



---

AUDIT REPORT

CAO Audit of IFC  
CAO Compliance

C-I-R4-Y12-F156  
December 18 2012

---

**CAO Audit of IFC Investments in Mozal, Mozambique**

Office of the Compliance Advisor Ombudsman (CAO)  
for the  
International Finance Corporation (IFC)  
Multilateral Investment Guarantee Agency (MIGA)  
Members of the World Bank Group

## **About the CAO**

The CAO's mission is to serve as a fair, trusted, and effective independent recourse mechanism and to improve the environmental and social accountability of the private sector lending and insurance members of the World Bank Group, the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA).

The CAO (Office of the Compliance Advisor Ombudsman) is an independent post that reports directly to the President of the World Bank Group. The CAO reviews complaints from communities affected by development projects undertaken by IFC and MIGA.

For more information about the CAO, please visit [www.cao-ombudsman.org](http://www.cao-ombudsman.org)

## Acronyms

AMR	Annual Monitoring Report
CAO	Compliance/Advisor Ombudsman
E&S	Environmental and social
EIB	European Investment Bank
FTC	Fume Treatment Centers
IFC	International Finance Corporation
MIGA	Multilateral Investment Guarantee Agency
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PAH	Polyaromatic hydrocarbons
PS	Performance Standard

## **Overview of the CAO Compliance Audit Process**

When the CAO receives a complaint about an IFC or MIGA project, it first refers it to the CAO Ombudsman, which works to respond to complaints through facilitated settlements, if appropriate. If the CAO Ombudsman concludes that the parties are not willing or able to reach a facilitated solution, the case is transferred to the compliance arm of the CAO, CAO Compliance, to appraise the concerns raised in the complaint for a compliance audit of IFC or MIGA. A compliance audit may also be initiated by request from the President of the World Bank Group or senior management of IFC or MIGA.

CAO Compliance auditing focuses on IFC and MIGA, and how IFC/MIGA assured itself/themselves of project performance. The purpose of a CAO audit is to ensure compliance with policies, standards, guidelines, procedures, and conditions for IFC/MIGA involvement, and thereby improve the social and environmental performance of investments and activities backed by IFC/MIGA. In many cases, in assessing the performance of the project and implementation of measures to meet relevant requirements, it is necessary to review the actions of the project sponsor and verify outcomes in the field.

A compliance audit must remain within the scope of the original complaint or request. It cannot go beyond the confines of the complaint, or request that other issues be addressed. In such cases, the complainant or requestor may consider submission of a new complaint or request.

CAO Compliance appraisals and audits consider how IFC/MIGA assured itself/themselves of compliance with national law, reflecting international legal commitments, along with other audit criteria. The CAO has no authority with respect to judicial processes. The CAO is neither a court of appeal nor a legal enforcement mechanism, nor is the CAO a substitute for international court systems or court systems in host countries.

In cases where IFC/MIGA is/are found to be out of compliance, the CAO will keep the audit open and monitor the situation until actions taken by IFC/ MIGA assure the CAO that IFC/ MIGA will move back in to compliance. The CAO will then close the audit.

## 1. Background

In October 2010, a coalition of local and national NGOs representing themselves and other locally affected people filed a complaint to the CAO regarding the Mozal project in Mozambique. The complaint was also filed with the Complaint Mechanism of the European Investment Bank (EIB); the Organisation for Economic Co-operation and Development (OECD) United Kingdom National Contact Point; and in several different judicial and non-judicial mechanisms. In addition, the complainants have led a national campaign that collected thousands of community member signatures for presentation to the Parliament of Mozambique regarding the Mozal bypass program.

Mozal, located 20 kilometres west of Maputo, is an aluminum smelter. IFC has two active investments in the project: the first, approved in 1997, supported the construction and operation of the smelter, and the second, approved in 2001, supported doubling its production capacity. BHP Billiton, a publicly traded international mining and metals group, is the primary sponsor of Mozal.

The complaint to CAO in relation to this project relates to the bypass of Fume Treatment Centers (FTCs), which clean emissions from the plant's carbon anode bake house. The bypass operation ran for a period of 134 days from November 2010 to March 2011 during which time plant's emission levels were increased.

The complaint argues that Mozal's bypass program – which allowed stack emissions to bypass the FTCs while these were being rebuilt – would result in harmful exposure to people and the environment. The complaint also raises questions about IFC's environmental and social (E&S) due diligence in relation to the bypass program, and what is perceived as a lack of access to and disclosure of relevant information.

CAO deemed the complaint eligible for assessment in October 2010 and a CAO ombudsman team traveled to the field in December 2010 to meet with the complainants, company representatives, and IFC team working on the project. The ombudsman assessment aimed to understand the perspectives of all the parties and explore options for resolution of the issues raised. In January 2011, the CAO conducted a second trip to discuss the draft assessment report with the parties and next steps. The company and complainants agreed to pursue a CAO dispute resolution process to attempt to resolve the issues raised and jointly agreed to ground rules outlining the suggested topics for discussion during the dialogue meetings.

