

Review of Environmental Material for Phase 1
of the Jubilee Oil Project Offshore Ghana
February 10, 2009

Pacific Environment was asked by Oxfam America to review environmental documentation associated with the development of the Jubilee field offshore Ghana by Kosmos Energy, Tullow Energy and partners, posted on the World Bank's International Financial Corporation website.¹ Both Kosmos and Tullow are seeking a combined \$215 million in public financing from the IFC for the Jubilee project. Pacific Environment's conclusion is that the documentation and approach of IFC on the Jubilee project is substandard, far below best or even good practice. Our concerns are as follows:

- Classification as Category B
- No Complete ESIA
- Pre-Conceived Conclusions
- Second-Hand, Single Hulled Tanker
- No Assessment of Oil Spills
- Inadequate Assessment of Impacts on Endangered Species, Critical Habitats
- Inadequate Assessment of Noise Impacts on Marine Mammals
- Dumping of Drilling Wastes into the Sea
- Lack of Demonstration of Compliance with International Standards

Classification as Category B: Astonishingly, IFC classifies the Jubilee project as a Category B project. The Jubilee project is overwhelmingly a new off-shore oil drilling project, with 15 new wells, and only 2 previously drilled exploratory wells. Under the commonly understood international norm of project classification, the Jubilee project would be considered Category A. For example, the European Bank for Reconstruction and Development and most of the world's export credit agencies have agreed on an illustrative list of projects that meet the definition of Category A that includes "[e]xtraction of petroleum and natural gas for commercial purposes." Private banks that follow the Equator Principles classify off-shore oil projects as Category A, such as Citigroup's Kashagan project (offshore oil project in the Caspian Sea). Indeed, every off-shore oil and gas project in the developing world that Pacific Environment has ever reviewed was unflinchingly designated as Category A by the lender in question.

IFC's argument against a classification of the Jubilee project as Category A hinges on its Policy on Social and Environmental Sustainability which defines Category A as limited to "[p]rojects with potential significant adverse social or

¹ See

<http://www.ifc.org/ifcext/spiwebsite1.nsf/f451ebbe34a9a8ca85256a550073ff10/16d0ffb7aa697a28852575270065fed8?opendocument>

environmental impacts that are diverse, irreversible or unprecedented,” Certainly, any off-shore oil project has the potential for such impacts resulting from oil spills and many other harmful unplanned events and planned activities. An oil spill from the Jubilee project could significantly and adversely affect a diverse marine environment including endangered species, as well as diverse coastal communities and economic enterprises. Further, a large percentage of oil from most large oil spills is never recovered, so the effect is irreversible. And, since the Jubilee project is part of a new oil and gas development boom off-shore Ghana, adverse impacts of an oil spill on any coasts that have never before been impacted by oil spills would be unprecedented. Thus, the Jubilee project meets all the criteria for a Category A classification.

Yet, the IFC argues that the Jubilee project fits the policy definition of Category B, which is: “[p]rojects with potential limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures.” Impacts on diverse marine organisms and local communities cannot rationally be considered few in number, and oil spills are not reversible. Finally, oil spills can travel great distances in a marine environment; certainly not a site specific impact.

The IFC claims that, in accordance with the Category B definition, impacts can be readily addressed through mitigation measures. Yet, as the next section demonstrates, the Jubilee project has no complete Environmental & Social Impact Assessment or even completed baseline study upon which to make such an assertion.

No Complete ESIA: The Jubilee project seeks IFC board approval in the absence of a completed Environmental & Social Impact Assessment (ESIA) that has been approved by Ghana’s Environmental Protection Agency. This defeats the internationally accepted purpose of an ESIA, which is to assess the potential impacts of a project prior to project approval to determine whether, and under what conditions a project should be approved. In so doing, IFC undermines an international professional norm and drags down international good practice.

Pre-conceived Conclusions: In the absence of an approved ESIA, IFC has disclosed an Environmental and Social Evaluation Report for Lenders (ESER) prepared for Kosmos Energy by CSA International, a US-based marine environmental consulting firm. This desk review falls far short of an ESIA and fails to provide the assessment necessary to determine whether, or under what conditions a project should be approved. In fact, the ESER does not even include an environmental baseline study. IFC has stated that an environmental baseline study will eventually be presented in the subsequent ESIA, after board approval. Yet, baseline studies are a *prerequisite first step* in the environmental assessment process, indeed, it is impossible to assess impacts on the environment and to determine necessary mitigation measures to protect the environment until the baseline study of that environment is done.

The ESER contains a section describing the importance of the marine environment in the region, including the nutrient-rich upwelling that occurs in the area, as well as the diverse marine mammal fauna, including endangered species. According to the ESER, “Marine waters offshore Ghana are within the Central West African upwelling zone, with a major upwelling season from July through September and a minor upwelling season from December through March. Upwelling of cool, nutrient-rich water results in enhanced primary production, and therefore a situation conducive to high productivity for fish resources.” However, the ESER concedes that little is known about distribution and abundance in specific areas around the project site. Yet, in the absence of this prerequisite baseline information, the ESER claims without factual basis that adequate mitigation measures will be applied.

