

環境チェックレポート

- (1) プロジェクト名
油ガス田開発プロジェクト
- (2) 実施場所
メキシコ合衆国中東部
- (3) プロジェクト概要
石油・ガス開発
- (4) カテゴリ分類
カテゴリ A
- (5) カテゴリ分類の根拠
本事業は、環境ガイドラインに掲げる石油・天然ガス開発セクター、及び影響を受けやすい地域に該当し、影響を及ぼしやすい特性を伴うため。
- (6) 環境許認可
本件の環境社会面の配慮については、メキシコ環境天然資源省 (SEMARNAT) から承認されていることが確認されている。
- (7) 汚染対策
大気質の計画値は、メキシコ合衆国の基準値を満たすと共に、世銀基準を概ね下回る計画である。騒音および水質にかかる計画値は、現地基準を満たす。また、廃棄物は同国制度に基づき処理される計画である。
- (8) 自然環境面
本件サイトは、影響を受けやすい地域（保護区）に該当するが、保護区内では一切の活動を行わない計画である。また、本プロジェクトの実施により森林伐採が発生する場合には、事業者は、伐採相当分の植林を実施する計画である。
- (9) 社会配慮面
本件サイトは、影響を及ぼしやすい地域（先住民族）に該当する。また用地取得は発生するが、住民移転は発生しない。事業者は先住民族に対

して適切な対応計画を策定・実施する。

(10) その他・モニタリング

本件では、大気質、水質、騒音、生態系につきモニタリングを行う予定である。

以 上

Questions

Q1. Please provide the address of the project site.

The Project is mainly located on the Northern area of the state of Veracruz in Mexico.

Q2. Please provide brief explanation of the project.

Exploration and Production of oil and gas.

Q3. Will JBIC loan be applied to a new project or an executing project? In case of executing project, please inform the presence of strong claims by local residents.

- | | |
|--|---|
| <input type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim) |
| <input checked="" type="radio"/> Executing Project (without Claim) | <input type="checkbox"/> Others (Please specify) |

Q4. In case of this project, is it necessary to execute Environmental Impact Assessment (EIA) based on the laws or regulations? If necessary, please inform the progress of EIA.

- | | |
|---|---|
| <input checked="" type="radio"/> Required (Completed) | <input type="checkbox"/> Required (Under execution or under planning) |
| <input type="checkbox"/> Not Required | <input type="checkbox"/> Others (Please specify) |

Q5. In case that EIA is already completed, please inform whether EIA report is already approved based on the environmental assessment system or not. If EIA report is already approved, please provide the date and name of authorities of the approval.

- | | |
|---|---|
| <input type="checkbox"/> Approved (without condition) | <input checked="" type="radio"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | <input type="checkbox"/> Others (Please specify) |

Date of Approval : In the years 2002 and 2005 with the documents (DGIRA-DIA-0659/02 and DGIRA-DDT-0381/05)

Name of Authorities : Secretaría de Medio Ambiente y Recursos Naturales (Secretary or Ministry of the Environment and Natural Resources. (SEMARNAT)

Q6. If environmental permit(s) other than EIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?

- | | |
|---|---|
| <input type="checkbox"/> Obtained | <input type="checkbox"/> Required, but not obtained yet |
| <input checked="" type="radio"/> Not required | <input type="checkbox"/> Others (Please specify) |

Name(s) of required permit(s) : _____

Q7. Will the loan be used for the undertaking that cannot specify the project at this stage (e.g. export or lease of machinery that has no relation with specific project, or Two Step Loan that cannot specify the project at the time of loan agreement)?

(Yes No)

If you answered "Yes", it is not necessary to reply to the following questions.
If you answered "No", please reply to the following questions.

Q8. Are there any environmentally sensitive area shown below in and around project site?

(Yes No)

If you answered "Yes", please select applicable items by marking, and reply to following questions.
If you answered "No", please reply to questions 9 and after.

- (1) National parks, protected areas designated by government (coastal areas, wetlands, habitats of minorities or indigenous populations, heritage sites, etc.)
- (2) Primeval forests, tropical natural forests
- (3) Ecologically important habitats (coral reefs, mangrove, tidal flats, etc.)
- (4) Habitats of endangered species of which protection is required under local laws and international agreements.
- (5) Areas that have risks of large scale increase in soil salinity or soil erosion
- (6) Desertification areas
- (7) Areas with special values from archaeological, historical and/or cultural viewpoints
- (8) Habitats of minorities, indigenous populations, nomadic people with traditional life style, or areas with special social value

Q9. Does the project involve following elements?

