



## **GAC PROJECT**

**Independent Environmental  
and Social Consultant**



**Second Monitoring Site  
Visit Guinea May 2019**





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Second Monitoring Site Visit Guinea May 2019**

<b>Prepared for:</b>	
<b>International Finance Corporation</b>	
<b>African Development Bank</b>	

<b>Team Members:</b>	
Ryan O'Connor	Project Manager / HSE Expert (not present on site visit)
Mark Mackintosh	Senior Environmental Mining Specialist
Louise Johnson	Senior Biodiversity Specialist
Jose Zorrilla	Senior Social Specialist
Olivia Vannello	Project Coordinator and Biodiversity Specialist (not present on site visit)

**RINA Consulting S.p.A.**

Società soggetta a direzione e coordinamento amministrativo e finanziario del socio unico RINA S.p.A.  
Via San Nazaro, 19 - 16145 Genova  
Tel. +39 010 31961 - Fax +39 010 3621078 - [www.rina.org](http://www.rina.org) - [rinaconsulting@rina.org](mailto:rinaconsulting@rina.org)  
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## ACRONYMS

<b>AfDB</b>	African Development Bank
<b>BEN</b>	Bauxite Environmental Network
<b>BMEP</b>	Biodiversity Monitoring and Evaluation Plan
<b>BMP</b>	Biodiversity Management Plan
<b>CASSM</b>	Company for Security Support of Mining Companies (Compagnie d' Appui à la Sécurité des Sociétés Minières),
<b>CBG</b>	Compagnie des Bauxites de Guinée,
<b>CBNRM</b>	Community-Based Natural Resources Management
<b>CE</b>	Critically Endangered (on IUCN Red List)
<b>CEO</b>	Chief Executive Officer
<b>CEFAD</b>	Centre for Training and Development Support
<b>CFP</b>	Centre for Professional Training (Boké)
<b>CHA</b>	Critical Habitat Assessment
<b>CIS</b>	Community Investment Strategy
<b>CLO</b>	Community Liaison Officer
<b>CMIS</b>	Special Intervention Mobile Company (Compagnie Mobile d'Intervention Spéciale)
<b>DSM</b>	Distance Surface Modelling (Chimpanzee data analysis)
<b>EBZ</b>	Environmental Buffer Zone
<b>EcoS</b>	Ecosystem Services
<b>EDC</b>	Export Development Canada
<b>EGA</b>	Emirates Global Aluminium PJSC
<b>EHS</b>	Environmental, Health and Safety
<b>EHSMS</b>	Environment, Health and Safety Management System
<b>EMP</b>	Environmental Management Plans
<b>ENAE-Koba</b>	National School of Agriculture and Livestock of Koba (École Nationale d' Agriculture et d'Élevage – Koba)
<b>EPC</b>	Engineering, Procurement and Constuction
<b>EPRP</b>	Emergency Preparedness and Response Plan
<b>ESAP</b>	Environmental and Social Action Plan
<b>ESMP</b>	Environmental and Social Management Plans
<b>ESHS</b>	Environmental, Social, Health & Safety
<b>FOOS</b>	First Ore On Ship
<b>GAC</b>	Guinea Alumina Corporation SA
<b>GIIP</b>	Good International Industry Practice
<b>GBV</b>	Gender Based Violence
<b>HC</b>	Human Capital
<b>HR</b>	Human Resources
<b>IBC</b>	Intermediate Bulk Container
<b>IESC</b>	Independent Environmental and Social Consultant
<b>IFC</b>	International Finance Corporation
<b>IR</b>	Industrial Relations
<b>ITP</b>	Interim Technical Panel (Moyen-Bafing offset)
<b>IWMP</b>	Integrated water management plan
<b>KBA</b>	Key Biodiversity Area
<b>KCT</b>	Kamsar Container Terminal

## GAC PROJECT

<b>KPI</b>	Key Performance Indicators
<b>MB</b>	Moyen-Bafing
<b>MBNP</b>	Moyen-Bafing National Park
<b>MIGA</b>	Multilateral Investment Guarantee Agency
<b>MoU</b>	Memorandum of understanding
<b>NG</b>	Net Gain
<b>NGO</b>	Non-Governmental Organisation
<b>NNL</b>	No Net Loss
<b>OHS</b>	Occupational health and Safety
<b>OS</b>	Operational Safeguard
<b>PAP</b>	Project Affected People
<b>PCBS</b>	Pre-Clearance Biodiversity Surveys
<b>PIIM</b>	Project Induced In-Migration
<b>PMC</b>	Project Management Consultant
<b>PS</b>	Performance Standard
<b>RAP</b>	Resettlement Action Plan
<b>RO</b>	Reverse Osmosis
<b>SEIA</b>	Social and Environmental Impact Assessment
<b>SEP</b>	Stakeholder Engagement Plan
<b>SHE</b>	Safety, Health, Environment
<b>SHEC</b>	Safety, Health, Environment, and Community
<b>SMP</b>	Security Management Plan
<b>SOP</b>	Standard Operating Procedure
<b>SPV</b>	Special purpose vehicle
<b>TARP</b>	Trigger Action Response Plan
<b>TPI</b>	Technology Partners International
<b>TSS</b>	Total Suspended Solids
<b>UNDP</b>	United Nations Development Programme
<b>USTG</b>	Union of Workers of Guinea ' <i>Union Syndicale des Travailleurs de Guinée</i> '
<b>WCF</b>	Wild Chimpanzee Foundation
<b>WHO</b>	World Health Organization
<b>WI</b>	Work Instruction
<b>WWTP</b>	Wastewater Treatment Plant

## EXECUTIVE SUMMARY

RINA Consulting S.p.A. (formally D'Appolonia), has been appointed to act as the Lenders' Independent Environmental and Social Consultant (IESC) to monitor the construction and operational phase of the Guinea Alumina Corporation (GAC) Project. The IESC scope is to assess compliance with the Environmental and Social Management Plan (ESAP) and the Environmental & Social Requirements of the Project during the life of the loan agreement and Multilateral Investment Guarantee Agency (MIGA) guarantee of the GAC 'Project'.

The Project includes the development of a greenfield bauxite mine in the Boké province of Guinea, the construction of a port terminal with an offshore export berthing facility and a loading conveyor at Kamsar, and the construction of railway spurs connecting the bauxite mine and the port terminal to the existing railway system.

This report presents the IESC's findings from the second construction monitoring visit post financial close, undertaken on the 13-17<sup>th</sup> May 2019.

### SHEC<sup>1</sup> Management

The SHE and Community Relations Management structure remains under review for the transition towards operations post-First Ore On Ship (FOOS) due at the end of June 2019, but in essence remains the same as for the last IESC visit (November 2018). The Safety, Health & Environment (SHE) Director has overall responsibility for four main reports, namely the Project SHE Manager (Mine & Port), Operations Safety Manager (Mine), Operations Safety Superintendent (Port), and Environmental Manager, as well as the contracted health service provider which covers both the port and the mine. The Stakeholder Engagement Director continues to have responsibility over all aspects of social management (See Social Section below)

Since the last IESC visit there has been the appointment of a new Environmental Superintendent who is considered to strengthen the environmental team, and brings a good skill set, and there has been a Waste and Resources Supervisor appointed who reports to the Environmental Manager. Biodiversity Team is now under-resourced, without a mentor or team leader following the loss of the Biodiversity Specialist in March 2019. GAC is now actively looking for a replacement. To manage social issues, a Guinean National with considerable experience in the mining industry in the region, and knowledge of the country's social issues, has been appointed as the Stakeholder Engagement Director, reporting directly to GAC's Chief Executive Officer (CEO). The rest of the capable Stakeholder Engagement team remains unchanged.

