

**Office of Accountability Compliance Review
of OPIC's Environmental Due Diligence and Monitoring
of the Baku-Tbilisi-Ceyhan Oil Pipeline Project**

Final Report

January 2007

**Office of Accountability
Overseas Private Investment Corporation**

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS.....	iii
EXECUTIVE SUMMARY.....	1
INTRODUCTION	3
DESCRIPTION OF THE PROJECT	3
Physical Facilities.....	3
Project Sponsors and Financiers.....	4
Chronology of OPIC Process.....	5
COMPLIANCE WITH OPIC’S ENVIRONMENTAL DUE DILIGENCE POLICIES AND PROCEDURES.....	5
OPIC’s Environmental Due Diligence Policy and Procedures.....	5
OPIC’s Environmental Due Diligence for the BTC Project	7
OA Findings on Environmental Due Diligence.....	9
THE FIELD JOINT COATING CRACKS.....	10
COMPLIANCE WITH OPIC’S MONITORING POLICIES AND PROCEDURES.....	11
OPIC’s Policy and Procedures for Monitoring Compliance with Environmental Requirements.....	11
OPIC’s Environmental Monitoring of the BTC Project	13
OA Findings on Environmental Compliance Monitoring	15
FINDINGS AND RECOMMENDATIONS	16
Findings	16
Recommendations.....	17

LIST OF FIGURES

FIGURE 1. Comparison of Timelines for OPIC Due Diligence and BTC Construction.....	11
FIGURE 2. Map of BTC Pipeline Right-of-Way in Azerbaijan.....	18
FIGURE 3. Map of BTC Pipeline Right-of-Way in Georgia.....	19

ABBREVIATIONS AND ACRONYMS

BTC Co.	Baku-Tbilisi-Ceyhan Company
BTC Project	Baku-Tbilisi-Ceyhan Oil Pipeline Project
CCP	Contractor Control Plan
CP	cathodic protection
CTA	Common Terms Agreement
Direct Agreement	BTC Co.-OPIC Direct Agreement
DCVG	direct current voltage gradient
EA Summary	Environmental Assessment Summary
EBRD	European Bank for Reconstruction and Development
ECA	Export credit agency
ECGD	Export Credits Guarantee Department (UK)
EIA	Environmental Impact Assessment
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ExIm Bank	Export-Import Bank of the United States
FJC	field joint coating
FOE	Friends of the Earth
FOIA	Freedom of Information Act
GOSRP	General Oil Spill Response Plan
Hermes	Euler Hermes Kreditversicherungs-AG (Germany)
HGA	Host Government Agreement
IEC	Independent Environmental Consultant
IFC	International Finance Corporation
JBIC	Japan Bank for International Cooperation
KP	kilometer point, a linear reference point along the pipeline
LG	Lenders Group
NEXI	Nippon Export and Investment Insurance (Japan)
NGO	non-governmental organization
OA	Office of Accountability, OPIC
OIP	Office of Investment Policy, OPIC
OPIC	Overseas Private Investment Corporation
OSRP	Oil Spill Response Plan
SACE	Servizi Assicurativi del Commercio Estero (Italy)
SLIP	Supplementary Lenders Information Pack
SMQ	Self-Monitoring Questionnaire
SOCAR	State Oil Company of the Azerbaijan Republic
The Act	Foreign Assistance Act of 1961, as amended
TPAO	Turkiye Petrolleri A.O.
USAID	U.S. Agency for International Development

EXECUTIVE SUMMARY

Office of Accountability (OA) prepared this report in response to a request from residents of Georgia and a Georgian NGO to review the Overseas Private Investment Corporation's (OPIC's) compliance with its own environmental policies and procedures with regard to the Baku-Tbilisi-Ceyhan (BTC) Oil Pipeline Project. The request refers to the segments of the pipeline in Azerbaijan and Georgia.

The BTC Project consists of construction and operation of a dedicated pipeline, approximately 1,760 km in length, with an approximate capacity of one million barrels of crude oil per day. The Project is sponsored by BTC Company, a special purpose entity comprised of twelve oil companies, of which BP Corporation owns the largest share and is the operator in Azerbaijan and Georgia. Total cost of the Project is US\$3.9 billion. A Lenders Group comprised of the International Finance Corporation, the European Bank for Reconstruction and Development, seven export credit agencies, and a group of commercial banks are extending credit of US\$2.4 billion. In February 2004, 15 commercial bank lenders organized as the BTC Pipeline Project 2003 Trust contracted with OPIC for up to US\$141.8 million in political risk insurance.

The requesters' environmental concerns focus primarily on cracks in field joint coatings at the points where pipe sections are joined, initially discovered in Georgia and Azerbaijan in November 2003.

The two key questions addressed by the compliance review were:

- Did OPIC follow its own procedures regarding environmental due diligence?
- Did OPIC follow its own procedures regarding environmental monitoring?

In its audit, OA conducted interviews of OPIC staff and BTC Co. staff, reviewed OPIC and BTC Co. files and reports of independent consultants to the Lenders Group, and made a field visit to Georgia and Azerbaijan.

On the question of whether OPIC complied with its procedures regarding **environmental due diligence**, OA finds that:

- OPIC did comply with the seven steps in OPIC's due diligence process, as stated in OPIC's *Environmental Handbook*;
- OPIC did collaborate with other lenders and insurers of the Project regarding assessment and mitigation of significant environmental issues; and
- Although pipeline construction commenced during due diligence, OPIC did not access all construction monitoring data that could be material to due diligence.

