FirePro.

19th October 2018

REF: CP-19/10/2018

Dear FirePro Partners and Associates,

FirePro (Powdered Aerosol E) has been included on the U.S. Environmental Protection Agency (EPA) SNAP list of acceptable substitutes as suitable for use in "Normally Occupied Areas".

The U.S. EPA, administers the Significant New Alternatives Policy (SNAP) Program, which identifies and evaluates substitutes for Ozone Depleting Substances (ODS) in specific end-uses based on assessment of their health and environmental impacts.

The US EPA decision, published in the US Federal Register Vol. 83, No. 193 on Thursday, October 4, 2018, confirms that the **FirePro condensed aerosol fire suppression agent** (indicated as Powdered Aerosol E) has successfully passed the review for physiological effects and that it is now listed as acceptable for use in total flooding fire suppression applications, in **"Normally Occupied Areas"**.

The US EPA SNAP list has consequently been updated, and lists FirePro as acceptable for use in "Normally Unoccupied Areas" as well as in "Normally Occupied Areas".

The EPA requires that "powdered aerosols" intended for use in total flooding systems undergo a review for physiological effects, before they can be listed as acceptable for use in normally occupied areas (Refer to Q9 on EPA site via Link).

Ozone-depleting substances (ODS) are being phased out of production as a result of a series of international environmental regulations, established through intense diplomatic and legislative efforts that have taken place over the past three decades, including the Montreal Protocol and the Clean Air Act Amendments of 1990 (CAAA).

EPA's risk screen indicates that the use of FirePro (Powdered Aerosol E) will be less harmful to the atmosphere than the continued use of ODS and substitutes commonly used in this sector, as it is less harmful to the ozone layer, has a lower climate impact as well as a shorter atmospheric lifetime (ALT).

The post-activation products of FirePro (Powdered Aerosol E) do not contain Volatile Organic Compounds (VOC), so impact on local air quality from the release of the FirePro agent, is not a concern.

EPA's risk screen indicates that the use of FirePro (Powdered Aerosol E) does not pose a significant toxicity risk to personnel, end-user and or the general population.

The pre- and post-activation constituents of FirePro (Powdered Aerosol E) have a negligible Global Warming Potential, lower Climate Impacts and shorter ALT (Atmospheric Life Time) than those predicted for other substitutes and other commonly used substitutes such as halocarbon agents.

Thus, according to the EPA the use of FirePro (Powdered Aerosol E) would result in substantially less harm to the climate and ozone layer than the continued use of commonly used ODS (Ozone Depleting Substances) substitutes as total flooding agents.

You may access the related FirePro US EPA SNAP listing for Occupied Areas by using the following links, redirecting you on the related sections of the US EPA website:

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1. EPA SNAP Substitutes for Total Flooding Agents
2. Federal Register / Vol. 83, No. 193 / Thursday, October 4, 2018 / Rules and Regulations

On the EPA website search for “Powdered Aerosol E (Fire Pro)” as per below.

Powdered Aerosol E (Fire Pro)	0	0	September 27, 2006; October 4, 2018	**Acceptable**	Use of this agent should be in accordance with the safety guidelines in the latest edition of the NFPA 2010 standard for Aerosol Extinguishing Systems. For establishments manufacturing the agent or filling, installing, or servicing containers or systems to be used in total flooding applications, EPA recommends the following: adequate ventilation should be in place to reduce airborne exposure to constituents of agent; an eye wash fountain and quick drench facility should be close to the production area; training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent; workers responsible for clean up should allow for maximum settling of all particulates before reentering area and wear appropriate protective equipment; and - all spills should be cleaned up immediately in accordance with good industrial hygiene practices. See additional comments 1, 2, 3, 4, 5.

General Engineering Requirements

NFPA 2010, Standard for Fixed Aerosol Fire Extinguishing Systems requires a warning of a pending discharge and a time delay prior to agent release to allow for the safe egress of occupants from the protected space, to minimize the occupants’ exposure to the agent.

The risk of improper activation of a FirePro extinguishing system is low because all the FirePro systems installed in Normally Occupied Spaces are fitted with a cross-zone fire detection system, that includes a pre-discharge alarm and time delay, sufficient to allow personnel evacuation prior to the system discharge, as required by the NFPA 2010 standard. The NFPA 2010 also requires a supervised ‘disconnect switch’ installed on the releasing circuit located at the entrance of the protected space in order to avoid unwanted discharge of an aerosol system. Additionally, the US EPA recommends employing cross-zone detection systems and abort switches located near the exit of the protected space.

Moreover, US EPA recommends that end-users are familiar with personnel evacuation procedures, and for this purpose such information and procedures are clearly stated and explained in the FirePro Installation and Use Manual.

The design of a FirePro condensed aerosol total flooding fire extinguishing system shall be prepared only by a person qualified and experienced in designing extinguishing systems and the installed condensed aerosol systems shall be reviewed/verified by a qualified engineer to ensure it complies to regulations and meets the approval of the Authority Having Jurisdiction (AHJ).

The condensed aerosol agent when used as a total flooding system in a protected space, results in reduction of visibility that may affect the evacuation of occupants from the protected space. The requirements of the NFPA 2010 standard are intended to minimize the safety risk related to the post-activation reduced visibility.

Our Company provides as an additional safety feature, the “Dynamic Emergency Exit Path Signage”, driven by the “Fire Detection System” via the command activating the optical/visual and acoustic information once a Fire pre-alarm is identified. The “Dynamic Emergency Exit Path Signage” system will guide occupants in the protected space to safely reach the exit doors, prior and after system discharge.

You may also find attached with this letter a copy of the related U.S. Federal Register.