GAC remains committed to the development and implementation of a SHEC management system. The draft structural design of the Environmental, Health and Safety Management System (EHSMS) is considered to be good and meets Good International Industry Practice (GIIP) and is considered to be aligned with ISO 14001, and identifies the main risks and impacts. GAC reported that the plans will all be completed before FOOS, with some of the procedures and other documents (e.g. Standard Operating Procedures (SOPs) and Work Instructions (WIs)) being completed after FOOS. The EHSMS remains to be interfaced with DTP's (the mining contractor) and VIVO's (fuel contractor) management systems. Based on the discussion held, and documents seen, the IESC is reassured that the management system will be ready for operations. The full operational management system will then be reviewed by the IESC during the next monitoring visit in October 2019.

### Environment

Since the last IESC monitoring visit, GAC's Environment Team have commenced inputting the new and historical monitoring data from their laboratory contractor Technology Partners Limited (TPI) into the Borealis data base. As well as better tracking compliance, and querying data, this will enable GAC to evaluate data in the context of the overall project, and environmental/Biodiversity and community setting. In parallel once the data is with GAC (rather than TPI), they will be undertaking an evaluation of the monitoring strategy for the different media, and the locations of the monitoring points. The proposed timetable for this is that the data will be input into Borealis by mid-June 2019, and then the data and programme for TPI can be evaluated through queries, and linked to ARC-GIS, and alerts generated as appropriate. This data inputting and management of Borealis is being undertaken by a specialist Borealis database contractor. The IESC considers that that plan as presented by the Environmental Superintendent in charge of Compliance and Monitoring is appropriate and his recent appointment to GAC's SHE team adds more depth to the team with his fresh approach and international experience.

The Project remains in a dynamic construction phase and therefore the current resource efficiency management remains largely focused on tracking a few significant parameters such as monthly fuel usage. Once the Project moves into operations (post-FOOS), there will be the opportunity to track key performance indicators (KPIs) on

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<sup>1</sup> The document uses the term SHEC (Safety, Health, Environment, and Community) as used by GAC, which is equivalent to the traditional ESHS (Environment, Social, Health & Safety).

resource efficiency such as fuel use per tonne of product exported. The tracking and checking of fuel usage by the different divisions, and balancing this with the fuel supplied through the VIVO fuel system, should be part of the Waste and Resources Supervisor's role under the Environment Manager. GAC will need to ensure there is sufficient granularity in the data collected to evaluate where improvements can be made, and have a system with suitable cross-references to assess accuracy. Out of this resource efficiency effort further KPIs can be developed.

GAC is reported to have a draft Integrated Water Management Plan (IWMP), which is currently being reviewed internally. This should assist to define the water sourcing strategy, and tie into the review of the water monitoring programme. The aim should be to ensure that the monitoring data informs the IWMP and provides data to the Project to assist management assess the interaction of various parameters (e.g. rainfall and turbidity), inform management actions and decisions, as well as identify short and longer term trends which may affect the Project (e.g. changing rainfall patterns).

A number of the actions raised during the IESC's first monitoring visit have been closed, and there has been progress on others which remain open, the IESC does not have any specific concerns with the remaining open actions, although expects these to be closed before FOOS. Following this IESC monitoring visit there are a number of new remedial actions required at the Port Platform, such as the construction of an adequate discharge for the RO plant reject and WWTP discharges, and rectifying the detrimental impact the creek crossing is having on tidal flows in that water body and associated mangroves. The actions around these are detailed in this report, but in general, it is considered that they are straightforward to implement, and the IESC will review the remedial actions during the next monitoring visit.

Since the last IESC visit the management of waste has not progressed as far as planned by GAC and it is disappointing that the new waste management facility near the Tinguilinta Camp, which had been due for completion by the end of January 2019 remains unfinished. However, the Waste and Resources Supervisor has now been appointed, and at the existing management site waste volumes have been reduced and the incinerator has been commissioned. Also waste oil is now collected in an old steel tank rather than reused intermediate bulk containers (IBCs) significantly reducing the risk of releases environmental to the environment.

Since the last visit GAC has had a detailed assessment undertaken of the Tinguilinta Camp wastewater treatment plant (WWTP), which has resulted in a number of immediate remedial actions and a slightly longer term remedial programme which should result in the WWTP efficiency being improved and reduce the risks to the environment and workers. This is expected to be remediated during 2019 as part of the overall camp upgrades.

The impacts from the Platform car dumper dewatering on the adjacent creek have now been fairly comprehensively assessed, and whilst there were potentially weaknesses in the sampling strategy there appear to have been no long term impacts. The finalisation of the linkage of the settlement pond and polishing channel is now needed before the wet season starts.

Overall the Project's management of hazardous materials and pollution prevention is considered to be good, although some details around bund drainage controls need to be checked and better auditing procedures put in place to ensure that the integrity of environmental protection measures is in place and monitored.

The IESC's observation from the last monitoring visit that the air, noise and vibration baseline monitoring strategy should be reviewed and updated prior to the start of operations remains. However, with the recent move to place all the monitoring data into Borealis, and the appointment of a new Environmental Superintendent, the IESC anticipates that GAC will soon be in a position to review and amend its monitoring programme so that GAC maximises the benefit from the data gathered.

### Health and Safety

Health and Safety continues to be a key focus of top management and all morning meetings have a review of H&S at the start, and notice boards show performance. The monthly green book (presentation on Project progress) includes details of the month's safety focus (e.g. Exclusion Zones in May which reflects the fact that many areas of the platform are going live at this time, and have many hazardous activities underway). The IESC notes that there continues to be a good focus on H&S statistics, and key aspects, such as the number of drugs and alcohol tests, or training courses undertaken. The HSE week in May focused on the clean-up of the site. There have been zero Lost Time Injuries, Restricted Work Case or Medical Treatment Case for the month of April, and only one LTI for the year to date. Malaria rates through the dry season (since the last IESC visit) have been very low (15 for the year to date) and none were reported for the month of April. GAC continue to track nine leading safety indicators and 15 lagging indicators.

GAC's emergency preparedness and response plan (EPRP) still requires updating to reflect the operational case, including tying into VIVO's EPRP for the fuel delivery and distribution. Following the reappraisal of the failure risks associated with the dam and the increase in the modelled worst case scenario flood zone and the speed of the

inundation, a specific Dam Emergency Plan has been developed. GAC will manage the dam in operations (rather than designating the responsibility to DTP as was initially planned). As part of the dam emergency plan, a Trigger Action Response Plan (TARP) has been developed which has four trigger levels. GAC has trained 10 people in the village in the TARP and the evacuation actions, and this training was tested through a drill exercise on the 13<sup>th</sup> May 2019. This drill was considered to be a success with response times for the evacuation and arrival of GAC emergency vehicles within the specified times. GAC has also developed an Operation Maintenance and Survey Plan for the dam which was not available for review by the IESC.

There are no updates on traffic management and safety, with no significant issues reported or identified. GAC reported that there have a number of H&S training courses for the new contractors coming onto the site (VIVO and DTP), some of which are related to traffic management and safety.

### **Biodiversity**

The loss of the Biodiversity Specialist in March 2019 (we are informed the consultancy contract was not terminated on commercial or professional reasons) means the 2-person Biodiversity Team is under-resourced, currently without a mentor or team leader. GAC are actively trying to find a suitable replacement but competition is fierce for internationally experienced, qualified individuals willing/able to take on such a role. We recommend GAC source a temporary replacement from a specialist consultancy with existing knowledge of the project e.g. from TBC. Planning for additional staff resources to effectively manage the workload and implement all biodiversity management/monitoring requirements would ensure a degree of resilience within the team to cope with unforeseen staffing turnover.

