

# Environmental Supervision on Expansion and Maintenance of Roads

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# PPA – Política e Planejamento Ambiental Ltda.

- Since 1991, works worldwide in the following areas:
  - Consulting Environmental and Urban Plans and Programs
  - Environmental Impact Assessments
  - Environmental Manuals and Methodologies
  - Integrated Environmental Assessment
  - Strategic Environmental Assessment
  - Environmental Management of Road Works

# Environmental Supervision - Introduction

- Law №. 6938 of August 31, 1981;
- Defines principles, objectives and management instruments;
- Most effective instruments for planning and management:
  - Environmental Licensing
  - Assessment of Environmental Impacts

# Environmental Supervision - Introduction

- Environmental licensing in Brazil:
  - PL - Preliminary License
  - IL - Installation License
  - OL - Operating License
- Monitor forecasts during construction phase
- Elimination and mitigation of impacts
- Creation of instruments for public and private entrepreneurs
- Environmental Supervision carried out by the entrepreneur

# Environmental Supervision on Expansion and Maintenance of Roads

- Based on the advice of the PPA with the DER / SP (road authority of the State of São Paulo - Brazil)
- The DER / SP instituted the Environmental Supervision of road works from 2007
- Established its Environmental Policy and a set of technical instructions for Environmental Supervision Road Works
- Aiming to “verify the compliance with environmental requirements defined in environmental law” (DER/SP, 2007a, pg.3)
- The results can also be used by the environmental agency to extend its control over the projects (Sánchez, 2006)

# Environmental Supervision – Procedures

- Plan the activities according to the work and affected area or region
- Monitoring or obtaining environmental legislation and licensing
- Inspection and monitoring of services - all road construction stretches must be covered
- The responsible in charge of the work must participate of the inspection.
- Technical meetings with stakeholders
- Preparation of monthly reports and periodic environmental monitoring

# Environmental Supervision – Procedures

- Identification and register of environmental incidents and non-conformities
- Records of occurrence
- Environmental reporting
- Photographic survey report
- Statement of nonconformity.
- unforeseen impact on environmental quality should be reported immediately as an environmental non-compliance.
- Unforeseen impacts are described as negative environmental events.

# Environmental Supervision – Severity of Impacts

- Severity of the impacts must consider the following factors:
  - Non-compliance with environmental legislation
  - Destruction of vegetation beyond that allowed by the environmental license
  - Opening of support areas without prior authorization
  - Leakage of contaminants in water or soil
  - Release of waste in water resources and unsuitable locations
  - Burning of materials in the open air



# Environmental Supervision – Categories of Impacts

- Environmental non-conformities can be subdivided according to its severities:
  - Low: is not hazardous to the environment and to workers
  - Average: may pose risks to the environment and workers
  - High: present risk to the environment, workers and others

# Environmental Supervision – Reports

- Environmental supervision monthly reports must be approved by DER / SP
- Relate non-conformities, notifications and information of environmental performance
- At the end of construction and inspections, all information should be included in a final environmental report
- irregularities should be identified and documented
- Certificate of Environmental Compliance Project can support the application for License to Operate with environmental agencies

# Environmental Supervision – Discussions and Recommendations

- Is an adequate tool to prevent and minimize environmental impacts
- Can ensure that mitigation measures are implemented effectively
- Supports activities environmental enforcement officers (large number of projects to be inspected)
- Subsidize the official control and inspection by the environmental agency

# Environmental Supervision – Discussions and Recommendations

- Improving private projects and environmental management procedures
- Environmental licensing can absorb the efforts of entrepreneurs
- can be the path to a shared environmental management
- Allows the self-control to be recognized by the Official Licensing System

# Environmental Supervision – Recommendations

- Greater sanctions and penalties
- Improvement of Performance Indicators
- Performance statements can be used to select contractors
- Promotes the inclusion of environmental technicians with the teams responsible for the works
- Training in Environmental Education for officials in charge of carrying out the works;
- **Environmental monitoring: repetitive measurement, descriptive or continuous, or systematic observation of environmental quality. (Glossary - Cetesb 2011)**

# Thank You!!

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