

# ***MINING INDUSTRY***

***"THE QUINTESSENTIAL  
FIRE AND EXPLOSION  
SOLUTION"***

***THE ALL "GREEN" ALL FIRE CLASS  
EFFECTIVE TECHNOLOGY  
PROVIDING THE HARDWARE  
SYSTEMS & MEDIA TO DELIVER THE  
SAFETY AND RELIABILITY  
NECESSARY TO SAVE LIFE & THE  
VALUABLE BUSINESS ASSETS***

***Marketing Department: Technical***

WHITE PAPER

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**FIRESTOPPER**  
Industrial - Commercial  
Government

# INTRODUCTION

**FireStopper® International Limited** (FireStopper®), a transnational Registered Company, is the developer of the world's most advanced and powerful firefighting and anti-explosion "**Proprietary Technology**", within the meaning of the Uniform Trade Secret Act ("UTSA") Cal. Civ. Code Sec. 3426, Common law, Business and Profession §17200 and all other applicable U.S. and International statutes, which also produce environmental remediation and other supporting applications.

FireStopper® initially devoted the first 25-years of its existence to R&D and subsequently is the recipient of the stand-alone Global testing and certification results. Such achievement was afforded by way of unprecedented results in fire ratings, usage and environmental certifications. Said superior performances over all others is supported by the certifications received from the most recognized and respected third party testing and listing facilities in the world.

Moreover, this unique Technology has rendered the only available "**all fire class**" effective and "**anti-explosive**" products, which are **Non-Toxic, Non-Irritant, Environmentally Safe and Non-Hazardous**. These achievements were garnered by way of the most demanding environmental and life exposure testing and certification making the FireStopper® "Brand" the best overall over the other existing and available products in the explosion/fire and safety channel of business.

## PRESENTATION:

### **The Specter Of Devastation From Explosion And Fire Has Plagued The Mining Industry Since Inception.**

Notwithstanding the natural causes for these devastating events, a new set of risks is evident today. With today's advanced technology driven electric-powered equipment, which now employ the desired and evolved ion-Lithium batteries, the safe operation of mining no longer can rely on the failed old fire and explosion equipment and media.

The FireStopper® Brand and Technology is the deliverer of the only reliable, all fire-class effective, anti-explosion media available in the World. Our Concentrates and exclusive to FireStopper® Trademarked Systems Premix is the only true solution to the problem. Whether the genesis of the explosive event is born of a natural source ignited by a spark or caused by faulty equipment, FireStopper® will quickly and efficiently terminate the fire, saving the potential loss of life, equipment and productivity.

Moreover, by deploying FireStopper®, contingent liabilities shall dramatically be reduced, allowing for the ability of the business to undertake expansion in output and profit. The FireStopper® Brand of hardware products are manufactured in stainless steel for durability and ease of maintenance. For example, the FireStopper® line of handheld portable extinguisher is the only portables line in the Industry offering a 20-year warrantee alongside the unique and reliable effectiveness. All efficacies represented by FireStopper® rely exclusively on 3<sup>rd</sup> party certifications, confirming all fire-class (ABCDK) and subclasses of flammable materials, including Nuclear Industry related flammables.



*In addition, all FireStopper® Media, concentrate or premix, offer and deliver massive cooling efficacy, smoke abatement, vast reduction of water use, reliability of environmental safety, plus non-toxic, non-irritant and non-aggressive additional reliabilities.*

*We encourage all who contemplate employing our products to conduct their own head-to-head comparison with whichever other materials are in use or considered for use.*

## **DISCUSSION:**

### **Industry Safety & Economic Concerns:**

#### ❖ *Explosion*

- *The most prevalent threat comes from the mass accumulation of dust particles in the active prospecting environment, which is the byproduct of the mining operation in the extraction process, that can and will be ignited by a spark to cause a catastrophic explosion. The spark may initiate from an electrical source or even more endemic, a natural occurrence when the dust particle count reaches a point where static electricity may happen automatically.*

#### ◆ *The Solution*

- ⇒ *In every environment where digging and drilling is taking place, a misting/fogging system should be employed delivering the appropriate FireStopper® product to coat the dust particles; in most cases this process will cause the micro particles to fall to the ground while still coated for protection against any reemergence of the hazard. The coating of the particles with immediately prevent the potential for explosion from this source. Other sources of explosions may materialize as spontaneous reaction events, which may be born from decaying stored explosive devices. If a detection and activation system is deployed in these areas, the appropriate FireStopper® premix will be effective in reducing the explosion's intensity to such an extent that the damage may be negligible at best. We recommend you view the FireStopper® explosion mitigation video and study the "Explosion Protection" white paper also available at our website @ [www.firestoppreus.com](http://www.firestoppreus.com)*

