

Intended for  
International Finance Corporation; Overseas Private Investment Corporation; BNP Paribas;  
ING Bank, a branch of ING-DiBa AG; Natixis; and La Banque Internationale pour le  
Commerce et L'Industrie de la Guinée 'BICIGUI SA'

together, the Original Lenders and other Lenders as defined in the common terms agreement  
to be entered into between, among others, the Original Lenders, the Bank of New York  
Mellon and Compagnie des Bauxites de Guinée from time to time.


Date  
**9<sup>th</sup> October 2017**

Project Number  
**UK14-23656**

# **CBG BAUXITE MINE EXPANSION ENVIRONMENTAL AND SOCIAL MONITORING REPORT - JULY 2017**

**CBG BAUXITE MINE EXPANSION  
ENVIRONMENTAL AND SOCIAL MONITORING REPORT  
- JULY 2017**

Project No. **UK14 23656**  
Issue No. **1**  
Date **9 October 2017**  
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## CONTENTS

### GLOSSARY OF TERMS/ ACRONYMS

#### EXECUTIVE SUMMARY

		<b>I</b>
<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2.</b>	<b>SCOPE AND STRUCTURE OF THE REPORT</b>	<b>3</b>
2.1	Scope of the monitoring visit	3
2.2	Summarised itinerary	3
2.3	Project standards	4
2.4	Structure of the report	5
2.5	Limitations	5
<b>3.</b>	<b>PROJECT STATUS</b>	<b>6</b>
3.1	Status of the Expansion Project at time of the audit	6
<b>4.</b>	<b>SIGNIFICANCE ASSESSMENT</b>	<b>7</b>
4.1	Review findings	7
4.2	Assessment of significance	7
<b>5.</b>	<b>PERFORMANCE STANDARD 1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS</b>	<b>9</b>
5.1	Management systems	9
5.2	HSEC responsibilities and resources	9
5.3	Contractor management	10
5.4	Environmental and Social Impact Assessment	10
5.5	Environmental and Social Management Plan (ESMP)	10
5.6	Constraints mapping	11
5.7	Stakeholder engagement	11
5.8	Grievance mechanism	12
5.9	Emergency planning	13
5.10	Security management plan	14
5.11	Audit and inspection	14
5.12	Management of change	14
<b>6.</b>	<b>PERFORMANCE STANDARD 2: LABOR AND WORKING CONDITIONS</b>	<b>19</b>
6.1	Introduction	19
6.2	Employment and employees	19
6.3	Workers' accommodation	19
6.4	Workers' grievance mechanism	20
6.5	Occupational health and safety	20
<b>7.</b>	<b>PERFORMANCE STANDARD 3: RESOURCE EFFICIENCY AND POLLUTION PREVENTION</b>	<b>23</b>
7.1	Introduction	23
7.2	Waste water treatment	23
7.3	Surface water drainage (Kamsar)	23
7.4	Surface water drainage (Sangarédi)	24
7.5	Land contamination	24
7.6	Waste management	24
7.7	Environmental monitoring	25
7.8	Dredging	26
7.9	COBAD Road	26
<b>8.</b>	<b>PERFORMANCE STANDARD 4: COMMUNITY HEALTH, SAFETY, AND SECURITY</b>	<b>31</b>
8.1	CHSMP and SMP	31
8.2	Use of haul roads by locals	31
8.3	Creation of steep sided slopes at mined areas	31

8.4	Railway safety	31
8.5	Social unrest	32
<b>9.</b>	<b>PERFORMANCE STANDARD 5: LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT</b>	<b>35</b>
9.1	Introduction	35
9.2	Hamdallaye and Fassaly Foutabhé: recent/current situation	35
9.3	Mine plan changes: Land acquisition and involuntary resettlement implications	41
9.4	Resettlement: Institutional capacity	42
9.5	Past compensation and grievances close-out	43
9.6	COBAD Road: Land acquisition and involuntary resettlement	44
<b>10.</b>	<b>PERFORMANCE STANDARD 6: BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES</b>	<b>51</b>
10.1	Introduction	51
10.2	Resources	51
10.3	Biodiversity monitoring studies and on-site offset	52
10.4	Creation of plateau-by-plateau management units	53
10.5	Routine environmental inspections	54
10.6	Land disturbance permit	55
10.7	Ecosystem services and stakeholder engagement	56
10.8	Review and update of the BMS	57
10.9	Piling at the mineral quay	57
10.10	COBAD Road	58
10.11	Vultures	59
<b>11.</b>	<b>PERFORMANCE STANDARD 8: CULTURAL HERITAGE</b>	<b>63</b>
11.1	Cultural heritage management documents	63
Appendix 1	Audit itinerary	
Appendix 2	Project Documentation made available for review	
Appendix 3	Photo log	

## GLOSSARY OF TERMS/ ACRONYMS

<b>Acronym</b>	<b>Abbreviation</b>
BAP	Biodiversity Action Plan
BMS	Biodiversity Management System
CBG	Compagnie des Bauxites de Guinée
CFP	Chance Finds Procedure
CHMP	Cultural Heritage Management Plan
CHSMP	Community Health and Safety Management Plan
CTA	Common Terms Agreement
DMP	Dredge Management Plan
EEM	CBG's Environmental Consultants
EHS	Environmental, Health and Safety
EPCM	Engineering, Procurement, Construction Management
ERP	Emergency Response Plan
ESAP	Environmental and Social Action Plan
E&S	Environmental and Social
ESMP	Environmental and Social Management Plan
H&S	Health and Safety
HSE	Health, Safety and Environment
HSE&S	Health, Safety, Environment & Social
HSEC	Health, Safety, Environment and Communities
IESC	Independent Environmental and Social Consultant
IFC	International Finance Corporation
KBA	Key Biodiversity Area
LDP	Land Disturbance Permit
LR	Livelihood Restoration
LRP	Livelihood Restoration Plan
MMOs	Marine Mammal Observers
MoC	Management of Change
MS	Management System
MSDS	Materials Safety Data Sheets
NPIVP	Net Positive Impact Verification Panel
OHS	Occupational Health and Safety
OPIC	Overseas Private Investment Corporation
PAP	Project-Affected Person
PPE	Personal Protective Equipment
PS	Performance Standard
Ramboll Environ	The IESC
RAP	Resettlement Action Plan
RN	Route Nationale
SEP	Stakeholder Engagement Plan
SMP	Security Management Plan
WBG	World Bank Group
WWT	Waste Water Treatment

## EXECUTIVE SUMMARY

In early July 2017, Ramboll Environ UK Ltd (Ramboll Environ), acting in the role of Independent Environmental and Social Consultant (IESC) with a duty of care to Lenders<sup>1</sup>, visited the Compagnie des Bauxites de Guinée (CBG) bauxite mine in Guinea to monitor the environmental and social performance of the Expansion Project. In addition to monitoring of the Expansion Project, Ramboll Environ was tasked with assessing the Health, Safety, Environment and Social (HSE&S) performance of CBG's ongoing mining operations (the 'Operations').

The July 2017 visit followed the first monitoring visit by Ramboll Environ ('Ramboll Environ' is used interchangeably with 'IESC' hereafter) which occurred in November 2016. During the July 2017 visit, Ramboll Environ was joined by representatives of the Policy Lenders, namely representatives from the International Finance Corporation (IFC) and the Overseas Private Investment Corporation (OPIC). A three-person team from Ramboll Environ assessed CBG's HSE&S performance associated with: the Expansion Project (construction); ongoing operations; and the construction/forthcoming use of the COBAD Haul Road located within CBG's concession. During the monitoring visit, emphasis was given to:

- The implementation of the Expansion Project's Environmental and Social Action Plan (ESAP);
- The adequacy of the HSE&S Management System(s);
- Performance of CBG's main contractors working on the Expansion Project;
- The implementation of a suite of environmental and social management plans intended to address applicable Project Standards, notably the IFC Performance Standards; and
- Follow-up on those issues identified during the November 2016 site visit.

At the time of the monitoring visit Ramboll Environ was unable to meet with community stakeholders in Kamsar because of recent social unrest, but was otherwise unhindered. Throughout the monitoring process, CBG cooperated fully and responded to all Ramboll Environ's requests in relation to the audit effort.

The findings presented in this report should be incorporated within CBG's assurance programme(s), with documentary evidence of corrective actions and close-out of issues provided periodically. The IESC will undertake desk-top review of subsequent documentation and, also, undertake a further monitoring visit in approximately six months from the date of the July 2017 visit during which the issues identified in this report will be revisited and the progress in addressing the issues confirmed.

The monitoring visit covered a broad range of health, safety and environment and social matters. CBG has a large team of HSE and Community Relations specialists that are working to satisfy the requirements of the ESAP, however, despite considerable efforts, there remains a lot of work to be completed. A total of 39 findings were identified during the monitoring visit. Of these 7 are considered High; 22 are Moderate and the remainder considered to be of Minor significance. The High findings relate to the timing/urgency/compliance of necessary actions as follows:

- There is a need to supplement the Health, Safety, Environment and Communities (HSEC) team, and in particular, recruit a high-calibre dedicated HSEC Manager thereby allowing others currently covering the HSEC Manager's roles to refocus their efforts elsewhere. This is particularly relevant to the Biodiversity Manager because he is covering many of the HSEC Manager's tasks and is therefore being distracted from important biodiversity related tasks;
- Implementation of certain management plans that are behind schedule with potential to result in material adverse effects, e.g. Management of Change procedure;

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<sup>1</sup> Lenders as defined on the cover page of this report.

- Finalisation of the ESIA Addendum for the COBAD Road is required, including confirmation of critical mitigation measures and the parties responsible for financing and implementation of these mitigation measures;
- During finalization of the ESIA Addendum for the COBAD Road clear statements are required on which settlements/households require relocation with justifications. Also, the livelihood strategy followed by the inhabitants of Hairé Hounsiré Woyoh is to be determined, by a specific investigation, as an input to decisions/s on potential relocation. Subsequently, Resettlement Action Plan/s and or Livelihood Restoration Plans to be prepared as appropriate for resettlement actions;
- Restoration of COBAD Road river crossings is yet to be initiated with no clear agreement on responsible parties to complete the works. There is significant risk from sedimentation into gallery forest and watercourse critical habitats; and
- Rejuvenation of constraints mapping for new mining areas and the development of plateau-by-plateau management units as a priority, as soon as additional information becomes available from other studies, to ensure adequate protection is provided particularly to springs, watercourses and chimpanzee hotspots.

## 1. INTRODUCTION

Ramboll Environ UK Limited (Ramboll Environ) was commissioned in September 2016<sup>2</sup> by Compagnie des Bauxites de Guinée (CBG) to undertake environmental and social monitoring of the 18.5MTPa Mine Expansion Project (the 'Project' or 'Expansion Project'), Guinea.

In fulfilling the role of Lenders' Independent Environmental and Social Consultant (IESC), Ramboll Environ has a duty of care to the Lenders to the Project, including the Policy Lenders International Finance Corporation (IFC), Overseas Private Investment Corporation (OPIC) and UFK (together the 'Policy Lenders') and a consortium of commercial banks (collectively with the Policy Lenders referred to as the 'Lenders').

This report provides our findings following a monitoring visit (also referred to interchangeably as an audit) of the Project that has included an assessment against applicable Project Standards, specifically, IFC Performance Standards and applicable World Bank Group (WBG) Environmental, Health and Safety (EHS) guidelines, thereby identifying any environmental and social risks associated with the Project's realisation. Ramboll Environ visited CBG's mining facilities and the Expansion Project facilities in July 2017.

Face-to-face interviews were held primarily with CBG:

- Senior Management;
- Health, Safety and Environment (HSE) Team (Expansion Project and Operations);
- Community Relations Team;
- Resettlement Manager;
- Personnel Director; and
- Security and Fire Department Managers.

Meetings were also conducted with key Expansion Project Contractors, including Fluor the Engineering, Procurement, Construction Management (EPCM) Contractor, Tecnasol and Sogea Satom. In addition, a discussion was held with the Operations Manager of Aden Services about workers' accommodation during a visit to the RBQ and Base vie accommodation facilities.

A team of three from Ramboll Environ comprising of Chris Halliwell, Peter Burston and Ron Bisset, accompanied by E&S specialists from IFC and OPIC, travelled to Guinea to assess CBG's progress towards meeting the requirements of the Environmental and Social Action Plan (ESAP) and the various management plans therein, and more broadly CBG's overall HSE and Social performance. The same team from Ramboll Environ had previously visited the CBG concession in November 2016 and was therefore already familiar with CBG's ongoing operations, although at that time very little construction work associated with the Expansion Project was under way. Therefore, Ramboll Environ has largely concentrated its efforts on construction activities associated with the Expansion Project, whilst also following up on issues raised following the November 2016 visit. More specifically, the trip presented Ramboll Environ with an opportunity to:

- Re-visit the Sangarédi mining facilities;
- Visit the Expansion Project construction areas (excavation of the primary crusher pit and mineral quay extension) and gain a good appreciation of ongoing construction activities at the mine and port areas;
- Meet with CBG's main construction contractors for the Expansion Project;

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<sup>2</sup> Ramboll had previously been commissioning to undertake the original Environmental and Social Due Diligence and was reappointed in September 2016 for the IESC monitoring role.



- Visit key sensitivities within the concession including critical habitats and villages that will be relocated or experience economic displacement;
- Participate in face-to-face interviews with the Health, Safety, Environment and Community (HSEC) team members including individuals tasked with leading on;
  - Biodiversity;
  - H&S;
  - Social issues, specifically stakeholder engagement and resettlement;
  - Personnel;
  - Security;
  - Emergency planning; and
  - Environmental monitoring;
- Inspect the full length of the COBAD Road (previously only Section 1 and 2 could be viewed).

The IESC team spent 5 days on site viewing mining and auxiliary activities around Sangarédi, the COBAD Road within the CBG concession area and the bauxite processing facilities at Kamsar. Visits were also made to locations of interest including villages which are experiencing land acquisition /resettlement actions associated with the Expansion Project and those that are likely to experience either land acquisition and/or resettlement actions soon associated with the COBAD Road. In 2 villages, formal meetings were held with chefs du village, elders and community members. The full site visit itinerary is provided in Appendix 1.

Throughout the site visit the Ramboll Environ team were granted full access to all facilities/sites and received full cooperation from the HSEC team. CBG provided all necessary vehicles with drivers and HSEC team members to escort the IESC and Policy Lenders. The Ramboll Environ team (and Policy Lenders) therefore split on several occasions to focus on the team members' disciplines, namely, environmental (excluding biodiversity), social and biodiversity. The report presents key visit findings in sections which use the key IFC Performance Standards, that cover the issues investigated during the monitoring visit, as headings. The report makes extensive use of photographs taken during the site visit.

This site visit report focuses on the observations made during the site visit; however, it also refers to earlier reviews and reports where necessary reflecting the ongoing nature of ESAP deliverables and Ramboll Environ's review work.

## 2. SCOPE AND STRUCTURE OF THE REPORT

### 2.1 Scope of the monitoring visit

As a condition of the Common Terms Agreement (CTA), CBG is required to appoint an IESC to monitor (audit) and report on the implementation of the ESAP and compliance with IFC Performance Standards and Project Environmental and Social (E&S) commitments. For the purposes of this report we refer to monitoring and auditing interchangeably.

This report details the Project's compliance with the applicable Project Standards, and in doing so, presents environmental and social risks associated with the Project. It has been prepared for the attention of CBG and Lenders.

The report presents the findings of the audit based on information gained following:

- A review of ESAP implementation;
- A review of Health, Safety, Environment and Communities (HSEC) Management System documentation;
- Interviews held with key HSEC staff within CBG;
- Interviews with other CBG functions including Security, Personnel and facility managers (workers' accommodation in Kamsar and, also, maintenance workshop);
- Interviews held with Contractor's HSE representatives and Construction Managers;
- Visit to new Hamdallaye village site, COBAD Road, rail transfer yard and other sites in the concession area; including meetings in 2 villages to discuss resettlement issues; and
- Visual observations made during walkover inspection of Expansion Project and Operations facilities.

A full list of Project documentation reviewed during preparation of this report is provided in Appendix 2.

### 2.2 Summarised itinerary

The site visit was undertaken between 30th June and 6th July 2017. The tasks performed during this period are summarised below and detailed in the audit itinerary (Appendix 1).

1st July	Travel to Kamsar and opening meeting (office based with possible exception of biodiversity team in late afternoon)
2nd July	Sangarédi - visit active mining areas Visits to future displaced communities Key Sensitive biodiversity areas
3rd July	COBAD Road (all sections)
4th July	Kamsar landfill Active construction sites e.g. crusher Meetings with HSE team/management in the office Visit to key biodiversity sensitive areas
5th July	Visit to Kamsar facilities (quay area); Office based interviews and Close-out meeting (pm)
6th July.	Office-based meetings (am) and depart for airport

Meetings/interviews with CBG representatives primarily concerned the management and monitoring of the following Project HSE&S aspects:

- Emergency response planning;
- Water management
- Waste management;
- Biodiversity;
- Audit and inspection programme;
- Management of change;
- Physical relocation and livelihood restoration planning and management;
- Past compensation analysis;
- Environmental monitoring;
- Stakeholder engagement/Grievance Mechanism;
- Occupational Health and Safety (OHS) plans and procedures;
- Security management;
- Community Safety (railway safety);
- Labour and working conditions; and
- Cultural heritage management (including Chance Finds Procedure).

Meetings were also conducted with the Fluor, the EPCM Contractor and the main Expansion Project Construction contractors, Tecnasol (excavation of the crusher pit) and Sogea Satom (extension of the mineral quay). In addition, a discussion was held with the Operations Manager of Aden Services (responsible for management of workers' accommodation), during a visit to the RBQ and Base vie camps.

### 2.3 Project standards

In accordance with Ramboll Environ's Terms of Reference, the Project was assessed against the following standards and guidelines:

- Applicable laws and regulations of Guinea;
- Specific commitments made by CBG and requirements specified in the ESAP;
- IFC Performance Standards (2012) including:
  - PS1: Assessment and Management of Environmental and Social Risks and Impacts;
  - PS2: Labour and Working Conditions;
  - PS3: Resource Efficiency and Pollution Prevention;
  - PS4: Community Health, Safety, and Security;
  - PS5: Land Acquisition and Involuntary Resettlement;
  - PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
  - and
  - PS8: Cultural Heritage; and
- WBG Environmental Health & Safety (EHS) Guidelines applicable to the Project.

PS7 (Indigenous Peoples) was excluded from the scope of the audit on the basis that the Environmental and Social Due Diligence performed prior to financial close concluded no Indigenous Peoples are affected by the Project.

## **2.4 Structure of the report**

Section 3 provides a description of the Project status. Section 4 describes how different levels of significance are attributed to issues highlighted in the report. The report is then structured around the seven IFC Performance Standards applicable to the Project as listed above. The key issues identified during the audit and IESC recommendations to address issues are summarised in 'significance tables' for each Performance Standard.

Within the report, we have endeavoured to provide a balanced opinion, providing examples of good practice. However, due to the nature of a compliance report, and the broad range of aspects covered, and for the sake of brevity, the report does focus on areas for improvement.