IFC also states, “[a]long with the ESER, an Action, Contingency and Mitigation Plan (“ACMP”) for the project has already been developed.” How can IFC consider an action plan to be adequate until the project sponsors first complete a baseline study and ESIA to predict what the impacts will be, and therefore, what action, contingency and mitigation will be required? The lack of a baseline study and ESIA prior to proposed project approval demonstrates that the environmental impact assessment process is now simply being retrofitted to adapt to foregone conclusions.

Meanwhile, the ESER has a typical system of rating environmental impacts including beneficial, negligible, minor, moderate and severe, along side of probabilities, including likely, occasional, remote and rare. The ESER then goes on to concoct these ratings and probabilities, without supporting evidence or data. Tables with guesstimates are not the same as an analytical evaluation.

Moreover, the ESER tables infer that minimal compliance with standards is the same as mitigation measures, however, mitigation should typically be additional site-specific measures, and not generic minimal standards.

Second-Hand, Single-Hulled Tanker: The Jubilee project proposes to employ a second-hand, single-hulled tanker called the Tohdoh for a floating production, storage and offloading vessel (FPSO) that will be called the Ohdoh. This conversion is proposed despite the fact that used vessels are subject to heightened levels of structural fatigue and that the world has long since been moving to double-hulled tankers . (See <http://www.aukevisser.nl/supertankers/part-2/id165.htm> for pictures and specifications for the Tohdoh)

Tanker conversion into FPSOs is very dangerous because of metal fatigue problems. According to international maritime experts:

The hull of an FPSO may be perforated after a collision with another vessel in the same way as an ordinary oil tanker. The industry argues that

FPSOs are nevertheless a safe development option. Part of their reasoning is based on the fact that no major accidents have occurred during the last 30 years that FPSOs have been in use. Drawing conclusions from historical data is however difficult because the bulk of FPSOs have only recently been put into service. The first FPSO was installed in 1974 in Indonesia and 2 more FPSOs were commissioned in 1976 in Spain and Brazil. But it was not until the second half of the 1990s that the number of FPSOs began to grow significantly. Today approximately 100 FPSOs are operating worldwide (Shimamura, 2002). Because of lacking historical data to make a proper risk analysis based on sound statistics, insurance companies find it difficult to establish adequate insurance fees for FPSOs (Lloyd's website).

The renowned classification firm Bureau Veritas has therefore performed a survey on half of the FPSOs in service. They concluded that FPSOs made out of former oil transportation tankers are unsuitable to serve as oil production and storage platforms. According to the study, structural and fatigue problems arise over time even in the calmest of conditions. Oil companies have argued that such FPSOs are a safe development option in the calm seas of Africa and Asia. Furthermore the study concluded that oil tankers are built to meet ship specifications, whereas offshore structures must always be designed for 100-year wave conditions. Additionally, an oil tanker has very specific loading criteria which do not match the more extreme and frequent loading and offloading sequences of an oil production and storage platform (Bureau Veritas, 2004).²

In addition, Regulation 13G of the International Convention for the Prevention of Pollution From Ships (MARPOL) requires phase out of all single-hull tankers above 20,000 tonnes deadweight by 2010. When it was new, the Tohdoh weighed in at 258,096 tonnes deadweight, thus its continued operation as a tanker after 2010 would be in violation of the MARPOL Convention. Conversion of the Tohdoh to the Ohdoh for use as a second-hand FPSO is an abuse of a loophole of international law. What's more, the International Maritime Organization (IMO) has made a formal recommendation to transpose the 13G regulation to FPSOs, including those for double hull construction.³ IFC should not finance projects that contravene the recommendations of the IMO; the international institution with recognized legal and professional competency in this sector.

² Personal communications, Sandra Kloff and Clive Wicks, Members of CEESP (IUCN Commission on Environmental, Economic and Social Policy). For more information, see Environmental Management of Offshore Oil Development and Maritime Oil Transport: a Background Document for Stakeholders of the West Africa Marine Ecoregion, Kloff & Wicks, October 2004, available at http://cmsdata.iucn.org/downloads/offshore_oil_eng.pdf

³ Guidelines for Application of MARPOL Annex I Requirements to FPSOs and FSIs, MEPC/Circ.406, 10 November, 2003, International Maritime Organization

Meanwhile, the Johannesburg / Nairobi, 2 November 2007 statement entitled, Conference of the Parties of the Abidjan and Nairobi Conventions Address Marine Pollution from Land-Based Activities and Oil and Gas Exploration in Sub-Saharan Africa, states that there is “the need to encourage countries to conduct Strategic Environmental Assessments to avoid adverse impacts to the marine and coastal environment, particularly for countries in which off-shore oil exploitation or exploration is planned.”⁴ Given this, the IFC should not flout international conventions and should not finance the Kosmos Energy/Tullow project until a Strategic Environmental Assessment that covers off-shore oil and gas extraction and transport is complete.

