

## APPENDICES

With the advisory review of the  
General Oil Spill Plan

(appendices 1 to 3)

## APPENDIX 1

### Letter from DGIS dated 21 June 1999 in which the Commission has been asked to submit advisory review

		Ministerie van <b>Buitenlandse Zaken</b>
Netherlands Commission for EIA att. Mr. J.J. Scholten, Secretary General P.O. Box 2345 3500 GH Utrecht The Netherlands		Sub-Saharan Africa Department Western Africa Division Bezuidenhoutseweg 67 Postbus 20061 2500 EB Den Haag The Netherlands
		<b>Commissie voor de m.e.r. OS</b>
		<b>INGEKOMEN 23 JUNI 1999</b>
		nummer: 242-99
		doosler: 033-151
		kopie naar: Sc/Mo/brcb/KL/SH/PO
<i>Date</i>	21 June 1999	<i>Contact</i> Gerda Dommerholt
<i>Our ref.</i>	DAF 99/804	<i>Tel.</i> 070-348 60 02
<i>Page</i>	1/1	<i>Fax</i> 070-348 66 07
<i>Encl.</i>		<i>E-mail</i> dommerholt@daf.minbuza.nl
<i>Re</i>	oil winning in Chad/Oilpipeline Chad-Cameroon	
<i>Cc</i>	DML/MI WB EDO Netherlands HMA Yaoundé	

Last year, via our DAF/WA 98/174 d.d. 3 march 1998, we invited you to review the Environmental Assessment Studies and other relevant information for the oilproject/pipeline in Chad and Cameroon. Your advise, Advisory review of the environmental assessments of the Chad export project in Chad and Cameroon (d.d. 2 july 1998), was highly appreciated and used by this Ministry and by the World Bank in its dialogue with the consortium of Exxon, Shell and Elf. Partly due to your advise the World Bank decided to ask the oilconsortium for additional information about environmental issues and the pipelineroute. Recently the consortium presented the additional information to the World Bank. At the moment the World Bank is studying the new documentation. When the documents are available they will be forwarded to the Commission and you are invited to review this additional documentation about the main environmental issues and other relevant subjects. In the review you can use your own advise (July 1998) as the point of departure and again your findings will serve for identifying possible benchmarks in the case a Board discussion will be held.

We invite you also to elaborate a design for a monitoring structure for the oilproject and pipeline in Chad as well as in Cameroon, as an advice for the Minister for Development Cooperation in formulating the Dutch position regarding the World Bank loan and dispose of benchmarks to follow the implementation of the project.

You are also invited to give a general advice on how to best approach capacity development for setting up EIA-regulations and encourage the implementation thereof in the countries Chad and Cameroon as one of the tools for environmental management in general.

As the World Bank Board discussion on this project is foreseen for september/october 1999, we kindly request you to inform us about your results of the review within four weeks after receiving the necessary documents.

Looking forward to your earliest reply and referring to the agreement between the Minister of Development Cooperation and the Commission for EIA of January 1999, I would like to receive the composition of the working group and a budget, which should be send to DML/MI of the Environment and Development Department in this Ministry.

The Minister for Development Cooperation  
for the Minister



Hans G. Småling  
Deputy head Western African Division



## APPENDIX 2

### Project information

**Proposed activity:** The government of Chad intends to exploit the oil fields of Komé, Bolobo and Miandoum in order to stimulate its national economy by investing the revenues in the sectors of education, health and infrastructure. In 1988 the Chad government granted a consortium<sup>1</sup> a permit to explore 4.8 million hectares for oil and a permit to develop and produce crude from individual fields for a period of 30 years. The consortium now considers development and transport to Kribi, Cameroon, of crude oil from the oil fields mentioned above. These fields are expected to produce a total of 924 million barrels over a 30 year exploitation period.

Two private companies, named Tchad Oil Transportation Company (TOTCO) and Cameroon Oil Transportation Company (COTCO), intend to transport the crude by means of a pipeline and an offshore loading facility. The total length of this pipeline is 1070 km, of which 170 km are located in Chad. The pipeline in Chad will be exploited by TOTCO, in which the consortium and the Chad government will participate. The Pipeline and offshore loading facility in Cameroon will be exploited by COTCO, in which the consortium and the Cameroon and Chad governments participate.

The government of Cameroon intends to take advantage of the opportunity of constructing and exploiting its part of the pipeline to create job opportunities and to resolve its economic problems.

The consortium will provide the majority (about 97 percent) of the investment capital needed. An International Finance Corporation (IFC) loan is foreseen for both TOTCO and COTCO. The government of Chad will provide 45 million US\$ for investment in the Chad portion of the pipeline. The Chad government has asked for a World Bank loan (on International Bank for Reconstruction and Development [IBRD] funds). The Cameroon government will provide 70 million US\$ for investment in the Cameroon portion of the facilities. Also the Cameroonian government has asked for a World Bank IBRD loan. It is assumed that involvement of the World Bank will facilitate commercial loan contracting by the consortium.

Draft Environmental Assessments have been published in April 1998 for the Chad and the Cameroon portion of the project. Also, an Environmental Management Plan has been prepared for the Cameroon portion of the project as well as a Plan de Compensation et de Réinstallation, Tchad. On request of the Netherlands Minister for Development Cooperation, the Netherlands Commission for Environmental Impact Assessment published an advisory review of these documents in July 1998.