(Yes) (No)

If you answered "Yes", please describe the scale of applicable elements, and reply to the questions 10 and after.

If you answered "No", please reply to questions 11 and after.

- (1) Involuntary resettlement (Number of resettlers:)
- (2) Pumping of groundwater (Scale: ton/year)
- (3) Land reclamation and/or development (Scale: ha)
- (4) Deforestation (Scale: 1000 ha)

Q10. Please reply to this question only in case that the project involves some of the above (1) to (4) elements. In the country where the project is planned, are there any regulations on a scale of the elements asked in question 9? If the country has such regulation, please answer whether the project satisfies the regulation or not.

- Regulation is applicable (satisfied not satisfied) No regulation
 Others (Please specify)

Please reply to questions 11 and after.

Q11. Will JBIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC loan equal or less than SDR 10 million?

(Yes) (No)

If you answered "Yes", it is not necessary to reply to the following questions.
If you answered "No", please reply to questions 12 and after.

Q12. Does the project belong to either of the sectors that impact on the environment is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansionary renovation project, acquisition of rights or interest without additional plant investment)?

(Yes) (No)

If you answered "Yes", it is not necessary to reply to following questions.
If you answered "No", please reply to the questions 13 and after.

Q13. Does the project belong to the following sectors?

(Yes/No)

If you answered "Yes", please specify the sector by marking, and reply to questions 14 and after.
If you answered "No", it is not necessary to reply to the following questions.

- (1) Hydro power plant, Dam or water reservoir
- (2) Thermal power plant
- (3) Mines
- (4) Development of oil and gas
- (5) Pipeline
- (6) Steel industry (with large scale furnace)
- (7) Non-ferrous metal refining
- (8) Petrochemical (including manufacturing of raw materials and petrochemical complex)
- (9) Terminal of oil, gas and chemicals
- (10) Petroleum refining
- (11) Paper and pulp
- (12) Manufacturing and/or transportation of hazardous substances (specified by international agreement)
- (13) Road, railway or bridge
- (14) Airport
- (15) Port
- (16) Waste material processing or treatment
- (17) Treatment of sewage and/or waste water that includes hazardous substances or executed at environmentally sensitive area
- (18) Power transmission and/or distribution lines (including large scale involuntary resettlement, large scale deforestation or submarine cable)
- (19) Tourism (Construction of hotel, etc.)
- (20) Forestry or tree planting
- (21) Agriculture (large scale project and/or project including irrigation)

Q14. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, please explain whether an execution of EIA is required on account of the large scale of the project in the country where the project is implemented.

The principal physical goals in next years are:

| Item | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | TOTAL |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| Development wells | 1,074 | 1,222 | 1,307 | 1,218 | 1,217 | 1,219 | 1,218 | 1,209 | 1,214 | 1,204 | 817 | 1,140 | 1,122 | 12,169 | |
| Major workovers | 348 | 418 | 1,378 | 1,888 | 1,888 | 2,349 | 2,197 | 2,889 | 2,400 | 2,820 | 2,271 | 2,458 | 2,488 | 28,244 | |
| Minor workovers | 1,410 | 1,621 | 2,480 | 2,708 | 3,188 | 3,849 | 3,427 | 3,789 | 3,612 | 3,728 | 3,227 | 3,983 | 2,783 | 33,681 | |
| Completion of development wells | 574 | 1,206 | 1,211 | 631 | 1,217 | 1,212 | 1,246 | 1,160 | 1,220 | 1,216 | 878 | 1,140 | 1,138 | 14,663 | |
| Seismic (km ²) | 1,260 | 1,920 | 1,430 | | | | | | | | | | | 4,610 | |

Additional facilities required involve roads and paths of drilling, crude oil separation batteries, 4 processing centers and pipelines.

Two Impact Assessment Evaluations have been produced and a Line Base Study commissioned to the UNDP, to comply both with the legislation and with PEMEX commitment to social responsibility and sustainable development.