As part of the dispute resolution process, the parties met on several occasions between February and June 2011. The ground rules paved the way for a negotiation that resulted in the drafting of several proposals. The process did bring the parties closer to an understanding of one another's concerns and potential solutions and Mozal agreed to disclose information with the coalition about the bypass program.

Although the parties worked toward a final agreement on all the issues, an agreement was not reached and the NGO coalition requested that the complaint be referred to CAO's compliance function.

## 2. Summary of Findings from the CAO Compliance Appraisal

In its compliance appraisal CAO found that, having been made aware of an imminent risk of total failure of the FTCs in March 2010, IFC took reasonable steps to assure itself that Mozal was taking necessary measures to identify, assess and rectify the problem. Similarly though advance measures to engage with communities around the bypass were lacking, CAO found that IFC took appropriate action in advising its client once this issue was identified.

The CAO compliance appraisal also concluded that while ambient air quality remained mostly within relevant limits during the rebuild, research commissioned by Mozal provides sufficient evidence that, from a public health perspective, polyaromatic hydrocarbons (PAH) emissions from the plant should be minimized both in concentration and duration.<sup>1</sup>

The CAO compliance appraisal process did not, however, support a conclusion on whether IFC was sufficiently proactive in its supervision of the risk of total failure of the FTCs or whether more proactive supervision of this risk would have provided opportunities to advise Mozal in relation to techniques that in turn could have: (a) mitigated the corrosion problem; (b) facilitated the management of the resulting maintenance in ways that minimized emissions, or (c) contributed to prior informed consultation with the community.

CAO's decision as outlined in its appraisal report dated July 24, 2012 was to conduct a compliance audit focusing on:

- (a) The extent to which the risk of corrosion of the FTCs could have been foreseen;
- (b) The extent to which this risk was appropriately supervised by IFC;
- (c) The extent to which enhanced supervision of this risk could have provided opportunities for IFC to advise its client in relation to measures that might have mitigated or allowed earlier detection of the problem; and
- (d) The extent to which IFC policies and procedures provide appropriate guidance on the scope of Environmental & Social supervision, particularly in relation to the monitoring of known risks to E&S performance, and preventative actions.

## 3. CAO Audit Terms of Reference

Terms of reference for this audit were finalized in October 2012.

In the course of drafting these terms of reference IFC and CAO reached agreement in relation to the following points which are relevant to defining the scope of the audit:

---

<sup>1</sup> See CSIR, *An Assessment of Impacts on Air Quality as a Result of the Proposed Fume Treatments Centre (FTC) Rebuild at Mozal* (February 2011).

- (a) IFC took reasonable steps to assure itself that the engineering designs for the project met or exceeded good international industry practice at the time of its investment in Mozal;
- (b) According to Mozal's 2001-2002 Annual Monitoring Report (AMR) repairs to corrosion in the FTCs required the plant to run on FTC bypass for a period of 62 days through to November 16, 2001;
- (c) Mozal reports having conducted further major repair work to the FTCs in 2005, 2006, 2007 and 2008. Further, tests conducted in 2007 predicted that the FTC cooling tower would reach critical thickness within two years.
- (d) IFC first became aware of the likely need to replace the FTCs during a supervision visit in October 2009. Further information regarding the corrosion of the FTCs, which by this time had become critical, was transmitted to IFC in March 2010.
- (e) The fact that the need for the rebuild had become critical before IFC became aware of it, meant that preparation for the bypass operation occurred in a time frame that was sub-optimal from IFC's perspective. With more advance notice IFC would have been in a better position to advise its client in relation to the E&S impacts of the bypass.
- (f) IFC's approach to the supervision of E&S risks is designed to be proactive; if changed project circumstances would result in adverse E&S impacts, IFC is committed to working with the client to address them; similarly IFC expects its clients to monitor their E&S management programs using dynamic mechanisms, adjusting monitoring according to performance experience and feedback and thereby identifying and reflecting the necessary corrective and preventative actions in amended management programs (paraphrase from Policy on Social and Environmental Sustainability and Performance Standard 1); if serious incidents occur IFC is committed to following up to ensure that the root causes of the incident are being investigated and appropriate corrective action is taken (paraphrase from Environmental and Social Review Procedure).

The approach to the audit is described in the CAO Operational Guidelines (April 2007), and states that the working definition of compliance auditing adopted by CAO Compliance is as follows:

A compliance audit is a systematic, documented verification process of objectively obtaining and evaluating evidence to determine whether environmental and social activities, conditions, management systems, or related information are in conformance with the audit criteria.

The audit will typically be based on a review of documents, interviews, observation of activities and conditions, or other appropriate means. The verification of evidence is an important part of the audit process.

