

Union Carbide's Last 20 Years in Oak Ridge – part 4

As we conclude Bill Wilcox's personal review of the last 20 years of Union Carbide's tenure in Oak Ridge, Bill started us off with a general overview and brought us through some of the specific milestones of accomplishment or significant events during those years from 1964 until 1984. This concludes those milestones.

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1982. At a management dinner at Club LeConte in the fall of the year, the Carbide official who came to report to us the Carbide news, wound up with the announcement that Carbide had decided to resign its 40 year contracts to operate the three Oak Ridge installations and the Paducah Plant. It sure stunned those of us who had worked for Carbide for its 40 years here. He explained that they had studied their overall situation carefully and finally concluded that our nuclear businesses here did not fit in well with their main business lines.

1983. As the result of a local newspaper's Freedom of Information request, ORO released a formerly classified Y-12 Memo on inventory of mercury losses in the major lithium isotope separation program of 1954-1962 that I like to call "Y-12's Second Manhattan Project." The desperate need of the U.S. in the early 1950s was to produce some highly enriched lithium-6 for use in building the first thermonuclear, also called the hydrogen or super-bomb.

The project from the beginning was highly secret, not wanting the Soviets to know how much effort or how much product we were making. So when the release of this memo informed the public that some 238,000 pounds of mercury had been released to the East Fork of Poplar Creek that flows through the town, the press and public howled. This major eruption resulted in a Congressional Hearing that was held in Oak Ridge on July 11, 1983, with even ORO Manager Joe LaGrone testifying.

To dig out the full record and facts Roger Hibbs appointed Wm. J. Wilcox Jr. head of a 20-member Investigative Task Force, made up of Carbiders who had never been associated with the Y-12 Lithium. Their task was to dig out the true facts of what happened 20 years before - facts like the mercury losses to the air, water, and soil, whether and to what degree the program impacted employee health, and the program's impacts on the environment.

The Mercury Task Force physically rounded up all the Y-12 Divisions records of the Lithium project, located and interviewed all survivors of the Project, and enlisted the help of ORNL stream and lake experts and environmentalists to both understand what happened at the time as well as the present state of affairs.

Bottom Line – It was learned that from the beginning of the lithium program Y-12 health physicists were well aware of the hazards of handling mercury and carried out hundreds of thousands of mercury in air samples, monitored repeated urine samples of mercury workers, and analyzed the East Fork Creek water for mercury routinely.

It was twenty years (1970) after the start of Y-12's program that biologists all over the world first became aware that mercury in lakes and streams could be converted from relatively harmless forms by bacteria to a form called methyl mercury, not at all dangerous to fish but dangerous to people who then eat the fish.

This finding caused a flurry of intense study of the large number of mercury dischargers all over the country, mostly from chlor-alkali plants as to who was discharging how much mercury and where. ORNL did one of the first and an excellent survey. It turned out that dozens of plants across the U.S. were discharging as much or more mercury than Y-12, but into large rivers/lakes like the Hiawasee and Cherokee Lake.

Y-12 was discharging into a very small stream, the East Fork, hence higher concentrations.

Hibbs set up a new Environmental Group under Bob Jordan, former plant manager, and his office and each installation initiated programs to monitor and mitigate where possible all environmental discharges, not just mercury discharges.

1983. DOE Headquarters and ORO then conducted an intensive search and selection campaign to replace Union Carbide Nuclear Division as the operating contractor for their Oak Ridge and Paducah facilities. There was intense interest by Westinghouse and others with Martin Marietta Energy Systems chosen as winners of the bid. They took over April 1, 1984. Roger Hibbs resigned then and Carbide bowed out after 40 years of leading and shepherding so many vital contributions to the welfare and security of our Nation and the world.

Afterword. In **1985** DOE Secretary Herrington announced that all the operations at the K-25 Plant would be shut down, all enriching operations and all Research & Development on the Gas Centrifuge Process. It stopped all work at that historic K-25 site, Carbide's first association with Oak Ridge. It was the other Bookend to Carbide's exciting start-up 40 years ago.

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Thank you so much Bill! What an exacting and clearly written synopsis of the last 20 years of Union Carbide's stay in Oak Ridge. Bill is working on an expanded version of the ***40 years of Union Carbide***, that I hope he will let me help him publish. As you well know, Bill is one of Oak Ridge's "Heroes" and I am proud he is willing to produce such exceptionally well written history articles.