On the question of whether OPIC followed its own procedures regarding **environmental monitoring**, OA finds that:

- OPIC did receive two kinds of monitoring reports after financial close:
 - client environmental self-monitoring reports (quarterly and annual reports that were publicly available); and
 - third-party quarterly reports by the Lenders Group's Independent Environmental Consultant and Independent Midstream Facilities Engineer, which were prepared for its benefit. The Independent Midstream Facilities Engineer's reports tracked detection and repair of the field joint coating cracks in 2004-05.
- OPIC did not fully meet its obligations with respect to third-party monitoring in two instances:
 - OPIC did not enforce its requirement, as stated in the *Environmental Handbook* and the Environmental and Social Action Plan, that the Project's Annual Environmental and Social Annual Report must provide a summary of environmental monitoring data; and
 - the Independent Environmental Consultant's reports to date have not included a section on validation of self-monitoring methodology. The IEC should validate the methodology in at least one of its reports during the three-year period within which the *Environmental Handbook* calls for an independent third-party audit. OPIC has not enforced its requirement that these reports validate the client's self-monitoring methodology.
- To OA's knowledge, OPIC has not defined when the three-year client audit requirement commences.

INTRODUCTION

Office of Accountability (“OA”) prepared this report in response to a March 2006 request (“The Request”) from residents of the Republic of Georgia¹ and Green Alternative, a Georgian NGO (“The Requesters”).² The Request asked OA to conduct a review of the Overseas Private Investment Corporation’s compliance with its own environmental policies and procedures with regard to the Baku-Tbilisi-Ceyhan Oil Pipeline Project (“BTC Project” or “Project”). In accordance with its operational guidelines, Office of Accountability screened the Request against its eligibility criteria and accepted the Request in May 2006.³

The Office of Accountability is the accountability mechanism for the Overseas Private Investment Corporation (“OPIC”), and reports directly to OPIC’s President and CEO. OA’s authority extends only to reviewing OPIC’s compliance with its own environmental, social, worker rights and human rights policies; the compliance of other parties participating in the BTC Project is outside the scope of OA’s authority and is not the subject of this report.

The Request concerns BTC Project’s alleged failure to provide a protective pipeline coating at the points where 12 m pipe sections are joined. Cracks in field joint coatings (“FJC”), identified by BTC Company (“BTC Co.”) in November 2003, are the subject of the Requesters’ concerns. The Request raises the issue of OPIC’s failure to conduct either a) adequate environmental due diligence before signing of OPIC’s Contract of Insurance on February 3, 2004, or b) adequate compliance monitoring after OPIC’s participation in the Project commenced.

This report reflects OA’s independent compliance audit of OPIC’s environmental due diligence prior to signing of the BTC Project agreements and OPIC’s environmental monitoring. The findings of this report are based primarily upon interviews with OPIC staff, examination of OPIC files, interviews with BTC Co. staff, examination of BTC Co. files, and examination of reports of the independent consultants to the BTC Project Lenders Group (see below).

DESCRIPTION OF THE PROJECT

Physical Facilities

The BTC Project consists of construction and operation of a dedicated pipeline, approximately 1,760 km in length, with an approximate capacity of one million barrels of crude oil per day. BTC Co. expects the pipeline to be the primary export route for most

¹ The request was made by Ms. Manana Kochladze, on behalf of Manana Beridze, Kety Gujaraidze, Nino Gujaraidze, Lela Inasaridze, Tamuna Kurtanidze, Vano Shalataashvili, Guliko Shoshitaishvili, and Green Alternative.

² The Requesters named Pacific Environment, a U.S. NGO, as their US-based representative.

³ OPIC’s website (www.opic.gov) includes a link to Office of Accountability’s webpage, which contains OA’s request acceptance criteria and a public registry showing the current status of registered requests.

of the oil and other liquid hydrocarbons produced from the Azeri-Chirag-Gunashli oil fields in Azerbaijan. To the extent of capacity, the pipeline will also be available for the transport of liquid hydrocarbons produced elsewhere in the Caspian region. The pipeline begins at the Sangachal terminal near Baku in Azerbaijan. The Azerbaijan section is 443 km long, the Georgia section is 249 km long, and the Turkey section is 1076 km long. The pipeline varies from 34 to 46 inches in diameter. It terminates at a new export terminal at Ceyhan on the Mediterranean coast. All sections of the BTC Project pipeline are buried, and from Sangachal to the Georgian-Turkish border, it will share the same 44-meter wide construction corridor with the Shah Deniz natural gas pipeline. The Shah Deniz pipeline is scheduled for construction about one year after the BTC pipeline became operational, viz., July 2006. (See Georgia and Azerbaijan maps, Figures 2 and 3). Above-ground installations include the terminal facilities at Sangachal, pumping stations, block and check valves, the cathodic protection system, a fiber optic communications system, a computer-based control system, pigging and metering stations, and the Ceyhan terminal.

