contrast, smelter waste is often exposed to weathering.

Gellings and Peck, Gaines and Wang, and Hwang complain about our range of battery energy densities. However, the low end of our battery technology range can be purchased in auto supply stores; the upper end of the range is not yet available. Is it "unreasonable" to use the low-end battery in an EV? Perhaps. What battery energy density–vehicle range makes an EV attractive?

Hwang also asserts our vehicle energy efficiency is too low. However, the GM Impact, under ideal conditions, is not indicative of the range of 1998 vehicles (including light trucks and minivans) in actual driving conditions. We agree with Hwang that current lead-acid batteries are the major use of lead and the major contributor to lead in the environment.

Rubinstein and Austin assert our estimates are "absurd." However, contrary to their assumption, virgin lead is not recycled before being made into batteries. Thus, instead of 10 milligrams per kilometer of lead being discharged, they should have calculated that 7.1 milligrams per kilometer is discharged for virgin lead and 4.3 milligrams per kilometer for recycled lead. As roughly two-thirds of lead is recycled, discharges are 5 milligrams per kilometer, of which 17% is emitted into air: 0.9 milligrams per kilometer. As leaded gasoline resulted in roughly 22 milligrams per kilometer of air emissions, the correct figure is 4% of air emissions. Lead in solid waste migrates slowly, contributing little to current air emissions. Contrary to their conclusion, the data are consistent with a 96% decrease in lead air emissions.

Socolow seeks a middle ground. If current lead discharges are not acceptable, setting a cap at this level is not acceptable.

Sperling and others suggest that forcing the introduction of EVs in 1998 will push the technology and quickly lead to satisfactory vehicles. Technology forcing has worked in some cases (for example, vinyl chloride monomer) and not worked well in others (for example, passive automobile seat belts). New technologies should not be embraced without systematic economic and environmental analysis; see (*2*, *3*) for recent EV studies. The 1998 mandate means that automobile and battery manufacturers must spend hundreds of millions of dollars on current battery technology: lead-acid, nickel-cadmium, and nickel-metal-hydride. These batteries would require up to 1000 pounds of toxic metals in each EV. Heroic efforts would be required to smelt and recycle these metals without significant environmental discharges. Forcing lead-acid or other available technology (and the associated recharging infrastructure) is not attractive compared to pushing advanced technologies such as fuel cells. Research and development should focus on promising technologies that do not require the processing of large quantities of toxic materials.

Lester B. Lave
Chris T. Hendrickson
Francis Clay McMichael
Carnegie Mellon University, Pittsburgh, PA 15213, USA

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Corrections and Clarifications

In the Research News article "Controversy: Is KS really caused by new herpesvirus?" by Jon Cohen (30 June, p. 1847), the quote from Susan Krown of the Memorial Sloan Kettering Cancer Center was incorrect. The quote should have read, "I think we all need to be treatment activists to move the field forward."