investigations, life safety inspections and enforcement. Our current complement consists of two supervisors, two public educators and eight fire prevention officers.

In December of 2006 Windsor Fire and Rescue responded to a large restaurant fire with a report that fire was already visible above the roof line. The morning cleaning staff at this restaurant called 911 and reported that flames were coming out of the chimney in this establishment's commercial kitchen. Twenty-three fire fighters spent approximately three hours to bring this fire under control. Upon fire crews arrival they began their fire attack in the interior of the structure. Approximately ten minutes prior to the roof collapsing into the interior of this structure, crews were luckily ordered out.

We conveyed to all stakeholders that they would be prosecuted if they did not complete their work to the NFPA 96 standard and that they own the work that they do on another's property.

I was called in to investigate this fire for origin and cause but with the large dollar loss being approximately \$1,500,000, the

Ontario Office of The Fire Marshall was contacted to be the lead investigative authority for this fire. The Fire Marshall's Office sent one investigator and one engineer to Windsor to determine what had occurred in this fire. A thorough scene examination was conducted and on the third day of this fire investigation a back hoe was utilized to remove the commercial kitchen exhaust system from the fire debris. When this exhaust system ducting was opened, there was a copious amount of grease in the inside of the ducting. All evidence indicated that the cause of this fire was an electrical issue with the up-blast fan. Contributing factors that allowed this fire to spread throughout the building was the heavily grease contaminated ducting, and this ducting was also not grease tight. I also note that this commercial kitchen ducting was inside a fire rated, double dry walled chimney.

This structure has been used as a restaurant since 1979 and there were never any access hatches servicing the middle and upper flue, so these areas could not be inspected or cleaned. The last documented cleaning of the commercial kitchen ducting had occurred approximately five months prior to this fire's occurrence. The paperwork this cleaning company had provided the owner did not indicate that the work had been completed to NFPA 96 guidelines nor did it indicate that they were not able to inspect and or clean the upper ducting.

With this information, the Windsor Fire & Rescue Fire Prevention Division, which regularly inspects all commercial kitchens annually, looked at these systems in great detail. We soon discovered that the majority of the exhaust systems were not being maintained to the NFPA 96 standard. These systems were heavily grease laden and they did not have access hatches where required so they could be cleaned and completely inspected at regular intervals. This information was passed onto the Chief Fire Prevention Officer Lee Tome and to the Assistant Chief Fire Prevention Officer Richard Marr. My superiors indicated that going forward we would require documentation from

all cleaning companies that their stated work had been completed to the NFPA 96 standard and that the entire system had been inspected and cleaned.

All stakeholders (commercial kitchen cleaning companies, building inspectors and commercial kitchen installers) were invited to a meeting in late 2007 where we discussed the NFPA 96 standard and what would be expected of these companies going forward. In this meeting we made it very clear what our expectations, as AHJ, were for the cleaning companies and for the installers. The local building department supervisors, who enforce the Ontario Building Code, indicated that any hatches that are added to existing commercial kitchens must be done by certified installers. An Ontario Building Code permit would also be required as the addition of the hatches is considered a material alteration to these systems.

The Ontario Fire Code defines an Owner as: "any person, firm or corporation having control over any portion of the building or property under consideration and includes the persons in the building or property."

We went to our Crown Attorney's Office and asked if the above definition would describe companies or persons that are contracted to do work on a property by the owner on title. The Crown's Office indicated that persons contracted to do work on others' property are in fact the owners of the work that they do and could be held accountable if that work was not performed properly. With this information from the Crown Attorney's Office, we conveyed to all stakeholders that they would be prosecuted if they did not complete their work to the NFPA 96 standard and that they own the work that they do on another's property. To date we have laid information against two cleaning companies and one company who was installing commercial kitchen access hatches. All three of these companies pleaded guilty to the charges and were fined.