



Environmental and Social Review Summary

Eco-tourism Sao Tome and Principe

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA's Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by MIGA's Board of Directors. Board dates are estimates only.

Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country:	Sao Tome and Principe
Sector:	AMS
Project Enterprise:	Eco-tourism Sao Tome and Principe
Environmental Category:	A
Date ESRS Disclosed:	19 th December 2013
Status:	Due Diligence

A. Overall Project Description

1. The project involves an ecotourism development that includes the refurbishment of two hotels, the development of three new hotels, the construction and operation of a carpentry center, and the construction of a new runway at the Principe airport in Sao Tome and Principe (the "Project"). HBD SGPS, Lda. ("HBD"), the Sponsor, is based in Lisbon, Portugal. All of the developments, except for one hotel in Sao Tome, will be located on the island of Principe. Through the Project, the Sponsor intends to turn Sao Tome and Principe ("STP") into the high-end tourism destination of choice in West Africa.

2. HBD is part of an emerging market investment group established by Mark Shuttleworth, a South African entrepreneur. It was created with the express purpose of developing the ecotourism developments in STP and was established in Portugal given its historical and language ties to the Host Country. Mr. Shuttleworth decided to invest in STP after spending some time in the country in 2009 and seeing its potential as a tourism destination considering its strategic location between South Africa and Europe, and its proximity to the Gulf of Guinea with a large expatriate staff working in the oil market. Between 2011 and 2012, HBD acquired the two existing hotels, one in Sao Tome and the other in Principe, and obtained concessions for the greenfield developments.

3. Sao Tome and Principe has been recognized by many international conservation organizations for its wealth of endemic wildlife including birds, amphibians, higher plants, bats, reptiles, butterflies and mollusks distributed in different ecosystems and habitats throughout the two islands. Bird Life International recognizes the islands as an Endemic Bird Area and one of 200 Important Bird Areas. The World Wildlife Fund recognize the islands as one of the most

important eco-regions for biodiversity and as one of the 10 most important hotspots. The southern end of Principe Island is a designated National Park.

4. The Project comprises several separate developments that will be carried out at different stages.

Existing investments

- Omali Lodge: 30-key hotel located in Sao Tome catering mainly to the business market and to be used in the future as a base for tourists traveling on to Principe. HBD took over the concession in May 2012 from International Hotels Development Corporation, Ltd. (“IHDC”), a client based in Turks and Caicos and owned by Rombout Swanborn, a Dutch businessman that currently owns another hotel in Principe. The new concession period is 27 years, renewable for two more 10-year periods. Hotel amenities include a restaurant, bar, swimming pool and tennis court. Renovations on the 20-year old hotel started in September 2013 and will continue for another year before completion.
- Bom Bom Island Resort: 19-key beach hotel in the northern tip of Principe catering to the leisure market. HBD took over the concession in July 2011 from IHDC. The new concession period is 30 years, renewable for two more 30-year periods. Hotel amenities include a restaurant, swimming pool, pool bar, and conference room. Renovations on the 20-year old hotel started in mid-2012 and will continue for another six months.
- Airport Runway: Airport Management STP, Lda., a joint venture between HBD and IHDC, entered into an investment agreement in October 2012 with the Principe Regional Government (“PRG”) to renovate the airport buildings, build a new runway to allow bigger 60-seater planes to land on the island, and manage the airport. Currently, there are only five flights a week between Sao Tome and Principe on 15-seater planes. The investment agreement is complementary to a concession agreement originally signed in 2008 and later transferred to Airport Management STP, Lda. Although the party to the investment agreement is the joint venture, in practice each partner is in charge of different activities: IHDC is in charge of renovating the airport buildings and managing the airport, while HBD’s work is limited to the construction of the new runway which is already underway. Airport Management STP, Lda., will manage the operations of the airport once it has been renovated.
- Carpentry Center: Wood working center in Santo Antonio, Principe, established to build the bungalows and other woodworks for the hotels. HBD has a 20-year lease agreement signed in February 2012 for the land with the PRG and has already built the workshop. They are currently importing the timber from Bali but plan to help establish a sustainable supply in Principe.

New Investments

- Bom Bom Island Resort: The plan is to partially renovate and operate the existing hotel for another four years, then change the lodging concept to 5-6 large villas. One villa is currently being built and depending on its success, and the progress in the construction of the other two resorts (below), HBD will tear down the existing rooms to build the new villas. The idea is to integrate the villas more with the surrounding vegetation, where they will not interrupt the natural landscape, while offering privacy and upscale services. Coverage is being sought for the villa under construction, but not for the other villas since this plan is not definitive.
- Macaco: 54-key beach resort to be located in the northeast coast of Principe and that will cater to the leisure market. As in the new Bom Bom concept, the idea will be for the hotel to

blend into its surroundings. The resort amenities will include a restaurant, bar, swimming pool, tennis court, conference room, art studio and gallery, and a destination spa. HBD took over the concession in February 2011 from Praia Macaco Unipessoal, Lda., a Portuguese client. The new concession period is 30 years, renewable for two more 30-year periods. The project will start in 2016.

- Sundy Beach Hotel: 15-key luxury tent hotel with restaurant, bar and pool. It is aimed to become the first carbon neutral hotel in Africa. HBD entered into the concession agreement directly with the PRG in February 2011 for a period of 30 years, renewable for two more 30-year periods. The project will be started in the first quarter of 2015.
- Paciencia: 20-key hotel with restaurant and spa. The hotel concept is an ecological spa retreat, which a focus on yoga, meditation and treatments. HBD entered into the concession agreement directly with the PRG in February 2011 for a period of 30 years, renewable for two more 30-year periods. The project will be started in mid-2014.
- Boi Beach, Uba Beach, and Santana/Fortaleza: HBD holds concessions for these properties, but there are currently no definitive plans for their development. However, coverage is being sought for the value of the concessions.

5. The Project is being carried out by several branches and local companies in STP, owned by three Portuguese companies, which are owned by HBD. All of the subsidiaries of these three companies, except for Porto Real Training and the STP Gestão de Activos Branch, will be covered by MIGA.

B. Environmental and Social Categorization

6. The potential environmental and social impacts for the five hotels, the carpentry center, and the new runway on the two islands of Sao Tome and Principe are related to liquid and solid waste management, water and soil pollution, species conservation and biodiversity protection within the biosphere reserve, land acquisition and resettlement of 31 families at two project sites and community and workers health and safety. The project is category A under MIGA's policy on environmental and social sustainability.

C. Applicable Standards

7. While all Performance Standards are applicable to this investment, based on our current information indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS1: Social and Environmental Assessment and Management Systems
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety & Security
- PS5: Land Acquisition & Involuntary Resettlement
- PS6: Biodiversity Conservation & Sustainable Natural Resource Management

8. Performance Standard 7: Indigenous Peoples and Performance Standard 8: Cultural Heritage, do not apply as the Project will not affect indigenous territories and communities and no known archeological, cultural heritage or paleontological sites exist, and the risk of encountering unknown sites or artifacts is considered to be very low.