A key focus area for this site visit was to discuss implementation of the Biodiversity Management Plan (BMP) *general* control measures, and score progress (red/yellow/green) for each. It was valuable to discuss control measures and prioritise with the Environment Manager. Post visit, GAC has recirculated a version, having aligned the scoring with their existing internal project progress scoring system to aid with ongoing performance assessments – the IESC will provide feedback following review.

There was insufficient time during the visit to review in detail with GAC the BMP *species-specific* control measures, or any of the monitoring activities contained within the Biodiversity Monitoring and Evaluation Program – these will also need to be reviewed at GACs earliest convenience, scored and any gaps discussed prior to the next site visit (ideally in the next few months).

We make recommendations on the range of presentation topics to provide the IESC and Lenders during site visits to enable a structured discussion of progress or challenges related to various work activities (very few presentations were provided to us).

During discussions, the IESC were encouraged that Environmental Buffer Zones now seem more established into the mining planning process and we observed the integration of updated remote sensing data with higher resolution that will more accurately delineate EBZs within the company's GIS system. There is a lack of clarity in how the BMP/BMEP aligns with the Environmental Management System (EMS), management plans and the EBZ decision framework. IESC is keen to understand how key elements of the existing BMP & BMEP will align with the operational EMS and plan development, as this is not yet clear – for example, the pre-clearing biodiversity survey data integration into mine planning avoidance, and the decision framework that decides when EBZ encroachment is acceptable. Aspects such as these should be reviewed to ensure that these are formalised procedurally and integrated within GAC's management system.

GAC's participation in the Bauxite Environmental Network has also been impacted by the loss of the Biodiversity Specialist, and thus no updates were received on GAC's intentions or plans to continue these collaborations and address cumulative impacts.

An area earmarked for the 'rock storage' was queried by the IESC (and Lenders) during the site visit, but discussions were halted by GAC. Note: As the footprint of any potential rock dump might be sizeable, we strongly recommend GAC adhere to the mitigation hierarchy implicit in PS6 requirements and choose an area of Modified Habitat in preference to Natural Habitat. The IESC recommend GAC undertake a robust alternatives analysis to ensure that no priority biodiversity features will be impacted – if there is the potential for them to be impacted, GAC needs to demonstrate that no other viable alternatives exist.

With regard to ecological monitoring, the Final Report from the 2018 chimpanzee survey was provided. The results indicate that by using a combination of traditional transects and recce walks, along with a localised nest decay rate and modelling, an updated estimate of 217 (171-264) individual chimpanzees has been generated for the concession. The use of camera traps and DNA analysis from faeces were particularly useful to help identify individual chimpanzees and start to determine group characteristics – e.g. DNA analysis allowed the specific identification of 115 separate individual chimpanzees. Further such analysis will prove invaluable in understanding

group characteristics in the area. The locations of highest chimpanzee density (2018) are clearly indicated, including Plateaus 20 & 26 and an area stretching from north-central across to the south east of the concession – see section 6.2.2 for more detail. This work should inform GAC's future ongoing chimpanzee monitoring program, plus help identify the best area(s) for onsite set-aside within the concession – topics that will both be discussed during our next visit, along with how this informs Project mitigation measures, including restoration for mined areas.

With the Biodiversity Specialist not being present, a full review of GAC activities was not possible during the visit. Information on other ecological studies undertaken or planned for the rainy season was not provided – post-visit, IESC again requested details on GAC's planned surveys but no information had been shared by the deadline for writing this report. During the previous site visit, we discussed the results and some shortcomings of the 2018 freshwater fish and herpetology surveys and the need for follow-up, but we do not know whether further surveys are planned for the rainy season due to start imminently. We flag the need for comprehensive implementation of the BMEP monitoring activities and presentation of this to Lenders, otherwise GAC is not able to demonstrate how well ecological impacts are being avoided or managed, and the state of priority biodiversity features core to the requirements of PS6.

We observed some areas where slope stability and restoration have been managed well. However, there have been delays in contractual negotiations with EPA, the organisation that provides not only nursery seeds/seedlings but also restoration planting and weed management. Currently it is not clear whether agreements will be in place to supply sufficient seeds/seedlings for the 2019 planting season. Weed management at the port site is not occurring regularly, and no information was provided on weed management at the mine. We await data on the size of the area restored, and size of the area managed for weeds.

During a walkabout around Kamsar to study boundary effects on mangrove, we observed two non-compliances at the Marine Laydown platform: (1) significant dumping of rubbish outside the fence and spilling onto the mangrove Critical Habitat (including GAC and Fluor branded rubbish – see Section 6.2.2 for photographs), and (2) multiple instances of slope instability and washout of platform foundation material into mangrove Critical Habitat. Both were reported to GAC and corrective actions listed. The rubbish had been cleared and bagged the week following our visit (photographic evidence provided), but at the deadline for writing this report we have not yet received evidence of slope stabilisation work which was to be completed prior to the start of the rainy season. We recommend that GAC review the environmental incident form and procedure and confirm that this is sufficient to capture ecological incident reporting such that details on incidents that temporarily/permanently affect Critical Habitat, CH-qualifying species, or priority biodiversity features are covered.

GAC have completed their internal review of the setbacks suffered by the mangrove restoration offset program, with strength of water especially waves at high tide being the primary cause. GAC have put forward ideas on how the program could be adapted and have issued a ToR for a University research group to assist. We reiterate our recommendation to consult with regionally experienced mangrove restoration experts, ideally with experience of designing and implementing offset programs. A strategic rethink is warranted – an external review of the mangrove offset programme was originally scheduled, but not undertaken. With regard to the Moyen Bafing chimpanzee offset, a Dec 2018 workshop output has been shared with Lenders. A Project Manager for the offset is to be recruited to oversee the overall project execution and represent the offset externally. In addition, GAC will shortly recruit an internal Offset Technical Manager to oversee the offset on behalf of the company.

With regard to avoidance and management of impacts on ecosystem services, the SYDEV-led community based natural resource management (CBNRM) program looks good and appears to be making progress in the right direction in the locations it is being implemented. The program needs to be implemented on a widespread basis being a vital pre-cursor to planned mining areas being targeted, as well as areas that GAC seeks to retain ecological value such as EBZs and restored areas. Regarding internal management, the IESC are of the opinion that application of the CBNRM program and alignment between the Environment/Biodiversity and Community teams does not yet feel settled within GAC. We have recommended several times for Senior Management to engage and enable this, to ensure there are overlapping, collaborative objectives and work-programs between the Environment/Biodiversity team and the Community team. We are advised there are now irregular meetings taking place, but these are focussing primarily on land access & disturbance. The BMP requirement is for an Ecosystem Services Working Group, working to a wider strategic purpose than simply land access/disturbance. For GAC to be compliant with PS6 and implement the necessary ecosystem service mitigation measures, the priority given to CBNRM needs to be scaled up. To avoid silo-working, the Environment/Biodiversity team should be better engaged in how the Community team is meeting the ecosystem service aspects of PS4 and PS5, and the Community team should be better engaged in how the Environment/Biodiversity team is meeting the PS6 ecosystem service requirements; perhaps this requires a workshop approach with professional facilitation, engaging both senior management and team-members. Based on the discussion held the IESC did not get the impression there was a

common purpose, and appeared that this was an area for improvement. Subsequently we have been informed that there is a formal weekly meeting between the environment and community departments, which, although we have not seen the agenda of these, appears positive and something the IESC will assess further on the next monitoring visit.

