This month’s issue is the second in a two-part series that spotlights the “waste” side of the Air & Waste Management Association, with expert insight into effective approaches for managing contaminated soils, as well as the timely issue of managing spent electric-vehicle batteries.
A question for readers to consider: What did former U.S. Senator of Wisconsin Gaylord Nelson, Bill Coors (of The Coors Brewing Company), and Mother Theresa have in common? All three were early advocates for the recycling and reuse of discarded materials, rather than disposal.

Sen. Nelson was the originator of Earth Day in 1970, which catalyzed public support in the United States for a national recycling commitment. Bill Coors, when President of the Coors brewery in 1959, introduced the first aluminum beverage can, and then a redemption program, that he called “Cash for Cans,” which paid a penny for each can returned for recycling. This brings us to Mother Theresa of Calcutta, who was declared a Saint for her lifetime of unparalleled devotion to the poorest of the poor. It would be hard to imagine such a selfless individual becoming truly angry, but there was indeed at least one exception. Quoting Mother Theresa, "I only feel angry when I see waste. When I see people throwing away things we could use.” Well, Mother Theresa would be heartened to know that we’re working on it—hard.

Without question today, new initiatives are constantly being undertaken to implement the waste management hierarchy that prioritizes “reduce, reuse, and recycle” over disposal. This is true for individuals, industry, and governments. Motivations vary. These can include a prescient vision of changes required now to sustain the human species into the future, or a sense of guilt for living in a high-consumption culture, or a win-win opportunity to generate revenue through a sustainability-based business. Regardless of the motivation, successful implementation of more sustainable practices for waste reduction and management requires knowledgeable insight and relevant skills.

In the front lines are today’s waste management professionals. These are the professionals who are devising more productive and cost-efficient ways to recover spent materials for reuse and recycling. In addition, for residual waste that must be disposed, these professionals are developing treatment and disposal methods that have lower environmental impact and consume fewer resources. In this issue of *EM*, there is an interesting mix of articles whose authors, all waste management professionals, address topics ranging from waste prevention to more sustainable methods of waste treatment and disposal.

In the first article, Paul Ruehl describes the use of cement to stabilize contaminated soils. Many of you likely don’t know that adding cement to contaminated soils is a long-proven, cost-effective way to “lock up” soil contaminants such as metals and organics.

Next, Lisa Damiano, Stephanie Monette, and Eric Steinhauser address evolving thoughts on how to responsibly manage excavated “mildly contaminated soils,” a common example of which is roadside soil. In their article, the authors describe acceptable dispositions that avoid high-cost landfilling while encouraging reuse.

With the third article, we move to the upper end of the waste management hierarchy, reuse and recycling. Given the rapidly growing demand for electric vehicles, Ning Ai and Katheryn Borucki provide a timely synopsis of the strategies and methods being pursued to advance spent-battery reuse and recycling.

Rounding out this month’s offerings, and in fact our two-part series on waste, is an article by Tom Palaia, which addresses an aspect of petroleum-contaminated soil remediation that may be unfamiliar to most *EM* readers. The article provides, in some technical detail, a description for petroleum-contaminated sites of the natural processes occurring subsurface that achieve, on their own, part of the required remediation. The article then addresses how to quantify that natural depletion, as this must be known to properly engineer the remediation system for the remaining petroleum contamination.

Readers are invited to peruse this issue, and last’s month’s, to get updated on a number of important developments in sustainable waste management. *em*