Project Sponsors and Financiers

BTC Company, a special-purpose entity, is developing and owns the Project. Affiliates of Amerada Hess, BP Corporation, ConocoPhillips, Eni, Inpex, Itochu, the State Oil Company of the Azerbaijan Republic (SOCAR), Statoil ASA, TOTAL, Turkiye Petrolleri A.O. (TPAO), and Unocal hold shares in BTC Company. BP Corporation owns, in the aggregate, 30.10% of BTC Co. SOCAR owns 25% and TPAO 6.53%; they are owned and controlled by the Governments of Azerbaijan and Turkey, respectively. The total U.S. ownership is 13.76%, the aggregate of the shares of Amerada Hess, ConocoPhillips, and Unocal. BTC Co. sponsors will contribute at least US\$1 billion of equity to BTC Co. to fund the BTC Project. The total cost of the Project is approximately US\$3.9 billion.

Credit facilities extended by JBIC, Hermes, Coface, ECGD, the U.S. Export-Import Bank (“ExIm Bank”), SACE,⁴ the Project sponsors, and fifteen commercial banks⁵ are providing US\$2.4 billion. The commercial bank lenders contracted with OPIC for up to \$141.8 million of political risk insurance coverage for a ten-year term.

During the pre-financial close period (2002 to February 3, 2004), the financing agencies organized a “Lenders Group” (“LG”). On behalf of its members, the LG retained the services of an Independent Engineer (Parsons Energy and Chemicals Group Inc.) and an Independent Environmental Consultant (“IEC”) (Mott MacDonald) to assist

⁴ Japan Bank for International Cooperation, Nippon Export and Investment Insurance (Japan), Euler Hermes Kreditversicherungs-AG (Germany), Coface (France), Export Credits Guarantee Department (UK), Servizi Assicurativi del Commercio Estero (Italy).

⁵ ABN Amro Bank, Banca Intesa, Bayerische Hypo-und Vereinsbank AG, Citigroup, Credit Agricole Indosuez, Dexia Credit Local, ING, KBC, KBC Finance Ireland, Mizuho, Natexis Banques Populaires, BNP Paribas, Royal Bank of Scotland, San Paolo IMI, Societe Generale, West LB.

with technical, environmental and social due diligence.⁶ OPIC, as a provider of insurance but not financing, was not a formal member of the LG but participated in LG meetings, discussions and written communications on environmental issues.

After financial close (February 3, 2004), the LG engaged an Independent Midstream Facilities Engineer, WorleyParsons Energy Services (“Independent Engineer”), to assist in supervision of construction and commissioning and to address technical issues that might arise during construction. The Independent Engineer replaced Parsons Energy and Chemicals Group. The LG also contracted with an Independent Environmental Consultant (D’Appolonia), to monitor compliance with the Environmental and Social Action Plans (“ESAP”) during construction and operation, replacing Mott MacDonald.⁷ Although OPIC was not a signatory to either of these contracts, it was on the distribution list for their reports and, according to OPIC staff, OPIC customarily reviewed reports of both consultants.

Chronology of OPIC Process

OPIC began discussions of the BTC Project with potential investors several years prior to receipt of the formal application for political risk insurance on May 2, 2002. OPIC disclosed the Project’s Environmental and Social Impact Assessments (“ESIAs”),⁸ prepared by BTC Co., for public comment on June 12, 2003. OPIC’s Board of Directors approved OPIC’s participation in the Project on November 14, 2003, OPIC’s Office of Investment Policy (“OIP”) issued internal environmental clearance for the Project on December 16, 2003. OPIC executed the Contract of Insurance on February 3, 2004, at the same time the LG signed the Common Terms Agreement (“CTA”), which contained environmental provisions. OPIC was not a signatory to the CTA but entered into a BTC-OPIC Direct Agreement (“Direct Agreement”) with BTC Co. that incorporates by reference the environmental provisions of the CTA.

COMPLIANCE WITH OPIC’S ENVIRONMENTAL DUE DILIGENCE POLICIES AND PROCEDURES

OPIC’s Environmental Due Diligence Policy and Procedures

OPIC’s environmental due diligence policy derives from the Foreign Assistance Act of 1961, as amended (“The Act”), that requires OPIC “to refuse to insure, reinsure, guarantee, or finance any investment in connection with a project which the Corporation determines will post an unreasonable or major environmental, health, or safety hazard, or will result in significant degradation of national parks or similar protected areas.”⁹ The

⁶ BTC Co. began construction of the pipeline in April 2003 with financing from the sponsors. Consequently, the environmental review carried out for the LG by Mott MacDonald included field visits in July 2003 and September-October 2003 to observe construction activities.

⁷ Two ESAPs were prepared, one for the construction phase that became final in February 2004 and one for operations that was approved in April 2005.

⁸ There were ESIAs for Azerbaijan and Georgia, and an EIA for Turkey.

⁹ Foreign Assistance Act of 1961, as amended (“The Act”), § 231(n).

Act prohibits OPIC's Board of Directors from voting in favor of an action that is likely to have significant adverse impacts unless the applicant has completed an environmental impact assessment ("EIA"), and the assessment has been made publicly available in the United States and the host country for at least 60 days prior to the date of the vote.

Before providing insurance, reinsurance, guarantee or financing for an environmentally sensitive investment in a country, OPIC is obliged to notify the appropriate officials of that country of all guidelines and other standards adopted by the World Bank and any other international organization relating to public health, safety or environment that are applicable as well as any health, safety or environmental restriction under U.S. law that would apply to the project if it were undertaken in the United States. The notification shall include a summary of guidelines and standards and may include any EIA prepared for the project. The statute also requires OPIC to take into account any public comments it receives on the project before providing its financial support.