9. In addition, the World Bank Group (WBG) General Environmental Health and Safety (EHS) Guidelines along with the sector specific guidelines for Tourism and Hospitality Development; Airports; Construction Materials Extraction; and Forest Harvesting Operations are applicable to this project.

D. Key Documents and Scope of MIGA Review

10. MIGA's due diligence included the review of key environmental and social documents, meetings, phone calls and emails with the Project sponsor and a site visit in November 2013. The following documents were reviewed by MIGA:

- Airport Management STP, Contract Documents for Principe International Airport Runway upgrade, June 2012 from Airport Management STP to Contractor Aurecon, AMEI Ltd, Mauritius
- Environmental License Airport Construction, July 2012
- Acompanhamento Ambiental da construçao do Aeroporto do Principe, Proposta, HBD, Novembro 2012, Matos, Fonseca Associados
- Environmental License Beach resorts Macaco, Boi and Uba, June 18, 2013
- Environmental License road rehabilitation, Roca, Paciencia Macaco and Boi, June 18, 2013
- Environmental License Sundry beach resort, June 18, 2013
- Global Rescue Master Services Agreement, June 7, 2013
- Lease Agreement, Timber Workshop, Regional Secretary of Economy and Finances, Principe, February 24, 2012
- List of Attendees, EIA presentation
- Current list of workers per project, October 2013
- Map of the Concessions
- Map of houses at relocation site
- Health and Safety Management System, Standard Health and Safety Procedure for HBD Operations
- Resettlement Protocol Sundry Beach
- Sustainability Report
- EIA Road - Paciencia, Macaco, Boi Matos, Fonseca Associados, April 2013
- EIA Macaco, Boi and Uba beach resorts Matos, Fonseca Associados, April 2013
- EIA Sundry Beach resort Matos, Fonseca Associados, April 2013
- EIA Airport Expansion, ERM April 2012
- Biosphere Responsible Tourism, International Standard for Hotels
- Client Code of Ethics and Conduct Policy, HBD
- Resettlement protocol for the airport

E. Key Issues and Mitigation

Overall Project

PS1: Social and Environmental Assessment and Management Systems

11. HBD has a large portfolio of projects in Sao Tome and Principe and, understanding the fragile environment in which it is operating, is committed to environmental and social

sustainability of all of its operations. An Environmental and Social Policy and Occupational Health and Safety (OHS) plan is already in place. The Client is in the process of developing an Environmental and Social Management System (ESMS) to guide its projects and staff to ensure sustainability. Environmental Health and Safety (EHS) plans and policies will be developed under the ESMS.

12. The Client has established a fully staffed environmental and social management unit, headed by a suitably qualified EHS Manager, to oversee all projects. The HBD EHS manager will be responsible for implementation of Environmental and Social Management System (ESMS), Environmental and Social Management Plans (ESMPs) and Environmental and Social Monitoring Plans for all projects. HBD will also ensure each project has an environmental and social officer responsible for sustainability at the project level.

13. Recognizing the unique environment in which it is operating, HBD is committed to achieving international standards for social and environmental sustainability and is currently preparing for audits by the Institute for Biosphere Responsible Tourism Certification for the Omali Lodge and the Bom Bom Island Resort. This voluntary certification scheme draws from international standards (e.g. ISO9001, ISO14001, EMAs, etc.), but also includes requirements on sustainable development, social responsibility, conservation of cultural property and improving the quality of life of host populations. All new hotel projects will also be developed in line with this certification as well as other international certifications for environmental and social sustainability and management.

PS 2 Labor and Working Conditions

14. HBD employs a Human Resources Manager who is located in the head office in Santa Antonio on Principe. A Human Resources policy, procedures and handbook are being developed which will integrate the code of ethics, compensation and benefits, performance evaluation system and grievance mechanism. Benefits provided to employees include transportation; food during working hours; allowances for major life events (e.g. funeral and birth of a child), etc.

15. *Non-Discrimination, Equal Opportunities and Protection of the Workforce:* The client will apply the principles of Non-Discrimination and Equal Opportunity. As per national labor laws the client does not plan to hire employees under the ages of 18 and as such the Project is not anticipated to have any child labor issues. Prior to being hired candidates will have to provide a birth certificate, a certificate of nationality (or similar identification), and a copy of his/her judicial standing. Furthermore the Client does not and will not employ forced labor or trafficked people.

16. The Client will use commercially reasonable efforts to contractually stipulate that its suppliers and the construction firms (for the construction / refurbishment phases) comply with national labor laws, pay employees at a minimum the legal requirements, provide necessary personal protective equipment to carry out work in a safe manner and in the case of construction firms, additionally report on onsite health and safety incidents and corrective measures. The Client will include in its ESMS a procedure to audit contractors and suppliers with respect to the above mentioned matters.

17. The Client will have a salary grid which is internally accessible as well as a performance evaluation system to increase transparency in compensation and promotion. The Client will make explicit non-discrimination reference in its HR policy.

18. *Freedom of Association and Grievance Mechanism:* The Client will enable staff to elect workers representatives to serve as a formal liaison between management and staff. Staff will be free to join unions. The workers' representatives will also liaise with the national labor union. The Client will establish a well-functioning grievance mechanism in collaboration with workers' representatives.

19. *Training:* HBD has hired a team of environmental and social experts in order to advise on managing environmental and social impacts for all operations on the islands. The HBD Safety and Health Procedure requires all employees to be provided with a site induction which will include occupational health and safety (OHS) training. HBD EHS Manager has the capacity to provide training and manage the ESMS and OHS for the construction of all projects. The client will develop a detailed training program for all staff to ensure they are fully equipped to do their jobs and will include training on social and environmental sustainability. Training will be reinforced throughout the life of the project and staff will be encouraged to keep their skills and knowledge up to date.

PS 3: Pollution Prevention and Abatement

20. *Liquid and solid waste management.* HBD will develop a Liquid and Solid Waste Management Plan to ensure that management of liquid and solid wastes are undertaken in a consistent manner for the overall HBD development project. As part of its ESMS, the Client will implement a comprehensive solid waste management program across all of its facilities which will focus on reduction of waste generated and will aim to segregate, reuse and recycle the generated waste as well as ensure adequate storage and disposal practices. Local context and market for the products will be considered in the strategy.

PS5: Land Acquisition and Involuntary Resettlement

21. As there are many projects in many different locations, several communities are impacted by HBD's intervention on Principe. The client has therefore developed an overall internal community consultation and engagement plan which guides community consultation for the major projects. A Community Development team consisting of an overall manager, an anthropologist and additional community liaison officers has been established.

PS6: Biodiversity Conservation & Sustainable Natural Resource Management

22. The island of Principe is a designated UNESCO Biosphere reserve as well as an Endemic Bird Area (EBA) by Birdlife International, as it contains 133 endemic species of fauna and 24 of flora. The south of the island is a designated national park with protected forests. A majority of the Project sites are comprised of Capoeira forest, which is described as secondary forest, i.e., has experienced some disturbance with limited species diversity. Some endemics were found at one of the sites, and endangered turtle at the Macaco hotel site. A protocol has been signed between HBD and the Marine Turtles Association (AMT) which provides details of activities which ATM will carry out in order to assess and protect turtles in all HBD concessions and surrounding areas. Maintaining and promoting the ecological integrity of Principe is considered a key component of the eco-tourism business model. All Project sites will have reforestation and biodiversity protection programs to improve and enhance biodiversity values in the vicinity of Project sites. Further, to offset the impact of construction and refurbishment of all Project components, the client has also established a forest rehabilitation program on the island, which is currently focused on three demonstration areas on the northern part of the island.