### **Social Management**

The Stakeholder Engagement department manages social aspects of the GAC operations. It is organized in three main areas: Community Relations, Resettlement and Compensation, and Social Investments, under the supervision of the Community Manager, who reports to the Stakeholder Engagement Director. Since the last IESC site visit in November 2018 the Stakeholder Engagement Director has been replaced with a Guinean national. The Stakeholder Engagement department currently has a total of 24 staff and 26 people hired on a contract basis, including the Social Investment Manager, Influx Management Coordinator, an Agronomist, 13 Community Relays<sup>2</sup> and 10 consultants supporting resettlement and compensation. It is positive that a new Stakeholder Director is a full time GAC employee as opposed to the previous director who was on a temporary contract. GAC informed of upcoming changes to the structure including the transfer of the Local Government Liaison function from Corporate Affairs and will be reporting to the Community Manager adding three staff to the Stakeholder Engagement Department. It is also envisioned that the Community Relations and Social Investment functions will be integrated under one senior superintendent. The number of staff and structure will continue stable until at least 2020, when it may be revised to address the needs of operations.

A Stakeholder Engagement Plan (SEP) and a Community Investment Strategy (CIS) are under implementation. Both documents are being revised for the operations phase. GAC has included additional gender equality provisions in the updated CIS, but should review the SEP, and the CIS to ensure all actions outlined in the Gender Strategy are included in the updated documents and are being implemented. Similarly, the human resource plans and programs should be revised to ensure all internal actions of the Gender Strategy are implemented. The community grievance mechanism is in place and average time to resolve grievances has been consistently reduced over previous periods. The mechanism will continue to be implemented and included in the SEP.

GAC continues implementing the Community Investment programs through six development programs: youth professional development, functional literacy, scholarships, community health, agriculture production and community infrastructure, some of which have a gender focus, with very positive results. However, at the time of the site visit, GAC was still in the process of evaluation of proposals and programs for implementation of the 2019 budget. Therefore, some programs had not been implemented in the first months of the year creating a gap in continuity. GAC needs to initiate budget planning and evaluation of community investment projects early to avoid interruption of programs and ensure their continuous success.

Labour and working conditions are managed by the department of Human Capital (HC). The Director of HC reports to the CEO, and has 11 staff divided in four areas: Learning and Development, Recruitment and Onboarding, Business Partners, and Payroll and Administration. Aspects related to working and labour conditions of the construction contractors are overseen by Industrial Relations and the Project Director.

In the Code of Business Conduct and Internal Regulations, GAC states its commitment to provide adequate working conditions, and comply with requirements of non-discrimination and equal opportunity, freedom of association and rejection of child and forced labour, and is committed to local hiring requiring contractors to hire local workers whenever possible. A strategy to substitute expatriates with Guinean nationals is in place.

GAC reached a collective agreement with the Union of Workers of Guinea (Union Syndicale des Travailleurs de Guinée – USTG), which elected new representatives in April 2019. The new agreement is to be reflected in an updated Internal Regulations. GAC provided a draft of the updated Internal Regulations, but the draft is in track changes, has different text and conditions in the English and French versions and has not been dated or signed. GAC needs to provide the final version of the revised Internal Regulations.

The contractors' workforce is not unionized. GAC supervises working and labour conditions of contractors. In the first 4 months of 2019, there have been 12 workers led project stoppages causing project delays. Most were related to salaries, payment and benefits. Three of these stoppages appear to be related to issues with demobilization, one was due to organization of elections of employee representatives and the remaining were related to payment or contractual issues and misunderstandings.

GAC has identified the high rotation of personnel as a risk to the project. GAC expects to reduce the level of rotation through the implementation of a succession plan to increase the participation of Guinean nationals in managerial

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<sup>2</sup> Term used by GAC for what is referred commonly as Community Liaison Officers (CLO): people from local villages hired by the company to support engagement

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and supervisory positions. However, retaining highly qualified personnel has proven to be difficult given the local conditions and the high demand of qualified people in the region. To improve attraction and retention of workers, the Tinguilinta camp is being upgraded, including the provision of family housing units.

GAC has two grievance mechanisms in place, one managed by HC and the other one managed by Compliance. Contractors have their own grievance mechanisms that are supervised by the Project area through the Project Management Consultant (PMC) Industrial Relations (IR) department. IR did not provide information on numbers of grievances received and resolved by contractors and GAC reported that no grievances had been registered in 2019 through the internal grievance mechanism managed by HC. It was informed that workers grievances are received frequently by HC staff, but these are resolved quickly and therefore not registered. GAC should register all workers grievances in order to document and be able to identify trends and implement measures that help avoid causes of complaints and anticipate and avoid potential conflicts.

Information provided indicated that there may be a level of sexual harassment and potentially other forms of Gender Based Violence (GBV) in the company. GAC informed that there was one confirmed case of sexual harassment in 2015 where the perpetrator was fired. GAC should make efforts to ensure GBV and other types of harassments do not exist in the organization by providing training and developing other related programs. During the site visit, the IFC offered assistance through a GBV specialist. GAC needs to ensure that all internal focus actions of the Gender Strategy are implemented throughout the project including identifying job opportunities for women, actively approaching technical schools and women's groups to advertise available positions, undertake career development sessions with male and female workforce separately to understand specific goals, review health and safety training procedures and track number of men and women and their salaries.

GAC has a traffic and vehicle management plan, and provides road safety training to communities in the concession area and along the corridor between the mine and the port. GAC has not yet implemented the recommendations from the previous visit to expand safety measures for water safety through awareness and training to the communities around the dam and set signs both at areas where community members can access the shores of the dam and at the river crossing in order to prevent accidents.

GAC has established control measures for before, during and after blasting, which include the presence of area access spotters and security guard. Two days prior to any blasting, the community relations team informs of the event to nearby communities. A temporary buffer zone and control area is set at a 500 m radius for quarry blasting and 800 m for mine blasting.

GAC continues to make good progress with the planning and implementation the Project Induced In-Migration Management Strategy (PIIM). At the time of the site visit AMERI was finalizing a Report on Population and Migratory Dynamics commissioned by GAC for the area of influence. The report found that migrant population in Tanéné, Sangarédi and Kamsar was 11%, 52%, and 29% respectively. In the last two years approximate population growth through migration was 2.5%, 5.7%, and 6.1%, in the same districts with 6%, 2%, and 5%, being specifically attracted by GAC's project. GAC needs to develop a clear plan to implement influx management actions in consultation with local and regional authorities, and civil society, identifying partners and defining responsibilities for implementation, including funding.

GAC has recently made some improvements to its security management arrangements including, among others, the increase of unarmed security guards and the implementation of a security protocol. GAC has also recently signed a Memorandum of Understanding (MoU) with the Ministry of Mines outlining how public security forces are to be engaged, when necessary, in the mine, port and the corridor between those. The MoU includes provisions to act in accordance to United Nations (UN) and international principles on security and human rights. A contract with the police for provision of security services was also signed stating that the services must be provided "in a professional manner in accordance with good practices". Considering reports of abuse, corruption and violation of human rights by the police, GAC should make best efforts to revise the agreement to define principles and procedures aligned with human rights, in the same manner as the MOU with the Ministry of Mines. GAC has in place a Security Management Plan that is mostly adequate but needs to be revised to incorporate newly adopted security measures and to manage risks to communities posed by GAC's security arrangements

Considering that the lack of electric power is one of the most pressing issues in the region, causing safety and security concerns due to protests and civil unrest that affect mining operations, GAC is engaging with COBAD and CBG, looking to potentially invest/donate resources to improving the electric system until the electric network is expanded and strengthened in Boké by the government. This strengthening is expected to happen in 2021 with the start of operations of the Souapiti hydroelectric power project.