## **2.5 Limitations**

At the time of the visit, construction in Kamsar was well underway. Ramboll Environ experienced no constraints except Ramboll Environ, following CBG advice, chose not to engage with local community members in Kamsar because of recent community unrest.

Ramboll Environ only considered activities relevant at the time of audit based on ongoing Project activities/activities planned for the near future. Previous issues, including detailed review of management plans, have been reported elsewhere and future activities will be the subject of forthcoming monitoring visits.

### 3. PROJECT STATUS

This section is intended to provide a brief description of the Project activities ongoing at the time of the visit.

#### 3.1 Status of the Expansion Project at time of the audit

At the time of the audit construction of the Expansion Project was well underway with 1,260 construction personnel on site. Key activities as follows:

- Workers' accommodation almost completed;
- Primary crusher and conveyor trench – diaphragm wall closed and second ring beam 50% complete (Appendix 3, photos 27 and 29);
- Foundations in place for the secondary crusher;
- Marine dredging is completed;
- Mineral quay – 72 piles out of a total of 148 installed (Appendix 3, photos 34 - 36);
- Railway sidings – good progress being made;
- Hamdallaye (new) – demarcation of land plots with first tree planting scheduled for later in the month and construction of new houses in November 2017; and
- Fassaly Foutabhé – identification of a site for new school and new route for access to the Route Nationale (RN) 3<sup>3</sup>.

A total of 22 contractors have been commissioned. The two main contractors active at the time of the audit were Tecnasol with responsibility for the crusher pit diaphragm walls and crusher pit excavation and Sogea Satom with responsibility for construction of the mineral quay extension and marine dredging works.

At the time of the visit it was estimated that 20% of the construction effort was complete [Ref. 01].

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<sup>3</sup> The RN 3 is the national road from Conakry and Boké to Sangarédi.

## 4. SIGNIFICANCE ASSESSMENT

### 4.1 Review findings

A summary of the review findings is presented in a significance table at the end of each section. For each item, we present:

- The topic/aspect;
- A description of the issue, for example deficiencies or omissions;
- The phase(s) to which an issue relates;
- Identification of the standard(s) against which the deficiency has been identified;
- Ramboll Environ's recommendation, where applicable, to resolve/manage the deficiency; and
- The significance on a three-point scale (see below for criteria).

### 4.2 Assessment of significance

A ranking system has been used to indicate the relative significance of an issue identified during the monitoring visit. As well as highlighting the most important areas requiring attention, it can also be used to aid the tracking and rectification of specific items requiring improvement.

Identified issues have been placed into one of the following three categories:

**Minor:** Minor non-compliance, risk or minor technical breach of Applicable Standards and commitments with no material, actual or likely potential environmental or social consequences; or significant human injury or harm.

**Moderate:** Moderate non-compliance or risk with actual or likely potential localised and short-term environmental or social consequences; minor human injury or harm; or material short-term breach of Applicable Standards and commitments.

**High:** Major non-compliance or risk with actual or likely potential spatially extensive and/or long-term environmental or social consequences; serious human injury/death or harm; or material and extensive breach of Applicable Standards and commitments.

**Not Applicable** Item is noteworthy, but it is not an issue of non-compliance.

Where time critical recommendations for specific actions are made a timeframe linked to Construction/Operational phase milestones is indicated in the 'IESC recommendations' column. Time critical issues can lead to a higher classification of significance.

**Table 4-1: Example of the summary table format**

ID	Aspect	Issue Description	Phase <sup>4</sup>	Standard	IESC Recommendations	Significance
00	Storm water run-off – monitoring	The ESAP requires <i>Company X</i> monitors the quality of surface water run-off from facilities.	Ops	WBG EHS Guidelines  ESAP	<i>Company X shall Expedite procurement of monitoring equipment with the support of senior management.</i>	<b>Moderate</b>

<sup>4</sup> Phases can include: construction; operations; decommissioning or; any combination of these phases.

CBG Bauxite Mine Expansion

ID	Aspect	Issue Description	Phase <sup>4</sup>	Standard	IESC Recommendations	Significance
		To date the Company has been unable to procure monitoring equipment – no monitoring has been undertaken.				

## 5. PERFORMANCE STANDARD 1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

### 5.1 Management systems

In November 2016, Ramboll Environ reported that CBG was aiming for ISO14001 and OHSAS 18001 certification in 2017. In March 2017, CBG Operations successfully obtained several certificates as follows:

- ISO14001 Environmental Management System certification. Certificate ref no. 2017/74565.1 issued by AFNOR;
- OHSAS 18001 Occupational Health and Safety Management System certification. Certificate ref no. 2017/74563.1; and
- ISO9001 (Quality) Management System certification. Certificate Ref no. 2017/74564.1.

All certificates were issued on 10<sup>th</sup> March 2017 and covered mining, transportation, processing and ship loading at CBG's areas of operation in Kamsar and Sangarédi.

In addition to CBG's management systems, contractors similarly have their own certified management systems.<sup>5</sup> For the Expansion Project, Fluor mainly uses its own policies and procedures, especially in terms of safety management. Fluor policies and procedures were reviewed by the CBG HSEC Manager before their use. Fluor operates a robust audit programme for the Expansion Project (see Section 5.9).

It is the IESC's opinion that there is a strong HSE culture in contractors which is reinforced by Fluor. CBG's progress in attaining certification of its management systems is welcomed and provides a framework for continuous improvement. Close interaction with Fluor and other contractors during construction of the Expansion Project will provide valuable opportunities for the transfer of good practice knowledge and an enhanced HSE culture within CBG.

### 5.2 HSEC responsibilities and resources

#### 5.2.1 HSEC Manager (Expansion Project)

At the time of the site visit, CBG was in the process of recruiting a replacement Expansion Project HSEC Manager following the resignation of the previous HSEC Manager in April/May 2017. The responsibilities of the HSEC Manager are currently being split between the Biodiversity Manager and the Environmental Monitoring Specialist, with additional support also being provided by CBG's Environmental Consultants, EEM. It is the IESC's view that, although this provides a solution in the short term, individuals are being distracted from their primary roles and recruitment of a very experienced HSEC Manager is a high priority. Furthermore, the ESAP includes a requirement for CBG to '*Employ a dedicated full time Health, Safety, Environment & Communities Manager under Terms of Reference agreed with Lenders.*' As such, CBG is technically out of compliance with the ESAP.

#### 5.2.2 Community Relations

The Community Relations team remains stable and effective under the leadership of Carine Gracia. There are 4 staff members based in Kamsar and 1 based in Sangarédi. It is planned to recruit 2 more staff members: both to be based in Sangarédi, with one of them being at 'co-ordinator' level. The new appointments will be an asset given the scale of actions needed to implement the Action Plan for Community Consultations and Sensitization for the period 2017-2018 (see Section 5.7 for more details on the Action Plan) and their recruitment is a priority.

<sup>5</sup> Sogea Satom had ISO14001, ISO 9001 and OHSAS 18001 certificates displayed in its offices.



Staff resources and responsibilities for CBG's resettlement-related activities are discussed in Chapter 9.

### 5.3 Contractor management

CBG has contracted Fluor as its EPCM contractor. Fluor in turn commissions other contractors to undertake specific construction tasks. All sub-contractors are required to satisfy the same 'CBG Environmental and Social Requirements' as specified in Attachment S of Contractors' agreements [Ref. 02].

Attachment S defines Environmental and Social Standard with reference to IFC Performance Standards, the EHS guidelines, and OPIC's Consolidated Environmental and Social Policy. It also refers to the Owner's Environmental and Social Management Plan (ESMP) as follows: '*the requirements of the ESMP, to the extent instructed by Owner pursuant to paragraph 0*' (emphasis added by Ramboll Environ). The contractual wording clearly places the responsibility for instructing sub-contractors on CBG as the Owner. The mechanism for communication between CBG and Fluor's sub-contractors needs to be further understood by Ramboll Environ. During a meeting with Fluor's HSE representative Ramboll Environ was informed that, although Fluor had participated in several meetings with CBG on the subject, clear instruction outlining specific mitigation measures applicable to for each contractor, had not been provided to Fluor.

### 5.4 Environmental and Social Impact Assessment

During the site visit, Ramboll Environ was made aware of additional work being prepare an Addendum to the original Expansion ESIA Report. The Addendum is required to assess the impacts of mining activities in the south-east of the concession which is required to meet the required bauxite production rates following a delay in the financing process. EEM explained that Lenders and Ramboll Environ had been informed within the context of the biodiversity documentation, however neither the Ramboll Environ Project Manager nor the Policy Lenders present on the trip had knowledge/memory of the Addendum. Ramboll Environ was informed that the change was agreed prior to the finalisation of the Management of Change (MoC) Procedure.

Dates for the delivery of the Addendum have not been agreed, however it is anticipated the Addendum will be available in late October 2017.

### 5.5 Environmental and Social Management Plan (ESMP)

The ESAP includes a requirement to '*Update the ESMP to include the existing CBG operations, the Phase 1 Expansion and any future expansions*' by 31 March 2018. To meet this timeframe CBG has requested support from EEM. Ramboll Environ was informed that EEM has undertaken a gap analysis between 23 May-23 June 2017 comparing CBG's Operations with the ESMP for the Expansion Project. EEM reported that many of the system elements are in place, but also identified several gaps and categorised these by magnitude<sup>6</sup> and is in the process of upgrading CBG's existing management system (MS). At the same time, Ramboll Environ is aware that CBG has also commissioned a separate study by an ex Rio Tinto employee, now a freelance consultant, and is considering adopting elements of the Rio Tinto MS. During the meeting it was apparent that EEM was unaware of the second study and there was concern that two separate paths might be taken.

Ramboll Environ recommends that the various functions within CBG and EEM coordinate to ensure there is no duplication of effort/compatibility of the two work streams. CBG should also provide a 'cost of implementation' to Policy Lenders for the ESMP update by March 2018 ESAP

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<sup>6</sup> Results of the gap analysis indicate 6 small, 15 medium and 8 large gaps.

item. Furthermore, IFC also requested an outline budget for CBG's alignment (full implementation) of HSEC MS for existing operations with HSEC MS for the Expansion Project, as required in the ESAP (by 2024)<sup>7</sup>.

### 5.6 Constraints mapping

During the site visit, CBG's mining engineering department expressed a desire for clear guidance about any environmental and social constraints for new mining areas, for example, a standard buffer zone for any environmental sensitivity. Members of the HSEC team and EEM correctly indicate that a standard size buffer zone is too simplistic an approach to be applied across mining areas, potentially being over or under conservative. Instead the HSEC team would prefer to develop specific measures for each area opened taking account of the various environmental and social sensitivities.

During the November 2016 site visit, Ramboll Environ was informed of CBG's intention to map E&S sensitivities for each new mining area demarcating constraints for use by the mining team. Based on the sensitivities identified a colour coded 'traffic light' system was to be employed in which green indicated no constraints, amber required additional mitigation measures be employed and red indicated no mining to take place. Red areas would effectively provide a defined buffer zone that would be adjusted depending on the nature of the sensitivity. Amber might require measures such as consideration of seasonal constraints or use of alternative mining technique such as a surface miner in preference to blasting<sup>8</sup>.

During the site visit Ramboll Environ was informed that the concept of constraints mapping had not progressed due to other priorities. It is worth noting that the concept was being driven by the HSEC Manager before his resignation and this initiative appears to have lost momentum.

The IESC supports the concept of constraints mapping as an operational instruction given to the mining team from HSEC. It can be used as a mechanism for the HSEC team to communicate specific sensitivities and mitigation measures identified in the ESIA Report/ESMP to specific locations as they are opened for mining. It is therefore recommended that resources are provided to action this initiative.

See also Section 10.4, Creation of plateau-by-plateau management units.

### 5.7 Stakeholder engagement

As a component of implementing the SEP, the Community Relations department has prepared an Action Plan for Community Consultations and Sensitization for the period 2017-2018 [Ref. 03]. This Action Plan is based around key topics which will be the focus of specific consultation/sensitization activities in selected communities. One of these topics relates to dissemination of the Grievance Mechanism in communities (see Section 5.8 below). The consultation and sensitization will occur at two levels: community and local government. Selected topics are presented below to give an idea of the scope of consultation and sensitization activities, by level, as follows:

- Local government:
  - Community development initiatives, transmission/prevention of communicable diseases such as malaria and HIV/AIDS, and employment and training policy/procedures; and
- Communities:

<sup>7</sup> It is understood that budget estimates will be established following replacement of the Operations HSEC Manager.

<sup>8</sup> In November 2016, the IESC was informed that CBG evaluating the feasibility of surface mining. In July 2017, the IESC was informed of two new surface miners. These can be used as an alternative to blasting in proximity of noise sensitive receptors.

- Railway, road and maritime safety, the community Grievance Mechanism; and noise and vibration impacts.

Considerable work has already been undertaken to implement this Action Plan (see section 5.8 Grievance Mechanism). A key component of work in the future will be the disclosure of Expansion activities as per the Mine Plan to communities in the period 2017-2018. Recently, the Mine Plan had changed with major implications relating to the need for physical relocation. Care will need to be taken to reduce the likelihood that communities are informed about future activities and then learn soon afterwards, perhaps from other sources, that the expected activities will not occur, have been postponed with an uncertain date, or have changed. Such information should only be disclosed by the Community Relations team as they will have created a relationship of trust with the communities.

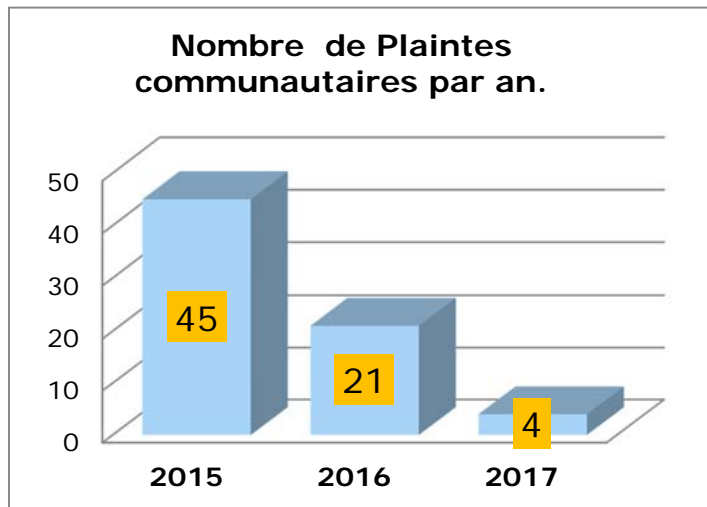
Finally, work to update the stakeholder mapping, in the SEP, was initiated at the end of June, 2107.

**5.8 Grievance mechanism**

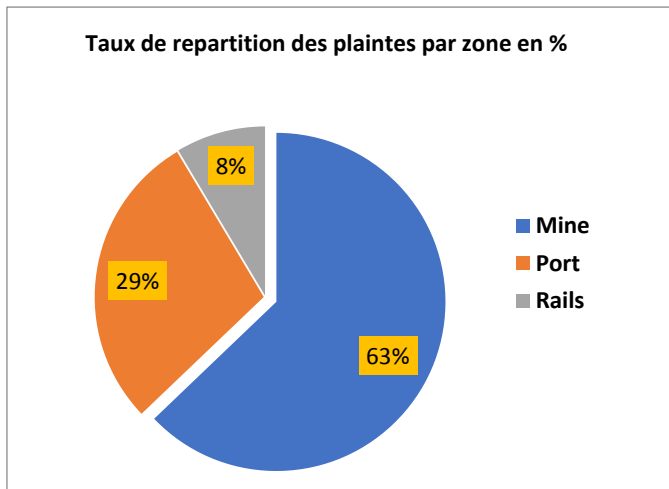
CBG confirmed that the Grievance Mechanism had been revised in the light of previous Policy Lender/IESC comments. Also, CBG is tracking grievances and analysing and presenting the results in a more systematic manner than previously (Figures 5.1 and 5.2). Currently, the analysis of grievances is reported monthly to CBG management and the status of grievances is discussed at weekly Community Relations team meetings. A grievances database has been created.

The number of complaints received has reduced dramatically since the end of 2015 (Figure 5.1) and most grievances refer to the mine site (Figure 5.2). Although not shown here, the data show that 75% of the 2017 grievances; 81% of the 2016 grievances and 98% of 2015 grievances have been closed<sup>9</sup>. The legacy of non-closed grievances from 2015 and 2016 is of concern. It is suggested that CBG focus efforts on achieving close-out of all legacy grievances by 31 December 2017.

**Figure 5-1: Annual number of complaints received**



<sup>9</sup> PPT presentation on the Grievance Mechanism and grievances update presented in a meeting between members of the Community Relations department and the IESC on 3 July, 2017.

**Figure 5-2: Number (%) of complaints by zone**

It is expected that the number of complaints received will rise in the near and medium-term future as the Grievance Mechanism is now finalized and the Community Relations department is in process of implementing a campaign to disseminate and explain the Grievance Mechanism to 96 villages (in all zones) by the end of 2018 (see Section 5.7 above for information on the Action Plan for Community Consultations and Sensitization, 2017-2018). To date, the campaign has been completed in all the main areas impacted by CBG activities. The Grievance Mechanism campaign is the most extensive campaign, in terms of number of villages involved, included in the Action Plan for Community Consultations and Sensitization, 2017-2018.

The analysis of grievances does not yet categorize the grievances by type, apart from those relating to hiring/employment. When asked about this issue, during a discussion on the Grievance Mechanism, CBG confirmed that it would begin to allocate grievances by category and add these data to the other results presented to CBG management. It is suggested that CBG analyse existing grievances and create a set of categories into which they fall. Then all grievances received to date, and those to be received in the future, should be allocated to these categories and the results included with the other data already presented to management.

## 5.9 Emergency planning

The ESAP includes the following '*Update and fully operationalise Emergency Response Management plans for all areas of influence*' by 30 June 2017. The Emergency Response Plan [Ref. 04] was delivered on schedule and discussed with representatives from CBG HSEC, security and fire departments during the site visit. A full review of the ERP will be provided by Ramboll Environ once this report is completed. However, based on a preliminary review, the document received is intended as a framework document and operational plans will be developed in due course. In several instances the framework document will be used to update existing plan/procedures, for example an existing Emergency Preparedness and Response Plan.

Ramboll Environ acknowledges the presence of existing plans, but has not received a full suite of operationalised plans for review. Currently, responsibility for the operationalisation of emergency response plans sits with the Operations HSEC Manager. Ramboll Environ has concerns over the Operations HSEC Manager's time constraints and therefore ability to deliver the plans which are now overdue. The following recommendations are made:

- CBG needs to ensure resources are available to write/revise emergency plans and should consider commissioning an external emergency response consultancy to rapidly produce the required plans; and

- CBG should make use of the EPCM Contractor's emergency response plans, for example Sogea Satom's ERP [Ref. 05] which provide a guide to format, content and level of detail.

