The Boice Report #64



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Waste Not. Want Not

My first experience with radioactive waste was in 1970 shortly after I joined the U.S. Public Health Service. My first assignment was to go to Grand Junction, Colorado, for a month and knock on citizens' doors on behalf of the Colorado State Health Department and ask whether I might come in and measure radiation levels attributable to <u>uranium mill tailings</u>.

This low-level radioactive waste had been used for the foundations of homes, parking lots, shopping centers, and churches. The gamma decay from the radium in these gray tailings could be measured readily. Most of the homes had relatively low levels, but every once in a while a few homes peaked the meter. Some of the residents were former millers or miners who brought home colorful rocks that glowed in the dark and placed them near their Lazy Boy[®]. I recommended to the family that they put these radioactive rocks in the garage (my first application of the ALARA principal!).

Fast forward 50 years: the United States is still dealing with low-level radioactive waste and now high-level radioactive waste storage and management.

To address these issues, the National Council on Radiation Protection and Measurements (NCRP) will convene the special symposium <u>"Emerging Issues in Radioactive Waste Management"</u> at the 2018 Health Physics Society (HPS) Midyear Meeting in Denver, Colorado, 4–7 February. The chair is S.Y. Chen and members of the Program Committee are shown on the photo collage below.



Left to right: Program Chair S.Y. Chen (Illinois Institute of Technology), Donald Cool (Electric Power Research Institute), William Irwin (Vermont Department of Health), William Kennedy (W.E. Kennedy Consulting), and Andrew Wallo (DOE) Photos courtesy of NCRP and individuals

The Introduction

Leonard Slosky (<u>Rocky Mountain Low-Level Radioactive Waste Board</u>) will start the plenary session with <u>"Updating Low-Level Radioactive Waste Issues."</u>

Happy Holidays!

First Session – Remediation and Regulation

The first session speaker will be Casey Gadbury (U.S. Department of Energy [DOE] Carlsbad Office), who will provide an overview on contamination mitigation in the Waste Isolation Pilot Plant (WIPP) repository. Then Kent Rosenberger (Savannah River Remediation) will present "High-Level Waste Tank Closure at the Savannah River Site." Gregory Super (U.S. Nuclear Regulatory Commission) will provide the overview "Final Rule: Low-Level Radioactive Waste Disposal 10 CFR Part 61."

Second Session - Present and Future Issues on Radioactive Waste

Janet Schlueter (senior director, Radiation and Materials Safety at the Nuclear Energy Institute) will discuss "Nuclear Industry Perspectives on Low-Level Waste Management." Janet will be followed by Chris Shaw (Waste Control Specialists, LLC), who'll present the talk "Present and Future Low-Level Radioactive Waste Issues, an Industrial Perspective." Bill Kennedy (W.E. Kennedy Consulting) will then provide the overview "Waste Management Approaches for Handling Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)."

Session 3 – Managing Waste Generated by Homeland Security-Related Incidents

S.Y. Chen (Illinois Institute of Technology) will lead off with "Issues and Framework for Managing Radioactive Waste Resulting From Wide-Area Contamination." Next will be Sang Don Lee (U.S. Environmental Protection Agency [EPA]) providing the overview "Waste Management Challenges Facing Fukushima's Long-Term Recovery." Then Paul Lemieux (EPA) will lead the discussion "Trade-Offs Between Decontamination Methods and Waste Management During Response to a Wide-Area Radiological Incident."

Session 4 - Managing Incident-Specific Waste

John Cardarelli (EPA) will discuss "Waste Management and Decontamination of Incidents Involving ²¹⁰Po in the United Kingdom During 2006"—remember <u>Litvinenko</u>? The final speaker will be Daniel Schultheisz (EPA) covering "Managing Waste From Radiological Incidents: <u>Considerations for Decision Making</u>."

<u>Please come to Denver with the snowfall</u>. You won't be wasting your time. No one wants waste but since we have it, let's not waste opportunities to provide solutions so our grandchildren don't have to!

Two Greats Have Departed



Charles B. Meinhold 1934–2017 Photo courtesy of NCRP



Ralph H. Thomas 1932–2017 Photo courtesy of Thomas family

The world of radiation science, protection, and leadership recently lost two greats.

Charles B. Meinhold is remembered by many, including the NCRP, his friend Jim Adelstein, and in this issue of Health Physics News. As for me, my career and life were blessed by serving with Charlie at NCRP, HPS, the International Commission on Radiological Protection (ICRP), and the United Nations Committee on the Effects of Atomic Radiation (UNSCEAR).

Ralph Thomas is also remembered by <u>NCRP</u> and in <u>this newsletter</u>. He was a world leader on <u>radiation protection for particle</u> <u>accelerator facilities</u>. For this and his many other accomplishments, contributions, and qualities, Ralph is sorely missed.