Given, however, the points of agreement summarized above, in this case, CAO is in a position to finalize its audit without significant further investigation.

#### 4. Audit Findings

CAO recognizes that IFC has limitations on the scope of its engagement with clients. In particular it is noted that the IFC Sustainability Framework does not establish a general obligation for IFC to supervise process operational risks encountered by its clients. Nevertheless, IFC is committed to investing in such a way that negative E&S impacts are avoided where possible (Sustainability Policy, para 8). Reflecting this commitment, CAO finds that in cases where a piece of equipment or system that is essential to delivering on a client's E&S commitments is known to have failed, or to be at significant risk of failure, the approach to supervision outlined in paragraph (f) above would require IFC to advise its client that such risks need to be assessed, monitored and reported on in accordance with the Performance Standards. Further, if future failure of said equipment or system can reasonably be anticipated, the same approach to supervision would require IFC to advise its client to develop contingency plans that are commensurate with the nature and magnitude of the identified risk.

In the case of Mozal, CAO acknowledges the steps IFC took to assure itself that the engineering designs for the project met or exceeded good international industry practice at the time of its investment. In particular, CAO notes IFC's position that the design work was done by Fluor, considered one of the leading global engineering firms for this application; that the latest Pechiney technology was selected; and that a highly reputable global process plant consultancy, Hatch, was the lender's Engineer.

While acknowledging the position of the IFC team that it would be unreasonable to expect IFC, as a lender, to question the validity of the conclusions reached by the client and its highly qualified design team, CAO finds that the history of issues around the functioning of the FTCs gave rise to a situation in which it would have been appropriate for IFC to take a more proactive approach to the supervision of risks associated with the failure of the FTCs.

In relation to this history, CAO notes that repairs to corrosion in the FTCs required the plant to run on FTC bypass between September and November 2001 (a fact that was reported to IFC in Mozal's 2002 AMR). Subsequent to this event, CAO notes that the FTCs required major repair work in 2005, 2006, 2007 and 2008; as well as tests conducted in 2007 which predicted that the FTC cooling tower would reach critical thickness within two years (facts which were only reported to IFC once Mozal had identified the need for the FTC rebuild in 2010). In this context CAO also notes statements attributed to the Asset President for Mozal at BHP Billiton that identified the causes of the failure of the FTCs in suboptimal engineering, overproduction and inadequate repairs.<sup>2</sup>

While CAO accepts IFC's position that this history demonstrates Mozal's ongoing attention to the problem, CAO also finds that it indicates a risk of failure of the FTCs that could reasonably have been anticipated well before the need for a rebuild was

---

<sup>2</sup> Johannes Myburgh, 'Mozal comes under Fire,' *fin24* (06 March 2011), available at <http://www.fin24.com/Companies/Mining/Mozal-comes-under-fire-20110306>

communicated to IFC. In these circumstances CAO finds that it would not have been an unreasonable imposition for IFC, after it became aware of the 2001 corrosion incident, to have requested that Mozal assess, monitor and report regularly on its approach to the management of risks associated with the possible future failure of the FTCs.<sup>3</sup> Further, and here CAO and the IFC team agree, with a view to facilitating interactions with local communities and given the history of corrosion problems and equipment failure, it would have behooved Mozal and IFC to have communicated earlier with regard to the impacts on ambient concentrations of key pollutants in the case of total failure of the FTCs.

Analyzing the reasons why engagement with these risks did not feature as part of E&S supervision, CAO finds that both IFC and Mozal assumed that the risk of failure of the FTCs was outside the scope of their reporting relationship so long as agreed FTC uptime and point emission targets were being met. This suggests to CAO an unduly narrow interpretation of the Sustainability Framework; and one that could be clarified in a way that enhanced IFC's approach to the management of environmental and social risk without placing unrealistic expectations on IFC staff or its clients.

## **5. Conclusion**

In conclusion, CAO finds that IFC's supervision of E&S risks associated with the failure of the FTCs at Mozal fell short of that required by the policies and standards summarized above. In particular CAO finds shortcomings in the way IFC carried out its duty under the Policy on Social and Environmental Sustainability (2006, para 26) to work with the client to address E&S risks that emerged with changing project circumstances in the period between becoming aware of the 2001 bypass operation and the need for the 2010/11 FTC rebuild.

While ambient air quality around the Mozal plant remained mostly within relevant limits during the rebuild, the facts surrounding this complaint give rise to more general concerns regarding the existence of systems to ensure that a client's PS1 duty to proactively identify and respond to emerging E&S risks during implementation is appropriately supervised (2006, para. 24). Having in place systems for identifying and responding to such risks, CAO finds, is crucial to delivering on IFC's commitment to minimizing the adverse environmental and social impacts of its investments.

---

<sup>3</sup> This might have been done, for example, by requesting the insertion of a new heading in the AMR along the lines of "Identification and Management of Emerging E&S Risks."