### 5.10 Security Management Plan

Ramboll Environ provided comments on a security management plan provided for review on the 31<sup>st</sup> March 2017. During a meeting with the Security Manager, Ramboll Environ was informed that the author of the plan has now left CBG and it is unclear who will address Ramboll Environ's comments in his absence. Regardless, Ramboll Environ was informed by the Security Manager that the revised Security Management Plan would be available one month from the date of the meeting.

### 5.11 Audit and inspection

Based on discussion with Fluor representatives, Ramboll Environ was informed of a comprehensive audit programme including weekly HS audits and monthly Environmental audits of each contractor in which Fluor and the Contractors' HSE representatives participate. The performance of each contractor is subject to numeric evaluation and contractors are asked to stop work if their overall score falls below 80%<sup>10</sup>. Other key elements of the audit and inspection programme include:

- A Stop Work Policy in the event of poor HSE practice;
- Safety Observation Reports;
- Trend analysis (which gave rise to the current hand injury campaign);
- Special focus on equipment maintenance;
- Training and competency records (toolbox talks every Monday where Contractors' senior management is present);
- Emergency response drills (started several weeks before the IESC's visit)<sup>11</sup>; and
- Monthly review of all incidents<sup>12</sup> and lesson shared.

Reportedly, Contractors' HSE Managers have been asked to leave the Expansion Project because they failed to meet Fluor's expectations for HSE management.

As of the 1<sup>st</sup> July 2017 CBG reported 1,260 construction personnel, 2,483,654 man-hours to date and zero lost time injuries.

Fluor is not actively involved in the direct recruitment of Contractors' employees and the Fluor HSE representatives interviewed appeared to have little awareness of PS2, possibly because many aspects of PS2 were outside the remit of the interviewees.

### 5.12 Management of change

During the meeting with Fluor the IESC asked the Fluor Construction Manager and HSE Manager about Fluor's interaction with CBG with respect to the management of change. Whereas Fluor has its own procedures for managing change via Design Change Notifications, they were unaware of CBG's MoC procedure and the HSEC notification and reporting requirements specified in the Procedure that are placed upon Contractors.

The MoC Procedure is a direct requirement of the Lenders as specified in the ESAP. The Procedure was prepared by CBG and signed off by the IESC in September 2016, however during the meeting CBG informed the IESC that the procedure has not been shared with Fluor and had not been rolled out more widely across CBG's activities.

<sup>10</sup> HSE Assessment Scorecard – June 2017 [Ref. 01] showed Tecnasol score of 77%. Work was stopped.

<sup>11</sup> Schedule for emergency drills in April and May 2017 reviewed – included 8 drills (fire, medical and man overboard)

<sup>12</sup> Environmental incident (defective hose and hydraulic oil spill) report reviewed

Fluor confirmed they can readily incorporate the MoC procedure within its MS once provided.

**Table 5-1: Summary of Findings, PS1**

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
001	HSEC Resources – HSEC Manager	The Expansion Project does not have a dedicated HSEC Manager in post. Instead HSEC Manager duties are being split between other members of staff and CBG's environmental consultant (EEM) distracting individuals from their primary focus.	All	PS1 ESAP row 28	Appointment of a HSEC Manager to replace the previous HSEC Manager.	<b>High</b>
002	Contractor management	According to Attachment S of Fluor contractual agreement, responsibility for informing Contractors about specific mitigation measures listed in the ESMP falls to CBG. The mechanism for communication between CBG and Fluor's sub-contractors needs to be further understood by the IESC. The IESC was informed that clear instruction listing specific mitigation measures applicable to each contractor, had not been provided to Fluor. Consequently, there is a danger that some mitigation measures are not being communicated and implemented.	Construction	PS1	The mechanism for making contractors aware of specific mitigation measures needs to be clarified.	<b>Moderate</b>
003	ESIA Report Addendum for Expansion Project	The IESC was not formally notified of the need for an addendum to the Expansion Project ESIA Report.	Planning	All PSs	Future changes with potential for material environmental and/or social implications should be formally notified via the MoC Procedure.	<b>Minor</b>

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
004	Constraints mapping	The concept of constraints mapping has not progressed since the previous site visit due to other priorities and resource constraints.	Operations	PS1, PS3, PS4, PS6	It is recommended that resource is provided to action this initiative such that the Mining Engineering Department is given clear guidance about E&S constraints an additional mitigation measures that might be required for specific locations before mining is allowed.	<b>High</b>
005	Community Grievance Mechanism	The analysis of grievances does not yet include categories of grievances.	Construction and operations	PS1	Analyse existing grievances and create a set of categories into which they fall. Allocate all grievances and those to be received in the future to these categories and include the results with the other data already presented to management.	<b>Minor</b>
006	Community Grievance Mechanism	Legacy (2105 and 2016) non-closed grievances	Construction	PS1	Close out all legacy grievances by 31 December 2017.	<b>Moderate</b>
007	Emergency planning	Based on a preliminary review of the Emergency Response Plan (ERP) provided on the 30 <sup>th</sup> June 2017, it is the IESC's opinion that the ERP is a framework document. Consequently, the requirements of the ESAP for operationalised plans has not been satisfied.	All	ESAP	Expedite preparation of operationalised Emergency Response plans by: <ul style="list-style-type: none"> <li>• Utilisation of Fluor ERPs; and</li> <li>• Commissioning of specialist consultancy firm to produce the plans.</li> </ul>	<b>Moderate</b>
008	Management of Change	The MoC Procedure is a direct requirement of the lenders as specified	Construction	PS1 ESAP	The MoC Procedure should be rolled out across CBG's activities. Furthermore, it	<b>High</b>



ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
		<p>in the ESAP. The Procedure has not been shared with EPCM Contractor nor rolled out more widely across CBG's activities.</p> <p>Failure to implement the MoC Procedure is a non-compliance requiring immediate corrective action.</p>			<p>should be shared with Fluor for dissemination amongst Fluor and sub-contractors.</p>	

## 6. PERFORMANCE STANDARD 2: LABOR AND WORKING CONDITIONS

### 6.1 Introduction

There are two ESAP items pertaining to labour and working conditions: 1) relating to policies and procedures regarding employment practices and management of employees; and 2) design and manager of temporary workers' accommodation. Ramboll Environ attended a meeting, led by Fred Swartzendruber (OPIC), with the Director of Personnel (Mouctar Yoro Diarra) and, also, undertook a brief inspection of the RBQ and Base Vie accommodation accompanied by the Operations Manager of Aden Services (Olivier Boulimie). Aden Services is contracted to manage worker accommodation and is responsible to Fluor Corporation while undertaking this work.

### 6.2 Employment and employees

On 31 December 2016, CBG submitted a range of documents in accordance with the ESAP requirement relating to manage of employment /employees. Ramboll Environ and Lenders provided detailed comments stating that further work was needed and specifying the need for specific documents to be prepared and the required contents for these documents. Subsequently, CBG committed itself to preparing and submitting the require documents. During the meeting with the Director of Personnel, Ramboll Environ enquired about progress in preparing the required documents and the expected date for delivery to Lenders/Ramboll Environ. Ramboll Environ was informed that all the required documents, 'as specified following Ramboll Environ's review of CBG's HR Policy and associated documentation<sup>13</sup>', would be submitted by the end of 2017.

During the meeting, Ramboll Environ reviewed a redacted copy of a contract between CBG and a worker (permanently employed). Ramboll Environ can confirm that this contract conformed to the 'model' contract that Ramboll Environ reviewed following its submission on 31 December 2016. In addition, Ramboll Environ reviewed a series of documents pertaining to the disciplinary procedure initiated after an infraction, of employee terms and positions of employment, by a driver. These documents indicated that the disciplinary procedure followed due process with records of key actions/decisions taken.

During the meeting, Ramboll Environ took the opportunity to ask about the sex breakdown of the CBG workforce and was informed that there were 210 women employed on permanent contracts and 19 on temporary contracts. This is just under 10% of CBGs' total workforce.

Finally, the Director of Personnel stated that two new policies had been introduced in 2017 to date: one relating to retirement and the other to support for the families of deceased workers.

### 6.3 Workers' accommodation

Purpose-built workers' accommodation is provided by CBG for *ex pat* workers, that is those employed by contractors and who require temporary accommodation, such as those involved in the construction phase of the Expansion Project. Nationals are not entitled to CBG accommodation and either live locally (existing place of domicile) or must find temporary accommodation in Kamsar/surrounding areas.

Ramboll Environ inspected the accommodation (103 individual rooms) and shared facilities at the RBQ site which is occupied by senior Fluor staff. All rooms have TV and internet and *en suite* facilities. There is a suggestion box and a Committee of camp managers meets regularly to

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<sup>13</sup> HR Policy, Retrenchment management, Workers' Grievance Mechanism, updated OHSMP, updated Housing Policy, updated Employee induction (inclusive of employees' rights)

discuss issues of common concern and, also, to act upon any suggestions/complaints received via the suggestion box to the extent feasible/appropriate.

This camp is small and located in a pleasant area of Kamsar. The buildings are in a grassy area with trees and bushes and continuing efforts are being made to improve the amenity of the site. There is a central open-air 'palaver' hut with facilities for BBQs.

The Base vie accommodation is much bigger than the RBQ camp and there is no on-site vegetation. It consists, currently, of 9x96 person buildings (with 4 persons per room) and 6x24 person buildings (with 1 person per room). The accommodation is occupied by different staff grades of various Expansion Project contractors, such as Tecnasol. The capacity of the camp has not yet been reached and work is continuing to complete the camp. The contractor for construction of the camp is Red Sea (Ghana).

Each 4-person room has 2x2 bunk beds divided by lockers (1 locker per person). Each person also has a small table. There is a TV in the room, but the subscriptions to the service provider have not been paid so residents must use the TV/recreation room instead.

There is an on-site clinic, with a first aider and a doctor, which is managed by a contractor. Minor injuries and illnesses can be treated in the clinic, but more serious cases must be transferred to another linked medical facility.

There is a central canteen serving three meals per day and a recreation area with gym equipment and facilities for recreational activities such as table tennis, darts and table football. There are no indoors or external facilities for team sports.

Apparently, there have been budget cuts that have affected the quality of the structures, facilities and equipment of all accommodation sites. There is limited insulation in some of the walls so noise is not well attenuated. The gym equipment often breaks down and requires repair and is sometimes left unused from long periods (there are also safety concerns regarding these items). Kitchen and laundry equipment also causes periodic problems. Finally, the power supply (including the back-up system) is not reliable and there are power outages that cause occasional logistical/administrative problems such as making breakfast for all the residents with no power and hence no light.

The Worker Accommodation Design Plan (Rev0 of 2016/11/03) sets out the criteria and standards to be used to construct and manage worker accommodation. These are stated as being aligned with PS 2. There is no mention of the IFC/EBRD (2009) *Workers' Accommodation: Processes and Standards Guidance Note*; however, the Plan lists several specific requirements that have been taken from this document. The brief inspections undertaken confirmed that the criteria and standards had been and are being met. The quality issues and the accompanying periodic problems, relating to structures and equipment, being experienced by the camp managers and the residents are not directly addressed in PS 2 or the IFC/EBRD document.

In November, 2016 Ramboll Environ submitted comments to CBG on the Worker Accommodation Design Plan (Rev0 of 2016/11/03). To date, CBG has not issued a revised Rev1 version.

#### **6.4 Workers' grievance mechanism**

A stand-alone Workers' Grievance mechanism is expected, with other human resources-related documentation, to be submitted to Lenders/IESC by the end of 2017.

#### **6.5 Occupational health and safety**

##### **6.5.1 Expansion Project**

Fluor demonstrates a strong HSE culture and has a well-resourced HSE team. This culture is imposed on sub-contractors via contractual requirements, provisions of HSE plans and

procedures and a rigorous audit and inspection programme (Section 5.10). Ramboll Environ was informed that several HSE personnel had been removed from the project by Fluor because of concerns over attitude and competency. In general, Ramboll Environ noted many examples of good practice at the crusher pit and mineral quay including:

- Good use of Personal Protective Equipment (PPE) including life jackets;
- Certification of equipment, for example, certificates for scaffolding;
- Good signage and separation of active work areas/pedestrian areas;
- Use of flag men (Appendix 3, photo 30); and
- Clear availability of Materials Safety Data Sheets (MSDS) in multiple languages (Appendix 3, photo 28).

Ramboll Environ did however observe what appeared to be unauthorised personnel sheltering beneath a tree on the periphery of the crusher pit construction area. The Tecnasol HSE Manager confirmed they were not working for Tecnasol. The unrestricted access represents a potential security and H&S risk to the Project.

#### 6.5.2 Operations

In general, the operations demonstrate numerous examples of good practice. Ramboll Environ did however note isolated incidence of poor practice, including:

- Use of forklift forks as a working platform (Appendix 3, photo 3);
- Unprotected fall hazards (Appendix 3, photo 7);
- An incidence of unsuitable footwear; and
- Failure to use dust masks in a dusty environment e.g. bauxite loading at the mineral quay.

Ramboll Environ also noted the large amounts of dust on the mineral quay caused by losses from the conveyor belts and actual loading arm (Appendix 3, photo 34). At the time of the visit (early rainy season) wetted dust became very slippery for pedestrians and vehicles. Photo 33 shows the effect on tyre tread. Ramboll Environ observed skidding vehicles on the mineral quay with obvious potential for accidents.

The barriers on the jetty road (port to loading quay) are also weak and not suitable to prevent a vehicle leaving the road.

**Table 6-1: Summary of Findings, PS2**

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
009	Accommodation Provision	No final version of the Worker Accommodation Design Plan has been submitted to Lenders/IESC.	Construction and Operations	PS 2	Prepare, approve, disseminate and implement the final Worker Accommodation Design Plan.	<b>Minor</b>
010	Occupation Health and Safety practices - operations	Several examples of poor practice were observed. Continuous reinforcement of H&S is required.	Operations	PS2	<p>CBG operations should learn from some of the good practice observed by Expansion Project contractors.</p> <p>Measures to reduce slippery surfaces on the mineral quay during rainfall should be explored, for example, more frequent recovery of accumulated dust.</p> <p>Refresher training (or in certain cases sanctions) for those found to breach H&amp;S rules.</p>	<b>Moderate</b>

## 7. PERFORMANCE STANDARD 3: RESOURCE EFFICIENCY AND POLLUTION PREVENTION

### 7.1 Introduction

This chapter considers the management and monitoring of key environmental aspects associated with the Project and the Project's commitments to the prevention of pollution and resource efficiency. Key aspects relevant to the Expansion Project and CBG's operations include:

- Waste water treatment;
- Surface water drainage;
- Waste management; and
- Environmental monitoring.

These are discussed in turn below along with a section dedicated to environmental management on the COBAD Road.

### 7.2 Waste water treatment

The Waste Water Treatment (WWT) plant at Sangarédi was visited in November 2016 and then revisited during this audit. At the time of the November 2016 visit, Ramboll Environ was informed that the treated water discharge, which flows into a small stream before joining the Cogon River, was not monitored. Ramboll Environ was also informed of CBG's plans to upgrade the facility with a UV treatment plant similar to the one successfully used at Kamsar.

In July 2017, no progress had been made towards upgrade of the WWT plant. Filter beds remained overgrown with vegetation (Appendix 3, photo 10), impeding the effluent distribution process and we were informed that the sludge tank had not been emptied for 17 years.

The discharge point and confluence with a nearby stream was also visited during the audit. Of note, agricultural land borders the nearby stream and it is likely that water is abstracted close to the confluence point and before it reaches the Cogon (Appendix 3, photo 11). Ramboll Environ was informed that water quality measurements are taken on a regular basis and these results have been requested. However, at the time of writing the results have not been made available and Ramboll Environ is unable to comment on the results.

Ramboll Environ's overall impression is that the WWT plant is not managed and is highly unlikely to be working efficiently. It is therefore recommended that CBG undertakes a comprehensive review of the WWT plant including:

- Operational parameters;
- Management responsibilities; and
- Plant efficiency and effluent discharge quality.

Based on this work a clear plan, inclusive of budgetary requirements for additional manpower and plant upgrades, should be developed.

### 7.3 Surface water drainage (Kamsar)

As reported in the November 2016 site visit report, surface water drainage runs untreated from approximately eight discharge points to the sea/brackish creeks. Ramboll Environ has not visited each of these discharge locations, but understands there is no primary treatment i.e. no oil water separators/sediment traps. Given the large volumes of dust in the port, large volumes of sediment are likely to be discharged during rainy conditions.

Ramboll Environ did however visit the discharge adjacent to the tank farm where an oil water separator system is installed to separate oil and water from all CBG's port operations. Photo 37 is

the last of a series of chambers downstream of a primary and secondary oil water separator. Absorbent pads are being used to recover residual oil not recovered by the separators, but nevertheless oil discharged to sea is visible. The same observations were made in November 2016 indicating the system is not working efficiently/does not have the capacity to treat the volumes of oil generated by CBG operations. Indicative water quality results for hydrocarbons from site discharge locations indicating high oil concentrations provide support for the visual observations.

It is understood that definitive water quality results will be available in the first round of the comprehensive water sampling campaign (See Section 7.6.2.). On the basis that these will probably confirm indicative results and the visual observations, IFC effluent limits will be breached and actions will be necessary to bring effluent quality back into compliance.

It is understood that the water sampling campaign will also include other discharge points around the port. Depending on the results of these measurements consideration should be given to upgrade of the existing drainage system. Ramboll Environ understands drainage for the Expansion Project will tie into the existing drainage system, presenting an opportunity to upgrade the drainage system. Ramboll Environ further understands that EEM is supporting CBG with drainage design/capacity; given EEM's understanding of the Project and sampling campaign, it is recommended that EEM advise CBG on any additional design requirements to meet IFC/Guinean discharge limits.

#### **7.4 Surface water drainage (Sangarédi)**

In November 2016, Ramboll Environ found evidence of oil contamination at the main site discharge location within the Sangarédi maintenance/office area. In this site visit the same area was revisited and similar levels of oil contamination were noted (Appendix 3, photos 1 and 2). The pooled oil and contamination in the drainage channel were reportedly due to a recent failure of the oil water separator. Ramboll Environ acknowledged the explanation and noted a replacement pump, but nevertheless has concerns that on both visits significant oil contamination was noted and, also, that site personnel were unaware of the oil.

In future, it is recommended that the operation/maintenance of the oil water separator is closely monitored. Water quality should also be routinely monitored at suitable locations such as the boundary of the site and outlet of the oil water separator. Finally, collection of pooled oil and remediation of contaminated soil is necessary.

#### **7.5 Land contamination**

Evidence of fuel spills was noted during a visit to the fuel unloading area at the Sangarédi Power station. The same observation was made at this and other locations during the November 2016 site visit. At the time, Ramboll Environ was informed that it was a recent spill identified for corrective action during a recent internal inspection. It is the Ramboll Environ's view that either the spill had not been cleaned or there has been a repeat incident. Regardless of the circumstances, CBG should undertake an inspection of all its main fuelling areas, remediate contaminated areas where necessary and put in place improved design and fuelling practices (hard standing, bunding and spill kits) to prevent further reoccurrence.

Of note, there is a marked contrast between Operations and Expansion Project with respect to reporting and clean-up of minor oil spills.

#### **7.6 Waste management**

The landfill sites at Sangarédi and Kamsar (Bendougou located 12 km from Kamsar) were visited along with the old Tora Bora waste area in Kamsar.

