

Y-12 and some leaders in 1980s, part 1

Recently the mercury contamination of East Fork Poplar Creek has been thoroughly covered in the *Knoxville News Sentinel* newspaper and online through in-depth reporting by their senior writer, Frank Munger, who routinely covers the Department of Energy's Oak Ridge facilities. The multiple-day series has reminded us all of the history of Y-12's work to help win the Cold War and the resulting environmental insults of mercury releases as well as the consequences of those releases.

The focus was on the mercury releases during the years of 1955–1963 and the COLEX (Column Exchange) process, primarily in Building 9201-4. The articles also mentioned that mercury was used in Buildings 9201-5 (where one of the largest spills occurred near the end of the lithium 6 separation era in 1955), 9204-4 (where the ELEX [electrical exchange] process was located with its 50,000 stirring motors) and 9201-2 (where the pilot processes were located).

There were also workers who suffered because of exposure to mercury and potential for others to have been inadvertently exposed (children were especially vulnerable). This is a major environmental and health issue and one that was kept secret until the early 1980s. However, attempts were made to protect the workers during the COLEX process era by monitoring them for mercury and rotating them in and out of direct contact with the process material.

The decisions made from 1955 until May 17, 1983—when the declassified version of *Mercury Inventory at Y-12 Plant, 1950 Through 1977* was released—regarding the need for secrecy can be second guessed, and we all can have an opinion regarding those decisions. Not being there at the time, however, limits our ability to know the real important details of why the secrets were seen as being so vital to the nation's security at the time.

It might be helpful to know more details about the rationale behind the secrecy and the reasons why things were done the way they were. We all might understand better, but then again, most of the reasons things were kept secret was not something that could be shared with people who did not have the need to know. The same thing still applies today.

“Need to know” is a very helpful strategy when attempting to keep information secure. The Manhattan Project practiced it to an extreme. If a person had a “need to know” something about a process, they were not allowed to even talk to people about the job who did not have a need to know. This was done administratively through designations on badges. Access was limited by putting colored bands on the sleeves of clothing to specify onto which floors a person could go and where they were not allowed to go.

However, the facts are that the process in place to fight the Cold War required secrecy. The people charged with doing the work kept that secret information contained until the process was changed to allow disclosure of major parts of the past history including the mercury losses.

Work done at Y-12 then relied upon the individuals doing the work to abide by the restrictions placed on the information associated with some parts of their work, as it still does today. It has been so from the Manhattan Project days through the Cold War and now the war being fought against terrorists.

The Y-12 nuclear family can be defined as a unique relationship between workers, the government and our community. The work done at Y-12 is beneficial to the whole world (no World War in the previous 66 years!), our nation (we ARE the leaders of the free world) and our community (Oak Ridge is known around the world—no need to even say “Tennessee, USA”).

But what is it like to be responsible for the work that is done at Y-12 and need to maintain the necessary balance between secrecy, safety, production and community relations? What is it like to shoulder that heavy load for even a short time?

I have worked at Y-12 for 41 years and have seen leaders who were charged with the responsibility to safely execute Y-12 missions come and go, contractors come and go and oversight managers come and go. But the mission remains, and the need to meet the necessary information management constraints remains as well.

A few individuals stand out in my memory and some have held positions of responsibility regarding Y-12. I would like to share some personal observations (mine alone!) about what it means to be placed in a position of responsibility for the lives of others, the nation's security and the world's continued peaceful existence.

I want to do this by focusing on a few individuals who were engaged in the mercury issue and maybe help give a bit of insight into the overall system of controls and actions taken by strong, courageous leaders.

Three individuals, out of many, will be featured: Joe LaGrone, DOE Oak Ridge manager from 1983 to 1995; Gordon Fee, Y-12 plant manager from 1982 to 1990, president of Martin Marietta Energy Systems from May 1992 to 1995 and Lockheed Martin Energy Systems, Inc. from 1995 to April 1997; and Bill Wilcox, Manhattan Project chemist in 1943 to technical director of both Y-12 and K-25 from 1969 to 1981, technical assistant to the president of Union Carbide Nuclear Division and subsequently Martin Marietta Energy Systems, Inc. until retirement in 1986.

The next installment will tell how they were involved with the mercury situation that came to light in 1983.