
*NEW OIL SPILL ENVIRONMENT PROTECTION
AND CONTINGENCY PLAN REQUIREMENTS - ARGENTINA*

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As part of a concurrent wave of environmental awareness and restructuring of the oil industry in Argentina, the Secretariat of Energy, building upon an initial study by the Argentine Petroleum Institute, has developed several new regulations and guidelines designed to protect the environment. Exploration, development, and production of oil fields are now subject to new environment controls and the format and content of environment impact analyses, and oil spill contingency plans are defined. Offshore regulations are expected in 1994/95.

During the past few years, the Republic of Argentina has substantially opened its economy, led particularly by an opening of the petroleum industry. The deregulation and later privatization of YPF, the state oil company, ruptured the state oil monopoly, permitting an energetic transfer of oil properties to Argentine and extranational oil companies, as well as a recapitalization of the former state-owned oil company. The Argentine petroleum sector has clearly been invigorated by these actions.

The release of the state-owned oil company, and entry of many new companies, created a governmental need for standard operating criteria. The necessity for protection of the environment merited particular attention among the changes considered. In response, the regulatory authority, the Secretariat of Energy, Direction of Natural Resources, approached the Argentine Petroleum Institute (IAP) to assist in developing guidelines for petroleum operations. IAP created a special commission composed of industry representatives and associates with extensive experience in land-based oil operations. Slightly more than a year later, the Guide of Recommendations to Protect the Environment during the Exploration and Exploitation (E&P) of Hydrocarbons was produced.

The Secretariat of Energy used this guide as the basic document for developing Resolution 105/93 issued in 1993, the first rules in operation for the analysis and mitigation of land-based environmental impacts caused by oil exploration and production. Resolutions 252/92, 341/92, and

342/93, are complementary to 105/93, providing more regulatory detail to the general guidance provided in 105/93, which particularly relates to reporting format and content. A brief description of these regulations is provided below.

Summary of environmental regulations

Resolution SEE 105/92: Analysis and Evaluation of Environmental Impact, Activities of Exploration, Development of Production, and Exploitation, Measures, and Mitigation Programs. Development of an environmental impact analysis and mitigation measures report is required for all planned exploration as well as ongoing field development and production activities. This resolution forms the basis for the Secretariat of Energy to receive all development plans and a description of mitigation measures associated with every oil field in Argentina. Plans are due according to a strict timeline and must be completed internally or by a private consultant listed and approved by the Secretariat of Energy. An environmental description (including geology, meteorology, topography, flora, fauna, and hydrology) of each area is required. The content of the required report depends on the type of operation proposed: exploration, exploratory drilling, development drilling, and production installations (such as batteries, treatment plants, and workshops). Resolution 105/92 also provides guidance about environmental requirements, for example, watershed protection, erosion control, road width, waste disposal, process water disposal, and site abandonment.

Resolution SEE 341/93: Chronogram and Rules for the Reconditioning of Pits and Soil Restoration.

Previous to this law which was issued in November 1993, little to no control existed over the use of sumps, evaporation ponds, and ponds to store oil, drilling muds, and/or process water. As a consequence of highly publicized bird losses in these pits, SEE 341/93 was instituted and requires stringent classification and fairly rapid closure and cleanup of all pits except those used for emergencies such as control of oil spills. Closure time periods vary between 4 and 21 months depending on potential risk. The Secretariat of Energy - Direction of Natural Resources reports the following closures over a six month period ending on March 31, 1994: 1,149 of 1,293 pits in the immediate action category (96.5 percent), 1,143 of 3,555 pits in the high risk category (31.9 percent), 1,468 of 7,522 pits in the medium risk category (19.5 percent), and 1,545 of 9,027 low risk pits (17.1 percent).

Resolution 252/93: Guide and Recommendations for the Execution of Environmental Studies and Monitoring of Works and Tasks Required by Resolution 105/92.

This resolution, issued in August 1993, requires the submission of the environmental studies as required in Res. 105/92 in a particular format, and the categorization of impact into high, medium, light, and no-impact levels. Contingency plans are also required (see below).

Resolution 342/93: Structure of Contingency Plans.

This resolution, issued in November 1993, requires that all facilities and fields develop an oil spill contingency plan. Principally, the plan must include a description of organizational hierarchy, roles, and responsibilities; response callout contacts; lists of response contractors; evaluation of risks; analysis

or response times; communication plan; type and characteristics of the oil involved; maps; and the designation and methods to protect sensitive habitats.

Reports of spill occurrence must be made to the Direction of Natural Resources within 24 hours and must contain the type of installation involved, type of incident, details as to the location, cause, and evolution of the incident, and the affected resources.

Conclusions

The oil industry in Argentina has reacted very favorably to these requirements and has given significant effort to improving environmental performance. These regulations show clear results in reducing the level of existing pollution, including a substantial reduction in the number of uncontrolled oily waste pits, an increase in recovered petroleum (estimated by the Secretariat of Energy to be 50,000 to 60,000 cubic meters), and increased vigilance against contamination during oil field operations. Similarly, these programs have assisted development of an institutional consciousness toward protecting the environment, a positive relationship between regulator and the petroleum industry concerning these changes, and a series of educational and cooperative programs with universities and other institutions related to applied environmental studies (for example, soil treatment and process water disposal).

The government now plans to emphasize and apply the existing regulations to optimize practices and procedures for environmental protection, to complete the complementary offshore regulations, and to define its mission for environmental protection in terms of medium- and long-term objectives.

Author

Erich Gundlach has provided scientific support during major oil spills and developed response plans for over 18 years, both in the United States and internationally. For the last three years, he has conducted environmental assessments and contingency plan studies in Latin America, and particularly in Argentina.