Earlier this year Grinnell Mutual’s Special Investigations Unit collaborated with Corporate Loss Control to test intumescent paint on construction materials commonly used in livestock buildings. The research, which was conducted using Contego International’s intumescent paint, yielded important results.

Contego intumescent paint is a non-toxic, fire-retardant paint that when exposed to fire, forms a tough char barrier that cannot easily be penetrated. By depriving flames of an additional fuel source, the fire dies quickly. The paint also minimizes smoke production, a leading cause of fatalities in residential and commercial fires.

“We decided to conduct the research using burn cells in response to several large livestock confinement losses. A mutual manager asked if we recommended Contego paint as a way to slow fire spread, reducing the probability of another large loss,” said Director of Corporate Loss Control Larry Gallagher. “By using the expertise of Special Investigations in conducting burn cell testing, we were able to evaluate the paint first-hand.”

Seven burn cells were built to test the paint’s effectiveness (see photo above). High Density Polyethylene (HDPE) sheeting, Class C fiberglass reinforced panel (FRP) board, and spray foam were applied to two burn cells each. Half of the cells were painted with Contego intumescent paint according to the manufacturer’s instructions and half were left unpainted as a control group. Fire-resistant Class A FRP board, unpainted, also lined one cell to use as a comparison.

“We tested the material side-by-side. In each cell we ignited 50 paper cups and 50 napkins in a trash bag,” explained Director of Special Investigations David Miller. “The cells painted with Contego and the Class A paneling did not let the fire extend out of the room’s corner—only the combustible materials burned. We were impressed.”

Meanwhile, the cells without the fire resistant paint went up in flames within a few minutes. Surprised by the paint’s performance, the investigators decided to test an aggressive fire load. Gathering wood and plastic scraps, they lined the unburned corner of the painted cells, added gasoline, and ignited the pile. Once again, the paint contained the fire.

“We were surprised by how well the paint responded. It was a very productive exercise. As a result, we are revising the Grinnell Mutual’s recommended guidelines when building or remodeling livestock or poultry buildings to include Contego intumescent paint, or a tested equivalent, as a means to prevent fire spread,” said Gallagher.

“We have conducted demonstrations for companies and organizations all over the world. Grinnell Mutual did a thorough job of producing a dynamic, large-scale test, using entire rooms set up outdoors where wind can fan flames, debris flies around, and other variables occur,” said Contego Executive Vice President of Corporate Development Tony Scott, who was present for the test burns in Grinnell. “I was impressed with their forethought, detail, and professionalism. They were clearly out to seek solutions for their customers.”

About Contego International
With headquarters in Carmel, Ind., Contego International offers tested, non-toxic solutions to commercial and industrial sectors, as well as to consumers worldwide. Its intumescent paint is available in five gallon buckets, 55 gallon drums, 270 gallon totes, and 4,000 gallon tanker lots. To learn more, go to www.contegofirebarrier.com.