

CASE STUDY

Mining Industry
Electrical Substation



Why Is Fire Protection an Absolute Necessity in the Mining Industry?

It Can Save Operations From Digging into Their Wallets.

A company in the mining business for more than a century understands the need to protect their investments – personnel, equipment, facilities and products. With unmatched mining and recovery expertise, this industry leader maintains the world's lowest cost production by utilizing cutting-edge technology. When it came time to finance the operation of their new mine in Northern Ontario, Canada, they knew that they must secure first-rate components to guarantee quality production.

The Arctic climate of northern Canada mandates that mining operation facilities be set-up and torn-down seasonally – deeming a system that is capable of economical transport. In addition, the isolated location of the mine, miles from the nearest emergency services, required superior protection for the personnel that occupy the electrical substation that powers this site.

Fire Protection that Goes the Distance...

The architect and engineering firm contracted by the mining operation originally specified a Carbon Dioxide (CO₂) system for its fire protection needs. The mine operator called Kidde distributor Vipond Systems Group for installation of the system. Vipond conducted their own pre-installation hazard analysis and concluded that a CO₂ system was not the right option for this application.

Vipond proposed a Kidde ECS™ Clean Agent Suppression System using FM-200® from the proposed CO₂ System with the justification of personnel safety, as well as a cost reduction. Because the space intended for protection was to be occupied, FM-200 was a safer alternative as it is a proven, people-safe agent when used per NFPA requirements. In addition to the safety advantage, the Kidde ECS System would prove to be more economical for the operation as the system requires significantly fewer cylinders.

Ordinarily, this may not be an issue, but this installation had to fulfill portability requirements. The system would have to be hauled hundreds of miles across the arctic each time the operation was set-up and torn-down thus, having a smaller system equated to a large cost savings in transportation for the operation. The mining operation was impressed with this alternative suggestion and chose Vipond to install the Kidde ECS System using FM-200.

Typical Applications Protected by Kidde:

- Commercial Cooking Facilities
- Manufacturing and Industrial
- Marine and Off-Shore
- Mission Critical Facilities
- Petroleum, Gas and Oil
- Industrial Vehicles

Integrated Suppression and Detection System Components:

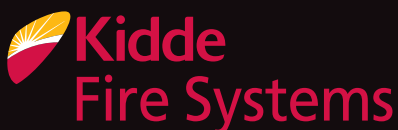
- Control Units
- Smoke Detection
- Heat Detection
- Suppression Cylinders
- Notification Devices
- Manual Pull Stations

Suppression System Agents and Inert Gases:

- Argonite™
- AquaGreen™
- Carbon Dioxide
- FE-13™
- FM-200®
- HFC-227ea
- IND™ Dry Chemical
- Nitrogen
- 3M™ Novec™ 1230 Fluid
- WHDR™ Wet Chemical

Approvals & Listings:

- UL Listed
- EPA Listed
- FM Approved
- USCG Approved



We are Kidde Fire Systems.

Kidde Fire Systems' products save people and property from the dangers of fire. Our broad product offering and design expertise have been protecting assets worldwide since 1917. We're the smart choice when early fire detection and suppression needs are especially demanding. To advance our leadership in the industry, our family of special hazard fire protection brands has united.

Kidde Fire Systems now incorporates Chemetron Fire Systems and Fenwal Protection Systems. As Kidde Fire Systems, we will enhance our customer focus and partnerships, provide highly efficient service and training, preserve a deep combined expertise in an array of vertical markets, and accelerate our product and technology developments, to the advantage of everyone who benefits from a world made safer from fire.

A world leader in special hazards. Advancing fire protection.



When you choose Kidde, you've chosen the world's most respected name in special hazards fire protection.

400 Main Street
Ashland, MA 01721 USA
508.881.2000

www.kiddefiresystems.com

FE-13 & FM-200 are registered trademarks of DuPont.
3M & Novec are trademarks of 3M.

Kidde is a registered trademark of Kidde-Fenwal, Inc.

CSK-301 March 2016 ©Kidde-Fenwal, Inc., All Rights Reserved.