### 7.6.1 Bendougou

The Bendougou landfill, located approximately 12 km SE of Kamsar, receives CBG non-hazardous waste from Kamsar City. CBG also periodically (2/3 times per month) collects non-CBG municipal waste from roadside locations as a community support function.

During the site visit, there was clear evidence of active management of wastes, including spreading, compaction (by bulldozer) and capping of wastes with laterite (Appendix 3, photo 25). Ramboll Environ also noted repair work undertaken since the previous visit to secure the boundary wall to deter scavenging (there was no evidence of human scavenging which was confirmed by the security guard).

At the time of the visit, odours were relatively minimal and inoffensive outside of the site boundary. As was the case in November, large volumes of pooled water were evident in the centre of the landfill which was presumed to be rainwater<sup>14</sup> based on groundwater levels around the landfill. Some evidence of hydrocarbons was present in areas, possibly from oil filters/rags observed previous during the earlier visit (Appendix 3, photo 26).

### 7.6.2 Sangarédi

The Sangarédi landfill was also revisited in July 2017. In November 2016, several women, men and children were observed to be scavenging at the site and smoulder fires were noted. Although the site remains unfenced, there was no evidence of scavenging or fires in July 2017, and less waste was visible indicating possible compaction and capping. Capping of waste is likely to have deterred scavenging.

A vandalized and broken groundwater monitoring well down gradient of the landfill is to be repaired. A second monitoring well (Appendix 3, photo 9) has been installed further down gradient of the landfill and is functioning, although no chemical analysis results are available to date (see Section 7.4.2).

### 7.6.3 Tora Bora

The Tora Bora site, located within Kamsar City, has been used as a temporary waste storage area and was earmarked as the location for a new hazardous waste facility. However, more recently, the Tora Bora area has been selected to accommodate a railway maintenance facility and is no longer available for waste management.

The nature of the waste currently stockpiled at Tora Bora (Appendix 3, photo 23) needs be assessed before it is transferred to alternative locations. This is likely to be Bendougou except for any hazardous waste. The cleared ground should also be assessed for any evidence of contamination and remediated accordingly as necessary.

Ramboll Environ's comments regarding CBG's strategy for managing hazardous wastes, and waste in general, has been reported elsewhere. The lack of a clear strategy for hazardous waste remains a live issue for CBG that the IESC will continue to monitor. The need to select a location for a hazardous waste facility is an increasing priority as CBG and construction contractors on the Expansion Project continue to segregate and stockpile hazardous wastes.

## 7.7 Environmental monitoring

An Environmental Monitoring Plan has been prepared in French and is currently undergoing translation. To date it has not been proved for review.

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<sup>14</sup> Groundwater heights taken from the 4 monitoring wells at the landfill site record to be between 3 – 6 metres below the surface.



### 7.7.1 Noise

The Noise Monitoring and Management Plan was scheduled in the ESAP for delivery to IFC on the 30<sup>th</sup> June 2017. CBG provided Lenders with an Interim Noise and Vibration Management Plan on the 30<sup>th</sup> June 2017; the interim status of the Plan reflected noise data gaps, the possible need for additional modelling and the need to explore some data anomalies. CBG/EEM also explained the plan will be further delayed because it has not been possible to satisfy the IFC requirement for 48 hours' continuous baseline noise data because of heavy (noisy) rainfall.

Ramboll Environ concurs that baseline data collection should not be taken in abnormal conditions such as high wind or heavy rainfall. IFC explained that the 48hour continuous monitoring period specified is a guideline and if not achievable then credible alternatives, using best endeavours, should be put forward rather than prolong delivery of the plan.

CBG has requested an extension of the delivery date to the 30<sup>th</sup> September 2017. At the time of writing CBG's request is under review by the lenders. Ramboll Environ has not reviewed the interim Noise and Vibration Management Plan, and will report separately on its adequacy later.

### 7.7.2 Surface and groundwater

Monitoring of chemical and biological water quality (surface, groundwater, domestic and industrial waste water) has been significantly delayed due to difficulties with the procurement/shipping of sample bottles. Delays in water sampling has been a significant concern for the IESC and Policy lenders that has been reported elsewhere, however, the first significant water quality monitoring campaign is scheduled to commence in mid-July upon the return from leave of the CBG Monitoring Specialist.

Groundwater monitoring wells have been installed and water levels are being monitoring for input into the Water Balance Model and Water Management Plan (Appendix 3, photo 9). Four monitoring wells are in place at Bendougou landfill and two at the Sangarédi landfill with a third planned. Wells will also be built around a second hazardous waste facility at Kamsar if a site is selected.

### 7.7.3 Air quality

A Standard Operating Procedure has been prepared and air quality monitoring equipment is largely procured and on site (except for pre-weighed filters). The first comprehensive monitoring campaign was set to commence in mid-July.

## 7.8 Dredging

The ESAP includes a requirement for a Dredge Management Plan (DMP) to be delivered to IFC by 31<sup>st</sup> December 2016. CBG delivered a DMP, however Ramboll Environ had several concerns about the Plan and did not consider it an 'operationalised' management plan. The Plan has been under revision since Ramboll Environ's comments were provided, however all dredging for the Expansion Project has been completed. The DMP will therefore only be applicable to future maintenance dredging and should be tailored to maintenance dredging activities accordingly. Maintenance dredging occurs approximately every 5 years with the next dredging programme scheduled for [date requested from CBG]. The DMP must be prepared and finalised with this date in mind.

## 7.9 COBAD Road

The rerouting of the COBAD Road to avoid gallery forest represents a major mitigation (avoidance) measure for the protection of chimpanzees and other flora and fauna. An ESIA Report [Ref. 07] has been prepared by EEM on behalf of CBG based on the realigned route of the

COBAD Road which provides further mitigation measures. Delays in the preparation of the ESIA Report were caused by design uncertainties resulting in a phased approach for the ESIA. The third and final section of the ESIA Report, and therefore the consolidated ESIA Report for the entire length of the Road through the CBG concession, was provided to Ramboll Environ during its visit to the site.

Ramboll Environ travelled the length of the COBAD Road accompanied by CBG's E&S inspectors for COBAD Road (2 environmental and 1 social specialist). At the time of the visit the Road was almost complete with a small amount of work being undertaken at the road/rail transfer location at the southernmost point of the Road. The preparation work for the rail spur was also underway.

In accordance with the ESAP (version agreed in November 2016), it is the IESC's responsibility to review the COBAD Road ESIA Report and provide '*IESC confirmation that mitigation measures are being implemented*' by 30<sup>th</sup> June 2017. Ramboll Environ was not able to sign-off against the COBAD Road ESIA Report for several reasons outlined below.

- The final version of the ESIA Report was not received until after the deadline. However, regardless of the timing Ramboll Environ would be required to visit site before it could sign-off against the ESAP item;
- Neither CBG nor COBAD had agreed to the mitigation measures presented in the ESIA Report. Thus, whereas the mitigation measures specified in the draft are reasonable, it is unknown whether relevant parties are committed to implement/finance the measures, recognising that certain operations-phase mitigation measures such as permanent wildlife and pedestrian crossings have significant cost implications;
- The revised ESIA Report needs to be closely checked by CBG. A preliminary review highlighted mitigation measures which have since been superseded, for example, the requirement for relocation of the village of Sinthiourou Ourkedji (see also Section 9.6);
- The Road, as constructed, materially differs from the design specified in the ESIA Report in at least two areas:
  - The ESIA Report refers to either an overpass or an underpass where the COBAD Road crosses the main Sangarédi to Boké Road (the RN 3). There is no underpass/overpass in the as-built road (Appendix 3, Photo 12);
  - The location of the transfer station differs from the ESIA Report and the rail spur approaches from the west rather than east as indicated in the ESIA Report. CBG Inspectors did not have access to the original design and did not report these deviations; and
  - The orientation of the rail transfer yard was altered to avoid damaging the source of a spring (the source was a cultural heritage site);
- Ramboll Environ witnessed several examples of poor environmental practice during the site visit including:
  - Abstraction of surface waters (Appendix 3, Photo 14);
  - Refuelling in or close to water courses;
  - Failure to protect a vulture nest on the transfer site; and
  - Failure to reinstate certain areas in a timely manner resulting in soil erosion and sedimentation of watercourses (Appendix 3, Photos 16-18) – see also Section 10.10.

These practices contradict the measures outlined in the COBAD Road ESIA Report and similar examples were observed by Ramboll Environ in November 2016; and
- Ramboll Environ witnessed several examples of poor Health and Safety practice, including:

- Failure to wear PPE; and
- Transportation of workers in the back of dump trucks (Appendix 3, Photo 15).

Despite the regular presence of CBG E&S inspectors, they have no power of enforcement and COBAD's practices continued to fall short of good practice throughout the construction period.

Ramboll Environ advised that it would not be able to confirm mitigation measures are being implemented. The Policy Lenders advised CBG to request an extension to the ESAP item whilst Policy Lenders considered options to move forward.

Ramboll Environ did however observe some good progress made by CBG in the reinstatement of the abandoned COBAD Road route following redistribution of stockpiled topsoil and mechanical ploughing of the compacted road surface. A team of local villagers employed by CBG was observed to be reintroducing shrubs as part of the reinstatement effort.

**Table 7-1: Summary of Findings (PS3)**

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
011	Water Treatment at Sangarédi	The Water Treatment plant at Sangarédi is poorly managed and unlikely to be functioning efficiently.	All	PS3	<p>CBG should undertake a comprehensive review of the WWT including:</p> <ul style="list-style-type: none"> <li>- Operational parameters</li> <li>- WWT plant management</li> <li>- Plant efficiency and effluent discharge quality</li> </ul> <p>Based on this work a clear plan, inclusive of budgetary requirements for additional manpower and plant upgrades to bring the WWT in line with IFC guidelines, should be developed.</p> <p>Timeframes for this action should be independent of the Water Management Plan.</p>	<b>Moderate</b>
012	Surface water drainage (Kamsar)	Ongoing discharge of water following treatment at the oil water separator (Kamsar) that is unlikely to comply with IFC effluent quality limits.	Operations	PS3	<p>Confirm indicative results and the visual observations with future monitoring of effluents and undertake necessary actions to bring effluent quality back into compliance with IFC standards</p> <p>Pending monitoring results, upgrade surface water drainage with silt traps/basic oil water separators.</p>	<b>Moderate</b>
013	Surface water drainage (Sangarédi)	Evidence of oil contamination in drainage channels within the Sangarédi maintenance workshop area.	Operations	PS3	<p>Improved HSEC site inspections including close inspection of drainage channels.</p> <p>Water quality should also be routinely monitored at suitable locations such as the discharge at the boundary of the site and outlet of the oil water separator.</p> <p>Remediation of pooled oil and contaminated soil is necessary.</p>	<b>Moderate</b>

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
014	Fuel contaminated areas	Evidence of fuel spills was noted during a visit to the fuel unloading area at the Sangarédi power station.	Operations	PS3	CBG should undertake an inspection of all its main fuelling areas, remediate contaminated areas where necessary and put in place improved design and fuelling practices (hard standing, bunding and spill kits) to prevent further reoccurrence.	<b>Moderate</b>
015	Waste management	CBG currently does not a facility to manage all it hazardous wastes. Expansion Project contractors are stockpiling hazardous waste as a temporary solution.	All	PS3	Following the loss of Tora Bora as a potential site for a hazardous waste facility the need to identify a suitable a location for a hazardous waste facility is an increasing priority.	<b>Moderate</b>
016	Environmental monitoring - noise	Baseline noise monitoring has been put on hold because the 48 hours continuous monitoring requirements specified in IFC guidelines cannot be achieved in the wet season. This in turn is delaying finalisation of the Noise and Vibration Management Plan.	All	PS3	CBG's environmental consultants should use best efforts to gather useable baseline noise data in the wet season even if the 48 hours of continuous monitoring is not achievable and progress the Noise and Vibration Management Plan accordingly.	<b>Moderate</b>
017	COBAD Road	Construction phase mitigation measures specified in draft version of the COBAD Road ESIA Report have not been implemented. COBAD has not committed to implement and/or pay for future Operations Phase mitigation measures.	Construction and operations	PS1, PS3	CBG should finalise the draft COBAD Road ESIA Report and in doing so confirm the parties responsible for financing and implementation of the mitigation measures.	<b>High</b>

## 8. PERFORMANCE STANDARD 4: COMMUNITY HEALTH, SAFETY, AND SECURITY

A draft Community Health and Safety Management Plan (CHSMP) has been prepared and was issued to Lenders/IESC for review on 31 May 2017. This CHSMP relates to the ESAP item which states,

*"Undertake a review of community health & safety risks during both construction and operation and update the HSEC Management Plan. This will cover all CBG related infrastructure and interaction with communities (e.g.: railway safety which will include building community awareness through an Operation Lifesaver Program). The review will also include consideration of security arrangements in accordance with PS 4."*

In addition, a draft Security Management Plan (SMP) has also been issued for Lender/IESC review (31 March 2017) as per the ESAP item requiring the preparation of an SMP.

Several issues arose during the site visit pertaining to community health and safety:

- Use of haul road by locals;
- Creation of steep sided slopes at mined areas; and
- Railways safety – overpasses, new barriers, community training and communications programme.

In addition, prior to the site visit there had been a number social disturbances in the Kamsar, Boké and Sangarédi areas which affected local people, government facilities, and mining companies in varying ways and to different extents. Although perhaps not directly a PS 4 issue, some observations and a recommendation are offered on this topic as it relates to CBG and its operations.

### 8.1 CHSMP and SMP

Policy Lender/IESC comments on the both the CHSMP and the SMP have been submitted to CBG. The Security Manager confirmed to Ramboll Environ that a revised SMP would be available by mid-August 2017. No date has been set for submission of the revised CHSMP.

### 8.2 Use of haul roads by locals

The use of the haul roads by non-CBG vehicles appears to be common practice and largely accepted by CBG (Appendix 3, photo 6). It does however fall short of standard industry practice and presents a significant risk to users of the haul roads. Further measures and actions necessary to deter communities from using haul roads should be explored and captured within the revised CHSMP.

### 8.3 Creation of steep sided slopes at mined areas

The opening of mine areas results in newly created steep sided slopes which present a safety hazard to community members (Appendix 3, photos 4 and 13). Risks occur where mine areas truncate existing paths. Risks posed to community members from newly-created steep slopes should be considered within the CHSMP.

### 8.4 Railway safety

The Railway Department has undertaken/will undertake several initiatives regarding rail safety:

- Programme to upgrade railway crossing barriers (over 4 years, 5 crossings will be upgraded);
- Seeking advice, initially from a Canadian consultant and more recently from IFC Advisory Services on mechanisms to improve railway safety; and

- Planning an awareness campaign in communities (in conjunction, as necessary, with the roads department) backed up by other communication means such as Radio CBG.

Regarding the awareness campaign, there is a level of co-ordination with the Community Relations Department. As a component of implementing the SEP, the Community Relations Department has prepared an Action Plan for Community Consultations and Sensitization for the period 2017-2018 (see Section 5.7). This Action Plan is based around key topics which will be the focus of specific consultation/sensitization activities in selected communities. One of these topics is road and railway safety. In total, 65 communities have been identified along the main road/s and railway used by CBG for transport purposes (including, but not limited to communities in Sangarédi, Kolaboui, Boké and Kamsar localities). Due to the number of communities involved in this campaign, the date for completion of the work is 31 December, 2108. Minutes of all stakeholder meetings will be prepared<sup>15</sup>. To avoid potential duplication of effort, the Railway and Community Relations departments need to co-ordinate efforts so that one well-supported and clearly-focused campaign on railway safety is implemented.

In Kamsar, CBG has started to erect a fence (9 km) on both sides of the railway to deter people from crossing the railway. At the same time CBG has erected several pedestrian bridges (overpasses) at regular intervals, particularly near busy market areas, located on the main road into Kamsar from Boké and, also, near to the railway line in Kamsar, to encourage people to cross the railway at these points (Appendix 3, photo 24). Work to erect the fences has stopped as some community members want improved water and electricity supplies as a *quid pro quo* for 'agreeing' to the fencing. CBG is prepared to assist with water supply and believes the community will relent and allow the fencing.

### 8.5 Social unrest

Although this issue was not a major topic for the site visit, some discussions occurred to try to gain an understanding of the reasons for the recent unrest and the possible implications for CBG's current and future activities and reputation (collectively this could be considered to constitute CBG's social licence to operate).

As indicated above social unrest occurred in Kamsar, Boké and Sangarédi areas all of which, to differing extents impinged on CBG. A summary of information provided to Ramboll Environ is provided below, by locality:

**Sangarédi:** Some villagers wanted to be paid to guard CBG monitoring equipment to be located near their villages. At the time of the site visit there were no difficulties with local villagers. It is not clear whether the unrest/disturbances, regarding employment opportunities generally and, in particular, in the mining sector, elsewhere acted as a catalyst for the 'Sangarédi' action;

**Boké:** Disturbances here seemed to be triggered by the death of a local person in a road accident involving a 'mining' truck. However, it quickly changed into a protest about inadequate provision of power (electricity) and adverse impacts arising from the activities of mining companies. During the site visit, Ramboll Environ observed external damage (mostly broken windows<sup>16</sup>) to two buildings associated with central/local government (one of which belonged to Electricité de Guinée); and

**Kamsar:** In Kamsar there appeared to be two triggers, which may/may not have been connected. First, there was resentment/anger about recent land acquisition/compensation actions implemented by GAC. This led to GAC staff being threatened and seeking 'refuge' in CBG managed areas/facilities. Also, there was anger about a lengthy period of power outages due to maintenance and repair of certain generators that are used to supply electricity to Kamsar.

<sup>15</sup> A similar campaign, focusing on maritime safety, will occur in communities in the Kamsar area.

<sup>16</sup> It is understood that considerable internal damage also occurred.

Unfortunately, demonstrations outside public buildings, including a police station, resulted in the death of a young protester. The central government then despatched the military to help the police restore and then maintain order. During the site visit, there was no sign of an increased military presence and there were no more than the usual number of road checkpoints on the road from Kamsar to Boké and Sangarédi.

Although the possible reason for the disturbances vary; there seems to be a tendency for public anger about inadequate government services and the uneven distribution of the benefits and disadvantages of mining operation to be directed at government even if the immediate trigger has resulted from the action/s of a mining company. The two appear to be conflated in the minds of some local people possibly because mining companies supply some of the services that normally are provided by central and local governments. This tendency to see mining companies and government as part of the same 'problem', by some local people, poses a threat to the mining companies.

Although CBG was not a target in the recent spate of social unrest; it is not difficult to foresee circumstances when CBG might be a target. The fact that CBG has an agreement (8 June 2015) with the Guinean '*Forces d'Ordre*' (the '*Forces d'Ordre*' comprise the Army, Gendarmerie and the Police) which enables it to call upon the army to protect its personnel and assets might result in a potentially serious situation in which the perceived conflation between mining companies and the government may turn into reality (at least in the eyes of protesters and their supporters) to the detriment of CBG's interests and reputation.

