Y-12 and the emerging environmental concerns

The 1970's is generally seen as the decade when a series of new issues struck Y-12. Environmental concerns of asbestos, polychlorinated biphenyl (PCB), lead paint and other potentially harmful substances began to escalate in the 1970's and Y-12, though previously somewhat insulated from many of the environmental issues, began to feel the increased concern as well.

Asbestos was the first issue to take hold and to cause radical changes in routine and regular daily practices. A full plant survey was completed to identify all the asbestos on the site. It was found to be almost everywhere, on pipes, on walls, in floor tiles and many other places. This was but a hint of other things to come.

Concern grew in the 1970's among the public in general about air pollution, water pollution, radiation, pesticides, noise pollution, solid waste disposal and a whole host of other environmental issues. Rachel Carson in her book, *Silent Spring,* published in 1962 brought attention to a number of environmental concerns. This book is thought by many to be the single most influential element that brought about what is known as the environmental movement.

Earth Day, 1970, is recognized as marking the turn of the tide regarding environmental concerns and the public support for addressing such concerns. Beginning with the Earth Day demonstrations and other activities that brought to light issues that had not been taken as seriously as many began to feel they should have been a new and much more environmentally aware public demanded that environmental issues must be addressed.

Y-12 was not excluded from many of the results of this swing in public opinion regarding environmental issues as environmental regulations began to apply there as well. An example is asbestos. As early as May 29, 1971, Occupational Safety & Health Administration issued regulations limiting exposure to asbestos.

While this did not immediately impact work at Y-12, eventually it caused a radical shift in the way work was done. At Y-12 there were many places such as steam lines that were insulated with asbestos. Buildings had asbestos siding. When surveys began, asbestos was found in many places that had not been noticed before taking a closer look.

While many people have worked on the Asbestos Program at Y-12, Chuck Lee may well have been the single individual who spent the most time dealing with the hazardous material and who has seen the effects of increased concern over the long-term effects of exposure to asbestos.

Chuck describes the history of asbestos work at Y-12 after the regulations were applied, "Y-12 wasn't covered until the construction standards were issued in 1986. At that time Industrial Hygiene issued the paper work which was very limited."

Note that it took a number of years for the regulations to apply to Y-12, but the concern was known earlier and efforts began to try and deal with the hazard of working around asbestos. The change in work practices was much like other changes over the years. As more is learned about the materials we work with more precautions are applied within the working environment.

Chuck went on to say, "I was a machinist then a R.E.D mechanic until 1990 and was getting laid off. I was hired as a maintenance planner and placed into the new asbestos program being formed by Maintenance.

"At that time Paul Standifer was hired as the program manager and the program included Paul, Neal Nolan, Chuck Haynes, Scott Skofield, Dennis Medley, Bill O'Brien, Jerry Pack, Gary Burnett, and Judy Tuxbury, and me." I remember these folks well from my days in Maintenance and the Facilities Management Organization in the late 1880's and 1990's.

Chuck continued, “At that point in time there were two big abatement projects. One in Building 9212 basement and one in Building 9215’s Met Lab. I think the big objective then was to remove as much asbestos as possible and manage what was left in place.

“In the early 90’s the asbestos insulators taught me everything about asbestos I needed to know and gave me the tools to build my knowledge over these past 21 years. Our guidance is provided in Y73-204 which has been updated several times since 1990. Over the years we have protected the environment and personnel here at Y-12.

“We have learned to place engineering controls on handling asbestos through air monitoring data, and have streamlined a lot of abatement techniques which reduces stress on the abatement workers. We have cut cost and time while still controlling the release of fibers.

I know that Chuck has dedicated his career to learning the regulations and assuring that we applied them at Y-12. The most important thing we do is work safely.

Chuck said, “The regulations that started Y-12 to do asbestos surveys was the Asbestos School Hazard Abatement Act (ASHAA) in 1982 which was strictly for schools and then ASHARA was added which covered public and commercial buildings.

Chuck observed, “As far of all the replacement materials for asbestos, none perform as well as the asbestos materials. That can actually be seen when you see steam piping lines with the metal busted and the non-asbestos insulation swelling.

But the danger of continuing to work with asbestos as had been done before the regulations has been replaced with the caution in handling the materials safely. Using replacement materials, even though the new materials do not last as long, is a small price to pay for protecting our employees.

Chuck concluded by saying, “Ray, Sorry I couldn’t be more in depth but I am winding down to get out of here. I feel very proud of my work in the asbestos program and feel I have helped protect our folks and the environment.” Chuck was writing this on his last day of work before retirement after a long and successful career at Y-12.

Chuck, we will miss you at Y-12 and want to thank you for the effort you have placed to assure you had a good working understanding of the necessary requirements to protect employees at Y-12 from the asbestos hazard over the years. Enjoy your retirement!