Role of TRI and Green Chemistry in DuPont's Sustainability Journey

DuPont's is committed to sustainable growth. For us, that means creating shareholder and societal value while reducing our environmental footprint. As part of our holistic approach to sustainability, we strive to achieve environmental footprint goals set to reduce our operational impacts, including decreasing emissions of air carcinogens, water consumption, energy usage, and greenhouse gas emissions. In the U.S., DuPont has reduced total TRI environmental releases by over 50 percent since the first TRI report in 1987. This is a substantial reduction considering the TRI program has expanded significantly to include 650 chemicals and chemical categories during that time. The significant company-wide decrease in TRI emissions through the years can be attributed to numerous individual projects at several manufacturing sites and facilities that contributed to the overall reduction, including process modifications employing the principles of Green Chemistry. This presentation will highlight TRI emission reductions achieved through applying the tools of Green Chemistry and describe DuPont's efforts to plan and track environmental footprint reductions on our continued sustainability journey.

Robert J. Giraud
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Based in DuPont's corporate Environmental Engineering group, Robert Giraud advises various Company business segments on the assessment and optimization of existing and new chemical processes and products from an environmental and sustainability perspective. Since co-authoring DuPont's corporate Waste Minimization Guidance Manual in 1987, he has worked with business, R&D, and plant technical staff across the Company to craft integrated technical solutions for meeting evolving environmental regulatory requirements largely using what has come to be known as Green Chemistry and Engineering.

Robert has led or served on multidisciplinary teams whose work has been recognized with one R&D 100 award (R&D Magazine), two U.S. EPA National Partnership for Environmental Priorities (NPEP) Achievement Awards, three DuPont Engineering Excellence awards, one DuPont Sustainable Growth Excellence Award, and one DuPont Environmental Excellence Award. He joined DuPont in 1980 and spent his first four years providing manufacturing technical support for wastewater treatment, water treatment, and power boiler operations, followed by a two-year assignment in process R&D prior to taking on his current role in 1987.

Robert has served on various U.S. EPA technical advisory groups, represented DuPont on the ACS Green Chemistry Institute Chemical Manufacturer's Roundtable, and actively volunteered in a community-based conservation program to preserve the Delaware Estuary (Clear into the Future). His publications and conference presentations cover a range of environmental chemistry and engineering topics. He graduated magna cum laude from Tulane University with a bachelor's degree in chemical engineering (1980) and also earned a master's degree in chemical engineering from Tulane (1983).