F. Individual Projects Key Issues and Mitigation

Airport Expansion

PS1: Social and Environmental Assessment and Management Systems

23. *Social and Environmental Assessment:* An Environmental Impact Assessment (EIA) has been completed for the airport expansion and borrow pits which includes details of the runway extension and refurbishment of the airport buildings. Following the completion of the EIA, a second environmental consulting company was contracted to complete the studies recommended in the EIA. This is still ongoing. The proposed project will bring the Principe Airport into compliance with the International Civil Aviation Organizational (ICAO) operational and safety standards. The EIA included an Environmental and Social Management Plan (ESMP) and an Environmental and Social Monitoring Plan for the construction and operations phases of the airport.

24. *Management Program and Monitoring:* The management of Occupational Health and Safety (OHS) and Environmental Health and Safety (EMS) during construction is the responsibility of the construction contractor, Mota Engil. OHS and EMS management plans have been developed in line with recommendations in the ESIA and ESMP. Aurecon has been contracted to provide technical design and implementation oversight for the construction. Both contractors are certified in OHSAS 18001 and ISO 14001 and 9001. All sub-contractors are contractually obligated to comply with the ESMS, EMS and OHS and associated plans.

25. The HBD Community Development team will manage resettlement, compensation and community engagement for the airport expansion.

26. During operations, OHS and EMS will be managed by the airport manager and an ESMP will be developed to guide activities at this stage.

27. *Organizational Capacity and Training:* Mota Engil has employed a Works Manager and Environmental Manager to oversee implementation of the ESMP and OHS and EMS plans, and Aurecon has a Resident Safety Officer on site during construction to supervise compliance. Both the construction and design contractors have the capacity to appropriately manage OHS and EMS during construction. An external environmental consulting company has also been hired by the client to oversee and advise on implementation of the ESMP.

28. The construction contractor is in charge of training construction staff appropriately to minimize risks to health and safety as well as to the surrounding communities and the environment. Only trained staff is allowed to operate heavy equipment. The design contractor and the environmental consultant also provide advice on the construction contractor's training program and / or provide training, as required. Risk assessments are carried out for each job and the staff are trained on how to manage the risks related to their position. There is no suitable facility to train/test local operators of heavy machinery in Sao Tome and Principe. As such, the Contractor has developed their own testing and certification methodology (including a large practical trial component) conducted by their mechanical engineer and most experienced operator (from Portugal). If the operator passes, they are given a certificate of competence. These certificates, along with the driver's license, are kept on file.

29. The operator has the capacity to manage OHS and EMS in line with the ESMP and will have a dedicated team on board. Training will be provided by duly qualified personnel

PS2: Labor and Working Conditions

Construction

30. During construction, the project is at peak expected to generate employment for a total of 80 people on a full-time basis of which 68 will be filled by local workers and 8 will be female. The client has represented that the contractors will not use child labor and that staff will be paid minimum wages. A grievance mechanism is in place. The scope of Aurecon's supervision contract includes regular monitoring of labor and working conditions.

31. As described above, Works Manager and Environment Manager will be responsible for developing and monitoring the implementation of the OHS plan within the ESMP. Health and safety signage exists on site and an Emergency Preparedness Plan has been developed. Personal Protective Equipment (PPE) such as hard hats, gloves, ear defenders, boots, etc. will be provided to all employees. Staff who do not use PPE will not be allowed on site.

32. Construction staff will be housed in a temporary construction camp on site, while managers will reside in rented accommodation in Santo Antonio.

Operations

33. Airport Management STP, Lda., (the current manager of the airport) will continue to manage operations of the upgraded airport. Ten to twelve staff are currently employed at the airport and will remain following construction. An HR manual including grievance mechanism will be prepared for operations. An OHS plan will be developed and implemented to ensure staff safety. Operations staff will continue to be housed locally.

PS3: Pollution Prevention and Abatement

Construction Phase

34. The key expected risks and impacts during construction are generally site-specific and include worker's health and safety, air, soil and water pollution, as well as liquid and solid waste management. These are mitigated through the implementation of an Environmental and Social Management Plan (ESMP) and EMS and OHS plans. The EMS plan is consistent with the requirements of PS3 and the World Bank Group's Environmental Health and Safety General Guidelines and Guidelines for Airports. The plans will be adapted as necessary to ensure compliance.

35. *Air pollution:* The most likely air quality impact during construction will be the generation of dust (particulate matter). During construction, water will be sprayed around the areas of the construction site, borrow pits and quarry at least three times a day to mitigate dust in the air. Aggregates will be sprayed with water prior to loading on haulage trucks.

36. Other potential air quality impacts, which include vehicle and heavy equipment exhaust emissions, are expected to be fairly minor. A construction emissions reduction plan has been implemented which includes regular maintenance of vehicles to reduce emissions.

37. *Liquid and solid waste management:* A liquid and solid waste management plan has been developed which includes details of how to categorize and dispose appropriately of all types of waste, including liquid, hazardous, domestic, recycling, etc. The plan also provides details of transportation of waste, final destination and responsible parties.

38. *Vehicle maintenance unit:* All vehicles are maintained on site in a designated vehicle maintenance unit which is appropriately designed in order to handle liquid and solid waste in line with PS3. The site includes hardened areas for servicing and lubrication of vehicles/equipment, an inspection ramp and an inspection and access/servicing pit. The drainage from the servicing pit is directed to an oil separator. The servicing is done by trained personnel.

39. *Noise pollution:* Construction and haulage activities are limited to daytime. Construction vehicles have been fitted with equipment to minimize noise pollution and are appropriately maintained. Staff have been trained to adhere to operational procedures that reduce the occurrence and magnitude of individual noisy events. The impact of noise pollution on local communities is monitored via the existing community grievance procedure and will be monitored by the Client.

40. *Soil erosion:* A storm water run-off plan is being implemented as part of the environmental management plan to control construction surface water run-off and the amounts of sediment entering the storm drain system.

41. *Hazardous Materials:* Hazardous materials such as diesel, oils and lubricants are stored and handled appropriately in order to reduce the risk of spills impacting on soil and water courses. Spill management equipment is available. Staff have been trained on transport, storage and handling of hazardous materials and spill reporting requirements. Concrete surface beds are provided for adjacent filling of vehicles with fire extinguishing equipment and signage. Transportation of diesel is carried out in purpose-made vehicles. Other hazardous chemicals are labelled and stored in locked ventilated containers.

42. *Water extraction:* Water during construction is supplied by bore holes established on site. Extraction licenses have been obtained and it has been confirmed that extraction does not impact on local community supply.