GAC continues to implement livelihood restoration projects for people affected by resettlement and most of the commitments have been completed, only pending the distribution and installation of solar panels in Beli Kindy and completing the resettlement of Dapress artisans. A socioeconomic study of the artisans to assess their current

situation and develop measures to ensure they have the means to restore their livelihoods is in the procurement process. This should be expedited.

A review of the risk analysis of the dam requires the resettlement of the community of Sionthourou Tiouladi. The 44 households will be resettled a short distance uphill from the village's current location, outside of the flood risk area. The community has agreed to the resettlement. In addition, GAC has identified three additional areas that will be required in the short term: additional areas of Plateau 20 and 26 and a location for rock storage. The RAPs for these four areas need to be developed and provided to the lenders for review prior to any physical or economic displacement occurs.

GAC has continued to engage with fishers and expects to start implement measures fishers' safety measures, including sensitization for fishers and the nearby coastal villages of Taïgbé and Taïdy. GAC engaged a consulting firm to conduct a fishers' assessment study that was expected to be delivered in May. The fishers' assessment report should include location of fishing grounds and routes used by the fishers, as well as GAC and other mining company routes to fully understand impacts, as recommended in the "Revised Fishermen Impact" study completed in December 2017.

Compensation to individuals affected by the pipeline and access roads has been concluded, and compensation for community land is underway. After negotiations with authorities and communities, the prefecture of Boké issued a resolution outlining the scheme to select, prioritize and implement the compensation community projects. A committee formed by representatives of GAC, the prefecture of Boké and the subprefecture of Tanènè oversee the process to ensure projects benefit the communities. At the time of the visit, projects in 9 of the 11 affected villages had been implemented or were under development. Projects included schools, mosques, sanitation facilities, and water wells among others.

Although it was never determined who was responsible for the February 2018 bushfire that affected crops and cashew trees, GAC agreed to provide support to the affected families and signed a protocol for the plantation of trees with the Prefecture of Boké. The first phase of the program, already been executed, involved providing monetary support to the affected community to procure and plant replacement trees in their land affected by the fire. The second phase will be implemented based on the successful of the first place, yet to be assessed.

GAC continues to advance on the implementation of recommendations from the completion audits of resettlement in the northern part of the concession and Dapras, conducted in 2005 and 2008 respectively. All recommendations have been fully implemented with the exception of development of market gardens in Filima, and the rice project in Taïgbé and the support of a program to improve production of fruit trees in Petoun Djiga and Toulde.

The cultural heritage survey conducted as part of the SEIA baseline information gathering exercise covered all plateaus and valleys between them and an additional 300 m zone. Within the mining areas in DTP's 5-year plan for the exploitation of plateaus 20 and 26 there are two genie residences. One replicable genie residence is located in the central part of plateau 26 and one non-replicable is located within DTP's planned area, but just south of plateau 26. The sites are identified and mapped and GAC will ensure the sites are managed in accordance with the Cultural Heritage management plan. No cultural resources were identified in the area of the proposed rock storage area.

ANNEX A – ESAP STATUS TABLE (Update of Active Items on ESAP May 2019)

Ref	ESAP ID	ESDD Source	ESDD Issue /Topic	Required Action	Timeframe	Deliverable	Documents Provided	GAC Status / Comment	IESC Update May 2019
<b>PS1 Assessment and Management of Environmental and Social Risks and Impacts – Management System</b>									
M0001/17	1	D1.3 1.6.2; 4.1.5	<i>The draft SEIA (December 2016) for the railway upgrades provided largely meets lender requirements. However, additional clarifications, assessments, and management actions, were identified as being required to address the gaps in the SEIA. GAC through its involvement in the project implementation is working to have these addressed. The success in addressing these gaps, and ensuring the continued focus of the lender requirements in the project documentation and implementation will require strong management commitment from GAC.</i>	<i>GAC to confirm the position and roles of individuals with responsibility for working with CFB on ESHS aspects and ensuring the continued focus of the lender requirements in the project documentation and implementation.</i>	<i>Before Operations</i>	<i>Organisational chart showing GAC-CFB management linkage and description of the roles and responsibilities of GAC members</i>			<b>CLOSED</b>  IESC understands that GAC is taking as proactive approach to this and within the limits of its roles and influence. IESC will continue to monitor but consider closed.
M0004/17	4	D1.6.1; 1.6.3;	<p>The Emergency Prevention and Response Plan (EPRP) is limited in its extent and is largely inward looking other than the cross reference to security plans. The EPRP should include details on the main components and consideration of the different risks in construction and operation.</p> <p>The EPRP does not include any requirement for, or details on how to, interface with community authorities. To meet Lenders standards, measures to support communities in responding to an emergency are necessary.</p>	<p>Refine EPRP and define project facilities and emergency situations to be addressed, incorporating lender guidelines.</p> <p>Define potential situations having impacts, and extent of communities and individuals subject to potential impacts. Consult communities so that their views and concerns are incorporated in the plan.</p> <p>Assess the capabilities of communities, government agencies and related parties to respond to emergencies at the mine and port, and identify what active community/local authority role(s) in preparing for and responding to emergencies associated with the project are necessary. Identify notification, communication, and support measures to include local authorities in the plan.</p>	<i>Before Financial Close</i>	Revised EPRP	GAC EPRP process_v1.docx Emergency Response Scenarios_ALL_14Dec2017.pptx  Emergency ResGAC DAM EMP draft-EN-V1-20171224.docx 0254472 GAC Dam Breach report 20150325.docx  GAC_Crisis Management_Guidebook_v20170908.pdf  GAC_Crisis Management Manual.docx  Loi_Gestion_Catastrophe.docx Plan_National_Gestion_Catastrophes_1994.docx	<b>In Progress</b>	<b>ACCEPTABLE</b>  The IESC considers that there remains work to do but this is as expected as the project transitions from construction to operations - specific areas to be reviewed on the next monitoring visit include assessment of the updated EPRP and the extent to which it covers the dam and also operations (such as the fuel transfer and spill response planning) and addresses the current lack of discussion of the interface with the communities within the EPRP.