It is suggested that the current work to revise the SMP takes account of the recent social unrest in terms of the updating the risk assessment process and considers carefully the provisions of the Voluntary Principles on Security and Human Rights, particularly with respect to the rules of engagement (especially the use of force) should CBG find it necessary to call upon the support of the '*Forces d'Ordre*'. To the extent applicable and feasible, measures applicable to armed security forces should be considered in terms of the scope and content of the rules of engagement to be adopted.



**Table 8-1: Summary of Findings, PS4**

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
018	Railway safety	Co-ordination of railway safety campaign.	Construction and Operation	PS 4	The Railway and Community Relations Departments to strengthen co-ordination efforts so that one well-supported and clearly-focused campaign on railway safety is implemented.	<b>Moderate</b>
019	Security Management Plan	Preparation of revised and final version of the Security Management Plan.	Construction and Operation	PS 4	Prepare and approve a revised and final Security Management Plan which is aligned with good international industry practice (including the Voluntary Principles on Security and Human Rights and other international requirements and guidance) and which takes account of the threats that may be posed in the future by social unrest which, compared to the recent events, has escalated in scale and intensity and is aimed at CBG specifically.  Dissemination and implementation of the Security Management Plan as soon as it is approved internally.	<b>Moderate</b>
020	Community Health and Safety Management Plan	Preparation of revised and final version of the Community Health and Safety Management Plan.	Construction and Operation	PS 4	Prepare, approve, disseminate and implement the revised and final Community Health and Safety Management Plan  The plan should include consideration of non CBG traffic on the haul roads and newly created steep sided slopes.	<b>Moderate</b>

## 9. PERFORMANCE STANDARD 5: LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

### 9.1 Introduction

Five key topics are presented below:

- Hamdallaye and Fassaly Foutabhé: Recent/Current Situation;
- Mine Plan Changes: Land Acquisition and Involuntary Resettlement Implications;
- Resettlement: Institutional Capacity;
- Past Compensation Measures and Grievances Close-out; and
- COBAD Road: Land Acquisition and Involuntary Resettlement.

### 9.2 Hamdallaye and Fassaly Foutabhé: recent/current situation

Currently, an interim Action Plan for Relocation and Compensation: Hamdallaye and Fassaly Foutabhé exists for involuntary resettlement affecting two villages: Hamdallaye (physical displacement of 79 families/ 558 inhabitants) and Fassaly Foutabhé (economic displacement affecting certain families/inhabitants out of total of 12 families, 104 inhabitants<sup>17</sup> and loss of community assets). This document, dated 19 October, 2105, may be considered as the equivalent of a Resettlement Action Plan (RAP) and will be referred to below as a RAP. This RAP was supplemented, in April 2017, with a Memo (Hamdallaye and Fassaly Foutabhé RAP Supplementary Information) which presents an update on some of the key RAP activities/issues. The current situation regarding the progress of resettlement-related actions for each of the villages is presented below.

#### 9.2.1 Hamdallaye

Since the date of previous IESC monitoring visit (November, 2016) several key actions have occurred (see Table 9.1). Although plots have been marked out the plots have not been allocated to families. The intention is that the Project-Affected Persons (PAPs) will be allocated plots at the new site which will be x1.5 the size of their plots at the existing village site. Vulnerable PAPs will receive a proportionately larger 'uplift' in plot size.

**Table 9-1: 2017 RAP Actions Completed**

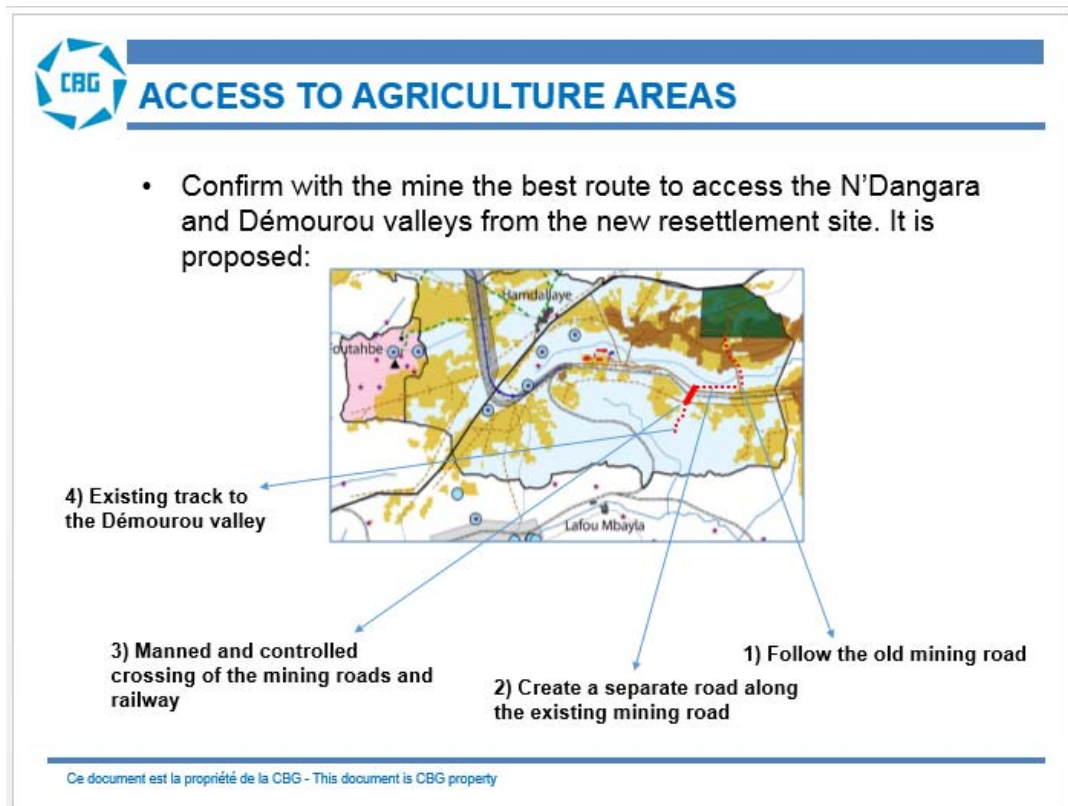
Date	Action
January 2017	Hamdallaye community approves the new site layout
April 2017	The new village plots are laid out on the ground by a contractor with a group of youths hired from Hamdallaye
June 2017	Completion of the RAP implementation management structure and schedule

Overall, there is a RAP implementation schedule/action plan, for an 18-month period, in place. The compensation principles to be applied have been accepted by Hamdallaye residents and a compensation schedule, incorporating dates for the calculation and payment of compensation amounts has been prepared (see details below and in Table 9-2. As the relocation site, selected by the villagers, is located within their own territory (see Figure 9-1), no 'land for land' compensation is appropriate; thus, only cash compensation will be provided supported by livelihood restoration measures.

<sup>17</sup> All population figures relate to end of 2015.

An important issue for Hamdallaye residents has been the need for easy access to two areas used for agriculture: N'Dangara and Démourou. These areas are located to the south and south-west of the new village location (see Figure 9-1 [green area is the new Hamdallaye village site and the light blue area shows Hamdallaye village land in which the two key agricultural areas are located]) and on the other side of mine roads and the railway line from the concession area to Kamsar. CBG is proposing a solution that would entail use of an old mine road (to be upgraded as necessary), creating a separate route alongside a mine road and providing a manned, controlled crossing point to enable villagers cross the mine roads and railway line. Currently, this is a proposal to mine management. If this proposal were not to be accepted by mine management the need for easy access to the two agricultural areas remains and CBG will need to devise a solution.<sup>18</sup>

**Figure 9-1: Map showing Proposed Access Routes to New Hamdallaye Resettlement Site**



During a meeting with Hamdallaye residents (02 July 2017), attended by the Chef du Village, elders, imam, head teacher and others, it was confirmed that water and shade remained as important issues in relation to the new Hamdallaye site. CBG staff and its consultants remain confident, based on previous studies, that there is sufficient ground water available to meet the needs for current and projected future population needs. Nevertheless, 2 boreholes will be drilled in August 2017 (wet season) and 4 additional boreholes in January 2018 (dry season) to confirm the view that there is sufficient groundwater. Should the results of the groundwater monitoring reveal there is insufficient water available now, and into the future, then CBG must find an alternative solution: currently there is no 'Plan B' for the provision of water to the site.

<sup>18</sup> Following review of the Issue 1 draft report, CBG has informed Ramboll Environ that CBG management has accepted the principle of a manned controlled crossing.

Regarding provision of shade, in addition to shaded areas incorporated into building designs, work for a tree planting campaign will begin in July 2017. In the first tree planting campaign, fast-growing acacia species will be planted. This first campaign will be followed by a second campaign in which fruit trees will be planted. This will be done in consultation with Hamdallaye residents (types of trees and location for planting). Despite the planting of the acacia trees; there will be a shade 'deficit' in communal spaces, in the first 2 or 3 years following occupation of the new site as the trees will not have sufficient time to grow to a size that will provide effective shade (see Figure 9-2).

Finally, the head teacher raised the issue of grazing; stating that animal husbandry was an important livelihood activity and that land for grazing was increasingly difficult to find. Access to grazing land as well as to land for growing crops was an important issue to be resolved for the new Hamdallaye site.

**Figure 9-2: July 2017 – Section of new Hamdallaye site showing part of marked out areas and areas in which grass (in background) is now growing**



As shown in Figure 9-1, in April 2017, the new site layout was marked using white stones to represent 'boundaries' of plots, market area, cemetery and location of other support /infrastructure facilities. This was done by a contractor under CBG management. As required by CBG, the contractor hired Hamdallaye youths to do the work (these were all males). Some women benefited, to a limited extent, by cooking and selling food on site to the workers. Unfortunately, there has been a delay in the youths receiving the final instalment of their due payments for the work. CBG is actively trying to resolve the issue which appears to be due to a delay on the part of CBG in paying the contractor that hired the youths. It appears that this situation is not having a negative effect on Hamdallaye residents' relations with CBG - at least not yet. CBG has learnt from this situation and will enhance its contractor controls, regarding employment and remuneration. Also, contractors will be required to report monthly to CBG on numbers employed from the village and on payments for work done.

Compensation payments to Hamdallaye residents will occur in three stages beginning in November 2017 and ending in October 2018 (the payments refer to different land areas) following an inventory of assets to enable calculation of compensation amounts for the PAPs (see Table 9.2). The payment stages relate to:

- The ore storage and loading area (November 2017);

- All other areas except the built area - that is, the village site and all its structures and other assets (January 2018); and
- The built area.

The payments relating to the second stage (all other areas except the built area) will be deposited into a bank account, but withheld from the recipients until the move to the new site has been completed. The aim is to ensure that recipients have sufficient monies available to enable them to maximize the benefits of the Livelihood Restoration (LR) programme especially those that require investment in income-generating activities. As the LR activities will begin in February 2018, and these monies are unavailable until November 2018, the PAPs will have received new information/training and will have time to consider their options before deciding on the scale and type of investments that they may wish to make to improve their livelihoods.

Work to select and then design the LR activities are scheduled to begin in November 2017. Implementation of the LR activities is expected to occur in February 2018 and be completed by March 2019 - a period of 13 months. Thus, LR measures will be implemented, to a significant extent, at the same time as the compensation process. A significant amount of work remains to be done by end October/beginning of November 2017 (see also Table 9-2), including:

- Asset inventory;
- Calculation of compensation payments and making payments under the first stage of the compensation schedule (PAPs will be able to access compensated land and harvest agricultural crops after compensation when possible to do so);
- Appointment of a 'managing' implementing partner for the livelihood restoration programme; and
- Finalization of the RAP by October 2017 (based on results of the asset inventory).

**Table 9-2: RAP Actions: Period August 2017 – March 2019**

August 2017	Completion of crop, land and buildings compensation updates Drilling of 2 boreholes (the remaining 4 will be drilled during the dry season (January 18))
September 2017	Processing of all compensation payments except for the built area (village) Plots distribution and housing options - Community choice selection and approval
October 2017	Final RAP updated with data for implementation
November 2017	Payment of compensations for the ore storage and loading area Start of Livelihood Restoration (LR) programs (identification and action plan 5 years) Start of construction
January 2018	Payment of compensations for all other areas except built area
February 2018	Start of LR programs implementation
October 2018	Completion of construction and payment of compensations for the built area
November 2018	Physical move of Hamdallaye
March 2019	Completion of LR programme implementation and start of monitoring/follow up

The main change in the Hamdallaye relocation 'situation' relates to the delay in the date for relocation. As stated in the previous IESC's Site Visit Report issued in January 2017 [Ref. 07], relocation of Hamdallaye was planned for the first half of 2018; now the expected date for the movement of people to the new site is November 2018. During the meeting in the existing Hamdallaye, Ramboll Environ asked about the implications of this delay for the villagers. There was concern expressed that the delay, and the accompanying uncertainty about the actual date of moving, had 'frozen' economic and other activities affecting livelihoods, specifically:

- Investment in agricultural activities (crops and land preparation) was on hold and perhaps had been reduced in some cases;
- Limited or no maintenance of houses and other structures; and
- Reduced numbers of people travelling and staying outside the village, for economic purposes, for periods of time as they are concerned that they may 'lose out' if they are not present in the village.

During the meeting the word 'confidence' (in CBG and its ability to deliver the intended relocation) was often mentioned and relationships between the villagers and CBG remain good. However, there were indications that this 'confidence' was time limited and that it might be withdrawn if an additional delay were to occur. The implications of a delay could be very serious for CBG if relations with the Hamdallaye community were to be adversely affected as the likelihood of successful and cost-effective relocation of other settlements could be significantly reduced.

Although not raised as an issue by the villagers in two meetings with Ramboll Environ, CBG has informed that it is considering the drafting and issue of a pledging document to ensure that the new Hamdallaye village area would be free from further mining activities. Such a document would provide an important safeguard to the villagers ensuring that they can plan/invest in their houses and nearby village 'plots' without any threat to their livelihoods or the permanency of their occupancy of the new site. To provide an effective safeguard, it is possible that the villagers may wish to seek legal advice regarding the details of the potential pledging document.

#### 9.2.2 Fassaly Foutabhé

Planning for Fassaly Foutabhé is not as advanced compared to Hamdallaye except for planning for the replacement of community assets (as required by the interim RAP). To date, no land has been taken and no compensation paid. It is expected that the asset inventory will occur in July 2017, but no new cut-off date will be applied (previously set in November 2016). CBG expects to enter discussions with villagers about land take in the second half of 2017 (following completion of the inventory) and that compensation payments will not begin until 2018. Essentially, the component of interim RAP which deals with Fassaly Foutabhé will begin implementation before the end of 2017.

Fassaly Foutabhé will lose access to the Hamdallaye school and mosque. CBG, with input from the villagers, has selected a site for a replacement school. However, there are two potential impediments to Fassaly Foutabhé having its own school:

- i. In 2016 the Director in charge of education in the Boké area gave a verbal acceptance to provide a teacher as soon as the school is built; however, a formal request to the Director has not yet been submitted by CBG, though this is expected to occur in the very near future.
- ii. The number of pupils that can be provided by Fassaly Foutabhé is below the threshold needed for a school to be supported by the state; thus, consultations are being held with the nearby village of Mbouroré to determine if the Mbouroré villagers will collaborate and send their children to a school at Fassaly Foutabhé. This approach is logical as the Mbouroré children currently attend the Hamdallaye school and the distance to Fassaly Foutabhé is

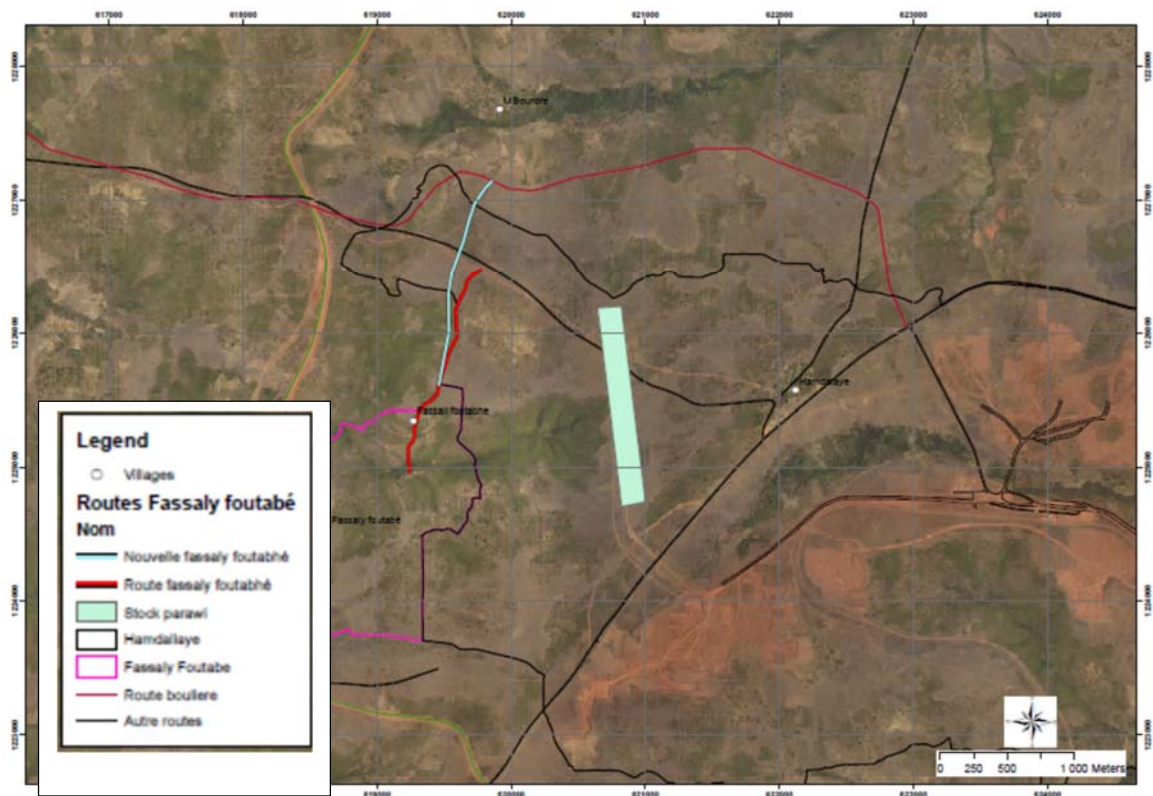


significantly less than the distance to the relocated Hamdallaye school (however, parents may still prefer to send their children to a school whose staff and reputation they know).

CBG will not build a mosque on Fassaly Foutabhé; however, CBG will build a 'prayer building'. Such a building is not considered appropriate for Friday prayers or for special religious occasions and Fassaly Foutabhé residents will need to travel to the new Hamdallaye site to attend the mosque at these times. The villagers appear to accept this situation (as expressed in an IESC meeting with Fassaly Foutabhé residents (02 July 2017); in the presence of the Hamdallaye Chef du Village<sup>19</sup>).