Operations phase

43. Pollution impacts of the current airport operation are fairly minor (due to the current low level of activity at the airport), but are related to liquid and solid waste, hazardous waste, and noise and air pollution. The risks and impacts of the upgraded airport will be the same as those currently experienced, though at a larger scale due to the increased number of flights and passengers expected to use the facility.

44. There is currently no environmental management program in place at the airport. The client is committed to improving environmental practice at the upgraded airport by supporting the development and implementation of an ESMP (as described above). Measures to be included in the ESMP are listed below. As the airport will be considered to be part of the overall 'eco-tourism experience' that the client will market, it is intended that the client will work closely with the airport operator to ensure that pollution prevention and abatement at the airport complies with international best practice.

45. *Liquid and solid waste management:* A liquid and solid waste management plan will be developed by the operator prior to operations. Liquid waste will be managed through the use of septic tanks which will be emptied periodically by the local government. Storm water will be managed through the drainage system. Solid waste will be the responsibility of the local government contractor.

46. *Hazardous Waste:* Hazardous materials such as airport fuel, diesel, oils and lubricants will be stored and handled appropriately in order to reduce the risk of spills impacting on soil and water courses. Spill management equipment will be available. Staff will be trained on transport, storage and handling of hazardous materials and spill reporting requirements. Currently, aircraft do not refuel at the airport, and initial plans indicate that this will continue to be the case. However, it is possible that refueling will take place in the future, as it is a concession obligation. If this is the case, fuel will be stored and handled to comply with international standards for health and safety.

47. *Noise pollution:* A number of measures will be put in place to ensure noise pollution is kept to a minimum including low power approach of aircraft, restricting arrivals and departures to day time hours and minimum flights on weekends. Future residential development will also be restricted to outside the buffer zone.

48. *Air Pollution:* Air emissions will be monitored by HBD during operations, and the results of monitoring will be reviewed to develop measures for reducing emission. HBD will support the operator to implement the proposed actions.

PS4: Community Health, Safety & Security

Construction

49. Key community health, safety and security risks of the airport construction phase include the unauthorized site access, road accidents and impacts associated with in-migration of the construction workforce.

50. *Security Arrangements:* During construction, the site is secured by unarmed guards and the local police. The site camp where heavy machinery is stored is gated and locked. The site will eventually be fenced off to ensure local communities do not enter. A community grievance mechanism has been developed and information regarding the contractors and the project is clearly displayed at the site.

51. A traffic management plan has been developed which guides construction vehicle operators in safe driving. Speed limits are displayed throughout the site, traffic calming measures are in place and drivers are sensitized about potential accident risks and are periodically checked for alcohol consumption. Transportation of abnormal loads are scheduled outside of peak traffic hours. Vehicles are correctly loaded to avoid accidents and loads are secured and covered where they pose a risk of windblown dust or material spillage. The Contractor's heavy equipment uses dedicated haul roads constructed on site (not for public use) and does not travel on the public road infrastructure. The safety of the public takes precedence over construction activities and the travelling public have right of way on all public roads. While there have been no incidents to date, the client will work with local schools and community leaders to build awareness regarding health and safety around the construction site. The client will develop a code of conduct to address road traffic management which will include respect for local residents, compliance with

the Traffic Management Plan and a description of disciplinary measures of infringement of the Code.

52. There is a low level of in-migration of people arriving from outside of Principe as a result of work opportunities as it is not easy to reach the island. Some people have arrived, but they are often family members of people already living on Principe, and they therefore live with their families.

Operations

53. Community health, safety and security risks associated with operations include accidents from general air traffic and an increase in air traffic above existing conditions and unauthorized access to the site.

54. *Air traffic increase:* Currently, there are approximately five flights per week arriving at Principe airport. As a result of the airport upgrade, it is expected that there will be an increase to:

- 3 to 4 flights a week (until 2015)
- 10 flights a week (by 2015)
- 20 flights a week (by 2030)

55. No night time flights are anticipated and no airline fuel storage on site at this stage. The airport is being upgraded to comply with the International Civil Aviation Organization's (ICAO) safety standards. Safety features that are being incorporated into the upgraded facility include fencing around the airport (including the runway) to prevent unauthorized access.

56. The impacts of additional tourists/people in Principe will be felt by the local community; however, the client expects the positive impacts to out-weigh the negatives. The client will ensure all visitors are made aware of the importance of respecting local culture and will offer organized tours of the island to ensure visitors are not encroaching on local inhabitant's way of life.

57. *Security:* The airport will be secured by unarmed guards who will operate 24/7. The airport will also be securely fenced and only authorized personnel and passengers will be allowed entrance.

PS5: Land Acquisition & Involuntary Resettlement

58. The land for the airport expansion was designated by the local government. Seventeen families require relocation as their current houses are sitting close to the new runway. The resettlement is the responsibility of the Regional Government but is being managed by HBD in line with PS 5, and a Resettlement Action Plan (RAP) has been developed in consultation with the affected families. The government allocated the land for the rehousing, which is located 1km from their existing houses. HBD is managing and funding the construction of brick houses, which are well above the standard of the current housing. The Regional Government will also compensate for lost crops and provide land for agricultural activities. Through regular monitoring and implementation of the Community Grievance Procedure, the client will ensure that the resettled households are able to maintain a standard of living at least consistent with that of pre-Project conditions.

59. The HBD Community Development team has been working with the communities for the past two years, and careful consultation has been and continues to be carried out with the affected communities. Currently, all affected are satisfied with the management of their resettlement.

60. Communities will also be impacted by the fencing of the airport in order to increase security. Currently, the airport property (including the runway) it is unfenced and communities use it as a thoroughfare to access their agricultural fields, schools and other services. With the proposed increase in air traffic, this will be a safety risk. In consultation with the local community, the client will construct an alternative access route prior to closing the access tracks through the airport property. As currently designed, the new access route will require people to walk an additional 1 km. Consultation on this design and the impact of loss of access tracks through the airport property is ongoing.

PS6: Biodiversity, Conservation & Sustainable Natural Resource Management

Construction

61. In order to prevent unnecessary disturbance and damage to natural vegetation and topsoil loss encroachment outside of the designated construction site has been minimized through demarcating the site and areas of sensitive vegetation on the airport edges has been designated as no go areas. Construction camps have been established within previously disturbed areas and not adjacent to forest areas, as well as parking vehicles, heavy equipment and the dumping of materials and waste. Vehicle movements are restricted to the footprint areas and access roads. Roads which cross drainage lines are designed to avoid disruption to the natural flow of water to avoid bank erosion. A rehabilitation plan is in place which will guide re-vegetation and reforestation of the impacted areas with endemic species. Awareness building is being carried out to educate the workforce on the importance of forest habitat biodiversity and prohibitions on fires and collection of plant and animal material. Poaching or hunting is strictly forbidden. No fires are allowed in forested areas, other than within demarcated areas within a defined camp. No dogs or other pets will be allowed at the site. Any forest clearance has been timed to avoid nesting seasons of as many of the range-restricted bird species as possible. Clear guidance is provided in the Environmental Follow up Plan as part of the EIA.