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Ref	ESAP ID	ESDD Source	ESDD Issue /Topic	Required Action	Timeframe	Deliverable	Documents Provided	GAC Status / Comment	IESC Update May 2019
<b>Assessment and Management of Environmental and Social Risks and Impacts – Stakeholder Requirements</b>									
<b>PS2 Labour and Working Conditions</b>									
<b>PS3 Resource Efficiency and Pollution Prevention</b>									
R0001/17	13	D3.1.1  3.1.2  6.1.2B	<p>The IESC considers that the integrated water management plan (IWMP) (31<sup>st</sup> March 2017) adequately addressed the majority of water management for GAC based on information available at that time, although it did not consider whether the use of dust suppressing binders could have mitigated the requirement for, or reduced the size of, the planned dam.</p> <p>New data is now available which influences the assumptions and conclusions of the IWMP and a revision is required.</p> <p>The IWMP for the reservoir area needs to better define requirements to ensure protection and conservation of downstream biodiversity</p>	<p>GAC to evaluate all opportunities to minimise water use, and reduce environmental (including dust suppression) and social impacts.</p> <p>As part of this GAC to update the IWMP for the project to include:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The results of the groundwater testing and whether supplementing the water supply from groundwater is a feasible option.</li> <li><input type="checkbox"/> Add detail on the decision process GAC is to follow to trigger the move from river to dam water supply.</li> <li><input type="checkbox"/> include the ESIA requirement for monitoring water flow on a daily basis downstream of the dam, and reconfirm the minimum flow appropriate to avoid freshwater ecological impacts downstream of the dam</li> <li><input type="checkbox"/> Discussion of, and assessment of the implications of, the volume of water available for dust suppression captured within the sedimentation ponds, as described in SRK report</li> </ul>	Before Operations	Updated IWMP Plan			<p>The draft updated IWMP has been prepared and this is currently with GAC for an internal review.</p> <p>The updated document needs to take account of baseline data collected to date, and also direct the future focus of the monitoring, so that the management of water (surface and groundwater) can be undertaken in an informed manner. The IESC anticipates that this item should be closed during the next monitoring visit, pending our review of the updated IWMP.</p>
R0002/17	14		<p>Water monitoring by GAC is limited to some aspects of water use, there is no detail water monitoring plan which is required for GAC to be able to monitor its water use, the natural water levels/flows, etc.</p>	<p>GAC to develop and implement a comprehensive water monitoring programme based on the key aspects of the IWMP and the water features (surface and groundwater) in the area. This should include selected headwaters around the plateaus. GAC should capture the monitoring data within an appropriate data bases to allow data interrogation, and assessment of temporal changes.</p>	Before Operations	Details Water Monitoring and Management Plan			<p>Water Monitoring and Management Plan – This remains under development. The new Environmental Superintendent understands the issues and is currently transferring all TPI data to Borealis and will be reviewing the current monitoring and assisting develop the future plans. It will require effort from GAC to establish a better monitoring network which is robust enough to withstand floods and provides information which can inform management decisions. Critically this should also tie in with freshwater ecological aspects of the BMP &amp; BMEP given the presence of aquatic critical habitat species.</p>
R0003/17	15	D3.1.1  3.1.2	<p>The IWMP is a valuable management tool to increase water efficiency, the water model within the IWMP will need to be revisited and updated on a regular basis as new monitoring data becomes available.</p>	<p>Once sufficient monitoring data is available on water use GAC is to further calibrate the water model assumptions. This will include calibration of the model based on season surface water flow monitoring, water capture, and water use. Based on the results of this update the water management plan (including evaluating the key decision points on when GAC moves from one water source to another).</p>	Within one year of operations starting	Updated Project Water Model and Water Monitoring and Management Plans			<p><b>CLOSED</b></p> <p>See ESAP item 13/14 for update on progress. The approach to the use of monitoring data in the context of the IWMP will be assessed during the IESC's next visit in June 2018 under ESAP items 13/14.</p>

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Ref	ESAP ID	ESDD Source	ESDD Issue /Topic	Required Action	Timeframe	Deliverable	Documents Provided	GAC Status / Comment	IESC Update May 2019
R0005/17	17	D3.2.2	<i>Air model impacts were assessed in SEIA Addendum based on generic assumptions regarding equipment and operations. This may not be reflective of the impacts likely to arise from the planned equipment and operations. The SEIA Addendum also includes the assumptions that humans have a medium sensitivity, and that 50% reductions in emissions can be achieved through water suppression or 95% through chemical dust suppression, and no justification of these assumptions is provided.</i>	<i>GAC to have the air model re-run once the equipment is confirmed and include an evaluation of whether the sensitivity of human receptors in the SEIA Addendum (set at medium) is correct, and provide justification for the assumptions on expected emission reductions used in the mitigation scenarios.</i>	<i>Prior to start of Operations</i>	<i>Air modelling report update/ addendum, and air quality monitoring and management plan</i>			<i>Air Modelling Report update/ addendum, and air quality monitoring and management plan - GAC report that the ToR has been produced and has been sent out for bidding. This Air Quality Model will be reviewed during the next monitoring visit in October 2019.</i>
R0006/17	18	D3.2.4	<i>The fuel handling on the GAC Port Platform appears to be designed to minimise spills and provides suitable containment and spill response capabilities. The final design and management plans will need to include detailed consideration of leak detection procedures and protection of the transfer pipelines (e.g. from accidents or fuel theft) to minimise the potential for releases and contamination of soils, groundwater and surface water (and therefore impact the mangroves and fisheries).</i>	<i>GAC to review fuel handling procedures and ensure that these contain specific procedures to minimise the risk of a release, such as the testing of transfer lines before use, and the monitoring of pressures during fuel transfers.</i>	<i>Prior to start of Operations</i>	<i>Detailed fuel handling procedure(s)</i>			<i>The detailed fuel handling procedure(s) from VIVO is a condition of their contract and has yet to be provided. IESC anticipates that this document will be available for review on next monitoring visit in October 2019. Assuming the documentation discussed has been prepared and rolled out this will be closed.</i>

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R0007/17	19	D3.2.6	The construction of the dam will require the excavation of borrow pits some of which will be substantial in size, however, no details are available on the design or management of these borrow pits, or their restoration.	Borrow Pit Management and Restoration Plan will be developed by GAC (through its contractor COLAS) including details on the location and design of the borrow pits and mitigation measures to avoid or minimise ESHS impacts, including control of sediment erosion, and restoration plans.	Prior to the start of dam construction	Borrow Pit Management and Restoration Plan			<b>CLOSED</b> GAC has instigated the Activity Based Environmental Method Statement (ABEMS) which is required to demonstrate that any land disturbance considers the impacts and restoration. The outcome of this is an Environmental and Social Work Release Permit.  The IESC will continue to assess the effectiveness of this system and compliance with the restoration requirements during the June 2019 monitoring visit, in conjunction with the recommendations for the development of a strategic plan for all future land acquisition needed by the Project.
R0008/17	20	D3.2.6	The expansion of GAC's quarry is required to provide the ballast for the railway, and other hard stone needs, however, no details are available on the design or management of this feature, or its restoration.	Quarry Management Plan will be developed by GAC (through its contractor COLAS) including details of the design of this quarry, applicable management systems, including control of sediment erosion, and restoration plans.	Prior to the start of operations	Quarry Management Plan			<b>CLOSED</b> The IESC visited the active hard rock quarry and noted that the operations had ceased, and quarry was in a dormant state. The exploitation had been managed through an 'Environmental Baseline Site Assessment' (EBSA) which set out the management and closure (temporary), and based on the observations and discussions this appeared to have been followed. The issue is considered to be closed.  It is envisaged that this quarry will likely become operational again in the future and an update to EBSA will be required to revisit and confirm the management and mitigation approach remains appropriate.
R0010/17	22	D3.2.9	As there is not a suitably designed and permitted landfill available to the Project in Guinea, GAC intend to construct a Project landfill at the mine site.	GAC will provide details of the landfill design, specifically around the design standards and how issues such as leachate will be managed through operations and in closure.	Prior to landfill construction	Report detailing the planned landfill design.			<b>CLOSED</b> IESC understands that GAC's aim is not to have a landfill on the project, but to seek to recycle or incinerate all wastes. Should this change this ESAP item will be re-opened.
R0011/17	23	D3.2.10	The final design or location of the landfill at the mine site is not yet developed, nor is the operational procedures which will be implemented to manage the risks from vermin and/or human scavenging of the landfill for recycling or opportunist finds.	GAC will evaluate the key risks from the landfill for the environmental and human health and safety, and develop appropriate mitigation and management measures (including security) for management of the landfill through operations and closure.	Prior to landfill construction	Landfill management plan and procedures			<b>CLOSED</b> See comment above on ESAP item 22
R0012/17	24	D3.2.12	The use of bio-solids for beneficial uses such as mine rehabilitation and agricultural land improvements are considered appropriate if	GAC will develop a suitable procedure within the waste management plan (WMP) to classify bio-solids waste, its handling (which will need to consider management through the wet season when drying will be limited), and safe disposal/use.	Before start of Operations	Incorporation of bio-solids in the WMP or appropriate procedure			An assessment of the WWTP at Tinguilinta has been prepared and immediate actions, and the remedial plan has been provided to GAC. The WWTP can be remediated and the process made efficient.

