

## **James P. Ray**

Jim Ray is the Manager of Environmental Ecology & Response for Shell Global Solutions (US) Inc. His department provides life (biological) sciences technical support and advice to Shell companies, and third parties, on an international basis. They are also the focal point for the environmental side of emergency response. Jim graduated from Texas A&M University in 1974 with a PhD in biological oceanography. He has been involved with environmental science issues for Shell Oil and the petroleum industry since that date.

Dr. Ray has had a long and varied career working in industry-related environmental issues. He is internationally known for his work on the fate and effects of discharges from marine operations, and the impacts of industry activities on the environment. His involvement has included most of the major offshore studies dealing with discharges, including drill muds and cuttings, produced water, produced sand, radionuclides, and waste waters. He was also involved in the early studies on oil spills and dispersants.

Dr. Ray supported Shell operations in Alaska for over 15 years. This included environmental studies on operational impacts (including noise) on marine mammals, ranging from seals and walrus, to bowhead whales. The studies included characterization of sound from construction and operations of gravel islands, ice islands, drill ships, support vessels, and helicopters. Studies were also conducted on behavior changes in bowhead migration relative to offshore exploration activities. Dr. Ray's Alaska activities took him to all shores, including the Beaufort, Chukchi, Bering, and Gulf of Alaska.

More recent activities have included involvement with the technical issues related to sperm whales studies in the Gulf of Mexico (SWSS), involving both the acoustics issues and the whale habitat issues. He currently serves as an environmental advisor to Sakhalin Energy and provides oversight on the five-year program on gray whale studies.

Dr. Ray's activities have included serving as Chairman of the 1995 International Oil Spill Conference. He served on the Minerals Management Service "Scientific Advisory Committee" for six years. He also served on the National Research Council's "Ocean Studies Board" for three years. He has also served on several NRC panels (Oil in the Sea/Drilling Mud's) and two Polar Research Board panels. He recently started a two-year term as an industry representative on the DOI/DOC Marine Protected Areas Federal Advisory Committee.

He currently chairs the Offshore Operators Committee "Environmental Science Subcommittee." He also chairs the Oil and Gas Producers (based in London) "Deepwater Environmental Monitoring Task Force." Dr. Ray is also Program Coordinator for the Industry Synthetic Based Mud Research Group, and Program Manager for the Synthetic Based Mud Seafloor Monitoring Program.