62. The client will be responsible for ensuring that the contractor obtains sand from a sustainable and duly authorized source outside of the island. Borrow material will be sourced from already existing borrow pits in order to minimize further biodiversity and habitat disruption.

Operations

63. The most significant impact associated with operation of the airport is likely to be associated with the potential for bird collisions with air craft. A bird study was carried out during the environmental assessment and a bird impact study will be carried out during operations in order to determine direct impacts to the bird populations and how this needs to be improved.

Environmental Permitting Process and Community Engagement

64. An Environmental Impact Assessment was developed for the airport expansion and submitted to the Director of Environment in Sao Tome. A team of experts evaluated the assessment to determine the major impacts and mitigation methods and issued an environmental license.

65. Substantial community engagement has been completed for the airport construction including meetings both in Sao Tome and on Principe Island. This has included meetings with regional and provincial governments as well as meetings with impacted communities on several occasions. Overall, stakeholders are satisfied with the project and major issues raised were related to the following:

- Relocation, compensation concerns including housing types, compensation amounts and who will be responsible;
- Airport access route once the current route is fenced off;
- Local employment, equal opportunities and how many jobs will be available;
- Wages and if they will be above the average;
- Safety during construction and operations;
- EIA process and protected species;
- Licensing for all activities; and
- Forestry clearance and reforestation.

These issues were all dealt with appropriately, either at the meetings or with follow up by the community relations officers. Community consultation is ongoing and will continue throughout construction and operations.

66. A Community development plan is in place, including the following activities:

- Improved water system, electricity and sewage.
- Market gardens will be planed near the airport to boost economic activity.

G. Omali Lodge and Bom Bom Island Resort refurbishment

67. Project Description

The hotel Omali Lodge in Sao Tome city and Bom Bom Island Resort on Principe Island are undergoing refurbishment which will likely take a further 12 months to complete.

The overall refit for the Omali included the following items:

- Renovation of all the public areas. (Reception; bar; restaurant; meeting room; lounge)
- New decoration features for the bar and the restaurant done by the local community.
- New tennis court.
- Electrical installation improvement.
- Water installation improvement.
- New electric bus.
- Staff quarter improvement to be concluded first quarter 2014
- Pool bar to be concluded by February 2014.

The overall refit for Bom Bom included the following items:

- Total new kitchen.
- Repair of the 3 existing boats with each new engines.
- Rooms and public areas total renovation with new decoration.

- Creation of a 30 person meeting room.
- Electrical installation improvement and WIFI installation.
- Water installation improvement.
- Construction of one villa.
- New furniture for the rooms and the bar done by the local community.
- Staff quarter total renovation.
- Swimming pool renovation

PS1: Social and Environmental Assessment and Management Systems

68. *Social and Environmental Assessment:* An EIA is not required for the refurbishment of the hotels. Among the primary objectives of the hotel refurbishments is to improve the sustainability and environmental performance of the hotels. Both hotels are undergoing significant renovations in order to prepare for the Biosphere Responsible Tourism Audit which is a certification process of the Institute of Responsible Tourism (ITR). ITR maintains a Memorandum of Understanding with the United Nations organization for Education, Science and Culture (UNESCO) and is affiliated to the World Tourism Organization (UNWTO), as well as being a member of the Global Sustainable Tourism Council. The audit includes areas on responsible tourism policy; conservation and improvement of cultural heritage; economic and social development of the destination; environmental conservation and client satisfaction and involvement in the responsible tourism system. In preparation for the audit, a number of improvements have been made to both resorts including structural upgrades, training, conservation activities, community development, etc.

69. *Management Program and Monitoring:* The requirements of the ITR certification are consistent with international management standards, including ISO14001 and ISO 9001. Both hotels have managers who have overall responsibility for social and environmental management in order to comply with the ITR certification. Their activities are guided by environmental and social specialist consultants who are hired by HBD to establish systems to manage environmental and social impacts in line with ITR, as well as MIGA Performance Standards. Occupational Health and Safety and Environmental Health and Safety policies, plans and systems are being established for both hotels and the managers are responsible for monitoring the activities and reporting back to HBD management. HBD Management will in turn report to ITR, the Sao Tome and Principe Environmental division and MIGA. EMSHBD will ensure that the EMS / OHS management programs implemented by the hotels include: (i) local EMS regulations, (ii) fire and life safety and emergency preparedness and response; (iii) energy and water efficiency (iv) labor and working conditions; (v) occupational health and safety and training during construction and operation; (vi) food hygiene procedures; (vii) environmental management such as solid and liquid waste management during construction and operation; (viii) equipment maintenance (such as generators, boilers) and housekeeping; (ix) stakeholder engagement; (x) environmental performance monitoring. The client will define data monitoring and reporting requirements consistent with the objectives of the ESMS. MIGA's Guarantee will request submission of an Annual Monitoring Reports (AMR).

70. *Organizational Capacity and Training:* HBD environmental and social consultants will work with hotel staff to improve capacity in environmental management. Some training has already been undertaken in preparation for the ITR audit. Training on fire and life safety, and occupational health and safety has been carried out. The ESMS will include training strategy and

programs to ensure that staff is well trained in first aid and first response, occupational health and safety, and job related aspects.

PS 2: Labor and Working Conditions

71. Omali Lodge employs 54 staff and Bom Bom employs 70. The HBD overall Client HR Policies apply to the employees of these two hotels.

72. *Occupational Health and Safety (OHS):* The hotel has modern kitchens for preparing food for guests as well as a semi open-air kitchen for preparing staff food and laundry rooms.

73. OHS issues during refurbishment will be supervised by an assigned Project Manager who will ensure that the contracted client complies with technical, administrative, and health and safety requirements. The overall HBD OHS Management System will apply to the hotels to ensure social risks during refurbishment and operation of the hotel are identified, monitored and controlled.

PS 3: Pollution Prevention and Abatement

74. MIGA's review considered the Clients management of key pollution prevention issues of concern such as air quality, solid waste management, effluent management, drainage system, pest management, as well as energy and resource conservation opportunities for hotel operations.

75. The contractor responsible for refurbishment will be contractually obligated to develop and implement an Environmental Management Plan during refurbishment. This EMP will include pollution prevention and abatement measures.

76. *Air Emissions:* Air quality issues during the refurbishment phase such as fugitive dust from demolition, construction and vehicular moments will be managed through dust suppression techniques, and complemented by personal protective equipment such as dust masks if necessary. Dust is expected to be localized, and not affect surrounding residents. Furthermore, exhaust from equipment and trucks will also be mitigated through the Contractors environmental, health and safety management plan.

77. During operation, the key sources of air emission will mainly be from boilers used to provide hot water and from the electricity generators. The hotels boilers and generators are likely to be considered as small combustion facilities and will be below the size threshold of 3MW thermal power input at which MIGA requires emission monitoring.

78. *Energy Efficiency:* The Client is already engaged in several energy efficiency initiatives in its hotels albeit the practices are not standardized. The initiatives include raising awareness on water consumption by giving the option to guests to reuse towels and the use of large size toiletries such as creams and shower gels. The client is also considering further energy efficiency activities such as room keys cards to shut off most electrical equipment in unoccupied rooms, energy saving lights and options for water saving such as reuse of treated water for irrigation purposes.

