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Dr. John Collins received his doctorate from the University of California at Riverside in Soil Physical Chemistry. His doctoral research was completed at the Savannah River Ecology Laboratory on sorption kinetics of transition metals in the natural environment at the DOE site in Aiken, South Carolina. Dr. Collins served two years as a Peace Corps Volunteer and Agricultural Extension Agent in a remote area of Nepal. After development of the Risk Assessment Guidance for Superfund, he was one of first scientists trained by EPA as a risk assessor. Subsequently, he worked on remediation and risk assessment at contaminated sites for DOD, DOE, EPA and Fortune 500 companies. In 2006, he and Dr. George Hoag founded VeruTEK Technologies, the first green technology company for the development of environmental solutions.

VeruTEK Technologies is a green technology company that has developed green technology platforms for cleaning up organic contaminants such as coal tar, creosote, PCBs, dioxins, fuels, MTBE, chlorinated solvents and metals. Visit www.verutek.com to learn more.

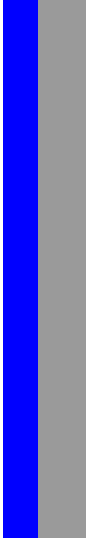
GREEN TECHNOLOGIES FOR ENVIRONMENTAL CLEANUP AND GREEN JOB CREATION

With the election of Barack Obama as president, the Democratic majority has promised to bring a green agenda to Washington. The ubiquitous contamination of the environment is one major problem that the president should address. Green technologies for environmental cleanup provide unique opportunities for green job creation, enhancement of the health and well-being of the nation. This stimulus would not only provide dollars for cleanup of environmental contamination on federal lands and facilities, but for Superfund Sites, our nation's vast legacy of industrial contamination. Importantly, constructive use of financial reserves set aside for environmental contamination the responsibility of some of the world's largest corporations can additionally stimulate the economy and cleanup sites. These corporations have reserved hundreds of billions of dollars to clean up contaminated sites, but are still waiting for superior technologies to be developed. Superior green and sustainable technologies, however, are now becoming available. Government should act to stimulate the economy using federal dollars, as well as facilitate release of these corporate financial reserves through financial and tax incentives and apply these resources to the cleanup of the environment and the development of an American green technology industry.

Green remedies for environmental contamination are currently being developed, but they remain woefully underfunded. While pharmaceutical companies and the federal government spend \$35 billion per year to develop cures for human sickness, minimal research and development is conducted by private public companies to develop cures for environmental problems. The further development of a green technology industry will provide jobs not only for scientists, engineers and researchers, but also for blue-collar workers involved in field implementation. The cleanup of just 2,500 contaminated sites would produce sustainable employment for 40,000 laboratory and office workers, and 110,000 construction-related workers.

EPA has identified more than 294,000 contaminated sites across the United States. These sites can be found anywhere – in towns and cities, near rivers, and beneath homes. Recently, construction was stopped beneath a New York City school due to coal tar contamination with benzene and thousands of other contaminants found in the soil and groundwater. This contamination was left behind from a Manufactured Gas Plant that operated in the 1900s. This type of story is not unusual and more toxic contaminated sites will certainly be found.

Contaminated sites contain chemical by-products of our industrial society that have until recently been improperly disposed of and dumped. Benzene, naphthalene, dioxin, PCBs and pesticides are the commonly known contaminants, but there are tens of thousands of other chemicals also present that are not measured in common soil and water analysis. Environmental contaminants have long been known as sources of cancer, especially in children, with incidence rates increasing every year. More recently, CalEPA has linked the incidence of autism to pesticide exposure in mothers during pregnancy. These contaminants move with the existing groundwater beneath schools and residence sites, where contaminants vaporize into gas and are sucked into interior living spaces. Recently, New York State found that 93 percent of homes had breathable benzene vapors present, exposing children to unacceptable amounts of contaminants.



Remarkably little cleanup to these toxic sites has been accomplished over the past 30 years. The primary methods of cleanup today—landfilling or placing walls around the contamination, were developed in pre-Roman times. Both technologies leave the environmental contamination legacy for future generations to deal with, either in leaking landfills or within leaking containment walls. Previously, with so many poor cleanup choices and the certainty of incomplete cleanup, companies have often preferred legal delay to remedial action. As a result, most of the money in environmental cleanup has gone to expensive lawyers and not to the actual work of making the nation healthier.

The development of green and sustainable technologies to clean up our toxic legacy is a necessary part of any industrial society. The advent of a new administration in Washington provides the opportunity to bring environmental cleanup technologies out of the 19th century and into the 21st. A clean environment would be the best gift and the most lasting legacy to pass on from this generation to the next.

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