The statutory requirements are the basis for the seven-step due diligence process described in the *OPIC Environmental Handbook*,¹⁰ as follows:

1. OPIC screens the application to determine (to the extent possible at this early stage) whether its support of the project would violate any of the categorical prohibitions in its statute or policy and thus be ineligible.¹¹
2. If the proposed project is not ineligible, OPIC screens the application to determine the level of environmental sensitivity and assigns an environmental category.
3. For new facilities in Category A, as the BTC pipeline is, OPIC requires an environmental impact assessment (EIA).
4. OPIC discloses the applicant's EIA for a 60-day public comment period prior to making a final decision to support a Category A project. OPIC notifies the host government of standards and guidelines that apply to the project. OPIC attempts to respond to detailed public comments, in writing whenever possible, and shares the comments received with the applicant. In addition, OPIC strongly encourages applicants to engage public stakeholders in informed, meaningful consultation, from EIA scoping through to completion of the project. This entails making environmental information available to locally affected people in language, format and medium that they can understand and use.
5. OPIC conducts an internal assessment of the project based on the EIA, public comments, and other available information. OPIC environmental staff assess the impacts of the project and identify the standards and mitigative conditions applicable to OPIC support. In many cases, determinations of eligibility rely on critical representations made by the client with respect to baseline environmental conditions, mitigative measures and net impacts. OPIC may require additional mitigative measures. Collaboration with other official and private lenders and insurers expedites the review process and avoids delays and needless duplication

¹⁰ The most recent edition of the *Environmental Handbook* was issued in February 2004. This review uses as its reference the previous edition dated April 1999 as the version in effect when BTC Co. applied for OPIC insurance in May 2002.

¹¹ See *Environmental Handbook*, Appendix F for the list of categorical prohibitions.

- with their requirements. OPIC may contract for outside expertise to enable it to complete the review process in a timely manner.
6. OPIC discusses the mitigative measures and other environmental conditions for its support with the applicant. They are included in the loan agreement or insurance contract as representations, warranties and covenants. Environmental conditions and covenants are developed in close consultation with the client to minimize the cost to the project and to ensure that they are consistent with the host country's legal framework, objectively measurable and verifiable, and allow for sufficient flexibility to address issues if circumstances change. OPIC does not attempt to prescribe to its potential clients the choice of technologies or processes they must use to meet the applicable guidelines. However, standards of best practice developed by governments, industry, and non-governmental organizations can be useful in providing guidance to OPIC and its users in assessing alternatives and their feasibility.
 7. Upon approval and in response to public requests, OPIC documents its determination as to applicable substantive/technical standards and conditions in an Environmental Assessment Summary ("EA Summary").

OPIC's Environmental Due Diligence for the BTC Project

In reviewing OPIC's environmental due diligence with regard to the BTC Project, OA examined correspondence and meeting records in OPIC electronic and paper files and interviewed OPIC staff from the Office of Investment Policy and Insurance Department who were engaged in due diligence in 2002 and 2003. OA also interviewed environmental staff from ExIm Bank and the International Finance Corporation ("IFC"). OA reviewed pertinent sections of the ESIA's for Azerbaijan and Georgia, the Supplementary Lenders Information Packet ("SLIP"), the Construction ESAP, the General Oil Spill Response Plan ("OSRP"), and the various comments that OPIC made during the preparation of those documents, both directly to BTC Co. and indirectly through the consolidated comments of the Lenders Group. OA's review included the reports of the Independent Engineer and the Independent Environmental Consultant, and the OPIC EA Summary of the Project.

After receiving the formal application for insurance, OPIC screened the Project, assigned Category A on the basis of environmental sensitivity, and informed the client of the necessity to prepare an environmental assessment. These measures, which were completed by July 19, 2002, were to fulfill the first three steps of due diligence. OPIC disclosed the ESIA's and other environmental documents on June 12, 2003, more than 60 days prior to the Board decision on the Project as required in Step 4. OPIC responded in writing to the comments it received from NGOs on December 5, 2003. BTC Co. conducted extensive consultation during preparation of the ESIA's and disclosed them in local languages, both in draft form for comments and in their final versions, prior to OPIC's disclosure. OPIC notified the host governments of standards and guidelines that apply to the Project, also a Step 4 requirement, but did so late, on or about April 16, 2004, rather than prior to execution of the insurance contract, as required by statute.

OPIC's internal review (Step 5) and development of environmental mitigation measures and other conditions (Step 6) proceeded in the context of the activities of the Lenders Group and, more important, the Environmental Subgroup of the LG. These aspects of OPIC's due diligence involved a site visit in mid-2002, in company with IFC, European Bank for Reconstruction and Development ("EBRD"), NEXI, JBIC and ECGD; at least eight meetings with other lenders, Mott MacDonald, and, usually, BTC Co.; and, according to OPIC staff, a large number of conference calls. The LG scheduled weekly calls beginning in April 2003; OPIC's files contain notes for 17 meetings and conference calls. The other lenders and insurers participating in the calls and meetings included: IFC, EBRD, JBIC, ECGD, U.S. ExIm Bank, Coface, Hermes, NEXI, and SACE. Following commencement of construction in April 2003, Mott Macdonald conducted field visits to observe construction activities in July 2003 and September-October 2003. OPIC staff did not participate in these field visits. OPIC met separately with ExIm Bank and with IFC to discuss specific environmental issues. USAID was not a lender or donor in the BTC Project, but it did participate in at least one Interagency Meeting at the U.S. Treasury Department that OPIC also joined – a meeting convened on October 9, 2003, to advise Treasury on the Project prior to IFC Board action.

