

Oral Testimony of John S. Bresland
Board Member, U.S. Chemical Safety Board
Before the U.S. House of Representatives Committee on Education and Labor
Subcommittee on Workforce Protections
June 28, 2010

Good morning distinguished members of Congress. I am John Bresland, board member of the U.S. Chemical Safety Board.

My statement today is on my own behalf and does not necessarily reflect the views of the other four board members. Last week I stepped down as the Board chair to make way for President Obama's new appointee, Dr. Rafael Moure-Eraso, who is here today. All of us welcome Dr. Moure and look forward to his leadership.

The Chemical Safety Board or CSB is an independent, non-regulatory federal agency that investigates major industrial accidents involving hazardous substances. Most recently, we have been called in to investigate the causes of the explosion and fire at the BP Deepwater Horizon oil rig in the Gulf of Mexico.

For the past four-and-a-half months, the CSB has conducted an intensive investigation of the root causes of the accident at the Kleen Energy power plant here in Middletown. This accident occurred during a procedure called a "gas blow", used to clean natural gas piping. During this procedure a huge volume of high-pressure natural gas was vented directly to the atmosphere.

The CSB team has interviewed more than 90 witnesses, gathered large numbers of documents, and painstakingly examined the site and key pieces of evidence. We have also exhaustively reviewed applicable federal and state regulations and other codes and standards.

Madam Chairman, the CSB team has uncovered what we believe is a significant gap in these standards – a gap that threatens the continued safety of workers at facilities that handle flammable natural gas.

The tragedy that took six lives and injured many others at Kleen Energy was not the first explosion involving natural gas that the CSB has investigated. On June 9, 2009, a destructive gas-purging accident occurred at the ConAgra Slim Jim meat processing plant in Garner, North Carolina.

These deadly accidents in Connecticut and North Carolina were preventable.

Gas company records show that some two million standard cubic feet of natural gas were released to the atmosphere during the gas blows at Kleen Energy on the morning of February 7. That by the way is enough to fuel a typical American home every day for more than 25 years.

You can get an idea of just how much flammable gas is released in a gas blow from the photograph on the easel, taken a week before the explosion at Kleen Energy.

On the morning of the accident, no safety meeting was held among the workers involved in the gas blows, and many personnel who were not essential to the gas blows remained on site.

At approximately 11:15 a.m. the gas found one of the numerous available ignition sources and exploded.

Through extensive research, our team discovered that since 2001, at least two other fires and explosions have occurred at gas power plants during gas blows. One of those explosions – at a Calpine power plant in California in 2003 – is pictured on the easel.

But alternatives to using natural gas are readily available. These include blowing with air, nitrogen, or steam, or using a cleaning device known as a “pig” which can be pushed through the piping using air.

Many companies already use these alternative techniques. Yet we found that natural gas blows remain the most popular single pipe cleaning method and they are still going on, despite our previous announcements about the hazards.

In our review of federal standards, safety codes, and industry guidance, we found nothing that specifically prohibits natural gas blows or mandates the use of available, inherently safer alternatives. Indeed, we found a series of exemptions governing the natural gas power industry. The CSB has a solution.

At our CSB public meeting at 6:30 tonight in Portland, I intend to vote for and support new urgent safety recommendations that we have developed, calling for OSHA to enact new regulations to control this hazard, and I will encourage the other Board members to do the same.

The new regulations would prohibit the use of natural gas for pipe cleaning, , and they would require the participation of workers and contractors in developing safe gas handling procedures.

We consider these recommendations urgent in part because some 125 new gas-fired power plants are planned for completion in the next five years across the U.S., including a number here in Connecticut.

If the Board approves the recommendations this evening, we plan to conclude the CSB investigations of the explosions at Kleen Energy and ConAgra, in the strong belief that we have identified the principal root causes of these disasters. We will focus our future efforts on advocating the swiftest possible adoption of our recommendations by OSHA, the National Fire Protection Association, and other recipients.

I thank you again, Madam Chair, for convening today’s hearing and I thank you and the entire Connecticut Congressional delegation for your unwavering support of the CSB’s investigation and our work to improve industrial safety. I will be happy to answer any questions you may have.