Finally, CBG aims to improve access for the villagers to Route Nationale (RN) 3. Figure 9-3 shows the current and proposed routes. The line (in bright red) shows the current access route linking Fassaly Foutabhé to the RN3 via the current Boulléré road, which will be blocked by the proposed Parawi stockpile area (light blue rectangle). For the first 'section' of the new route, the existing route, up to the point where it deviates (pale blue line), will be upgraded. Then a newly-created route (pale blue line) continues from the upgraded existing route, to the west of the current route, and then heads north and almost parallel to the existing route. It ends at a junction with the new Boulléré by-pass (darker red line) which leads to a junction with the RN 3 to the north-east of Hamdallaye (Hamdallaye is the white dot to the right of the Parawi stockpile area). This proposed alternative route remains to be approved by CBG management.

**Figure 9-3: Proposed alternative route from Fassaly Foutabhé to RN 3.**



CBG has made significant progress in the planning for resettlement activities of the two villages (both in terms of site preparation, but also in terms of staffing and implementation scheduling).

<sup>19</sup> Though considered as two villages, Hamdallaye and Fassaly Foutabhé share strong ties of sentiment and a range of socio-economic and cultural links. Indeed, they share the same Chef du Village with the Hamdallaye Chef du Village acting, effectively, as the Chef du Village for both villages.

However, the delay that has occurred, regarding the relocation of Hamdallaye, coupled with the importance of ensuring that Hamdallaye relocation is successful (being the first of an expected number of village relocations) requires that CBG is vigilant and proactive going forward. CBG needs to ensure that the implementing structure, in terms of staffing and supporting resources (implementing partners), is in place according to the current schedule of actions (for example, the tender processes for selecting both implementing partners and a contractor to construct all buildings is scheduled to occur in July and August 2017). Momentum created by the appointment of the Resettlement Manager needs to be maintained and the importance of ensuring that the necessary implementing partners are in place 'on time' requires a smooth and efficient procurement process.

### 9.3 Mine plan changes: Land acquisition and involuntary resettlement implications

The Resettlement Policy Framework of 13 September 2016, foresees the relocation of two nearby villages: Parawi (671 inhabitants) and Guéguéré (377 inhabitants) in 2018 due to mine expansion actions. A recent change to the mine plan has resulted in the relocation of these villages being delayed significantly. However, the mine plan change means that recently created individual dwellings, some of which have developed into small settlements (classed by CBG as 'hameaux'<sup>20</sup>) along the RN 3 (Parawi and Koobi plateaux), to the south-west of the village of Hamdallaye, will need to be relocated. Most are located on the north side of the RN3, although there is some occupation on the south side of the road (Figure 9-4).

**Figure 9-4: 'Hameau' on north side of RN 3 near Hamdallaye. The mix of traditional and modern building materials indicates a degree of investment in the location**



CBG considers that the occupation of these areas is illegal and believes that those who have created the dwellings/structures and 'hameaux' are residents of nearby Parawi and many of them retain their main dwellings in Parawi. CBG has informed those occupying the structures that their occupancy of the land is illegal (end 2015 and in the first semester 2016) and that they are expected to move before mining begins in this area. CBG refers, collectively, to the roadside 'settlement' as Kankalaré. Irrespective of the legality of the land occupancy/use, CBG has

<sup>20</sup> 'Hamlets' in English

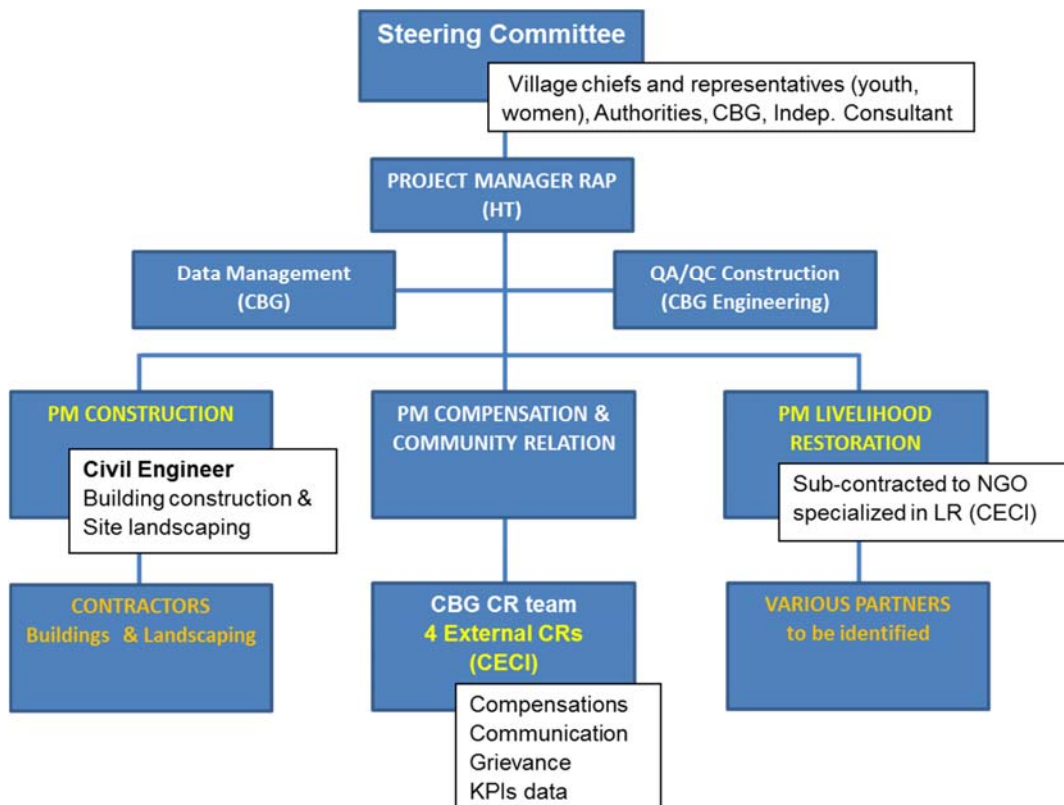


decided that it will abide by PS 5 and prepare a RAP to manage the relocation/compensation of those who have established agricultural plots and housing along the RN 3. The scale of relocation has not been determined yet, but it may reach just over 400 individuals (based on 2013 and 2016 data presented in the ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road, Revised Draft, June 2017 [Ref. 08]).

**9.4 Resettlement: Institutional capacity**

The current RAP implementation management structure is presented in Figure 9-5.

**Figure 9-5: Current RAP Implementation Management Structure**



The implementation structure is taking shape now that the Resettlement Manager is in post (at the time of the IESC visit he had been in post for approximately 1 month). The contract for Paul Willcott, an independent resettlement consultant who has been working on resettlement issues for CBG, will expire at the end of the first week of August 2017. Thus, a ‘handover’ period of two months is in place and it is to CBG’s credit that this ‘handover’ period has occurred. Apart from the Resettlement Manager, a key post is that of the person responsible for Compensation and Community Relations. During the IESC site visit it was confirmed that an existing CBG staff member would be allocated to this post. Currently, this staff member reports to Executive Reporting Lead – Expansion Project and not to the Resettlement Manager. This new role needs to be formalized as soon as possible so that the Resettlement Manager will have full time dedicated support.

A structural change has occurred with the ‘Resettlement’ function moving from the Expansion Project HSEC team to CBG ‘Operations’. This means that the Resettlement Manager does not now report to the Expansion Project HSEC Manager. This change should not interfere with the collaborative links that have been established between the Resettlement Manager and other

senior members of the HSEC department (such as the Community Relations Manager) and overall is considered by the IESC to be a positive move.

The management of the implementation of the LR component of the RAP will be sub-contracted to an entity specializing in this type of work. In Figure 9-5, the Canadian NGO 'CECI' is mentioned as being responsible for this task; however, a tender process will confirm the NGO/company/institution that will be responsible for the LR component. CECI has both a presence and a history of work in Guinea. At the time of the IESC visit, the ToR for the LR work had not been issued and therefore no entity had been appointed. Specialist contractors with responsibility for specific LRR tasks should be appointed, also, but this can only be done once the 'managing' entity is in place.

### 9.5 Past compensation and grievances close-out

During the site visit Ramboll Environ was requested, by CBG, to devote the planned session on this topic to a discussion on how the action/s that CBG could take that would enable it to meet the following ESAP requirement, *"Undertake review and assessment of past compensation and resettlement for the period January 2010 to January 2015. Ensure past compensation payments are not associated with a reduction in livelihood status for the recipients and any necessary mitigation measures are in accordance with PS5. Compliance is defined as a confirmation of no negative change in livelihood status for previous recipients of compensation payments."*

Since the end of 2015, CBG has submitted two reports to Lenders. Both have been subject to Policy Lender and IESC comments and neither has been accepted as providing, "... a confirmation of no negative change in livelihood status for previous recipients of compensation payments." CBG expressed their concern at this situation and clear desire to comply with the ESAP requirement; however, they were unsure how best to provide data that would enable a confirmation to be accepted by Ramboll Environ and the Policy Lenders.

Ramboll Environ's social specialist conferred with the IFC social specialist and it was agreed that the Ramboll Environ social specialist could propose a way forward for CBGs' consideration at the session. Essentially, the following process was tabled and, after clarification questions and discussion, was accepted by CBG:

- Provide confirmation that all compensation grievances for the period 2010-2015 were now closed-out (CBG confirmed verbally that this was indeed the case);
- Using CBG data showing that there were ~200 PAPs (from 15 villages), CBG to undertake key informant interviews with the Chefs du Village (of the 15 villages) and ask them to identify households that may be considered vulnerable (using criteria developed for the Resettlement Policy Framework) and/or very poor;
- CBG then to cross-check the identified vulnerable households against the list of PAPs for each village;
- If there are PAPs amongst the vulnerable and/or very poor households, CBG to initiate further investigations to determine if their current status can be linked in a way that indicates, credibly, that this status is due to the previous loss of assets (in the period 2010-2015) and inadequate compensation;
- If certain PAPs are identified as having experienced a negative change in livelihood status as result (wholly or in significant part) of loss of assets and inadequate compensation, then CBG to determine what remedial measures it proposes to take to rectify the situation; and
- Integrate monitoring/evaluation of any PAPs, who will be beneficiaries of remedial measures, into the planned monitoring/evaluation programme for all future resettlement actions.

Following this work, CBG will submit a report, presenting the results, to the Policy Lenders.

## 9.6 COBAD Road: Land acquisition and involuntary resettlement

The COBAD Road is being constructed to transport bauxite from the COBAD concession to a rail transfer yard, rail spur and associated facilities adjacent to the ANAIM railway (at PK 105<sup>21</sup>) and near the village of Horé Lafou. Construction of the COBAD Road is almost completed (Sections 1 and 2) and work is continuing apace on the ~3.75 km of road and the rail transfer yard and related facilities (Section 3<sup>22</sup>) (Figure 9-6). The crossing of the RN 3, in Section 2 of the road, was 'manned' at the time of the IESC visit.

**Figure 9-6: Section of map showing location of a part of Section 2 and 3 of the COBAD Road (orange colour) and the rail transfer yard area (red coloured rectangle)<sup>23</sup>**



No physical relocation has occurred because of construction of Section 3 and the rail transfer yard. Economic displacement has occurred and COBAD continues to compensate according to its own procedures. CBG has been instrumental in persuading COBAD to act to avoid or mitigate the impacts of its land take on livelihoods, for example, by:

- Changing the alignment of the rail transfer yard to avoid damaging the culturally valued source of a spring (the 'custodian' of the spring source is a resident of Fassaly Foutabhé);
- Providing alternative paths to replace those made impassable by construction works; and
- Providing an area of topsoil to be used by nearby villagers for agricultural purposes (see Figures 9-7 and 9-8).

**Figure 9-7: Area of topsoil provided for agriculture**



<sup>21</sup> PK = Kilometre Point

<sup>22</sup> As defined in: ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road: Chapter 1 (Revised Draft, June 2017).

<sup>23</sup> Source: ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road (Revised Draft, June 2017)

**Figure 9-8: Villagers using new path through bowal**



In the previous IESC Monitoring Report [Ref. 07], it is stated that two settlements are likely to require relocation for environmental reasons (essentially noise and dust) due to their proximity to the COBAD Road. Revised noise modelling, undertaken by EEM, demonstrates that the village of Sinthiourou Ourkedji does not now require relocation. However, the ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road (draft): Chapter 7 confirms that relocation is still required for the community of Hairé Hounsiré Woyoh (this has been confirmed by further noise modelling done for the expected road traffic which demonstrates that the night-time noise level will exceed the IFC criterion).

The ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road [Revised Draft, June 2017]), chapter 5, refers to the '*breeders camps*' of Hairé Hounsiré Woyoh and provides a single location for Hairé Hounsiré Woyoh on a map. Ramboll Environ understands, after a previous visit to Hairé Hounsiré Woyoh in the company of CBG Community Relations staff, that Hairé Hounsiré Woyoh consists of three nearby clusters of houses and associated structures (for cattle management) which collectively make up the settlement. Two of these clusters are on the west side of the road (travelling north) and one is on the east side.

The Addendum for the COBAD Road [Ref. 08] shows the location of Hairé Hounsiré Woyoh as being on the west side of the road and states that, as it lies within 175 metres of the road, it requires to be relocated. As the other two clusters are also within this distance from the road they, it may be assumed, that they also will require relocation. As presented in the previous IESC Monitoring Report [Ref. 07], one of these clusters was relocated relatively recently by COBAD as its location was directly on the road alignment.

Discussions with EEM and CBG staff, indicated that there was some uncertainty as to the permanence of Hairé Hounsiré Woyoh. Further work is required to determine if one or more of the three clusters are occupied permanently or temporarily, but used seasonally in line with a transhumant livelihood strategy or if was a temporary settlement, at the time of ESIA Addendum work, that has now been abandoned.



The results of COBAD Road ESIA Report Addendum noise modelling, undertaken for Sections 2 and 3 of the road, indicate that the inhabitants of the following structures/settlement are candidates for relocation due to exceedance of IFC night-time noise criterion (see Figures 9 and 10):

- A single house with agricultural structures and land parcel located to the north east of the road. This house occupied by a widow and three children<sup>24</sup>; and
- A cluster of seven huts located almost directly opposite the widow's house may also require relocation due to noise criterion exceedance.

**Figure 9-9: Hamlet of 7 houses almost opposite the widow's house, but about 200m from COBAD road**



**Figure 9-10: Widow's house and related structures showing proximity to COBAD Road**



<sup>24</sup> CBG considers that the occupant is building a house in Sangarédi, but this needs confirmation.

Unfortunately, the ESIA Addendum for the COBAD Road: (Revised Draft, June 2017) is not clear regarding whether (or not) these two 'settlements' will/will not be relocated (for example, Chapters 7 (Social impact Assessment) and Chapter 8 Environmental and Social Management Plan do not contain an explicit statement concerning whether (or not) they will require relocation.

Overall, the ESIA Addendum for the COBAD Road: (Revised Draft, June 2017) states that,

*".... preliminary results of compensation validation or section 1 & 2 strongly indicate that COBAD has not met IFC PS5 along an 18.61 km portion of the haul road."*

Land has been taken for Section 3 (3.75 km in length) and it is likely that this conclusion also applies to Section 3.

While travelling along the COBAD Road there were one or two instances of new structures appearing beside the road. Some of them appear to be temporary and relating to agricultural activities (See Figure 9-11). Creation of agricultural plots beside the COBAD Road and their use by small children as play areas increases the risk of road accidents.

**Figure 9-11: Temporary structure in agricultural plot next to COBAD road. Two women and several small children were working in the plot.**



Table 9-3: Summary of Compliance Findings, PS5

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
021	Relocation of Hamdallaye Village	There has been a delay to the date for relocation of Hamdallaye village.	Construction	PS 5	Devote sufficient resources to ensure the procurement and <u>contracting</u> of CBG's delivery partner/s as soon as possible and provide an enabling environment to allow the implementation of the Livelihood Restoration Programme to begin as soon as possible.	<b>Moderate</b> (increasing to High if contracts are not in place by end of October 2017)
022	Access to agricultural land for new Hamdallaye site	Safe access to agricultural lands – in particular, the N'Dangara and Démourou areas – is required for Hamdallaye villagers.	Construction	PS 5	Senior management to confirm that the current option for provision of access is approved as quickly as possible and that finance and personnel resources are available to provide the manpower to manage the road/rail crossing effectively.	<b>Moderate Closed</b> (on the understanding CBG management has accepted manned crossings)
023	Provision of shade for new Hamdallaye village site	Planting of acacia <i>spp</i> in 2107 wet season.	Construction	PS 5	Ensure planting is begun and completed to plan in the 2017 wet season.	<b>Moderate</b>
024	Security of tenure for Hamdallaye villagers	Provision of confidence to Hamdallaye villagers that they will not be relocated again.	Construction	PS 5	Ensure that an appropriate legally binding mechanism is found to ensure that CBG cannot relocate the village again due to a change in mine planning.	<b>Moderate</b>
025	Community asset replacement for Fassaly Foutabhé villagers	New school needs to be formally and officially approved by Government and requires pupils from Mbouroré to make it viable.	Construction	PS 5	Maintain and strengthen efforts to obtain agreement of Mbouroré villagers and the formal/official approval of Government.	<b>Moderate</b>
026	Change in mine plan	Land take for mine operations in near future requires relocation of Kankalaré hamlets in 2018 and thus swift action is	Construction	PS 5	Prepare RAP in near future	<b>Moderate</b> (increasing to High if RAP not in place by at least

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
		needed to prepare the Resettlement Action Plan.			Update Resettlement Policy Framework in near future	3 months prior to RAP implementation)
027	Post of Manager for Compensation and Community Relations	The staff member allocated to this post currently does not report to the Resettlement Manager.	Construction and Operation		The role of the Manager for Compensation and Community Relations to be formalized as soon as possible.	<b>Minor</b>
028	COBAD Road	Relocation requirements are not yet clear/decisions not made.	Construction	PS 5	<p>During finalisation of the ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road: (Revised Draft, June 2017) provide clear statements on which settlements/households require relocation - with justifications.</p> <p>The livelihood strategy followed by the inhabitants of Hairé Hounsiré Woyoh to be determined, by a specific investigation, as an input to decisions/s on potential relocation.</p> <p>Resettlement Action Plan/s and or Livelihood Restoration Plans to be prepared, as appropriate.</p> <p>Update Resettlement Policy Framework</p>	<b>High</b>
029	Access to school for pupils of Kankalaré hamlets and Telli Bofi	At present pupils from these communities attend Hamdallaye school. Once the village is relocated – the distance to school will be increased significantly.	Construction	PS 5	Consider ways of ensuring that school enrolment and attendance by children of Kankalaré hamlets and Telli Bofi does not decline due to relocation of the Hamdallaye school.	<b>Moderate</b>



ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
					Select and implement the preferred option so that no disruption to attendance occurs.	

## 10. PERFORMANCE STANDARD 6: BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

### 10.1 Introduction

As per a requirement in the ESAP, CBG has developed a Biodiversity Management System (BMS) that is designed to achieve net gains of Critical Habitat as per PS6. Mitigation measures and a schedule for their implementation were identified in the BMS version 1, dated 29<sup>th</sup> February 2016. The main aim of the site visit in relation to biodiversity was to ascertain the extent of progress in the implementation of BMS mitigation. The ESAP also contains items relating to the off-site biodiversity offset for chimpanzees. The offsite offset was not a focus of the site visit and is not commented on in this site visit report; Ramboll Environ's comments following review of the offsite offset strategy have been provided separately to this report.