OPIC staff reviewed documents – the ESIA's, the site visit and environmental evaluation reports of Mott MacDonald, and drafts and final versions of the SLIP, the Construction ESAP and the country-specific OSRPs. According to OPIC staff, OPIC did not attempt a comprehensive review of the ESIA's, which occupied more than 15,000 pages when finished. OPIC's review focused on the following issues: selection of the pipeline routing relative to sensitive areas such as the mineral springs at Borjomi,¹² seismic hazard, oil spill response planning and preparedness, pollutant discharge during construction, reinstatement of the right-of-way after pipelaying, impacts on the marine environment at the pipeline terminus, and incorporation of OPIC's specific prohibitions and environmental requirements into the ESAP. According to OPIC's Central Files and OIP files, OPIC prepared 16 different written comments, on issues such as the definition of primary forest, requirements for solid and liquid waste management during construction, required content of oil spill response plans, and inclusion of additional items in contractor control plans. IFC initially consolidated comments, particularly on the proposed ESAP, but Mott MacDonald later took over this function for the LG, first assembling the various inputs into a consolidated comment document, then obtaining approval of the document from the Environmental Subgroup, and finally transmitting it to BTC Co. Mott MacDonald itself also carried out comprehensive reviews of the ESIA's and the other environmental documents on the LG's behalf. A specialized consultant, Polaris Applied Science, Inc., reviewed the country-specific OSRPs that were developed on the basis of the General Oil Spill Response Plan during 2004.

With respect to field joint coating issues during due diligence, the Independent Engineer's Design Appraisal noted concerns about the compatibility of the selected FJC material and the line pipe coating and posed them as questions for review by BTC Co. and the IEC – namely, that it could be difficult to maintain coating integrity for the

¹² Selection of routing had been an issue of concern to OPIC since early meetings with BP Corporation in 2000 and 2001.

design life of the Project and that repair would likely be required and extra monitoring would be appropriate in sensitive areas. The Independent Engineer recommended that coating conditions in high-groundwater right-of-way areas be monitored and inspected at more frequent intervals, and that budgets be developed to reflect the need to repair or replace the pipeline coating in later years as indicated by the monitoring and inspection program.

The Export Credit Agencies' Legal Counsel, Freshfields Deringer Bruckhaus, included the question of the difficulty of maintaining coating integrity for the design life of the Project in an environmental issues matrix for consideration by BTC Co., the IEC and the LG. Concerns about field joint and line pipe coatings again appeared in the Independent Engineer's final report. A Leakage Prevention and Oil Spill Mitigation Report (May 2003) provided recommendations for the additional monitoring, using acoustic pigs (monthly pig runs are "envisaged") and quarterly monitoring of springs and groundwater wells. The Operations ESAP, which was approved in April 2005, referred to these recommendations for groundwater monitoring, noting that studies will be conducted after linefill. However, OA has not observed any documents in OPIC's files that would provide information on whether the networks have been designed, the groundwater monitoring has begun or the acoustic pigging has been carried out.

In writing the Environmental Assessment Summary that constituted OPIC's internal environmental clearance, OIP staff informed OA that they relied on their own review and the deliberations of the LG. They also considered: a) the statement by the Independent Engineer that "best available proven technology" was used in the BTC pipeline design; and b) the findings of Mott MacDonald which, after their document review and visits in July and September-October 2003 to sites where construction was underway, concluded that the Project would comply with the requirements of the host governments and the lenders if BTC Co. carried out all the commitments stated in the environmental and social documents for the Project. The EA Summary includes a summary of comments received from NGOs and OPIC's discussion of them. OPIC's issuance of the EA Summary on December 16, 2003, marked the completion of environmental due diligence Step 7.

OA Findings on Environmental Due Diligence

OA finds that OPIC did carry out the seven steps of environmental due diligence, as outlined in the *Environmental Handbook*.

With respect to the specific concern raised in the Request for Compliance Review about lack of collaboration with other lenders, and specifically with ExIm Bank and USAID, OA finds that OPIC did collaborate with other lenders and insurers. ExIm Bank was among the lenders with which OPIC collaborated, both formally through the Environmental Subgroup of the Lenders Group and, according to OPIC and ExIm Bank staff, informally in Washington. USAID is not a participant in the BTC Pipeline Project, and OPIC and USAID do not routinely consult with each other on projects in which only one of them is involved; consequently, OPIC did not collaborate with USAID.

As noted above, OA has not observed any documents in OPIC's files that would provide information on whether the monitoring networks recommended by the Independent Engineer have been designed, the groundwater monitoring has begun or the acoustic pigging has been carried out. OA recommends that OPIC give special attention during its monitoring of pipeline operations to implementation of the additional monitoring program as recommended by the Independent Engineer.

