Developing an Advanced Environmental Management System to Work in Alaska’s Sensitive Oil and Gas Fields

Alaska contains some of the most environmentally sensitive oil and gas development areas in the world. Federal, state and local governments regulate oilfield activities in Alaska. The planning and development of new projects can require permits from as many as 26 agencies.

Meeting the Schlumberger goal of “no harm to the environment” in this highly sensitive area required a unique solution. In response to developments in customer, industry and societal expectations for environmental performance in our industry in Alaska, we developed an advanced Environmental Management System (EMS). This paper describes the process of developing and maintaining that system, as well as some of the critical operational controls required to ensure environmental excellence.

The EMS has been benchmarked against the International Environment Rating System (IERS), an internationally recognized standard for environmental management. The EMS achieved a Level 3 rating in 2000, Level 6 rating in 2001 and Level 7 rating in August 2002 from independent verification company Det Norske Veritas. Level 4 is considered to be the equivalent of ISO 14001 accreditation.

The EMS has been implemented in six operational groups at five facilities in Alaska. Established performance indicators, such as spill rate, have shown a continuous improvement over the last six quarters since implementation. The Environmental Management System is a “living” document, and several new environmental performance indicators have been developed to accompany the EMS. The EMS is also now being amended and implemented in all our U.S. operations.