SAFETY ALERT- Explosions in Swine Confinement barns while pumping pits

There have been two explosions in swine confinement barns in the last five days. In both cases the pits were being pumped and within 2-20 minutes the explosion occurred.

Site one - Independence, Iowa. Barn pit was about half full and the barn has had a foaming problem where foam filled the pit and was coming out on the slats, making the pigs dirty and sluggish. Barn managers had burning eyes, but could not really smell any gas while foaming was going on. A pit additive was added about a month ago to try and reduce the foaming problem. They are feeding average levels of DDGS and bakery products and the foaming began in this barn about 1½ years ago. It was suggested that the pit be agitated to mix it and last Friday 9/25/09, curtains were down all the way, pit pump was put in the hole, pit fans were off because of the foam and within 20 minutes, there was a flash fire and melted all of the plastic water and feed lines and killed some of the pigs and severely burned many of the others. Several were euthanized and the rest were slaughtered as soon as they could get them into the plant. Since then they have added Synergize disinfectant to the pit and that has reduced the amount of foaming. The barn was about empty when this occurred.

Site Two - Hubbard, Iowa. 9/29/09 Barn pit had about $5 - 5\frac{1}{2}$ foot of manure in it with no foaming and no crust. They do not use any pit additive, but the feed does utilize DDGS. The curtains were down about half way and there was a slight breeze. The crew had put the agitator in the pit and 2 of the pit fans were still running. Within 2 minutes of the start of the agitation, there was an explosion which seems to have started at the feed auger motor. All of the plastic water and feed lines were melted, the bird netting vaporized and several pigs were killed and severely burned. The curtains caught on fire and the 2 x 4's were charred black but the building did not catch on fire.

We are not sure of why this is happening. We will be contacting people who may be able to shed some light on the cause. In the meantime, be sure to contact your barn owners and managers to be extremely careful when the pits are being pumped. Have them shut off the electrical and pilot lights on anything that could spark and start the fire. I hope these are a freak occurrences, but two similar incidences within 5 days is concerning, especially with the pumping season just about to begin. Contact all of your barn owners and barn managers and let them know of the dangers. We will pass on additional information as we receive it. We don't want anyone being killed or injured or hogs lost.

Thanks.

Roger E. Kinsey

Swine Business Manager

U.S. Feeds