Beginning with commencement of construction in April 2003, there was a source of construction monitoring information, in addition to the IEC's site visit reports – the BTC Pipeline Project Monthly Reports ("Monthly Reports") produced by the BTC Project team. The November 2003 through January 2004 Monthly Reports contained current information about the field joint coating problems. The November 2003 report described BTC's discovery of the FJC cracking problem in November. The December 2003 report described the investigative team BP Corporation organized and sent to the field, summarized its diagnosis, and outlined the planned remedial measures. The January report continued to address the topic. Thus, information about the FJC problem was readily available to BTC Co. management and sponsors before financial close, but, because the reporting requirements of the CTA had not yet come into effect, that information was not transmitted to the LG.

These circumstances demonstrate that where construction commences during due diligence, OPIC has an interest in including construction monitoring reports in its due diligence. (See Fig.1, Comparison of Timelines for OPIC Due Diligence and BTC Construction.) Due diligence is not just about preparing management plans for future operations; pre-financial close construction monitoring data can also be material. In this instance, OPIC could have requested BTC Co.'s construction monitoring reports from commencement of construction onwards. OA recommends that this be a regular practice.

THE FIELD JOINT COATING CRACKS

An article in *The Sunday Times* of London dated February 15, 2004 reported the discovery of the field joint coating cracks in November 2003 and the fact that concerns about the cracks had failed to surface during the British government's assessment of the Project in December 2003.¹³

BTC Co. forwarded the article to OPIC and other LG members on February 15, 2004. OA's interviews with OPIC and LG members' staff indicate that this was the first OPIC and the LG had heard of the cracking problem from BTC Co. On February 24, the LG reached consensus that the Independent Midstream Facilities Engineer (WorleyParsons) should conduct a desk-top study of the problem, followed by a site visit and report in spring 2004. OPIC files indicate that OPIC participated in the e-mail exchanges and conference call that established the consensus, and requested further information regarding the FJC issue from BTC Co. about ten days later.

¹³ "BP accused of cover-up in pipeline deal," *The Sunday Times*, February 15, 2004. This article was attached to the Request.

Fig.1. Comparison of Timelines for OPIC Due Diligence and BTC Construction

2002										2003												2004		
Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
OPIC receives insurance application OPIC makes site visit OPIC ENVIRONMENTAL DUE DILIGENCE PROCESS										OPIC discloses Project ES/As OPIC Board approval OPIC issues internal environmental clearance IEC makes first site visit Independent Engineer issues "BTC Final Report" IEC completes second site visit IEC issues "BTC Project Environmental and Social Review"												OPIC executes Contract of Insurance (2/3) The Sunday Times runs article on FJC cracks (2/15)		
										BTC Co. begins construction First FJC applications BTC Co. becomes aware of FJC cracking FJC suspended; BP diagnostic team on site BTC Co. issues new FJC procedures; FJC restarts														

COMPLIANCE WITH OPIC’S MONITORING POLICIES AND PROCEDURES

OPIC’s Policy and Procedures for Monitoring Compliance with Environmental Requirements

OPIC’s main source of information about OPIC-supported projects’ environmental compliance is the specialized monitoring of environmental performance specified in the *Environmental Handbook*. OPIC reserves the right to monitor any project for environmental impact and compliance with environmental conditionality at any time during the term of OPIC’s relationship with the project. The *Environmental Handbook* describes three tiers of environmental monitoring that OPIC implements for the Category A projects it supports.

- 1) *Self-monitoring by the client.* OPIC requires clients to submit annual self-monitoring reports (not to be confused with SMQs – see below). These reports must include regular testing results for any emission or effluent standards or ambient air or water quality limitations that were represented by the client.

- 2) *Compliance audits by the client.* Clients are required to conduct, and to certify that they have conducted, third-party independent audits after a project begins construction or is operational. The purposes are a) to evaluate compliance with all conditions that are reflected in OPIC’s environmental or social requirements for the project – in this case, the requirements of the ESAPs and, by reference in the ESAPs, of the OPIC *Environmental Handbook*; and b) to validate the methodology used for client self-monitoring reports. At least one audit must be conducted, generally within the first three years of all Category A projects.
- 3) *Monitoring by OPIC.* OPIC routinely conducts on-site monitoring of projects, using OPIC staff and/or consultants, for environmental and environmentally-based social impacts. OPIC endeavors to monitor all Category A projects on-site at least once during the first three years of project commitment, and more frequently depending on the environmental sensitivity of the project. OPIC may also make use of third-party evaluations of projects, including compliance information developed by host government authorities, co-lenders and independent auditors.

In addition, the Foreign Assistance Act of 1961 requires that “...the Corporation shall prepare and maintain for each investment project it insures, finances, or reinsures, a development impact profile consisting of data appropriate to measure the projected and actual effects of the project on development.” OPIC’s instrument to comply with this statutory requirement is the Self-Monitoring Questionnaire (“SMQ”); an OPIC directive requires all OPIC clients to submit an SMQ to OPIC annually.¹⁴

OPIC’s client self-monitoring and client compliance audit requirements became obligations of BTC Co. under the Environmental and Social Action Plan. Section 8 of both ESAPs – “Project Reporting to Lenders and Lender Monitoring” – specifies requirements for self-monitoring and reporting to the Lenders Group, and for third-party monitoring by consultants to the LG. They consist of:

- Quarterly client self-monitoring reports during the construction period, focusing on environmental and social matters, with content specified in the ESAPs;
- Annual reports during construction and operation, summarizing environmental and social performance, with content specified in the ESAPs, including summaries of air and water quality monitoring results; and
- Visits by the Independent Environmental Consultant to verify compliance with the ESAPs, quarterly during construction and annually during operation, according to terms of reference specified in the ESAPs.

