Gene Whelan is a Chief Engineer of the Hydrology Technical Group, Environmental Technology Directorate, Pacific Northwest National Laboratory.

Education:
Ph.D., Civil and Environmental Engineering, Utah State University, 1992
M.S., Mechanics and Hydraulics, Iowa Institute of Hydraulic Research, University of Iowa, 1980
B.S., Civil Engineering, Pennsylvania State University, 1977

Experience:
Dr. Whelan is a Chief Engineer with Battelle, Pacific Northwest National Laboratory in Richland, Washington, and has over 25 years experience in all aspects associated with hazardous waste site assessments and evaluations. He has managed and been the Principal Investigator on over $8M worth of contract research. During the first 10 years, Dr. Whelan investigated and developed computer-based multimedia (i.e., intermedia) contaminant migration and fate methodologies. Initially, he specialized in overland and instream fluid mechanics, hydraulics, and sedimentation engineering and eventually expanded into the area of multimedia contaminant transport and exposure/risk assessments. While at the Iowa Institute of Hydraulic Research, University of Iowa, he investigated overland water runoff and sediment erosion through numerical modeling. He is a principal researcher in the development of several multimedia environmental exposure assessment methodologies. He has been the lead researcher in applying these methodologies at numerous CERCLA sites and on a number of Federal activities associated with NEPA and CERCLA. He has developed, co-developed, and reviewed many models pertaining to the movement of flow, sediment (where applicable), and contaminants in overland, instream, and subsurface environments. These models have ranged from simple analytical models to simple mixing-tank models to complex finite difference/element contaminant transport models. For four of the 25 years, he focused his efforts on new and innovative treatment technologies for remediating hazardous waste sites contaminated with organics. For example, he used the principles of natural humification to polymerize, and possibly immobilize and detoxify, recalcitrant organics through abiotic catalysis. He also initiated the development of a computer-based methodology that is being developed to help analysts determine the most appropriate remedial alternatives for cleaning-up hazardous waste sites.