79. *Waste Management:* Solid waste management practices include segregation of plastic glass, paper and compost. An authorized contractor collects and disposes of waste in a municipal landfill as there are no recycling facilities on either Sao Tome Island or Principe Island, although

on Principe, used glass is collected and used in construction. The HBD Company-wide Liquid and Solid Waste Management Program will apply to both hotels.

80. Significant volumes of hazardous wastes are not expected from the project, some small quantities of used engine oil are generated from maintenance and are securely stored before being sold to a processor in Sao Tome. Swimming pool water is treated and with chlorine which is stored and handled appropriately. pH levels are monitored regularly.

81. Both hotels use diesel generators as grid electricity is intermittent. The generator housing at the Omali Lodge is adequate, however at both locations, diesel storage requires upgrading to improve secondary containment. Diesel housing at Bom Bom is in the process of being upgraded.

82. *Effluent Management:* Waste water at both hotels is collected in septic tanks which are emptied by a qualified contractor as necessary. These systems have been upgraded to account for the increased drainage requirement as a result of an increased in guests following complete refurbishment.

83. *Pest Management:* Pesticides both for the gardens and as mosquito control will be applied by a licensed third party contractor on a monthly basis and will be used in limited quantities. The Client will ensure that no class 1A or 1B pesticides are used in their operation. A procedure on pest control management will be included in the ESMS.

84. *Water source:* Water is sourced from wells which are located at both hotels and which are filtered using a charcoal filtration system. The water is not potable; therefore bottled water is bought in. Improvements to the system are being sought in order to reduce the reliance on bought water and hence improve sustainability.

PS 4: Community Health, Safety & Security

85. MIGA's review considered the clients management of risks as a facility receiving the public. In particular fire and life safety, emergency preparedness and response, and food safety.

86. *Food and Water Safety:* As part of the Client's ESMS international food and water safety standards are in place. Potable water is monitored for basic parameters such as pH and hardness and the Client is implementing a periodic and systematic monitoring system to ensure appropriate water quality. Furthermore, the hot water system which is a common source of Legionellosis is also included in the monitoring program; and preventive measures such as ensuring its storage at temperature above 60 °C are being implemented. With regards to food safety, the hotel follows a Hazard Analysis Critical Control Point (HACCP) based system and designed the kitchens accordingly. Awareness sheets are posted in the kitchens and bathrooms on advising staff on appropriate hygiene practices.

87. The pool is treated with algaecides and chlorine and monitored for pH and chlorine on a daily basis. A log of the testing results is maintained. The pool maintenance procedure is included in the ESMS.

88. *Emergency Preparedness and Response and Fire Life Safety:* A life and fire safety plan is in place at both hotels compliant with an internationally recognized fire safety code. The system is tested annually and fire drills are undertaken on a regular basis and involve the local fire department and hotel guests. The Client has an emergency preparedness and response system

as part of its ESMS which includes an evacuation plan. Muster points have been identified and clearly marked. At Omali, fire wardens are appointed in sufficient number to ensure adequate coverage; and are trained in first aid, and first response. Fire wardens will be appointed for Bom Bom and training is to be carried out in early 2014. Additional signage is also being developed.

89. *Security Forces and Community Safety:* The Client employs its own unarmed guards at both hotels and they are adequately trained. A mechanism for reporting credible allegations of unlawful or abusive acts to police authorities is included in the ESMS.

PS6: Biodiversity Conservation & Sustainable Natural Resource Management

90. A biodiversity conservation plan will be developed in order to improve biodiversity at the Bom Bom resort, especially as it transitions into an exclusive villa type resort. This is in keeping with the overall commitment of HBD to work with nature and reduce negative impacts at its locations.

H. Construction and Operation of the SundryBeach Resort and Macaco beach resort

Project Description

91. Sundry Beach resort will be a 15-key luxury tent hotel with restaurant, bar and pool. It is aimed to become the first carbon neutral hotel in Africa. Macaco is a 54-key beach resort to be located in the northeast coast of Principe and that will cater to the leisure market. As in the new Bom Bom concept, the idea will be for the hotels to blend into their surroundings. Sundry hotel will be constructed on a green field site, however, the Macaco hotel is on an already existing hotel site, but the hotel was never concluded. Small bungalows exist which will be torn down and a completely new hotel will be constructed, which will provide a much more secluded environment which will not be visible from the sea. This will be a 5 star hotel. Access to the hotel will be through an upgraded road which will not be covered by the MIGA guarantee, however a satisfactory EIA has been completed for the road and necessary licenses have been obtained. The construction for both hotels and in early stages and therefore the construction contractor has yet to be determined, however, the construction Client will be responsible for OHS and EMS in their ESMP.

92. The specific standards applicable to the Sundry Beach Resort and Macaco Beach resort projects are:

- PS1: Social and Environmental Assessment and Management System
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety and Security
- PS5: Land Acquisition & Involuntary Resettlement (Just Sundry)
- PS6: Biodiversity Conservation & Sustainable Natural Resource Management

93. Performance Standard 5 does not apply to Macaco Beach Resort as the land was acquired through a concession agreement with the RGP and no resettlement is necessary. Performance Standard 7: Indigenous Peoples and Performance Standard 8: Cultural Heritage, do not apply to either projects as they will not impact on indigenous territories and communities and no known archeological, cultural heritage or paleontological sites exist and the risk of encountering unknown sites or artifacts is considered to be very low.

PS1: Social and Environmental Assessment and Management Systems for both new resorts

94. The Projects will be covered by the existing ESMS for the entire HBD Tourism Development Project as noted above. Additional assessment and management considerations specific to the Sundy and Macacoa Projects are provided below.

95. *Social and Environmental Assessment:* An Environmental Impact Assessment (EIA) has been completed for Sundy Beach Resort (hereafter referred to as the ‘Sundy Project’). The EIA includes the construction of the 5-star resort, including 15 luxury tents, reception building, restaurant, bar, swimming pool, employee facilities, laundry and cleaning area, and maintenance and waste treatment area. The EIA considers two access routes – one by pontoon boat and the other via upgrade of existing access track. A separate EIA has been completed for the construction of the Macacoa Beach Resort Project including a restaurant, bar, swimming pool, tennis court, conference room, art studio and gallery, a destination spa, employee facilities, laundry and cleaning area, and maintenance and waste treatment area. Both EIA’s have been prepared according to Sao Tomé and Príncipe national legislation, or, where there were gaps in national legislation (i.e. water quality, waste, air quality and noise), Portuguese legislation was used.

96. *Management Program and Monitoring:* The EIA’s states that an environmental management system consistent with ISO14001 will be in place for the construction and operations phases. The EIA includes an Environmental Management Plan (EMP) and an Environmental Monitoring Plan. The EMP and Monitoring Plan clearly state that the management measures and monitoring will be incorporated into the contract with the Construction Contractor, and that HBD will monitor the performance of the Construction Contractor against the commitments in these plans. As with the Omali Lodge and Bom Bom hotels. HBD will also apply for certification by the Institute for Biosphere Responsible Tourism once the hotels are operational and is therefore constructing all hotels to meet this standard.