### 10.2 Resources

#### 10.2.1 Biodiversity Manager

The ESAP includes the requirement for CBG to employ a dedicated full-time Biodiversity Manager to manage the biodiversity risks associated with CBG's operations. To fulfil this requirement CBG has employed Johny Rabenantoandro [personal details to be deleted if the report is disclosed publicly] as a Biodiversity and Environment Manager ('JR' or the 'Biodiversity Manager'). During the December 2016 Paris workshop, Lenders expressed concerns that the Biodiversity Manager was being diverted away from implementation of the BMS to complete non-biodiversity related tasks such as the Waste Management Plan. Policy Lenders also proposed that CBG hire an additional mid-level environmental resource to support the Biodiversity Manager to deliver environmental work, to free up time for the Biodiversity Manager to focus on delivery of the BMS. CBG provided assurances that the necessary resources would be provided. Unfortunately, the situation has subsequently been exacerbated by the departure of the Expansion Project HSEC Manager which has led to the Biodiversity manager having to fulfil many of the HSEC Manager's former tasks as an interim measure whilst a replacement HSEC Manager is recruited. It is the IESC's opinion that the lack of a dedicated full time Biodiversity Manager has significantly reduced the extent to which the BMS has been implemented to date.

Ramboll Environ recommends that the Biodiversity Manager's time is refocussed back to implementing the BMS and developing the biodiversity team capabilities a matter of urgency. It is also recommended that JR is enabled to spend more time at Sangarédi, with a focus on transferring knowledge and capability from the Expansion Project to CBG Operations.

It is understood that the Biodiversity Manager is currently 1 year into a 2-year employment contract. If this contract is not extended or renewed, CBG needs to start planning a transition process within the next 6 months to ensure that there is a suitable hand-over period. The example of the hand-over from Paul Willcott to the new Resettlement Manager is very good and should be replicated for the Biodiversity Manager.

#### 10.2.2 Biodiversity Team

CBG has built a team of four biodiversity technicians, two based in Kamsar and two in Sangarédi, in addition to four environmental technicians. Ramboll Environ notes that the team is relatively inexperienced, although it has shown significant development since the November site visit (and is undergoing continued evolution in terms of team structure). During the site visit, Ramboll Environ was particularly impressed with the way the biodiversity team members interacted with local communities, obtaining local knowledge about biodiversity features and land management practices,

as well as providing sensitisation to community members on the importance of protecting forests. Unfortunately, it appears that the team's activities to date has been significantly constrained by the lack of vehicles. Ramboll Environ understands that vehicle availability has recently been resolved. However, there remains an issue of lack of equipment, which according to CBG is on-order but subject to similar delays seen with other procurement orders.

Ramboll Environ would make the following recommendations in relation to the Biodiversity Team:

- The team would benefit from additional training to build up their skill and experience base. This would be best delivered by the Biodiversity Manager, and particularly through spending more time in the field at Sangarédi;
- Any outstanding procurement issues for equipment for the biodiversity team need to be resolved; and
- The Biodiversity team is situated within the Expansion Project HSEC team. To effect significant changes to the environmental management of the mine, the Expansion Project capabilities and knowledge need to be transferred to the mine operations. This may require organisational restructuring. However, in the short term it is recommended that the biodiversity team efforts are more fully targeted to Sangarédi rather than Kamsar.

### **10.3 Biodiversity monitoring studies and on-site offset**

The BMS includes the requirement to complete additional studies on chimpanzees to determine more accurately population size and habitat. These studies are also required to better assess potential impacts to the Boulléré Key Biodiversity Area (KBA) as well as inform the development of the on-site offset. The monitoring programme was discussed during the December 2016 Paris workshop, and it was agreed that it is a priority that long-term monitoring is initiated to monitor populations, which will require a structured and repeatable transect survey methodology to be started in 2017. It is understood that the BMS actions relating to monitoring of other primate species, African golden cat, hippopotamus and otters will largely be captured as part of the chimpanzee study.

CBG is currently completing a tender process to identify external consultants to complete both the chimpanzee study and a 2-year project to develop a community-based forest landscape management structure. The implementation of the forest management programme is envisaged to deliver the on-site offset for chimpanzees, as well as numerous other BMS actions, including protection of the Boulléré KBA, provide a net gain in other critical habitat features associated with watercourse and gallery forest, as well as community involvement in management of potential impacts such as hunting and fuelwood use. It is understood that contracts may be awarded imminently. This is welcomed as it is Ramboll Environ's view that initiation of the chimpanzee study and the forest conservation programme are possibly the two highest priorities for CBG in terms of implementing the BMS. However, it is also worth emphasising that the monitoring and offset programme will require long-term commitment and funding from CBG.

From observation made during the site visits in November 2016 and July 2017, it is apparent that CBG will need to work closely with local communities if it is to be successful in meeting the requirements of IFC PS6. It is clear that the areas of natural and critical habitat are already under pressure from community use (e.g. slash and burn agriculture) and there is a very high potential for conflict between people and wildlife (e.g. conflicts with chimpanzees over access to water). The mining operations has a large potential to exacerbate these issues, for example, through reducing access to land, or impacting water resources.

CBG are also currently finalising the tender process for separate monitoring studies for herptiles and vegetation. It does not appear that a scope of works for fish monitoring has been developed, as stipulated in the BMS. During December 2016 Paris workshop the objectives and approach to the long-term monitoring of fish was discussed, including the potential for using physical parameters to

monitor habitat quality, as well as the potential use of environmental DNA. During the site visit, CBG and Ramboll Environ discussed briefly the possibility of using gallery forest as proxy for fish. Ramboll Environ recommends that this issue is discussed further with the Policy Lenders to agree a final approach.

**Figure 10-1: Recent slash and burn**



CBG has developed a scope of works for a marine monitoring programme, including hump-backed dolphin, manatees and turtles. It also includes a wider programme of survey of mangroves and to investigate cumulative impacts from other operators. This programme provides an opportunity for CBG to collaborate with other operators to manage cumulative impacts.

#### **10.4 Creation of plateau-by-plateau management units**

The BMS prescribes the creation of plateau-by-plateau management units ensuring early planning and monitoring and including input from the environment, social and engineering sides. This was agreed a priority action in the December 2016 Paris workshop. GIS expertise has been incorporated into the biodiversity team. However, due to procurement issues GIS software has yet to be secured and CBG has proposed to sub-contract its delivery through a third party.

Despite the delay in setting up the plateau-by-plateau management unit approach, some progress has been made in incorporating environmental constraints into the mine plan. According to the CBG Biodiversity Manager, the HSEC team were recently consulted for the first time by CBG operations in the development of the latest 6-quarterly mining plan to provide environmental and social input. Also, as part of the development of the Water Management Plan, spring locations have been mapped and these have been sent to CBG operations to be taken into consideration.

CBG has committed to implementing 100 m buffers for sensitive features such as gallery forest, springs and watercourses. In addition, the BMS stipulates that further actions may become required as the result of the Water Management Plan to protect critical habitat. During the site visit, there was some discussion whether a 100 m buffer will be sufficient to protect sensitive environmental receptors, particularly watercourses, springs and core chimpanzee habitat. This is a potentially contentious issue as larger buffers could impact the extraction of bauxite in some areas. The mine

operations manager expressed the need for clear and uniform guidelines that can be easily implemented. However, it is possible that the size of the buffer is best decided on a plateau-by-plateau basis. Based on the limited observations made during the two site visits, it appears that chimpanzees do not use the landscape uniformly and there may be some key nesting areas and water resources that are crucial to protect with larger buffers if they are not to be displaced. For example, the spring and valley to the south west of Kagnaka was observed to support numerous chimpanzee nests during both November 2016 and July 2017. Chimpanzees were seen and heard in the valley on two separate days during the July 2017 site visit. This area is also known to be sensitive in terms of competing use of water, which was expressed by community member during both visits.

**Figure 10-2: The spring-head gallery forest and valley at Kagnaka where Chimpanzees were observed during July 2017**



### 10.5 Routine environmental inspections

A HSEC inspection team has been created, which have been particularly active in monitoring the construction activities of the COBAD road. CBG has developed a proforma for use by the team during inspections. This currently includes a small number of elements relating to biodiversity and could be further developed to contribute to the implementation of BMS actions. Including enhanced biodiversity elements on the proforma would assist the environmental inspectors to be comprehensive and systematic in their inspections, as well as facilitate the results to be collated. Ramboll Environ suggests that the following could be included on the proforma:

- Signs of poor water quality or fish kills;
- Record of any animals killed on the roads;
- Aspects relating to limitation of noise impacts, such as observations of inappropriate siting of noisy equipment or lack of controls of blasting;
- Observed fire risks, or use of fire by CBG employees;

- Inappropriately installed lighting, or lighting affecting habitats;
- Observations or evidence of hunting, export of bushmeat, bushmeat markets, use of bushmeat by CBG employees; and
- Commercial use or transport of fuel wood.

During the site visit, the monitoring of COBAD Road construction was discussed. It is recommended that the environmental inspections of the near complete COBAD Road is reduced and refocused to the monitoring of CBG operations at Sangarédi.

#### **10.6 Land disturbance permit**

CBG has developed a soil resource management procedure, where any activity that causes disturbance to the land should be subject to an environmental and social assessment by the HSEC team and must obtain a permit to disturb the soil. The permit is developed following a joint site between HSEC and entity proposing the land disturbance visit and, according to the procedure, needs to be signed off by the 'HSEC Director'. The permit includes commitments aimed at minimising impacts to soil and vegetation, and the implementation of the commitments are verified during works. The procedure appears to be well devised, although there appears to be uncertainty whether all departments within CBG Operations are fully implementing it. For example, recent ground investigation works near Kagnaka did not appear to be subject to a permit, although this work may have started prior to introduction of the permit system. It is recommended that the HSEC team monitor uptake of the land disturbance permit (LDP) procedure by CBG operations and record any instances of works not covered by a LDP.

Many of the actions within the BMS are addressed through the implementation of the LDP procedure. Several requirements have been specified on the LDP proforma, including proximity to sensitive habitats, offering wood to local communities, limiting vehicle traffic to designated routes, and the need for restoration following land disturbance works. However, according to CBG Biodiversity Manager, several BMS items are captured during the soil disturbance permit assessment process, but are not currently specified on the permit proforma. This means that it is the responsibility of the HSEC team to define this requirement on a case-by-case basis. It is suggested that for robustness, that additional requirements could be added to the proforma, such as:

- Ensuring that work always begins in the part farthest away from critical habitat;
- Ensuring an environmental inspector is present during vegetation clearance;
- Prohibition of burning during vegetation clearance; and
- Need for clear demarcation.



**Figure 10-3: Location of recent ground investigation survey close to Kagnaka Chimpanzee Hotspot. Picture on right shows old chimpanzee nest directly above area of cleared vegetation**



### 10.7 Ecosystem services and stakeholder engagement

It appears that engagement with local communities by the biodiversity team is currently done on an *ad hoc* basis. However, the Community Relations department has prepared an Action Plan for Community Consultations and Sensitization for the period 2017-2018 which includes a campaign to sensitize local governments and communities about biodiversity; it is planned to include 25 communities in the campaign (Sangarédi and Kamsar areas) with completion dates for the two areas in Q4 2018. Ramboll Environ recommends that the CBG biodiversity team co-ordinates its activities with this campaign to ensure an effective engagement approach that meets its specific objectives. This engagement approach also needs to be aligned with the main biodiversity conservation programme biodiversity monitoring and on-site offset, which will be implemented by external consultants. Some specific recommendations are made below.

- **Local knowledge:** the local communities have a great deal of knowledge relating to the presence of high quality habitats, important species and their behaviour. For example, Ramboll Environ witnessed local communities being able to show CBG the location of chimpanzee nests and hippopotamus grazing areas;
- **Human wildlife conflict:** It is recommended that the potential for human wildlife conflict is assessed. For example, the Water Management team has surveyed the concession for the location of springs. However, during the site visits, discussions with local communities highlighted the potential conflict for water with Chimpanzees in two locations. This knowledge of which springs are subject to both human and chimpanzee usage should be an important consideration in the Water Management Plan;
- **Hunting:** According to CBG's Biodiversity Manager, sensitisation of CBG staff in relation to bushmeat has started in Kamsar, but needs to develop further to Sangarédi. Ramboll Environ

recommends that this issue will require a multi-pronged approach to include monitoring of the presence of hunters and well as markets. A strategy of engagement with local communities could include gauging the extent of bush meat hunting, presence of hunters from outside the local communities, as well as sensitisation in relation to threatened species etc. During the November 2016 site visit, a community close to the river Cogan described how they had a hunter come from outside wanting to hunt hippopotamus. CBG could help support communities to control undesirable hunting activities; and

- Use of fuel wood: During the site visits, many observations were made of communities collecting fuel wood, presumably for local use. This is often small sized wood, harvested as part of the rotational slash and burn. No evidence of exporting of wood or charcoal was observed. However, this could be investigated further through engagement with communities, and monitored as part of the regular environmental inspections.

#### 10.7.1 Biodiversity and Ecosystem Services Working Group

The BMS prescribes that CBG establishes a Biodiversity and Ecosystem Services Working Group involving stakeholders and external partners as a forum for communication and discussion. This should include local residents, local and national government bodies and NGOs. A formal working group has yet to be formed, although contact with some of the potential participants has apparently taken place (albeit not in the framework of forming a working group). Prior to formation, Ramboll Environ recommends that CBG gives careful thought on the Terms of Reference of such a working group and what the strategic purpose of the group would be. It is also suggested that the group is aligned with the main biodiversity programmes (biodiversity monitoring and the on-site offset).

### 10.8 Review and update of the BMS

The BMS version 1 has been developed by an external consultant EEM. It is now important that CBG internalise the BMS into its operations and make it functional. Towards this objective, CBG has developed the BMS version 1 into a practical management tool (using Excel spreadsheet) to develop KPIs, identify responsible parties and better define how actions will be delivered on the ground. The tool will also track implementation at regular intervals and identify when actions fall behind schedule. This development was ongoing at the time of the site visit, although a great deal of progress has been made. Ramboll Environ agrees that the BMS needs to be a living document and to continually evolve as actions are implemented and monitoring results assess their effectiveness. The BMS includes several actions relating to the BMS review and reporting process. It prescribes the establishment of a Net Positive Impact Verification Panel (NPIVP). It suggests that the NPIVP would bring together members of the Biodiversity Management Unit with external consultants responsible for the monitoring, and would be responsible for completing the regular review and update of the BMS. To date the Panel has not been formed, which given the early stage of implementation of the BMS is not seen by Ramboll Environ as a significant issue. However, it is recommended that a review takes place 6-12 months into the main biodiversity programmes. It is further recommended that the composition of the NVIVP is discussed with the Lenders.

### 10.9 Piling at the mineral quay

During a meeting with the Sogea Satom Construction Manager (responsible for marine piling) Ramboll Environ was informed that piling did occasionally continue into the night time. During hours of darkness it is not possible for Marine Mammal Observers to fulfil their roles, noting the use of MMOs is a key mitigation measure. However, Ramboll Environ does not view this as a material issue for the following reasons:

- Piling does not commence at night but instead is a continuation of piling that starts during day light hours when MMO would have checked for presence of marine mammals;



- To date MMOs have not spotted any marine mammals throughout their surveillance;
- The 2013 marine mammal survey performed by EEM showed marine mammals to be found significant distances from the mineral quay at the mouth of the estuary; and
- Other mitigation measures, including soft start piling to allow marine mammals to move away from construction activities, are applied.

#### 10.10 COBAD Road

The old COBAD Road alignment was inspected during the site visit. At the time of the November 2016 site visit, some restoration activities had been implemented by CBG, replacing top soil on part of the Road area. During the July 2017 site visit, replanting of the restored topsoil was underway. The local communities have been employed to complete the planting work, and they have been consulted in the species to be planted. The local community preference is the use of non-native cashews that provide a harvestable crop. This demonstrates the challenge of restoring native vegetation in CBG's concession, and greater preparation and planning is required to work with local communities to ensure that the needs of people and wildlife are both addressed.

No restoration of the river crossings had taken place since November 2016, and now that the wet season has started more erosion is likely to be incurred. CBG was unable to provide Ramboll Environ with its plans for the restoration of the river, or who will be responsible. Careful evaluation is required to decide on the restoration measures required to reinstate water courses to a more natural condition, stabilise river banks and restore the important gallery forest. Unless planned carefully, the restoration measures could cause additional negative impacts to biodiversity.

**Figure 10-4: Left – large area of sedimentation and run-off from COBAD road in gallery forest critical habitat, right – two-metre deep eroded pit in COBAD road drainage ditch**



During the July 2017 site visit, significant erosion and sedimentation into rivers from the COBAD road were observed. The exposed banks alongside road cuttings have not been stabilised and are already showing signs of erosion. The road side drainage ditches are unlined and significant wash out is

already taking place at the bottom of slopes. Inadequate sediment traps have been installed in some locations, but the ditches discharge largely straight into the rivers. Therefore, sediments eroded from the banks and ditches are likely to cause significant impacts to the watercourses. If COBAD are unwilling to implement mitigation and restoration, CBG should assess what measures it can take to rectify the situation.

### **10.11 Vultures**

At the current time, measures for vultures in the BMS are limited to surveying for nests prior to vegetation clearance. During the November 2016 site visit, significant numbers of hooded vultures *Necrosyrtes monachus* (IUCN Critically Endangered) were observed in both Sangarédi and Kamsar (peak count of 50 at Sangarédi). These birds are likely to nest in the mature trees within the urban areas and forage predominately on domestic waste. During the July 2017 site visit, white-backed vultures *Gyps africanus* (IUCN Critically Endangered) were also observed at Sangarédi. The previous site visit report discussed that CBG is currently developing a Waste Management Plan that includes improvements to the management of the waste management facilities at Sangarédi and Kamsar. This has the potential to reduce access to waste by the vultures, which could have significant negative impacts on vulture populations. Therefore, it is recommended that the Waste Management Plan needs to address impacts from removal of food source on vultures and appropriate compensation measures. Ramboll Environ recommends that monitoring of vulture populations is included in the BMS. This could be addressed simply through an annual vulture count in Sangarédi and Kamsar.

