

**GUIDELINE for the USE and MAINTENANCE of
FIRE EXTINGUISHERS containing FOAM.**

SUMMARY:

This Guideline relates to the importance of the environmentally friendly use of foams in Fire Extinguishers even when comparatively small quantities are discharged when a Foam Fire Extinguisher is activated. The validity of universally using Foam Fire extinguishers to cover certain risks is questioned as is the requirement for periodic testing by discharge of such extinguishers.

INTRODUCTION

The Fire Extinguisher Industry is a major User of Firefighting Foams and when all of the individual small quantities of foam discharged through each fire extinguisher throughout the World are added together, it becomes a total of a very large quantity of Foam covering a huge area of the World. The intention of this Guideline is to highlight the importance of the environmentally friendly use and the efficient and controlled application of foams in Fire Extinguishers.

The wider issue of Firefighting Foams discharged in large quantities per discharge by Emergency Response Teams through pumps, hoses etc. in Industries such as the Aviation and Petrochemical Industries is already being addressed in JOIFF at another level and JOIFF Members have voluntarily taking action to reduce such discharges of Foam particularly in Training and non-fire related incidents.

DETAIL

For some time, there has been a growing awareness of the possible damage to the Environment and to Human Health by uncontrolled discharge of Firefighting Foams. Before this issue came to major prominence as a result of the cessation in May 2000 by the Company 3M of production of PFOS (Perfluorooctane sulphonate), a constituent of some of the best selling Firefighting Foams that the Company 3M had produced until then, the European Union had published a wide ranging Groundwater Directive, the objective of which is to prevent polluting substances entering groundwater, primarily as a consequence of the disposal of waste substances. As an EU Directive, its requirements apply throughout the EU and in the United Kingdom, the Directive has been implemented by the Groundwater Regulations 1998 and Regulation 15 of the Waste Management Licensing Regulations 1994.

The Directive specifies groups of substances that are considered to be particularly undesirable in groundwater falling into two lists, List I and II substances, and requires that substances in groups included on List I should be prevented from entering groundwater, directly or indirectly unless they are contained and disposed of correctly.

Any Foam will contain one of the organohalogen substances in List I of the Directive and discharge of these products to open land or to drain may risk these substances entering groundwater, thus contravening the requirements of the Directive.

THE JOIFF STANDARD

Whilst this European Directive relates specifically to the European Union, it should be regarded as Best Practice and its proposals may be adopted in Countries outside the European Union.

Foam Fire Extinguishers are discharged not only in Training and “in anger” on actual fires, but also as a result of the requirement of National Standards / Codes of Practice for service and maintenance of Fire Extinguishers in a number of Countries for a 5 year test by discharge of Fire Extinguishers containing Foam. Those who know the methods used by those employed in the Industry dealing with service and maintenance of fire extinguishers are aware that in many cases, these extinguishers are tested by discharge in car parks, grassed areas, into drains or rivers etc. without any containment, therefore where applicable, putting large quantities of fluorinated material into the environment.

JOIFF GUIDELINE PROPOSAL for USE and MAINTENANCE

Use:

JOIFF supports the use of Fire Extinguishers containing Foam where Companies have decided, based on a risk assessment which includes an environmental impact assessment, that it is the “the most effective” type of Fire Extinguisher to suit their needs. However, when considering the potential damage that discharge of such Fire Extinguishers will cause to the Environment, the validity of using them to cover certain risks should be questioned where perhaps other types of environmentally-harmless extinguishing media might be just as suitable.

Maintenance:

The validity of regular test by discharge of Fire Extinguishers containing Foam as required currently in National Standards / Codes of Practice for the Maintenance of Fire Extinguishers, should also be questioned from the point of view of the value of this requirement versus the potential environmental impact of indiscriminate discharge of such Fire Extinguishers by service technicians.

CONCLUDING COMMENTS

Certainly in the United Kingdom, discharging a Fire Extinguisher anywhere without the relevant permission constitutes a technical offence under various environmental statutes – this probably applies in many other Countries also. JOIFF issues this Guideline in the hope that this subject will move the issue into the Public Arena for a wider debate and in particular that Manufacturers of Fire Extinguishers containing Foam will come forward with suggestions to assist their Customers in complying with the relevant statutes and that National Standards Bodies responsible for the Standards / Codes of Practice relating to service and maintenance of portable fire extinguishers will constructively and responsibly join the debate and change the relevant clauses of their Standards / Codes of Practice to reflect the concerns expressed by JOIFF in this Guideline for protection of the environment.

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