97. The HBD EMS Manager will be responsible for implementation of Environmental and Social Management System (ESMS), Environmental and Social Management Plan (ESMP) and Environmental and Social Monitoring Plan for Sundy and Macaco facilities. Management and implementation of resettlement and compensation from Sundy beach will be the responsibility of the Regional Government with financial and technical support from HBD.

98. *Organizational Capacity and Training:* Employees for operations, in addition to the OHS training, will be subject to a detailed training program, including a 12 month course for local workers in reception / administration services, laundry, restaurant and bar, kitchen and pastry; 3 month course on management of luxury and butler service and 1 month training in responsible tourism management and fire and life safety. The training of operation employees is anticipated to start during the construction phase to ensure training is complete prior to opening.

PS2: Labor and Working Conditions

99. Construction and operation employees of both projects will be subject to the overall HBD HR Policy and Safety and Health Procedure of HBD.

100. *Construction:* During construction, the projects are expected to generate employment for a total of 200 people on a full-time basis for 18 months. The majority of jobs will be filled by local workers.

101. OHS issues during construction will be supervised by an assigned Project Manager (in coordination with HBD EMS Manager), who will ensure that the contracted Client complies with technical, administrative, and health and safety requirements. The Construction Contractor will be required to implement an OHS Management System consistent with HBD policies and procedures to ensure social risks during construction and operation of the hotel are identified, monitored and controlled.

102. *Operations:* It is estimated that when fully operating (approximately 4 years into operations) the Sundy Project will employ 76 people full-time and the Macacoa project will employ 203 full time. Of these, it is estimated that 10% will be expatriates and the remaining 90% local. The HBD HR Policy and Safety and Health Procedure will apply to the operations phase as well.

PS3: Resource Efficiency and Pollution Prevention

103. The key expected risks and impacts are generally site-specific and include air quality, solid waste management, effluent management, drainage system, pest management, as well as energy and resource conservation opportunities. These will be mitigated through implementation of the Environmental Management Plan (EMP). The EMP complies with PS3.

Construction Phase

104. *Air pollution and Noise:* The most likely air quality impact during construction will be the generation of dust (particulate matter). Only a small amount of land (0.7 acres) will be cleared for the Sundy Project, and limited cut / fill will be required. As a result, dust emissions will be fairly minimal. With regards to the Macacoa project, more dust will be generated during the tearing down of the existing hotel, however, dust suppression techniques will be used, such as water sprinkling, in order to reduce impacts. Other potential air quality impacts, which include vehicle and heavy equipment exhaust emissions, are expected to be fairly minor. The EIA's do not include information on the electricity requirements for construction, though air pollution from these are expected to be fairly minimal.

105. Noise impacts during construction will be limited in extent and duration. The 14 households that reside within the Sundy beach Project Area will be resettled prior to construction (refer to the section on PS 5), and the closest residential area to the Project (Roca Sundy) is approximately 1 km away. This residential area does not have a direct line of sight to the Project due to topography and vegetation, and is therefore unlikely to be affected by construction noise. Movement of vehicles along the access road to the site, however, may result in minor, temporary noise impacts. The closest village to the Macacao beach project is Picão. Offloading for the project will be done by sea and there will be no noise impacts during operations.

106. *Liquid and solid waste management:* During construction, the most significant potential water quality impact is likely to be associated with erosion and sediment transport from cleared construction areas although these will be limited at Sundy. Major clearance and excavation activities will be undertaken during the dry season and re-vegetation activities will be ongoing. The EMP also includes installation of proper drainage around construction areas.

107. Excavation waste (spoil) will be reused as much as possible, and where it cannot be reused, it will be deposited off-site in a suitable location selected by the Construction Contractor

in consultation with HBD. To manage wastewater during construction, the Construction Contractor will be required to prepare a Water, Wastewater and Stormwater Management Plan. During construction domestic wastewater (from toilets, showers and dining areas) will be directed to a septic tank or treated prior to discharge to the environment. In the absence of STP legislation, any effluent discharged will comply with Portuguese effluent legislation.

108. *Hazardous Materials Management:* A designated maintenance area will be created with appropriate drainage and bunding to prevent release of hazardous materials (primarily hydrocarbons) to the surrounding environment. Spill management equipment will be available. Staff will be trained on transport, storage and handling of hazardous materials and spill reporting requirements.

109. *Water extraction:* Water will be sourced from within the hotel sites and will be treated using a filtration system as well as being treated and will comply with the EU water regulations. Feasibility studies for water sourcing, treatment and disposal are currently being undertaken, and will be concluded prior to construction. The Client will also obtain any required permits for water abstraction and discharge.

Operations phase

110. *Liquid and solid waste management:* Solid waste generated during operations will primarily be domestic solid waste (e.g. packaging, food, paper). The strategy will be to minimize, reuse and recycle as much solid waste as possible. Bins for different waste streams will be provided. The HBD Liquid and Solid Waste Management Plan will be implemented during the operations phase. Liquid waste will be collected in septic tanks.

111. *Hazardous Waste:* Pesticide use will be minimized, but if required, will be applied by a licensed third party contractor and only limited quantities will be used. The Client will ensure that no class 1A or 1B pesticides are used in their operation.

112. *Hazardous materials storage:* Any hazardous materials, such as pool chemicals (chlorine) and diesel will be stored appropriately in order to reduce the risk of spillages causing pollution to soil and water courses.

113. *Air Pollution and Noise:* During operation, both Projects are anticipated to have minimal air emissions. Primary emissions would be from transportation to the site (vehicle or boat) and potentially the energy generating source (e.g. diesel generator). The energy source for the Projects has yet to be identified, but the Project aims to be carbon neutral, so is looking into renewable energy options. It will also offset any carbon emissions through reforestation projects. A full carbon accounting will be undertaken once the power source has been identified.

114. Noise impacts will be limited to impacts from vehicle transport. Impacts will be minimized by the low volume of traffic expected and limiting vehicles travel to day time.

115. *Water extraction:* As above, water will be sourced from within the hotel sites and will be treated using a filtration system as well as being treated and will comply with the EU water regulations.

PS4: Community Health, Safety & Security

116. Following resettlement (see section on PS5), there will be only one community in the vicinity of the Sundry Project – Roca Sundry – which has approximately 380 residents. This community is relatively isolated, and primary livelihoods include fishing and agriculture. The main access road to the Sundry Project Area is a dirt road, which travels through Roca Sundry. The roads are in fairly poor condition, and in there is currently very little traffic through Roca Sundry.

117. The community closest to Macaco beach is approximately 2 km (by road) – Belo Monte and has approximately 50 residents. In the “Environmental monitoring plan for the construction phase” are foreseen mitigation measures and procedures related to these issues. Traffic will not travel through Belo Monte. In the event explosives are used during construction, an explosives protocol will be developed in conjunction with the government and appropriate management and health and safety measures will be applied. *Construction phase*
Community safety issues during construction are primarily associated with vehicle traffic, as construction vehicles will travel through Roca Sundry in order to access the Project site. It is anticipated that vehicle movement will be limited, and a traffic safety management plan will be developed prior to construction.

