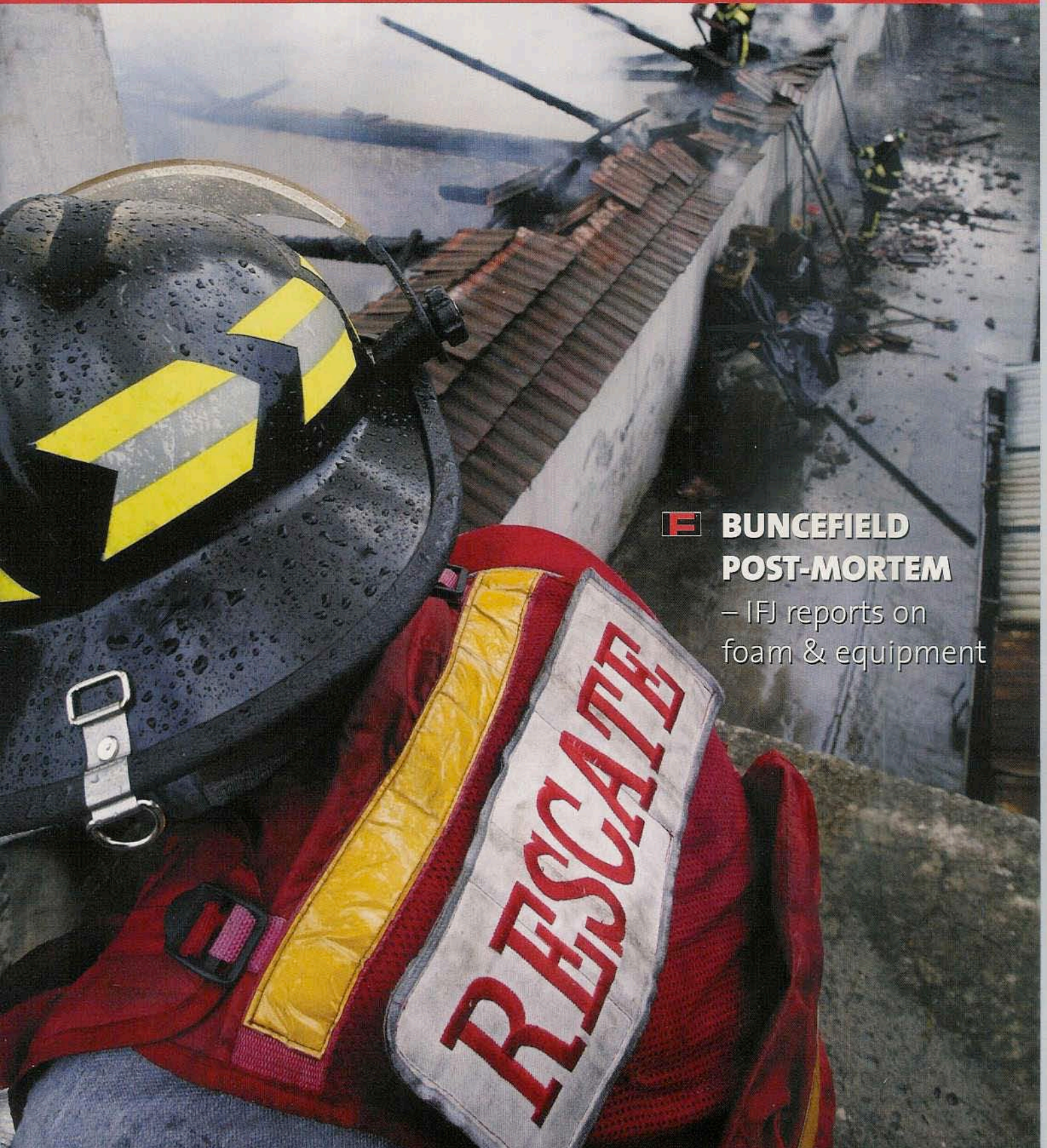


INDUSTRIAL FIRE JOURNAL

REPORTING WORLD WIDE TO THE OIL, GAS, CHEMICAL, POWER & OTHER HIGH RISK INDUSTRIES



**F BUNCEFIELD
POST-MORTEM**
– IFJ reports on
foam & equipment



*Franz Kitzwögerer of BIOVERSAL comments :
"The major problem with fire extinguishing agents is not the PFOS but the xeno-biotic tensides. »*

BIOVERSAL agents

Franz Kitzwögerer told Aidan Turnbull: "The major problem with fire extinguishing agents is not the PFOS but the xeno-biotic tensides. PFOS is a topic that relates to destruction of the protection of the ozone layer, however synthetic tensides, which nearly all fire extinguishing agents have, are completely and all together eco-toxic. During the use of cheaply manufactured tensides, the bacteria that naturally degrades hydrocarbon are very badly damaged and sometimes destroyed.

