

EIA procedure

Linking impact assessment to an
environmental management system.
Case study: a downstream upgrading
petroleum plant in Venezuela

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Abstract

A proponent of a downstream upgrading petroleum plant in Venezuela requested to carry out the mandatory complete EIA report with an Environmental Management System in mind. In Venezuela, a complete EIA report is a document that includes: the Environmental Impact Assessment, the Supervision Plan, the Surveillance Plan, and the Guidelines for a Contingency Plan. For this task, a methodology was proposed to review the role of a complete EIA report within the framework of the requirements of a future Environmental Management System. The outcome was a Proposed Working Model that was applied to the case study. The results showed that the linkage sustains the ongoing use of the complete EIA report in the process of environmental evaluation throughout the life cycle of an industrial plant. In addition, outcomes from the linkage substantially improved the Environmental Supervision Plan in particular. © 2001 Elsevier Science Inc. All rights reserved.

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1. Introduction

The Division of Technology, Industry, and Economics of the United Nations Environmental Program held a meeting in 1998 to review and assess the situation concerning Environmental Impact Assessment (EIA) for Industry (UNEP TIE, 1999). Several authors prepared thematic notes on key issues among which Turner (UNEP TIE, 1999), regarding “EIA and the Project Cycle,” stated that:

- An EIA is mostly used as a checklist at the planning/development permission stage only; and
- For an EIA to be effective, it must be operative throughout the whole project cycle. In most cases, there is no formal mechanism to ensure that measures agreed at the planning stage are subsequently carried out, with the result that they are often ignored.

In what follows, Turner’s statements are examined within the Venezuelan context by analyzing issues coming from impact assessments and audits carried out for industrial plants associated with the petroleum and gas sector. Before introducing these issues, a brief background on the Venezuelan legal framework for impact assessment is presented.

For projects related to industrial plants, such as downstream upgrading petroleum plant, Decree 1.257 (República de Venezuela, 1996) requires a complete EIA report that includes the following four documents:

1. The Environmental Impact Assessment.
2. The Environmental Supervision Plan.
3. The Surveillance Plan.
4. The Guidelines for a Contingency Plan.

In what follows, the term “complete EIA report” will refer to the set of the four documents required by Decree 1.257.

In addition to the complete EIA report, a Register of Activities Susceptible to Downgrade the Environment (Registro de Actividades Susceptibles de Degradar el Ambiente, RASDA) must be completed in Venezuela before a new facility starts full operation. The RASDA allows the Ministry of Environment and Natural Resources (MARNR) to learn the operational status of a new industrial facility in relation to air emissions, waste water discharges, and industrial waste management (República de Venezuela, 1995a,b, 1998). If there are already environmental problems with the new facility, then a compliance plan with its schedule must be established.

The procedure established with the EIA, Environmental Supervision Plan, Surveillance Plan, and RASDA might be visualized as a series of cycles of impact assessment. With these Venezuelan cycles of impact assessment, one might think that Turner’s (1999) statements are not appropriate. However, even

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