



# INFORMATION BULLETIN

Office of the  
Fire Commissioner

Issue Date: April 19, 2004

No. IN 014

## Vent Master Reactocell UV Pre Filter

This Bulletin provides guidance in assessing the current models of Vent Master Reactocell ultraviolet light (UV) grease removal devices, which incorporate UV Pre Filters as part of a grease removal system.

Grease removal systems, which are used as an equivalency, are required to be installed in conformance with Part 2 of the British Columbia Building Code on a site specific basis, with the approval of the authority having jurisdiction (AHJ).

Current Reactocell ventilating systems, manufactured for commercial cooking equipment producing heavy grease laden vapour, are fitted with an **optional** UV Pre Filter. The UV Pre Filter, as described by Vent Master Canada, is designed to **capture** grease. The purpose of the UV Pre Filter is to reduce the probability that larger grease globules, which are not collected by the primary grease filter cartridge, will make contact and adhere to the UV tubes, before being broken down. The powder residue created, when these uncollected globules burn up, will coat the UV tubes and gradually reduce the effectiveness of the system.

The UV Pre Filter is considered an **optional** component because the UV lamps will still work without this pre filter in place, but over time the maintenance and cleaning requirements of the UV tubes is increased, depending on the amount of grease vapour produced. This optional component is most important for commercial cooking equipment that generates large amounts of grease vapour. The increased powder residue created will expedite the reduction in the effectiveness of the system.

Although the thickness of the UV Pre Filter is such that the amount of accumulated grease may not seem to create a fire hazard, the use of the UV Pre Filter as part of the Reactocell system contravenes the NFPA 96-1998 Standard which prohibits the use of mesh filters. This conclusion is based on the definition of a grease filter as opposed to a "Grease Filter Mesh Type" (Mesh-Type Filter). [OFC Interpretation Bulletin IB 018].

On February 24, 2004, ULC accepted a **coalescer** to replace the UV Pre Filter (mesh filter) currently used in Vent Master UV grease removal hood systems. ULC acceptance of this coalescer means that the AHJ can approve this component of the **grease removal device** as per Sentence 3-1, NFPA 96-1998, "...other approved grease removal devices for use with commercial cooking equipment shall be provided".

The Office of the Fire Commissioner recommends that the mesh filter, currently installed in Vent Master UV systems, be replaced with the new **coalescer** (component of the grease removal system).

**NOTE: Daily** cleaning of grease removal device components, to reduce fire hazard and improve overall performance, may be required. Manufacturer must be consulted.

***The contents of this Information Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice.***

Information Bulletins are distributed to British Columbia Fire Departments, Local Assistants to the Fire Commissioner and where applicable, other related agencies and authorities, in order to provide general information on fire-related issues.

For further information contact: Office of the Fire Commissioner, Ministry of Public Safety and Solicitor General,  
Mailing Address: PO Box 9491, Stn. Prov. Govt., Victoria B.C. V8W 9N7 / Location: Suite 200, 645 Tyeer Road  
Telephone (250) 356-9000, Facsimile (250) 356-9019, E-mail: [ofc@gov.bc.ca](mailto:ofc@gov.bc.ca), Internet: <http://www.pssg.gov.bc.ca/firecom/>