Table 10-1: Summary of Findings, PS6

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
030	Resources	<p>ESAP item stipulates that CBG employ a dedicated Biodiversity Manager. However, the in post Biodiversity Manager has been diverted away from implementing the BMS.</p> <p>Delivery of the BMS has also been hampered by a lack of vehicles and equipment.</p> <p>The organisational structure of the Biodiversity Team residing in the Expansion Project HSEC team potentially reduces ability to implement change in CBG operations.</p>	All	PS6	<p>The Biodiversity Manager's time needs to be refocused back to implementing the BMS and developing the biodiversity team capabilities a matter of urgency.</p> <p>The Biodiversity team would benefit from additional training to build up their skill and experience base. This would be best delivered by the CBG Biodiversity Manager, and particularly through spending more time in the field at Sangarédi.</p> <p>Any outstanding procurement issues for equipment for the biodiversity team need to be resolved.</p> <p>The Biodiversity team is situated within the Expansion Project HSEC team. It is clear that to effect significant changes to the environmental management of the mine, the Expansion Project capabilities and knowledge need to be transferred to the mine operations. This may require organisational restructuring. However, in the short term it is recommended that the biodiversity team efforts are more fully targeted to Sangarédi rather than Kamsar.</p>	<p>Currently, <b>High</b> (until resources are adequately provided)</p>
031	Resources	The Biodiversity Manager is currently one year through a 2-year contract.	All	PS6	Ensure contract is either extended or transition and recruitment carefully managed to ensure continuity.	<p>Currently <b>Minor</b> (moderate in the future if not implemented)</p>

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
032	Monitoring Studies and on-site offset	CBG is currently conducting a tender process for a suite of monitoring studies and initiation of the on-site offset.	All	PS6	Contracts for monitoring studies and the forest conservation programme need to start by the end of July 2017 to avoid any further delays.	<b>Moderate</b> (increasing to High if contracts are not initiated by end of July 2017)
033	Plateau-by-plateau management units	The integration of biodiversity constraints into the mining plan has started, but key aspects are delayed or awaiting other studies (e.g. Water Management Plan).	All	PS6	The development of plateau-by-plateau management units are a priority and need to be updated as soon as additional information becomes available from other studies to ensure adequate protection is provided particularly to springs, watercourses and chimpanzee hotspots.	<b>High</b>
034	Routine Environmental Inspections	Inspection proforma does not systematically capture all of BMS requirements.	All	PS6	Update and enhance proforma and train environmental inspectors in relation to BMS aspects.	<b>Minor</b>
035	Land Disturbance Permit	Land Disturbance Permit (LDP) proforma does not systematically capture all of BMS requirements.	All	PS6	Update proforma.  HSEC team to monitor uptake of the LDP Procedure by CBG operations and record any instances of works not covered by a LDP.	<b>Minor</b>
036	Ecosystem Services and Stakeholder Engagement	Engagement with local communities by the biodiversity team is currently done on an ad hoc basis. Aspects of BMS relating to ecosystem services such as hunting, fuelwood behind schedule.	All	PS6	Develop an engagement strategy that identifies the objectives, identifies the target audiences and methodologies to be employed.	<b>Moderate</b>
037	Review and update of the BMS	Need to agree BMS review process.	All	PS6	It is recommended that a review takes place 6-12 months into the main biodiversity programmes (before March	<b>Minor</b>

ID	Aspect	Issue Description	Phase	Standard	IESC Recommendations	Significance
					2018). It is recommended that the composition of the NVIVP is discussed with the Lenders.	
038	COBAD Road	Restoration of river crossings yet to be initiated and no clear identification of responsible party to complete the works. Significant risk from sedimentation into gallery forest and watercourse critical habitats.	All	PS6	A restoration plan for the rivers needs to be developed. The responsible party to complete the works need to be identified and the budget made available. Liaise with COBAD over works required to prevent sedimentation into gallery forest and watercourses.	<b>High</b>
039	Vultures	Potential impacts to vultures from improved waste management.	All	PS6	Monitoring of vulture populations to be included in the BMS. This could be addressed simply through an annual vulture count in Sangarédi and Kamsar.	<b>Minor</b>

## 11. PERFORMANCE STANDARD 8: CULTURAL HERITAGE

### 11.1 Cultural heritage management documents

On 31 March 2107, CBG submitted a Cultural Heritage Management Plan (CHMP) and Chance Finds Procedure (CFP) to Lenders/Ramboll Environ. Subsequently, Lenders/Ramboll Environ submitted comments to CBG. During the site visit Ramboll Environ's Social Specialist was asked to meet with CBG and an EEM Social Specialist to discuss some to the comments and the best way to address them in revisions of the CHMP and CFP.

Subsequently, a meeting was held on Monday, 3 July 2107. Agreement was reached on the way forward and CBG confirmed that the revised and final version would be submitted by 31 July 2107.

**Table 11-1: Summary of Findings, PS8**

<b>ID</b>	<b>Aspect</b>	<b>Issue Description</b>	<b>Phase</b>	<b>Standard</b>	<b>IESC Recommendations</b>	<b>Significance</b>
040	Cultural Heritage Management Plan and Chance Finds Procedure	Cultural Heritage Management Plan and Chance Finds Procedure.	Construction and Operation	PS8	Prepare, approve, disseminate and implement the revised and final Cultural Heritage Management Plan and Chance Finds Procedure.	<b>Minor</b>

## APPENDIX 1. AUDIT ITINERARY

### Day 2 – Saturday 1<sup>st</sup> July Travel to Site

Time	Environment team	Social team	Biodiversity team
06.00 – 13.00	Travel from Conakry to Kamsar		
13.00 - 14.00	Lunch		
14.00 – 14.30 (office)	Sangarédi inception meeting, H&S inductions etc. Opening Meeting – purpose of the visit/scope of the audit		
14.30 – 15.00	Project status update (CBG presentation) <ul style="list-style-type: none"> <li>- construction activities completed/underway/planned</li> <li>- contractor and workforce management</li> </ul>		
15.00 – 15.30	HSE and S resourcing <ul style="list-style-type: none"> <li>- plans to replace Adrian Mill (interim measures and longer term plans)</li> <li>- current handover of roles and responsibilities</li> </ul>		
15.00 – end of day	Brief discussions concerning status of ESAP deliverables/key initiatives including: <ul style="list-style-type: none"> <li>- Water management (including procurement of equipment) – CBG presentation</li> <li>- Biodiversity programme</li> <li>- Use of surface miners vs blasting (feasibility study referenced in Nov 2016)</li> <li>- Mining plan and including ‘traffic light system’ to map E&amp;S sensitive areas described by Adrian Mill</li> <li>- Resettlement: <ul style="list-style-type: none"> <li>- Hamdallaye and Fassaly Foutabhé resettlement issues: work done, current/emerging issues and future planned activities (Carine Gracia and Paul Willcott);</li> <li>- 2018 resettlement actions (communities, RAPs/LRPs...)</li> </ul> </li> </ul>		

### Day 3 - Sunday 2<sup>nd</sup> July - Sangarédi

Time	Environment	Social	Biodiversity
08.00 – 09.00	Briefing (office)	Briefing (office)	Briefing (office)
09.00 – 10.00	Active mining sites (including an update on surface miner - CBG current thinking).  Previously rehabilitated areas (at various stages of reinstatement)  Water monitoring wells/springs and other water sources identified in water management study  Provisions for security guards	‘New’ Hamdallaye village site (accompanied by Paul Willcott and/or new Resettlement specialist)  Meeting with Hamdallaye village chief and elders  Sites of any new proposed Community Development Projects in Sangarédi and/or in nearby village/s (that is, projects which started implementation in 2017).	Spring head gallery forest: Kewel Bondi Pintoi’s Puddle Frog etc.
10.00 – 11.00			
11.00 – 12.00			



12.00 - 13.00	Lunch		
13.00 – 17.00	<p>CBG/Contractors’ workshops, laboratories? stockpile areas, rail yard, waste facilities, fuel/hazmat storage, waste water treatment, emergency response facilities and equipment etc.</p>	<p>Meeting with Fassaly Foutabhé elder (same person as previous visit if possible)</p> <p>Visit to any locations of CBG livelihood restoration actions and/or community facilities (such as the school and prayer building) for Fassaly Foutabhé</p> <p>Villages due for resettlement in 2018/2019: for example, Parawi and Gueguéré)</p>	<p>Red Colobus habitat area</p>

**Day 4- Monday 3rd July - COBAD ROAD**

Time	Environment	Social	Biodiversity
07.00 – 13.00	<p>South, including river crossing, site for COBAD transfer station and intended link to ANAIM railway AND/OR site of major planned modifications to railway for the multi-user rail project. Active construction sites Watercourse crossings Implementation of ESMP mitigation measures</p>	<p>Rehabilitated areas Villages due for resettlement: likely to be Hairé Hounsiré Woyoh, Sinthiourou Ourkedji</p>	<p>COBAD Road old alignment: Progress of reinstatement of previously disturbed areas and watercourse crossings. Plant nursery</p>
13.00 - 14.00	Lunch (pack lunch)		
13.00 – 18.00	<p>North, including cleared areas on old alignment. Also, stretch of proposed new road between Boundi Foullasso and crossing of paths from Sinthiourou Kourawel in the direction of Boulléré - if parts or all of it are motorable Active construction sites Reinstatement of previously disturbed areas Watercourse crossings Implementation of ESMP mitigation measures</p>	<p>Any villages that may be affected by physical relocation and ‘significant’ economic displacement by Section 3.</p> <p>Threatened sacred sites (as necessary and if acceptable to local communities)</p>	<p>Boulléré on-site offset site</p>

**Day 5- Tuesday 4<sup>th</sup> July**

Time	Environment	Social	Biodiversity
07.00 – 09.00	Kolaboui Railway inspection (Lenders)  Waste group (IESC)	0700 workers' accommodation	In Sangarédi (northern section)
09.00 – 10.00		Meeting with CR Team members to discuss Stakeholder engagement (current/planned activities; current/emerging issues)	
10.00 – 12.00	Active construction areas  CBG/Contractors' workshops, laboratories, stockpile areas, shunting yard, waste management facilities (current and historical), fuel/hazmat storage (including locomotive fuelling), waste water treatment including oily water, emergency response facilities and equipment etc.  Excluding quay	Grievance Mechanism  Past compensation review	
12.00 - 13.00	Lunch (IFC Q&A session)		
13.00 – 15.00	Environmental management systems (CBG and contractors) Progress towards ISO 14001 Internal Audit programme Environmental monitoring  ESAP  COBAD Road	See env  14.30 Community health and safety  Resettlement Manager	See above
15.00 – 16.00	Dredging  Piling	Security management	
16.00 – 1800?	Waste management  Hazardous materials	Cultural heritage management/Chance Finds Procedure	

**Day 6 - Wed 5<sup>th</sup> July - Kamsar**

Time	Environment	Social	Biodiversity
07.00 – 13.00	0700 quay visit  0800 -0900 Kamsar Port and processing plant site visit (cont....)  0900 Management of change  0930 Contractor management – HSE requirements including communication protocols  H&S (expansion and operations) Update on OHSAS 18001 Training programmes Incident investigation and corrective actions  Railway crossings (crossing safety initiative)	Issues arising from site visits on Day 3 and 4  Personnel Director  Security Manager	BMS  Offset programme  Biodiversity Monitoring / surveys (including marine mammals in estuary)  GIS  Reinstatement (progress towards use of natural species)  Quay area  Meetings with contractors and MMOs
13.00 - 14.00	Lunch		
14.00 – 15.00	Keep free – Lenders and IESC meeting and prep		
15.00 – 17.00	Close out meeting - IESC presentation - Discussion (all)		

**Day 7 – Thursday 6<sup>th</sup> July**

Emergency response (actions taken since November 2016)

Travel to Conakry

### APPENDIX 3. PROJECT DOCUMENTATION PROVIDED FOR REVIEW

Ref no.	Document Title	Organisation
01	CBG weekly scorecards	CBG
02	Attachment S, CBG Environmental and Social Requirements, 12 <sup>th</sup> August 2016	Fluor
03	Plan d'action de consultations et de sensibilisations des communautés au niveau des secteurs de la mine, des rails et du port dans la concession de la CBG pour 2017-2018.	CBG
04	Emergency Response Management Plan, Issue A 28-06-17 (Issued for review)	CBG
05	EMERGENCY RESPONSE PLAN - MINERAL QUAY EXTENSION AND MARINE DREDGING. 0022300-ERP dated 27 <sup>th</sup> march 2017.	Sogea Satom
06	Emergency Response and Plan. RAILCAR UNLOADING PIT & TRENCHES – CBG EXPANSION PROJECT – KAMSAR GUINEA INTFOAS_ERP.0011/0	Tecnasol
07	CBG BAUXITE MINE EXPANSION PROJECT, GUINEA ENVIRONMENTAL AND SOCIAL DUE DILIGENCE – SITE VISIT REPORT, January 2017	Ramboll Environ
08	ESIA Report for the CBG Expansion Project – Addendum for the COBAD Road [Revised Draft, June 2017]).	CBG

## **APPENDIX 3. PHOTO LOG**

**APPENDIX 3. PHOTO LOG**



**Photo 1.** Sangaredi maintenance workshops – oil contaminated drainage channel downstream of oil water separator



**Photo 2.** Sangaredi maintenance workshops – pooled oil at discharge location on the site boundary





**Photo 3.** Poor working practices – note use of forklift truck as working platform



**Photo 4.** Surface miner – note creation of steep and unstable mine face



**Photo 5.** Fuel spillages at Sangaredi power plant – same spillages observed in November 2016



**Photo 6.** Unimpeded use of CBG Haul roads by villagers





**Photo 7.** Unprotected raised platform at water treatment plant – fall risk



**Photo 8.** Sangaredi landfill – evidence of some management (compaction and covering with laterite)



**Photo 9.** Groundwater monitoring – down gradient of Sangaredi landfill



**Photo 10.** Waste water treatment plant at Sangaredi – overgrown (inefficient) filtration beds





**Photo 11.** Discharge downstream of Sangaredi WWT plant at confluence with another stream



**Photo 12.** Crossing of COBAD Road and the main road between Boke and Sangaredi (N3) – no overpass/underpass as referenced in the ESIA



**Photo 13.** Section 3 of COBAD Road – transfer station. Unprotected steep slopes created by surface miner



**Photo 14.** COBAD Road – abstraction of surface water contrary to mitigation measures specified in the ESIA





**Photo 15.** COBAD Road - poor H&S practices are common place



**Photo 16.** Recently completed section of COBAD Road – erosion and damage to rock armoured slopes



**Photo 17.** COBAD Road – erosion leading to siltation of watercourses



**Photo 18.** COBAD ROAD - discharge of fine sediments to stream located in the vegetation





**Photo 19.** Part constructed bridge on the abandoned section of the COBAD Road – no progress since Nov 2016 visit



**Photo 20.** Upgraded temporary foot crossing (replacing earlier log crossing)



**Photo 21.** Significant erosion around bridge – wooden planks required to cross bridge on the far side following erosion



**Photo 22.** COBAD Road – reinstatement of the abandoned route showing good vegetative cover with onset of rains.





**Photo 23.** Tora Bora – waste will need to be move during site preparation



**Photo 24.** New railway footbridge - in use during passage of trains



**Photo 25.** Kamsar Landfill – compaction and spreading of laterite cover with bulldozer



**Photo 26.** Kamsar landfill – large areas of standing water including traces of hydrocarbons





**Photo 27.** Construction of the new crusher pit at Kamsar



**Photo 28.** Bunded hazardous liquids and stockpile of hazardous wastes. MSDSs in multiple languages on the wall.



**Photo 29.** Excavation works inside crusher diaphragm

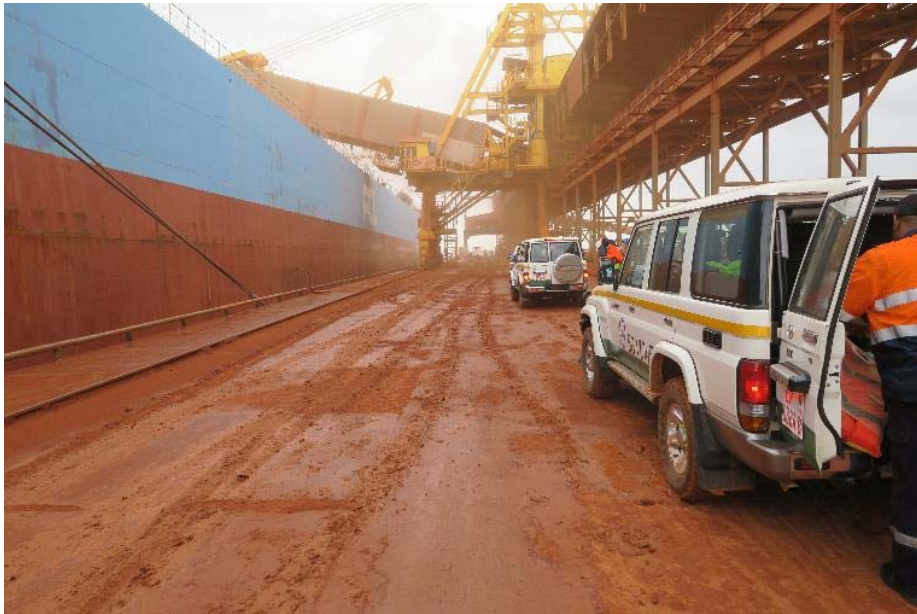


**Photo 30.** Good practice - moving excavator with flag man

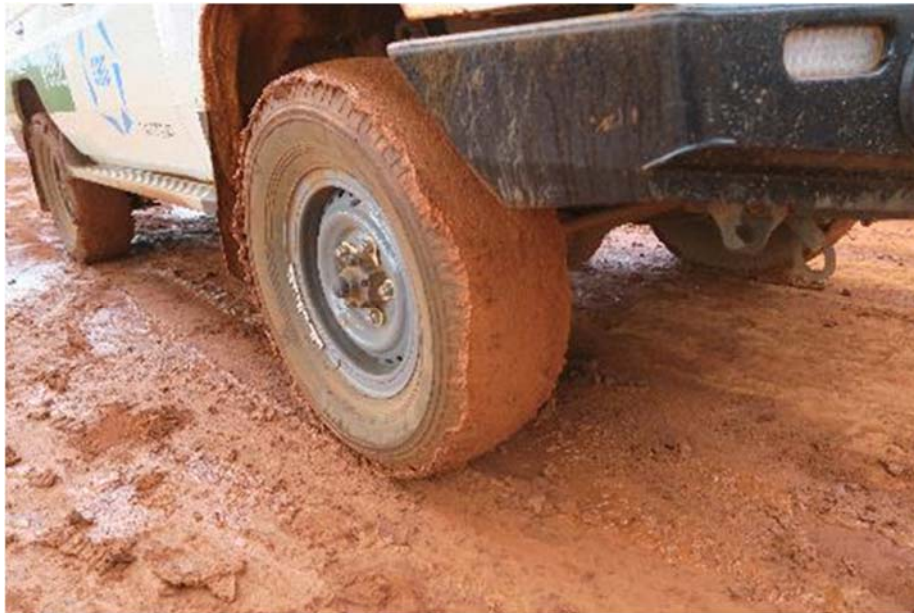




**Photo 31.** Unauthorised personnel – security and H&S risk



**Photo 32.** Bauxite loading at the jetty



**Photo 33.** Rainfall and large volumes of dust from loading made jetty very slippery for pedestrian and vehicles – skidding vehicles noted



**Photo 34.** Bauxite loading viewed from the newly extended jetty





**Photo 35.** Construction of extended jetty with jack-up piling barge in the background



**Photo 36.** Piles for the jetty



**Photo 37.** Kamsar port - discharge location adjacent to tank farm and main oil water separator plant