

## RINGKASAN

### **Hubungan Antara Penerapan Standar Penanggulangan Bahaya Kebakaran Terhadap Kejadian Kebakaran di Lingkungan Industri**

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Meningkatnya perkembangan di sektor industri yang ditandai dengan munculnya proses produksi, bahan baku, produk industri baru, telah membawa dampak meningkatnya resiko bahaya termasuk bahaya kebakaran. Menurut data dari Dinas Kebakaran Kota Semarang kejadian kebakaran di kota Semarang pada tahun 2001 sebanyak 208 kejadian, tahun 2002 sebanyak 271 kejadian dan tahun 2003 (sampai Agustus) 87 kejadian kebakaran.

Tujuan penelitian ini adalah untuk mengetahui hubungan antara penerapan standar penanggulangan bahaya kebakaran terhadap kejadian kebakaran di lingkungan industri.

Standar Penanggulangan bahaya kebakaran meliputi Keputusan Menteri Tenaga Kerja RI No.KEP186/MEN/1999 tentang Unit Penanggulangan Kebakaran di Tempat Kerja, Peraturan Menteri Tenaga Kerja dan Transmigrasi No.PER.04/MEN/1980 tentang Syarat-syarat Pemasangan dan Pemeliharaan APAR, Instruksi Menteri Tenaga Kerja No.Ins11/M/WB/1997 Tentang Pengawasan Khusus K3 Penanggulangan Kebakaran, Peraturan Menteri Tenaga Kerja No.PER02/MEN/1983 tentang Instalasi Alarin Kebakaran Otomatis.

Penelitian ini menggunakan metode observasional dengan pendekatan survai, jumlah sampel 16 perusahaan dengan klasifikasi potensi bahaya kebakaran berat di kota semarang. Pengumpulan data menggunakan instrumen daftar periksa yang disusun berdasarkan standar penanggulangan bahaya kebakaran.

Analisis data menggunakan uji U (*Mann Whitney Test*) dengan taraf signifikansi ( $\alpha$ ) = 0,05.

Hasil penelitian menunjukkan bahwa 11 (68,8%) perusahaan memenuhi standar penanggulangan bahaya kebakaran dan 5 (31,3%) perusahaan tidak memenuhi standar. Kejadian kebakaran dalam 3 tahun terakhir tertinggi terjadi 14 kejadian kebakaran dan terendah tidak pernah terjadi kebakaran. Hasil uji *Mann Whitney Test* didapat ada hubungan antara penerapan standar penanggulangan bahaya kebakaran terhadap kejadian kebakaran di lingkungan industri dengan nilai  $p = 0,001$ .

Dari hasil penelitian dapat disimpulkan bahwa penerapan standar penanggulangan bahaya kebakaran mempunyai hubungan secara bermakna terhadap kejadian kebakaran di lingkungan industri.

Saran yang dapat diberikan bagi perusahaan mewujudkan komitmen dalam menerapkan standar penanggulangan bahaya kebakaran, bagi instansi terkait lebih meningkatkan sosialisasi, pengawasan dan pembinaan pada perusahaan agar menerapkan standar penanggulangan bahaya kebakaran, bagi peneliti selanjutnya diharapkan dapat diteliti sampel perusahaan dengan klasifikasi potensi bahaya kebakaran ringan dan sedang serta lebih melengkapi instrumen penelitian (daftar periksa) terutama bila dijumpai peraturan penanggulangan kebakaran yang baru

## SUMMARY

### **The Relationships Between The Implementation of Fire Fighting / Fire Protection Standard and Fire Attack in the Industrial Environment**

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The development in industrial sector, as characterized by the enhancement in production proses, raw materials and new industrial products, have lead to the increasing risk of industrial hazard, including the occurrence of fire. Data from Fire Office, Semarang, showed that the fire attack in Semarang in year 2001 was 208 events, in 2002 217 events and in 2003 (up to August) 87 events

The objectives of the research was to make a study on the relationship between the implementation of fire fighting / fire protection standard and fire attack in the industrial environment.

Standard for Fire fighting/fire protection is elaborated in The Decree of The Minister of Manpower No. KEP 186/MEN/1999 on fire fighting / fire protection Unit in Workplace, The Regulation of The Minister of Manpower and Transmigration No. PER.04/MEN/1980 on The Requirements of Installment and Maintenance of Fire Extinguisher, Instruction of The Minister of Manpower No.Ins 11/M/WB/1997 on Special Surveillance for fire fighting / fire protection and The Regulation of The Minister of Manpower No.PER02/MEN/1983in The Installation of Automatic Fire Alarm.

Observational method was used in this research by way of longitudinal retrospective 16 (sixteen) companies in Semarang taken as the samples are classified as companies that are potentially destructed by fire. Data collecting was obtained through check-listing based on fire fighting / fire protection standard according to the jurisdictions on fire fighting / fire protection.

The results of the research showed that 11 (68,8%) companies have fulfilled the fire fighting / fire protection standard while 5 (31,3%) companies have not done so. During the last 3 (three) years, the highest fire attack consisted of 14 cases; and the lowest fire attack consisted of nil fire cases.

The result of the Mann Whitney Test used in the research showed that there was a relationship between the implementation of fire fighting / fire protection standard and fire attack in the industrial environment in which  $p = 0,001$  and level of significance ( $\alpha$ ) = 0,05.

It can be concluded that the implementation of fire protection standard has a significant relation with the fire attack in industrial environment.

It is recommended for companies to have knowledge and apply fire protection standard. Related institution should provide socialization, surveillance and improvement for the companies to apply fire protection standard. Further studies should focus on the companies with moderate and mild fire potentials and to improve research instruments (checklist), particularly when new regulation of fire protection have been enacted.

## ABSTRACT

### The Relationships Between The Implementation of Fire Fighting / Fire Protection Standard and Fire Attack in the Industrial Environment

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A large fire often starts from a small one; and we can extinguish the fire easily if we know how to control it. Nevertheless, when we overlook and fail to notice; the fire can then become uncontrollable. The fire will spread very quickly destroying our possessions and even our lives.

The objectives of the research was to make a study on the relationship between the implementation of fire fighting / fire protection standard and fire attack in the industrial environment.

Observational method was used in this research by way of longitudinal retrospective 16 (sixteen) companies in Semarang taken as the samples are classified as companies that are potentially destructed by fire. Data collecting was obtained through check-listing based on fire fighting / fire protection standard according to the jurisdictions on fire fighting / fire protection. This instrument was conducted to examine the achievement of the fire fighting / fire protection standard implemented by the companies. Data on fire attack were obtained from the last 3 (three) year records.

The results of the research showed that 11 (68,8%) companies have fulfilled the fire fighting / fire protection standard while 5 (31,3%) companies have not done so. During the last 3 (three) years, the highest fire attack consisted of 14 cases; and the lowest fire attack consisted of nil fire cases.

The result of the Mann Whitney Test used in the research showed that there was a relationship between the implementation of fire fighting / fire protection standard and fire attack in the industrial environment in which  $p = 0,001$  and level of significance ( $\alpha$ ) = 0,05.

**Key Words:** *fire fighting / fire protection standard, fire attack*