

環境チェックレポート

- (1) プロジェクト名
LNG プラントの建設等
- (2) 実施場所
イエメン共和国 Marib 州及び Shabwa 州
- (3) プロジェクト概要
LNG プラントの建設等
- (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大規模なガスターミナル及びパイプラインに該当し、周辺に影響を受けやすい地域があるため。
- (6) 環境許認可
本件環境社会配慮に係る Environmental Social Impact Assessment が作成され、2005 年 12 月、Environmental Protection Authority 及び Ministry of Water and Environment より承認済みである。
- (7) 汚染対策
大気質、水質及び騒音の計画値は、国際的な基準を満足する。
- (8) 自然環境面
LNG プラント建設地付近の海域に珊瑚礁が存在するが、珊瑚礁への影響を回避するため、栈橋等海上設備の設置位置等につき適切な配慮がなされている。
- (9) 社会配慮面
本事業実施に伴う住民移転は発生しない。LNG プラント建設地付近の被影響住民（漁業者）に対しては、漁業の各種補償策が実施されている。LNG プラント建設地及びパイプラインルートに新たに遺跡が発見された場合、発掘調査や記録等の対策を行なうことになっている。
- (10) その他・モニタリング
世界銀行基準に沿って作成された Environmental Social Management Plan に基づき、大気質・水質・騒音等についてモニタリングを実施する予定。

Questions

Q1. Please provide the address of the project site.

Balhaf, Gulf of Aden, Republic of Yemen

Q2. Please provide brief explanation of the project.

- LNG plant in Balhaf :
 - 2 gas liquefaction trains
 - Capacity : 6.7 Mtpa
 - 2 storage tanks of 140,000 m3 each
 - 1 loading jetty for ships up to 200,000 m3
- Pipe-line Marib-Balhaf: 320 km - 38" diameter - 1280 Mscf/d capacity
- Spurline to Mabbar for local consumption (see Note A after Q14.)

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 checked="" type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim) |
| <input type="checkbox"/> 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 type="checkbox"/> Required (Completed) | <input checked="" 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 type="checkbox"/> Approved (conditional) |
| <input type="checkbox"/> Under approval process | <input checked="" type="checkbox"/> Others (Please specify) |

Date of Approval : _____

Name of Authorities : _____

A working draft will be provided mid November 2005, a final draft for publication will be issued early January 2006

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

Name(s) of required permit(s) : permit to drill for water from the Ministry of Water,

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
- X (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
- X (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:)
- X (2) Pumping of groundwater (Scale: 292000 ton/year, during 2 years while building the pipeline)
- X (3) Land reclamation and/or development (Scale: 4 ha, agriculture terrain on pipeline route)
- (4) Deforestation (Scale: 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
- X Others (Please specify: no regulation on quantity, but permits to be obtained from ministry of water)

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-expansory 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
- X (5) Pipeline
- (6) Steel industry (with large scale furnace)
- (7) Non-ferrous metal refining
- (8) Petrochemical (including manufacturing of raw materials and petrochemical complex)
- X (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.

Pipeline: 320km

Plant: 1km²

Fenced plant site at Balhaf: 10km²

Note A: The project also involves construction and operation of an approximately 200 km pipeline to transport natural gas that has been reserved for domestic use from the dedicated fields to Ma'bar, south of Sana'a ("spur line"). Construction of the spur line may not commence until the ESIA has been amended to the extent necessary to reflect the spur line (or a separate ESIA has been prepared for the spur line) and the independent environmental and social consultant confirms that the spur line complies in all material respects with YLNG's Environmental and Social Management Plan.