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			<p><i>done with management oversight to reduce risks.</i></p> <p><i>Although bio-solid volumes are likely to be limited, they will be substantial over the life of mine. They need to be classified appropriately and if deemed not to be hazardous then they should be disposed in a beneficial manner.</i></p>						<p>GAC now needs to schedule the remedial actions and repair/rehabilitate the WWTP, and improve its efficiency, and enable bio-solids to be removed from the system.</p> <p>Management of bio-solids has been incorporated into the WMP v02, and GAC intends for bio-sludge to be solar-dried on flat banded/bioremediation pad, and then added to composting material. IESC will review progress and GAC's proposed strategy on the next monitoring visit in October 2019.</p>
R0014/17	26	D6.2.3	<p><i>With specific reference to the Mine area and according to the SEIA Addendum, once a pit becomes disused, the mining plateaus will be progressively rehabilitated with natural vegetation following the principles of the Mine Closure and Rehabilitation Plan that will be developed and periodically updated, in consultation with local communities and authorities. In addition, there are opportunities across the mining concession site to restore adjacent degraded habitats to the benefit of the local biodiversity.</i></p>	GAC to develop the Mine Closure and Rehabilitation Plan in order to address mining areas restoration activities and include funding mechanism.	Before start of Operations	Mine Closure and Rehabilitation Plan	20180207 V40 Mine Closure Rehab Plan MGN Clean 13 Feb 2018.docx (DRAFT)		<p>IESC has reviewed the updated Mine Rehabilitation and Closure Plan and provided comments to the Lenders.</p> <p>This ESAP items remains open while that review process is ongoing., with a specific focus on the end-point restoration intentions</p>
<b>PS4 Community Health Safety and Security</b>									
C0004/17	30	D4.2.1 4.2.2 4.2.3 4.2.4	<p><i>Guiding principles for hiring, training, equipping and monitoring security personnel for the mine and port areas and other facilities and operations,</i></p>	GAC will develop a Security Management Plan for the concession, port, and other GAC facilities aligned with IFC PS4 and the VPSHR and based on a security risk assessment. The plan should include Guiding Principles, Code of Conduct security personnel, rules of engagement, vetting process for security personnel, procedure for	Before Financial Close	Security Management Plan	GAC - Security management plan.pdf	Completed	<p><b>ADEQUATE</b></p> <p>The security management plan is completed and mostly adequate. The plan needs minor adjustments. A Memorandum of Understanding (MoU) with the Ministry of National Defence</p>

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		4.1.1	including Conakry office and transportation routes, are not defined and consolidated in a Security Management Plan.	investigation of incidents involving security personnel, and reference to the memorandum of understanding (MoU) with the GoG on the Provision of Security services					through which a military attaché was appointed to liaise with the company is in place and being implemented. In addition, GAC has recently signed an additional MoU with Ministry of Mines detailing how the public security forces (CASSM) are to be engaged, as necessary. IESC to review Security Management Plan when this is updated.
<b>PS5 Land Acquisition and Involuntary Resettlement</b>									
A0001/17	31	D5.1.7	A completion audit for the previous resettlement in Kamsar (2008) was conducted (in 2014), and revealed gaps in the implementation. An action plan to implement the audit recommendations is in place but has yet to be implemented.	GAC to complete the implementation of the audit action plan, and provide evidence of completion of the 2008 RAP.	Before start of Operations	Completion audit of the action plan			<b>CLOSED</b> Based on the IESC visit in November 2019, the IESC considers the implementation of the RAP is progressing and actions being addressed. Issues identified in the monitoring visit will be assessed further on the next IESC monitoring visit in June 2019.
<b>PS6 Biodiversity Conservation and Sustainable Natural Resource Management</b>									
B0001/17	32	D6.1.1A	Biodiversity management requirements and monitoring/indicators should be fully aligned across documents to ensure consistency.	GAC to complete fine-tune alignment of all biodiversity mitigation measures, monitoring and indicators (as appropriate) in future iterations of BMEP and EcoS documents.	Before start of Operations	Updated versions to be provided as completed.			<b>CLOSED</b> Mitigation measures in the BMP and early monitoring measures within the BMEP have been prioritised by GAC to allow them to focus resources on the most pressing issues - see ESAP ID.36
B0002/17	33	D6.1.2	GAC have provided written clarification that they do not intend to develop fisheries in the reservoir, but will not prevent communities fishing as they do now.  This is inconsistent with the mitigation measure of biodiversity management plan (BMP) Appendix 6, which states that GAC will 'stock the reservoir with indigenous species'	Address inconsistency over plans to replenish the reservoir with local fishes, and if planned specify the requirement for a feasibility study by a fish/freshwater ecologist expert to ensure the natural balance in the ecosystem would not be affected, and record appropriately in the biodiversity monitoring and evaluation plan (BMEP).  GAC to update BMEP to include appropriate management approach(s) to community fishing to avoid any over-exploitation of the fishery resources.  GAC to expand BMEP freshwater fish monitoring to the reservoir (ensure ecosystem health & diversity maintained, and commercial species not introduced), and be cognisant of community health & safety at GAC infrastructure.	Before start of Operations	Revised BMEP			<b>CLOSED</b> Any changes of approach such as decisions on the stocking of the fish in the dam, should be considered through the Management of Change procedures so that all social and biodiversity aspects, as well as safety and reputational risks, and responsibilities, are considered prior to any changes being made to ensure that all potential impacts are well assessed