No Assessment of Oil Spills: Amazingly, the ESER tries to minimize the negative impacts of oil spills by comparing total *global* oil production and the much smaller percentage of total *global* oil spilled, ignoring the fact that *local and regional* impacts of oil spills can be disastrous despite global percentages. The ESER acknowledges the potential for oil spill impacts on marine and coastal biota and habitats, but concludes, without providing any supporting data, that weathering and spill response capabilities will render the spill-affected area small. Meanwhile, the ESER contains no computer generated model of where the oil spill will go and no spatial planning map showing all the key areas of biodiversity including main fish breeding grounds and fishing grounds. Such a model is considered a norm, and should show how a spill could impact on these areas. This should be included in the ESIA before project approval.

Inadequate Assessment of Impacts on Endangered Species, Critical Habitats: The regional waters are known to support diverse marine mammal fauna, including baleen whales, toothed whales and dolphins. The ESER identifies the potential presence offshore Ghana of three whale species - blue, sei, and fin whales - that are classified as Endangered by the IUCN Red List, and one species classified as Vulnerable (sperm whales). Humpback whales, for which the classification was recently changed to Least Concern from the previous classification of Vulnerable, are also reported to be present offshore of Ghana and other West Africa areas, where they have their breeding and nursery grounds. “Sperm whales and Bryde’s whales, a Data Deficient species, may occur year-round offshore West Africa, while the presence of baleen whales is likely limited from May through October (austral winter)...This review indicates that the project area is a natural habitat that includes primary or secondary range for blue whales, and secondary range for fin whales.”

The ESER references the qualitative definition of critical habitats included in IFC’s Performance Standards. The ESER then goes on to identify endangered marine species of Ghana but in each case concludes that no critical habitat has been designated by authorities except in some coastal areas. However, the qualitative definition of critical habitats has nothing to do with whether critical habitat has been designated by authorities. Where the ESER discusses

⁴ See <http://www.unep.org/roa/docs/pdf/Nairobi-AbidjanPressRelease2007.pdf>

qualitative criteria, it concludes that little is known about these conditions in off-shore Ghana, demonstrating a recurring lack of baseline data that is necessary to determine whether critical habitats exist, a determination which should be done in the ESIA prior to project approval. Meanwhile, the ESER says there are protected areas that could be considered critical habitat along the coast, but that none are at or near the Jubilee Field. The ESER highlights that at its nearest point the Jubilee project is 60 kilometers from shore. The ESER acknowledges eastward currents (toward shore), but provides no quantitative analysis of whether these currents could cause spilled oil to come ashore, and in what quantities. Oil spills can travel tremendous distances, in the case of the Exxon Valdez, oil traveled some 600 miles (1,000 km) from the site of the spill, and ended up oiling some 1400 miles of shoreline.

Inadequate Assessment of Noise Impacts on Marine Mammals: Noise, and its impacts on marine mammals, can be one of the biggest negative consequences of off-shore oil and gas operations. The noise of drilling and operation is only briefly discussed in the ESER (less than one page), and there is no discussion whatsoever about seismic testing, which can be one of the biggest damaging impacts.

Inadequate Assessment of Cumulative Impacts: Cumulative impacts from future phases of Jubilee Field development, and surrounding oilfield developments is acknowledged, but not assessed. This is typical of flawed cumulative impacts assessments, where the authors believe that an acknowledgement of cumulative impacts is the same as an assessment of them.

IFC also says, “The project is working with local fishing communities who may operate in the area of the off-shore operations to explain the need for the exclusion zones and the methods by which they will be maintained.” This means they may have economic displacement, which should be dealt with in advance in the ESIA. Meanwhile, the ESER states that coastal seining fishing would be impossible if damaged from an oil drift, and lagoon fishing would be severely impacted, and salt production harmed, and tourism damaged if oil from a spill drifts ashore in those areas. These potential impacts should also be adequately assessed in an ESIA prior to a decision to support the project.

Dumping of Drilling Wastes Into the Sea: The disposal of produced waters is one of the most harmful practices of off-shore oil and gas projects; a practice that much of the world is moving away from, in favor of reinjection of produced waters back into the geologic formation or land-based disposal. Nonetheless, IFC guidelines allow the discharge of produced waters, demonstrating that IFC guidelines are not best practices and are undermining progress in best practice world-wide. Even so, the ESER states that “[p]roduced water will include formation water, injection water, and process water. Produced water is likely to be the largest effluent discharge during production. It is anticipated that quantities will be low during initial production, but may reach a maximum of 160,000 barrels

of liquids per day. They will be treated through oil water separation and discharged overboard if IFC guidelines are met.” In other words, the ESER authors could not confirm that IFC guidelines would be met.

Lack of Demonstration of Compliance with International Standards:

According to IFC’s Performance Standard on Social and Environmental Sustainability, “clients must comply with applicable national laws, including those laws implementing host country obligations under international law.”

The ESER indicates that the national law requiring an approved ESIA has not been met. The ESER also provides a list of some relevant environment and human rights conventions and agreements, yet provides no analysis to demonstrate compliance with these accords. This is consistent with some of the most poorly written environmental reviews which infer that listing international conventions, agreements and commitments is the same as meeting them.