



Licenses, Permits and Environmental Regulation



- Activities subject to ANP authorization
 - Exploration, development and production activities (including gas flaring)
 - Construction of pipelines, terminals, transportation facilities, refineries and other infrastructure facilities
- When applicable, ANP authorization requires prior approval by any governmental authorities with jurisdiction over these activities
 - Military authorities
 - Environmental authorities
 - Official agencies relating to indigenous peoples
 - Not likely to be an issue where Round 1 blocks located



ANP Authorizations - Procedure



- Exploration, development and production (including flaring)
 - As discussed in presentation on Concession Agreement
 - Exploration phase
 - Prior notice and subsequent reporting to ANP
 - No separate ANP approval for activities (including exploration wells) included in Minimum Exploration Program set forth in Concession Agreement
 - Development and production phase
 - ANP will issue *Portarias* with regulatory approval requirements
- Pipelines, terminals, refineries, etc.
 - As discussed in presentation on infrastructure



Military Approvals



- Approval of Brazilian Navy required for all offshore activities
- Approval of Brazilian Army for any use of explosives, offshore as well as onshore (e.g., for seismic)



Environmental Permits - Overview



- Required for any activity that may adversely affect the environment
 - Includes all activities related to exploration, development and production of oil and gas, construction or operation of pipelines and any other infrastructure facilities



Environmental Permits - Overview (continued)



- Distinction between offshore and onshore activities
 - Offshore activities under jurisdiction of federal environmental regulatory agency (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA)
 - Onshore activities (including tanker terminals) under jurisdiction of state where activity located
 - Each state has own environmental agency
 - Some states (e.g., Rio de Janeiro, Bahia, Rio Grande do Norte) very experienced with petroleum activities; others less experienced
 - Set own rates for permits
 - Activities that take place in more than one state under IBAMA jurisdiction





- Principal types of federal environmental permits

 - Long-term production tests for resource evaluation (LPpro)
 - Installation (development phase) (LI)
 - Production and operations (LO)
- Federal environmental regulatory system changing
 - ANP trying to simplify process
 - Negotiating expedited procedures with IBAMA
- Permitting procedures of state environmental agencies vary from state to state



Environmental Authorizations - Exploration Activities



- Prior Approval for Drilling (LPper)
 - Permit for drilling wells in a defined area
 - Requires filing of an Environmental Control Report (RCA) and risk analysis
 - RCA (prepared by the Concessionaire): description of drilling activities, environmental risks, identification of impacts and mitigating measures
 - Must be renewed after 5 years if project not completed



Environmental Authorizations - Evaluation Activities



- Prior Approval for Research on Oil and Gas Production (LPpro)
 - Addresses long term production tests for resource evaluation
 - Requires an Environmental Viability Study (EVA) prepared by the Concessionaire
 - EVA contents: production development plan, environmental evaluation and list of control measures to be adopted
 - Must be renewed after 5 years if research not completed





- Authorization for installation of production systems and fluids transfer
- Focused on platforms, ships and anchors, not wells or pipelines
- Validity: the length of the project (may not exceed 6 years)
- Requires filing of an Environmental Impact Study and Report (EIA/RIMA) or, in certain circumstances, Environmental Evaluation Report (RAA)





(Continued)

- RAA is prepared by the Concessionaire
- Contents
 - Environmental diagnosis of area involved
 - Description of new projects or expansions
 - Identification and evaluation or environmental impacts and mitigating measures to be adopted
- Must take into consideration other planned projects





- Permit for Installations (LI) (Continued)
 - EIA must be prepared by a professional registered with IBAMA
 - May be Concessionaire if registered with IBAMA
 - EIA always accompanied by RIMA
 - EIA contents:
 - Technological and location alternatives
 - Identification and evaluation of environmental impacts
 - Definition of directly and indirectly affected areas
 - Compatibility of project with proposed and established governmental plans and programs in affected area
 - Analysis of environmental impact of project and its alternatives
 - Definition of mitigating measures
 - Monitoring and follow-up plan





- Permit for Installations (LI) (continued)
 - RIMA contents:
 - Project goals and justifications
 - Project description and its technological and location alternatives
 - Summary of environmental diagnosis analysis performed for purposes of EIA
 - Description of probable environmental impacts
 - Characterization of the future environmental quality
 - Description of the mitigating measures effects and the expected alteration level
 - Monitoring of impact and follow-up plan
 - Recommendation regarding the most favorable alternative



Environmental Authorizations - Production Activities



- Permit for Operations (LO)
 - Authorizes operation of production facilities
 - Requires filing of an Environmental Control Project (PCA)
 - PCA (prepared by Concessionaire): projects for minimizing environmental impacts identified in the LPper, LPpro and LI phases
 - Validity: 4 to 10 years, subject to renewal at expiration



Environmental Authorizations - Procedure



- Public hearings
 - Conama Res. 009/87 provides that public hearings may be requested on any RIMA by a civil organization, any group of 50 or more citizens or the special public attorney or the competent environmental agency
 - More than one hearing may be held in connection with each permit
 - No provision for public hearings on licenses if no RIMA required



Environmental Authorizations - Procedures (Continued)



- Competent environmental agency may modify restrictions imposed under permits
 - Restrictions are generally imposed or modified in order to mitigate unexpected environmental impacts
- Decisions on environmental permits due within 6 months (or 12 months if permit requires filing of EIA/RIMA) (CONAMA Res. 237/97)



State Environmental Agencies



- State agencies have sole environmental licensing authority for intrastate onshore operations, unless federal environmental preserve involved
- Licensing Procedures for granting authorizations vary from state to state; examples:
 - Espírito Santo: one permit for both exploration and production
 - Rio Grande do Norte: separate permits issued for each well, flow line, production facility, etc.
 - Paraná: same as federal (CONAMA Res. 023/94) procedures



ANP-IBAMA Joint Work



Concerns

- Arguable under Brazilian law that environmental approval of all phases of exploration and production should be issued before any exploration or production activities begin
- Lack of definition of scope for RAA and RCA studies
- Requirement for separate approvals from ANP and environmental authorities for E&P activities
 - ANP and IBAMA studying possibility of combined approval process
- Nature of concession regime (shared facilities, neighboring concession areas, etc.) suggests appropriateness certain changes to licensing regime



ANP-IBAMA Joint Work (Continued)



- ANP-IBAMA: Goals for the future
 - Give to ANP responsibility for preparing EIA/RIMA on a regional or basin-wide basis
 - Reduce scope of studies for licensing exploration and production activities
 - Grant special treatment to companies with environmental management systems
 - Expede permitting processes
 - Issue specific regulations regarding drilling fluids, seismic operations, emergency responses and other environmental matters



ANP-IBAMA Joint Work (Continued)



- Preparation by ANP of regional EIAs/RIMAs
 - Definition of scope (reference term) expected by July 1999
 - Involves collection of environmental data and establishment of overall guidelines for use in subsequent studies and framework for monitoring, contingency and mitigation plans
 - Schedule for preparing studies of all regions expected by July 1999
 - As licensee, ANP would be responsible for any required updating of regional EIA/RIMA in connection with license renewal



ANP-IBAMA Joint Work - Transition Period



- Existing regulation will govern Concessions granted in Round 1
 - Definition of basic scope for environmental studies expected by July 1999
 - Case specific Considerations, as necessary



Environmental Liability



- Owner or operator strictly liable for environmental damage caused by it or its subcontractors
- Not liable for pre-existing conditions





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