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<sup>1</sup> This consortium is currently (since 1993) composed of Esso Exploration and Production Chad (40% and operator), Société Shell Tchadienne de Recherche et d'Exploitation (40%) and Elf Hydrocarbures Chad (20%).

A final EA has been published in May 1999. This EA is composed of an Executive Summary, Environmental Management Plans (EMPs) for Chad and Cameroon (6 volumes each) and Supporting Documents (6 volumes). In November 1999 the General Oil Spill Response Plan (GOSRP) was made available.

**Categories:** Extractive industries: oil/natural gas; DAC/CRS 21400, Oil transport facilities; DAC/CRS 71400, Floating structures; DAC/CRS 22010

**Project numbers:** DAF/WA 98/174; Commission for EIA 033

**Procedural information:** Letter with request to submit a advisory review: 3 March 1998

Advisory review submitted: 2 July 1998

Letter with request to submit an advisory review: 21 June 1999

Second advisory review submitted: 22 October 1999

Advisory review of General Oils Spill Response Plan submitted:

**Significant details:** The Commission concludes that in the Draft EAs information was lacking on the problem statement and the objectives of the initiative, on the initiative itself (parts had not yet been formulated), on the alternatives and their comparison, on project impacts, on monitoring and evaluation and on public information and participation.

Having reviewed the final EA, the Commission concludes that most shortcomings of the Draft persist in the final EA. The Commission is unable to find an analysis of the socio-political risks and concludes that:

- the EA does not make clear which partners in the initiative are committed to execution of the initiative in compliance with the contents of the EA;
- not all objectives of all partners in the initiative have been quoted as project objectives;
- information on oil spill response, on capacity building for implementation, monitoring and enforcement and on monitoring structures is lacking;
- the alternative analysis is incomplete and partly works towards predefined results;
- residual impacts after EMP compliant execution of the initiative have not been assessed;

The Commission concludes that the EA raises expectations by setting high standards and targets but does not balance these by providing guarantees for meeting these standards and targets.

With regard to the GOSRP, the Commission concludes that it provides the information required for development of an effective operational oil spill preparedness and response system. The Commission observes that an inventory of possible spill events, risk assessments and present response capacity in the region remain to be done, that the budget for oil spill preparedness and response needs to be adapted, that oil spill preparedness and response responsibilities and actions of the government need to be addressed and tuned to the private sector responsibilities and actions in line with international agreements and conventions.

**Composition of the working group of the Commission for EIA:**

Mr W.G. Been

Mr J.P. van Dessel (advisory review July 1998)

Mr P. Nkwi

Mr H. M. C. Satijn (advisory review September 1999)

Mr D. Steensma (advisory review September 1999)

Mr P. Wit

Mr. R. Schriel (advisory review of GOSRP, January 2000)

Mr D. de Zeeuw (chairman)

**Technical secretary:** Mr R.A.M. Post

## APPENDIX 3

### Detailed observations and comments on the GOSRP

- Page 8-5: There is one lesson to be learned from containment of oil spills: *Never try to cover the spilled oil with sand.* Experiences in Gabon (in a major clean up programme of Shell) has learned that this remedy is only promoting the renewed migration of the oil in the environment due to the pressure of the sand cover. The ultimate clean up cost peaked to US\$6000 for each barrel spilled;
- Page 8-24: Natural attenuation is a popular remedy for oil spills but knowledge of the subsoil processes is still limited, especially in the circumstances that soil conditions, soil nutrient levels and ecosystems are unknown. Applying a model to predict the behaviour of oil spills and plumes seems too optimistic. It is recommended to investigate the subsoil conditions at the spill site and to test the natural degradation capacity by batch tests, etc. This might be the input for models. In general, the degradation capacity in African soils is limited due to lack of nutrients, organic matter and micro-organisms;
- Page 10-24: Experience in Gabon points to the same conclusion: it is in many cases advisable to leave oiled vegetation in place rather than cutting it and leaving behind a desert for some years allowing the sensitive tropical soils to physically and chemically erode and degrade. But it requires long term monitoring of the ecosystem to be able to predict the long-term effects of oiled vegetation. There is hardly any information on this topic in literature. Therefore, it is recommended that oil companies foster the research on the long-term effects of residual oil in the ecosystem.
- Page 10-26: Experience has shown that tilling of oiled areas will hardly remedy the problem. Special sieving equipment is recommended to break the oil cobbles into tiny pieces to allow micro-organisms to break down the oil; applying special vegetation has also a positive effect on decomposition.
- Page 12-17: It is recommended not to fixate on the application of stabilising agents for the disposal of oily solid wastes. Recent studies in the Netherlands and other western countries have shown that co-disposal with organic matter like household garbage also has an immobilising effect on oily wastes. Traditional sanitary landfills with mixtures of wastes turn out to have much less negative impact on the subsoil environment as had been expected. Under African circumstances promotion of waste separation represents an overkill of environmental care, with probably even undesirable consequences.
- App. B, page 6: In all cases of oil spills some residual contaminants are left behind in the environment after a major spill. It is recommended to start a monitoring programme when clean up activities have been finalised. Monitoring provides insight into the effectiveness of the clean up activities and helps to define clean up criteria for other spills.

- App. B, page 14: NEBA is mentioned as being the solution for deciding on the pollution. Although a balanced decision between positive and negative effects of mitigating measures is recommended, it is equally recommended to provide more information on the application of this model.
- App. C page 20: No attention is paid to after-care activities, like re-vegetation, monitoring the recovery of ecosystem, etc.