Section 5.3 of the ESAP – “Lender and PR [Political Risk] Insurer Policies and Guidelines and Good Practice” – explicitly addresses the compliance audit requirement in the *Environmental Handbook*:

The BTC Project will conduct at least one independent third party audit within the first three years of operation. The audit will, among other objectives, evaluate the

¹⁴ OPIC Directive 94-13, effective date April 1, 1994.

BTC Project's compliance with respect to all environmental and social conditions contained in the above OPIC specific requirements and will validate the methodology used for the BTC Project's own environmental and social reporting (Handbook, page 20). The Environmental Consultant's quarterly verification visits during construction and annual verification visits during operations contemplated in Section 8.2 (Project Quarterly Report (Construction)) and Section 8.3 (Project Annual Report (Construction and Operations)) will satisfy this requirement.

OPIC's Environmental Monitoring of the BTC Project

Self-monitoring by the client. In its review of OPIC's environmental compliance monitoring of the BTC Project, OA examined electronic and paper files at OPIC; electronic files on the Intralinks website maintained for the LG and on the BTC Project website operated by BTC Co., and paper files at the BTC Project Office in Baku, Azerbaijan. OA interviewed staff at OPIC and BTC Co.; D'Appolonia (the Independent Environmental Consultant for post-financial close construction and operations), and WorleyParsons Energy Services (the Independent Midstream Facilities Engineer). The preponderance of the documents was found on the electronic databases. In interviews, staff at OPIC and at ExIm Bank explained that they and many of the LG used the Intralinks database rather printing paper copies of the various monitoring reports. OPIC staff routinely received e-mail notifications of posting of new documents to Intralinks.

OPIC did receive BTC Co.'s Annual Environmental and Social Reports for 2004 and 2005, in accordance with the Construction ESAP and the *Environmental Handbook*. The 2004 report stated that there were no reportable environmental discharges or emissions and did not include the summary of emission, effluent and ambient condition monitoring data specified in the *Environmental Handbook*. In a footnote, the report explained that details of air emissions and environmental discharges were not reported "due to the temporary and transient nature of construction activities" and promised that "emissions and discharges associated with operations will be reported in full." The 2005 report stated that environmental monitoring had commenced at facilities that had been handed over to operations and presented summaries of monitoring data from those locations.

BTC Co.'s interpretation of its monitoring obligations was not consistent with the commitments in the Construction activities to include a "summary of results" and "comparison of environmental performance to applicable Environmental Standards." The IEC's site visit reports for February, June-July and October of 2004 and February of 2005 confirmed that monitoring was ongoing and data were on file. The IEC's reports also cast doubt on BTC Co.'s assertion that there were no reportable emissions or environmental discharges during 2004, as each of those four reports discusses incinerators that were operating improperly and worker camp wastewater treatment plants with persistent violations of effluent standards, some of which were described in the February 2005 report as Level II Non-compliances. The 2004 Annual Report should have contained summaries of the emissions, effluent and ambient monitoring data that

BTC Co. and its contractors were collecting, and summaries in the 2005 Annual Report should not have been limited to data for facilities already turned over to operations.

In addition, BTC Co. submitted Environmental and Social Quarterly Reports and posted their English language versions on the Project website, beginning in Q1 2004, along with executive summaries in Georgian and Azerbaijani through the second quarter of 2005. The quarterly reporting is a commitment in the Construction ESAP and exceeds the *Environmental Handbook* requirements for self-monitoring. According to OIP staff, they routinely review the quarterly and annual reports prepared by BTC Co.

With regard to the specific concern raised in the Request for Compliance Review about the lack of Self-Monitoring Questionnaires concerning the BTC Project in OPIC's files, OA has not seen mention of the SMQ requirement in the Contract of Insurance, Direct Agreement or Common Terms Agreement. OA requested but has not seen evidence that OPIC informed BTC Co. of the SMQ requirement. BTC Co. has not submitted SMQs, two of which should now be on file if the 12-month period after which the first one must be submitted is calculated from the signature date of the Contract of Insurance (February 3, 2004). However, OIP and Insurance staff explained to OA that OPIC does not in practice require SMQs until a project has been in operation for one year. In any case, the SMQ is not OPIC's primary instrument for monitoring the environmental impacts of projects it supports.¹⁵

Compliance audit by the client. OPIC's *Environmental Handbook* requires at least one independent third-party audit, generally within the first three years of all Category A projects. Both the Construction ESAP and the Operations ESAP state that the reports of the Independent Environmental Consultant will satisfy this OPIC requirement. OPIC has received IEC quarterly reports since March 2004; however, they so far have not addressed one of the OPIC audit objectives – validation of the Project's self-monitoring methodology. The IEC's scope of work as defined in both ESAPs does not call for a validation of self-monitoring methodology, which would go beyond merely commenting on report accuracy, and none of the IEC reports has validated the self-monitoring methodology.