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B0003/17	34	D6.2.1A	<p>Significant results from reservoir chimpanzee surveys (part of Pre-Clearance Biodiversity Surveys or 'PCBS') demanded a more robust analysis of alternatives to minimize impacts, than has previous been undertaken. The timing of PCBS should recognise the increasing conversion of natural habitat to agricultural land being seen in the concession, so PCBSs can ensure true pre-impact detailed baseline conditions are captured.</p>	<p>GAC to embed in appropriate mine/drilling management plans the requirement to prioritise the timing of the PCBS so that these are available to inform/ influence mine design, contractual and infrastructure planning options.</p> <p>GAC to use remote sensing imagery to rapidly assess and analyse current concession-wide land use/land cover, and over time be able to track change associated with land conversion from natural habitat (and PIIM).</p> <p>GAC to retain information on justifications wherever Environmental Buffer Zones are breached</p>	By start of Operations	<p>Revised appropriate mine/drilling management plans detailing PCBS review</p> <p>Develop a remote sensing program.</p>		<p>The land disturbance permit process as presented in the approved BMP (Appendix 4) has been adapted into part of a wider Activity Based Environmental Method Statement (ABEMS) process (detailed in ESAP ID- 19 above). We were informed that an assessment of whether a PCBS is necessary, and its subsequent undertaking when required, is a mandatory pre-requisite input into GAC's ABEMS process. An example Biodiversity Checklist and associated ABEMS for one land disturbance event has been provided to the IESC to demonstrate the process. Whether this allows for sufficient time/opportunity for PCBS findings to inform any necessary avoidance decision-making will be reviewed in future visits. We recommend the procedures be formalised within a management system approach.</p> <p>The Environmental Buffer Zones (EBZ) are now part of the Mine Plan GIS. A systematic process to capture decision-making in those instances where encroachment into an EBZ might be justified was discussed. Retention of appropriate wildlife corridors will need to be factored into road layout and infrastructure design.</p> <p>The ongoing analysis of land-use change will continue to be an IESC focus area, and the progress in the integration of biodiversity information into mine planning/EBZ will be reviewed during the next monitoring visit</p>	
B0006/17	37	D6.2.4B	<p>One of the SEIA commitments not included in the BMP or mine plan is the requirement for a 500m buffer zone around the plateau periphery (as per in SEIA Vol.3 section 18.5)</p>	<p>Provide clarification in mine plan as appropriate on implementation of the 500m buffer zone required around plateau periphery (as per in SEIA Vol.3 section 18.5)</p>	Before the start of Operations	Revised Mine Plan		<p><b>CLOSED</b></p> <p>Although EBZ's were discussed during the site visit, it did not appear the 500m buffer periphery EBZ was included.</p> <p>As this was a commitment made in the approved ESIA SEMP, if GAC believe this 500m buffer is no longer necessary to mitigate impacts previously predicted, they should provide justification for this.</p>	
B0007/17	38		<p>A BMEP has been developed. This provides the framework for monitoring priority species at both the mine and port site. Although comprehensive, the BMEP includes a large number of indicators for the staff resources available to gather and use the data for adaptive management.</p>	<p>Develop work plan for first year of BMEP implementation.</p> <p>GAC to review the BMEP suite of indicators to ensure efforts are focussed on obtaining the most relevant data across priority species/habitats.</p> <p>Commitment to initiate set-up phase of Feasibility Road-Map.</p> <p>GAC to initiate regular progress updates for Lenders/IESC (e.g. monthly) on steps towards Moyen-Bafing offset design and implementation.</p>	By start of Operations	<p>1<sup>st</sup> year workplan Revised BMEP</p> <p>Initial status update</p>		<p><b>CLOSED</b></p> <p>Workplan developed. Evaluation of this workplan against Lender requirements will be ongoing, however, the IESC concurs with this approach at this stage. IESC note that the 2017/18 dry season opportunity for gathering detailed baseline data on invertebrates and freshwater fish has been missed, but the Scope of Work for contracting rainy season surveying (to also include herpetology) has been awarded and surveys are due to start shortly. IESC will follow up during site visits.</p>	

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B0009/17	40	D6.2.5A	GACs advisors (WCF/TBC) have recommended a permanent on-site set-aside. In addition to potentially offering refuge for chimpanzees, this will provide protection for Restricted Range species, and potentially the Temminck's Red Colobus.	GAC to provide details of on-site set-aside once forthcoming chimpanzee surveys by EEM are completed.  Once initial design of the long-term chimpanzee monitoring program is completed, integrate this into the Project's BMEP (in accordance with the BMP).	Before start of Operations	Chimpanzee survey analysis and on-site set-aside delivery plan.			Chimpanzee survey analysis and on-site set-aside delivery plan – the 2018 surveys and analyses are now completed, and a final report received. GAC are to inform Lenders on their future monitoring program and put forward their proposal for an onsite set-aside(s).
B0010/17	41	D6.2.6	GAC is undertaking a biodiversity offset program for the purposes of achieving net gain for Critical Habitat at the port terminal site. A mangrove restoration program at two selected sites in the Taïgbé and Taïdy Islands commenced in June 2015, to compensate for the loss of mangrove habitat related to the rail/platform/jetty footprint. Mangrove restoration efforts at Taïgbé were recently lost due to storm surge. The scope of works for the offset includes the requirement for an independent critical assessment review of the offset to assess its effectiveness.	GPS-SARL to provide a monitoring and evaluation plan which provides clarity on progress of the program and details indicators which GAC can use to demonstrate and measure progress towards net gain.  Undertake the planned independent critical assessment review of the first 2 years of offset, to assess progress against objectives and requirements.  Following construction, GAC to provide an updated assessment of loss (mangrove footprint) for offset purposes	By start of Operations	Monitoring and Evaluation Plan  Critical assessment review  Updated Conservation Loss Footprint	Rapport d'achèvement projet mangrove Kamsar VF.pdf		The Mangrove Rehabilitation Project was not as successful as anticipated, GAC has completed their internal review and should seek external specialist technical guidance. An external review of the program was originally proposed but did not occur. A monitoring and evaluation plan was not developed. The mangrove offset program will continue to be reviewed during future monitoring visits.
B0012/17	43	D6.3.1	The latest BMP v4 App.6 refers to and builds on TBC's Critical Assessment Review of GAC's EcoS approach, outputs, and contains further necessary mitigation measures. This appendix relates each measure to various management plans where measures should be incorporated e.g. RAP, LRP, CIS, PIIM, but does not complete the mapping sufficiently to be able to adequately track implementation and monitoring.	GAC to map the EcoS mitigation measures between those in the EcoSA, and BMP, and mapping these to the LRP, CIS, PIIM, etc.	By start of Operations	EcoS gap analysis mitigation measures report.			A preliminary gap analysis has been completed – this was not discussed during this visit and IESC will follow up during next monitoring visit

GAC PROJECT

Ref	ESAP ID	ESDD Source	ESDD Issue /Topic	Required Action	Timeframe	Deliverable	Documents Provided	GAC Status / Comment	IESC Update May 2019
B0013/17	44	D6.3.1	<i>It is noted that almost all EcoS residual impacts are deemed to be of minor significance following implementation of ESIA and additional mitigation measures. This is considered over-optimistic, especially considering the extent of PIIM anticipated, and significantly escalating land conversion already observed.</i>	<i>GAC to review the level of residual significance allocated to assessed priority EcoS impacts</i>	<i>By start of Operations</i>	<i>Revised EcoS Assessment</i>			GAC considered that the residual impacts on ecosystem services are being mitigated through the project with SYDEV. The SYDEV reports provided were in French and IESC will follow up on progress during our next visit.
B0014/17	45	D6.3.1	<i>It is unclear how priority EcoS issues are being managed overall, and who holds responsibility for ensuring that various individual measures to address EcoS impacts, when combined, are sufficient.</i>	<i>GAC to include EcoS as an issue requiring multi-function oversight within the new Integrated Business Planning (IBP) team.  This will include ensuring organisational role linkages between Biodiversity team and Communities team, and that teams discuss priority EcoS management/monitoring regularly.</i>	<i>By start of Operations</i>	<i>IBP EcoS Oversight Plan</i>			The SYDEV program looks good and appears to be making progress in the right direction in the small number of locations it is being implemented. However, internally that the community-based natural resource management program and alignment between the Environment/Biodiversity and Community teams does not yet feel settled within GAC. Successful implementation of mitigation measures to address impacts on priority EcoS will need ongoing collaboration. The IESC will follow-up on this during future monitoring visits.
<b>PS8 Cultural Heritage</b>									
H0001/17	47	D8.1.1	<i>GAC has identified and classified cultural heritage sites that may be impacted by the project in consultation with local authorities, traditional leadership and community members.  The SEMP indicates that a Cultural Heritage Management Plan will be developed in compliance with IFC, AfDB and Guinean legislation requirements. However, a Cultural Heritage Management Plan has not been developed. Only a chance finds procedure has been issued.</i>	<i>GAC to develop the Cultural Heritage Management Plan to ensure that mine plans and other activities fully take account of the known cultural heritage, and incorporate appropriate buffers and protection measures.</i>	<i>Before the start of Operations</i>	<i>Cultural Heritage Management Plan</i>			<b>CLOSED</b> Discussion during the November Monitoring Visit indicated acceptable progress and this is considered closed, but will continue to be monitored.