#### ❖ *Fire*

- *The Mining environment, by definition, can self-produce extremely volatile byproducts that can lead to serious fire events. The follow are just a few examples; nonetheless the solution is still the same:*
  - *Volatile gasses such as Methane, Hydrogen and Hydrogen sulfide or other volatile combinations thereof, however, the most volatile environment is referred to as damp. These damp are produced or released during mining operations including drilling and blasting, by mining machinery such as diesel and gasoline motors, and by other means such as the decay of timbers, the aftereffects of mine fires, and chemical processes like oxidation. Ventilation alone is not enough to eliminate the potential for deadly explosions.*

- *Malfunction of equipment or materials employed in the process of mining leading to fire.*
- *Lithium-ion batteries pose a present and future danger in this scenario. Most vehicles operating in the mining concerns come with the potential for an unstoppable fire event whose temperature can exceed 2000 °F leading again to a catastrophic event. Today, outside of FireStopper®, there exist no protection against a Lithium-ion battery fire no matter what or who represents efficacy; one must investigate the available evidence of massive failure to extinguish electric vehicles with the existing available class D certified products.*
- *Criminal and intentional setting of fires, which in the abundance of caution must also be address.*

◆ *The Solution*

⇒ *FireStopper® Portables and fixes systems should be deployed in a systematic way for maximum safety and to provide the quickest delivery of the appropriate product to the fire, regardless of the class of fire or flammables present within the fire parameter, to produce the fastest and most complete eradication of the fire potential and event.*

*The FireStopper® full line of handheld portable extinguishers provide the widest variety of sizes and efficacy, never before available, to quickly extinguish an event that normally would expand into a catastrophe.*

*FireStopper® offer a full line of the most applicable and feasible CAC (Compressed Air Catalyst) units designed to provide the maximum delivery system necessary to eliminate the threat of fire and explosion. Both of these category of products will deploy our exclusive to FireStopper® Predator FFC, only available through our trademarked hardware products (for additional information on all category of products, please consult our website).*

*For large volume output, FireStopper® Concentrates:*

- *FireStopper® Terminator 136 FFC, usable @ 1%, 3% or 6% for great insurance against mechanical failure of delivery devises not producing the correct required mixture*
- *FireStopper® Disruptor 3610 FFC, this product is the product of choice to pre-spray flammable surfaces or materials to prevent their ignition among other highly effective applications necessary in the course of business to defeat the fire or explosion threat.*
- *FireStopper® Fixed Systems, under this category all products are designed to fit the purpose; please consult FireStopper® for further details...*

*The history of this Industry has produced devastating fire events some of which are still burning for over 75-years; these are generally coal mine fires. Other mining operations are certainly not*

*immune to long lasting fire events that not only devastate the mining enterprise but also the environment, the adjacent human habitats and most unprotected, the animal related habitation.*

*Another serious source of fires to the mining operation derives from commonly employed materials making up the conveyer belt machine deployed across the Industry. There is a variety of this equipment at work in mine operations and because they are specifically design for purpose, identifying where a particular source of flammable materials used in their composition may cause the emergent event. Most of the components have high risk of fires due to heat from friction that before the advent of FireStopper® the operation would require a variety of different fire suppressants. Instead, FireStopper® provides the opportunity to the Industry to simplify their fire protection mechanism by employing just one product to provide global protection against every possible source of fire or explosion. As a direct result of implementing and utilizing FireStopper® the enterprise will eliminate confusion over which products to use while determining the source of the fire; one product does it all...*

## **CONCLUSION**

*Something else to consider as an additional advantage gained by deploying FireStopper®, the massive runoff produced from these serious explosive fires will be minimized due to the great overall efficacy this Technology delivers.*

*These unintentional and unexpected potentially massive contingent liabilities, caused by the present fire mitigation process will be greatly reduced with the use of FireStopper®. Also, as a consequence of said event's liabilities created and demanded by Government for post fire cleanup of the environment, this liability will be massively reduced if not eliminated in total when FireStopper® is used.*

*Because of FireStopper®'s unique and indisputable status as the only Technology and Products of its kind anywhere, it will deliver to the end-user never before afforded safety, security against these events where ever fire and explosions threatens their operations and by extension deliver economic gains to their bottom line no available before.*