Whether this constitutes an actual non-compliance with OPIC policy or a non-compliance that will occur unless OPIC addresses it expeditiously with the LG and IEC depends on when the three-year clock starts ticking, and on this it is necessary to establish clarity. The start dates could be: commencement of construction (April 03); execution of the Contract of Insurance & CTA (February 04); linefill in Azerbaijan and Georgia (August and November 2005, respectively); or celebration of the first oil shipment to Ceyhan (July 2006). If the date is one of the first two, then the due date for BTC Co. to satisfy the OPIC policy requirement has already passed or will soon arrive.

¹⁵ The SMQ contains two broad questions about environment: Does the project directly restore or preserve the environment; and Have there been any changes in the project or the environment that have created new environmental or occupational health and safety issues.

Monitoring by OPIC. As noted above, OPIC staff or consultants must conduct a site visit prior to February 3, 2007, to satisfy the *Environmental Handbook* minimum target of once within three years of OPIC commitment to the Project. From March 2004 forward, OPIC received monitoring information from site visits and analyses conducted by independent consultants, including seven IEC reports, 12 quarterly reports and site visit reports from the Independent Engineer.¹⁶ With regard to the FJC issue, the Independent Midstream Facilities Engineer submitted a “Desktop Study: Field Joint Coating Review” to the LG in draft in April 2004 and in a redacted version in July 2004. The Review found that the major cause of the cracking was the failure to implement curing procedures in low ambient temperatures (-10°C.); that BTC Co. had issued a revised FJC application procedure for low temperatures using pre- and post-heating and had increased its inspection staff; and that BTC Co. planned to remove and recoat all cracked field joints in Georgia when the weather improved. Beginning in Q1 2004, the Engineer’s quarterly reports summarized FJC-related data in BTC Co.’s Lender Reports and documented BTC Co.’s management of the FJC cracks, including detection and repair of existing cracks and post-repair surveys.

OA Findings on Environmental Compliance Monitoring

Self-monitoring by the client. The requirements OPIC imposes on its clients for environmental self-monitoring have been met in many respects. However, the 2004 Environmental and Social Annual Report lacked the required summary of environmental monitoring data collected during the year, and in the corresponding report for 2005, BTC Co. incorrectly limited the data summarized to those collected at locations turned over to operations. OA has not observed any correspondence on this subject by OPIC.

Compliance audit by the client. While the ESAPs state that the IEC’s quarterly and annual reports are to satisfy the OPIC compliance audit requirements, the IEC reports have not yet fulfilled one of the two purposes of an audit as stated in the *Environmental Handbook* – namely, “to validate the methodology used for all self-monitoring reports.” OA has not seen evidence that OPIC has raised this matter with BTC Co.

Monitoring by OPIC. OPIC staff visited the Project site in July 2002, prior to commencement of construction and prior to financial close. OPIC has relied on consultants to the Lenders Group (the Independent Environmental Consultant and the Independent Midstream Facilities Engineer) to meet its own-monitoring requirements.

¹⁶ The IEC reports were dated March 2004 to July 2006. The Independent Midstream Facility Engineer’s reports were quarterly beginning first quarter of 2004; the most recent covers the third quarter of 2006. The Engineer also reported on each of three site visits in May 2004, September 2004 and July 2006.

FINDINGS AND RECOMMENDATIONS

Findings

On the question of whether OPIC complied with its procedures regarding **environmental due diligence**, OA finds that:

- OPIC did comply with the seven steps in OPIC's due diligence process, as stated in OPIC's *Environmental Handbook*;
- OPIC did collaborate with other lenders and insurers of the Project regarding assessment and mitigation of significant environmental issues; and
- As pipeline construction commenced during due diligence, OPIC did not access all material construction monitoring data.

On the question of whether OPIC followed its own procedures regarding **environmental monitoring**, OA finds that:

- OPIC received two kinds of monitoring reports after financial close:
 - client environmental self-monitoring reports (quarterly and annual reports that were publicly available); and
 - third-party quarterly reports by the Lenders Group's Independent Environmental Consultant and Independent Midstream Engineer, which were prepared for its benefit. The Independent Midstream Engineer's reports tracked detection and repair of the field joint coating cracks in 2004-05.
- OPIC did not fully meet its requirements regarding third-party monitoring in two instances:
 - OPIC did not enforce its requirement, as stated in the *Environmental Handbook* and the Environmental and Social Action Plan, that the Project's Annual Environmental and Social Annual Report must provide a summary of environmental monitoring data; and
 - the Independent Environmental Consultant's reports to date have not included a section on validation of self-monitoring methodology. The IEC should validate the methodology in at least one of its reports during the three-year period within which the *Environmental Handbook* calls for an independent third-party audit. OPIC has not enforced its requirement that these reports validate the client's self-monitoring methodology.
- To OA's knowledge, OPIC has not defined when the three-year client audit requirement commences.

Recommendations

*Regarding **environmental due diligence**, OA recommends that:*

- Where project construction commences during the due diligence process, OPIC should make a regular practice of requesting and reviewing all available construction monitoring data, not only data labeled “environmental.”

*Regarding **environmental monitoring**, OA recommends that:*

- OPIC renew its focus on environmental monitoring of the Project in the medium to long term;
- OPIC give specific attention to implementation of the additional monitoring for field joint coating cracks or leakage, as recommended by Independent Engineer and required by the Operations ESAP;
- OPIC give particular attention to ensuring that the required summary of environmental monitoring data and periodic validations of monitoring methodology are included in monitoring reports;
- OPIC clarify when the three-year independent third-party audit period commences.



