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THE NATECH (NATURAL vs TECHNOLOGICAL) RISK CONCEPT: INDUSTRIAL PLANTS THREATENED BY BUSHFIRES, analyse on several reported cases and guidelines proposal

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ABSTRACT:

In South European and Middle East areas, around Mediterranean Sea, main concern of natural risk is forest and bushfire. Since many years, these accidents threaten high risks plants (e.g. radioactive power plants, high risk industrial plants or trading estates).

In 1989, an experimental nuclear site was lightly damaged by a forest fire, which could constitute the first act of Natech awareness. In the last 7 years, more than 10 cases have been reported, allowing gathering some study elements. The presentation will describe some of them, dealing with major accident occurrence probability.

Authors' recommendation are divided in

Prevention (Public bodies) measures:

Identification and mapping of Seveso sites subject to this risk;

Prevent Wildfires;

Integrate these scenarios in the legal safety report.

Preparedness ideas (in order to avoid cascading scenarios):

(Industrial): integrate the safety procedures in its own internal emergency planning;

(Industrial): remove the bush in nearby areas, (using prescribe fire tool if necessary);

(Local Authorities) information (booklets) and awareness.

Operational procedures:

(Industrial and fire brigades) implement the guidelines and tactics prepared.

As conclusion, the proposal is to begin a data base construction, connected to pre-existing data on bushfire in France. At first this data have to address the 30 previous years and present time in south of France. This focus should have, of course to define the methodology and criteria of inventory. Afterwards, this principle could easily be extended regionally. That construction could be a good support for working teams responsible for definition and implementation of guidances.

KEYWORDS:

Bushfires, Wildfires, Industrial plants, Natech, guidelines, safety.
