

EHS Manager Role in Industrial Sustainability Programs – Case studies incorporating a pollution prevention approach to problem solving - Anahita Williamson

The role of the Environment, Health and Safety Manager has changed in recent years. For many companies, the focus of EHS Managers is shifting from solely a regulatory compliance and waste treatment role to incorporating a green engineering and pollution prevention approach when solving environmental problems. It is critical for the EHS Manager to have a strong understanding of EMS and ISO standards pertaining to safety and environment. However, having the ability to go beyond this and collaborate with manufacturing personnel to determine opportunities for cost savings as it pertains to environmental reductions is critical. This paper will focus on case studies surrounding projects where the EHS Manager's role has been focused on pollution prevention. The effectiveness of this approach versus waste treatment-management solutions will be quantified by showing both the environmental and cost savings.

Author Bio

Dr. Anahita Williamson has a strong background and extensive experience in the field of environmental engineering, including manufacturing process modification for improved material recovery and reuse, design for the environment and life-cycle assessment. Prior to joining NYSP2I, she served as a senior engineer at Xerox Corporation where she assisted in implementing companywide sustainability and pollution prevention processes. Williamson led numerous teams at Xerox Corporation in defining environmental opportunities within processes/products by optimizing complex systems. She performed detailed material and energy balances on manufacturing processes in order to develop a quantitative baseline and capture all environmental inputs and outputs for a system. Dr. Williamson also has extensive experience in utilizing life-cycle assessment (LCA) methodology for evaluating the environmental performance of a process/product over its entire life-cycle and has performed multiple LCAs throughout her career. She has multiple peer-reviewed publications including the Journal of Cleaner Production and has presented at numerous international conferences including the International Society of Industrial Ecology conference in Stockholm, Sweden.

Dr. Williamson is a Lean Six Sigma certified Greenbelt. She understands the importance of applying lean thinking when defining the root causes of deficiencies in processes and utilizing lean tools when implementing solutions. Dr. Williamson holds a BS in chemical engineering and MS and Ph.D. in civil and environmental engineering, all from Clarkson University.