"This basically means that some of the fire extinguishing agents which were used in Buncefield have ruined the natural regeneration strength of nature. In the long term natural regeneration strength cannot take place and the pollution that was caused by the synthetic tensides is far greater than the spilled hydrocarbon.

"Nearly all detergents contain xenobiotic tensides which are considered fairly degradable. However, they prevent the very important natural process taking place because the diaphragm of the bacteria skin is destroyed. Often oil spills are treated with conventional detergents and this is completely counterproductive. Conventional firefighting foam agents are extremely harmful to the microbiology and in turn bad for the groundwater. Firefighting foams and conventional detergents have a similar chemical structure, neither should be put into our environment," he comments.

ORION

SAFETY INDUSTRIES

PTY LIMITED

SETTING NEW STANDARDS WITH OUR HIGH PERFORMANCE FIRE FIGHTING EQUIPMENT FOR PETROCHEMICAL RISKS.

Orion Safety Industries Pty Limited

29 Shepherd Street, Liverpool, NSW 2170, Australia
e-mail sales@orionsafety.com.au

Telephone +612 9821 2244 Facsimile +612 9821 2906
Web Page www.orionsafety.com.au

Bioversal QF consists of tensides with botanical origins, therefore the natural bacteria does not suffer and die, says Franz." The natural regeneration strength of nature can start immediately with Bioversal in the case of mineral oil spills. The advantages are not of environmental benefit only but of economic value as well. It is expensive to remove, store and treat firewater, it should be easier to solve the problem during application, where none of this will be necessary."

The product Bioversal QF contains an additional BIOACTIVATOR which increases dramatically the population of autochthones bacteria. This in turn will accelerate the biological biodegradation process of the lost mineral oil. An accelerated biological biodegradation is reflected in the active environmental protection and this technology should be preferred, argues Franz.

BIOVERSAL is the collective name for a range of highly effective cleaning and fire extinguishing agents which dramatically accelerate the biological degradation of mineral oil pollutants. The bioactivator used in BIOVERSAL products functions like a catalyst. BIOVERSAL's main advantage is that the agents do not create any ecotoxic effects and intensify Nature's self cleaning powers.

In Austria more than half the fire services have opted to use alternative firefighting foam extinguishing agents. BIOVERSAL products do not carry any hazardous markings for transport and the products do not carry any hazardous labelling whatsoever. BIOVERSAL QF meets the highest standards in the world, EN-standards and also international standards, i.e. ICAO, GOST etc.

The BIOVERSAL fire extinguishing technology can't be compared with film-foaming products. Essentially, the product encapsulates particles of the hydrocarbon when foaming, which means there is a high portion of water which creates a very effective cooling efficiency, making three-dimensional fires much easier to control. The most important thing about this process is that the BIOVERSAL QF prepares the hydrocarbons for a rapid biological breakdown during the extinguishing process. This so far, has been unequalled any where in the world.

Post-fire clean up costs and damage to the environment can be avoided by using the BIOVERSAL range of products which contain special natural substances which can fight fires and oil pollution but are completely harmless to the environment. These organisms are based on highly degradable surfactants. They stimulate the micro-organisms to multiply substantially, thus bringing about a rapid biological degradation process," reports Franz.

"BIOVERSAL products very rapidly treat the oil contamination to give an easily usable energy source for the numerous micro-organisms present in nature which break down the oil. The natural residual products CO₂ and H₂O ultimately remain as the end products of the degradation process. The bioactivator in collaboration with the natural surfactants makes nature its ally," he comments.

"The range of BIOVERSAL products offers a high-quality and economical alternative for every application in the field of cleaning oil and grease spills and for fighting fires."

In September 2002 approximately 5,000 litres of heating oil spilled into Lake Goldegg. The lake supplies mud packs to many health farms in Austria, supplies drinking water too and provides a big draw for tourism. Thanks to the use of environmentally-sensitive BIOVERSAL by April 2003 the lake water was approved for drinking by the local authority in Salzburg. This was an incredible achievement considering the level of contamination that had entered the Lake 6 months earlier. ■




Bioversal
in association with nature

BIOVERSAL is the collective name for a range of highly effective cleaning and fire extinguishing agents which significantly accelerate the biological degradation of mineral oil pollutants.

- ☞ Sustainable effect – saves the nature perfectly
- ☞ Internationally approved
- ☞ All in one product against fire- and oil accidents
- ☞ Accepted by water protection authority
- ☞ Highest rating
- ☞ Effective cleansing agent
- ☞ Low expenses for bio-remedial action
- ☞ Prevents slippery trail of oil
- ☞ From professionals for professionals



www.bioversal.com