Environmental Monitoring Programs are basic component of the Licensing studies and are required by National Environmental Agencies to evaluate, grant and renew exploration permits. In general, petroleum companies are required to perform monitoring campaigns before, during and after operational exploration and production activities to evaluate and measure the magnitude of their activities on the environment and its potential impacts.

Evaluation techniques include characterizing the ocean surface using satellite images, measuring oceanographic parameters, collecting water and sediment samples for chemical, physical and biological analysis. In addition, geochemical evaluation methods are performed when more detailed characterizations are required. The methodology used in the environmental monitoring programs involves the integration of all available parameters. For example, how hydrocarbons affect the local biology are studied by integrating the hydrocarbon concentrations and ratios (total hydrocarbon, PAHs, saturate biomarkers) with biological analyses (phytoplankton, meio and macrofauna).

During the last four years, environmental surveys in offshore areas of the South Atlantic supplied huge amounts of information about the most diverse local physical, chemical and biological background parameter, both in the water and in the sediment, demonstrating the ecological status and presenting environmental liabilities of the basins. The results of the monitoring programs performed have demonstrated environmental differences in the main areas of the South Atlantic, where a high background of organic and inorganic compounds was found not only in the better-known Campos Basin, Brazil exploration areas, but also in virtually still unexplored areas in the Santos Basin, Brazil.