118. Other potential health impacts include disease transmission (e.g. HIV / AIDS) from the in-migration of a construction workforce, water quality issues resulting from pollution, water-borne disease resulting from improper disposal of sanitary waste and accidents and injury associated with unauthorized access to the construction site. A majority of the workforce will be sourced locally minimizing the risk of disease introduction from the Project workforce. Implementation of water quality management measures will minimize the potential for pollution and water-borne disease. Further, after resettlement, there will be no communities using water resources downstream of the Project. During construction, the sites are adequately secured to prevent unauthorized access.

119. *Grievance Procedure:* As foreseen in the Environmental Management Plan, during the construction phase any grievances should firstly be addressed to the contractor and secondly be addressed to the HBD office in Santo Antonio.

Operations phase

120. The impacts of additional tourists/people in Principe will be felt by the local community; however, the client expects the positive impacts to out-weigh the negatives. The client will ensure all visitors are made aware of the importance of respecting local culture and will offer organized tours of the island to ensure visitors are not encroaching on local inhabitant’s way of life.

121. MIGA’s review also considered the clients management of risks as facilities receiving the public. In particular fire and life safety, emergency preparedness and response, and food safety. Systems are yet to be established to ensure client safety in all aspects of the hotels, however, the client has represented that it will develop such plans in line with international best practice.

122. *Security Forces and Community Safety:* The Client will employ its own unarmed guards at both hotels and they will be adequately trained. A mechanism for reporting credible allegations of unlawful or abusive acts to police authorities will be included in the ESMS.

PS5: Land Acquisition & Involuntary Resettlement Sundy Beach Resort

123. There is one small settlement of 14 families and 82 people within the Project Area. The settlement includes 14 private homes that will need to be relocated. Three (3) of these structures are permanent residences, while the remaining 11 are temporary residences. The fourteen (14) families that reside in these homes currently use the beach within the Sundy Project Area to undertake fishing activities. There is no community infrastructure (e.g. school, health center, electricity, water supply) associated with the settlement.

124. All fourteen families have signed an agreement with HBD and the Regional Government. Resettlement will be implemented by the Regional Government with financial support from HBD. In the agreement, the families consent to receive compensation to vacate their homes on Sundy beach and resettle to an area of land next to the Old Hospital in the City of San Antonio. The agreed upon compensation includes provision of two out of three of house / boat / land. People will also benefit from water and sanitation plus electricity. The resettlement site was provided by the Regional Government. The agreement also commits HBD to developing a platform for fishing within the HBD concession at Sundy. The use of the platform will be regulated, and fishermen will be permitted to use it but will not be permitted to remain overnight at the site. The resettlement will be monitored by the HBD Community Development team and a grievance mechanism will be in place.

125. In addition to the 14 families that reside within the Sundy Project area, other fishermen are known to use the beach. These fishermen will also be given access to the fishing platform with the same conditions (i.e. no staying overnight). The agreement provides for an international arbitration process if there is a conflict between parties where an agreement via the local government grievance mechanism cannot be reached. Aside from fishing, no further livelihoods are expected to be affected by the development of the Sundy Project. Further, the Project is anticipated to provide significant economic benefit to local residents through the provision of jobs and possibly spin-off tourism activities.

PS6: Biodiversity Conservation & Sustainable Natural Resource Management

Sundy Beach Resort

126. Despite the significant conservation value of Príncipe as a whole, the biodiversity values of the Sundy Project area are considered low due to significant human intervention. The flora in the Sundy Project area is typical of coastal areas with some degree of human intervention, and is comprised of capoeira forest, forest / rural area (includes use forest, residential area and gardens) and coastal marine areas. No fauna species of conservation significance were identified within the Sundy Project Area.

127. *Construction phase:* During construction biodiversity (flora and fauna) in the Sundy Project area will be affected by vegetation clearance and loss of habitat. This will be offset by revegetation and habitat improvements that the Project will undertake as part of the development. The Sundy Resort intends to market itself as a Biosphere Responsible Tourism site, and as such protection and enhancement of the surrounding natural environment will be key components of the Project.

128. *Operations phase:* During operations, impacts will be associated with the presence of tourists and the general operation of the resort. The low number of tourists (maximum of 54 guests) and the nature of the operation (as described above, to protect and enhance the natural of environment) will minimize the overall impact of the Project, and will likely result in a net ecological benefit – improving biodiversity values in the Sundry Project Area.

Macacao Beach Resort

129. The hotel will not be located on a protected area of the island. A biodiversity action plan will be developed which will include reforestation activities as well as other species regeneration programs. As the site has already been transformed when the previous hotel was constructed, no species of concern have been noted at this site or in the ocean immediately in front. This beach is however noted as a nesting beach for turtles. During the environmental assessment four species were recorded: *Chelonia mydas* (Green turtle) Endangered, *Eretmochelys imbricata* (Hawksbill turtle) Critically Endangered, *Dermochelys coriacea* (Leatherback turtle), Critically Endangered and a nest of *Lepidochelys olivacea* (Olive Ridley turtle), Vulnerable. A turtle protection plan has been developed with Marine Turtles Association (ATM) in order to protect the turtles from any negative impacts.

130. Energy efficiency materials and techniques will be used in the hotel construction such as insulation to reduce the need for artificial air conditioning. For the hotel construction, sand will be brought in from Sao Tome Island to avoid habitat destruction of Principe.

131. As with Sundry, it is anticipated that there will be net ecological benefits as a result of this project, especially in relation to Turtle protection and reforestation activities.

Environmental Permitting Process and Community Engagement

132. The STP EIA Legislation requires public consultation as part of the EIA process. Detailed consultation was undertaken with representatives of the 14 families to be resettled to identify resettlement and compensation expectations. The consultation process is documented in a series of reports and all families have approved the process and their compensation.

I. Carpentry Workshop

Project Description

133. A wood working center in Santo Antonio, Principe, is in the process of being established to build the bungalows and other woodworks for the hotels. The site is 10,000 Square meters. HBD has a 20-year lease agreement signed in February 2012 for the land with the PRG. The client will import the timber from Bali from a certified sustainable source, but may establish a sustainable supply in Principe if this proves appropriate.

PS1: Social and Environmental Assessment and Management Systems

134. A qualified staff member will be responsible for managing environmental health and safety and occupational health and safety. Operating manuals will be developed in the coming months to ensure the project is operating to good international industry standards.

PS2: Labor and Working Conditions

135. Twenty staff will be employed and they will follow the overall HBD Human Resources manual once it is completed. Occupational Health and Safety operating manuals will be developed to guide staff in safe equipment operations and appropriate training by a professional carpenter will be carried out.

PS3: Pollution Prevention and Abatement

136. An Environmental Health and Safety manual will be developed which will include activities to reduce air soil and noise pollution. The HBD Liquid and Solid Waste Management Plan will be implemented at this site. A vehicles maintenance plan will be developed to ensure all vehicles are maintained appropriately and any waste generated through their maintenance will be disposed of appropriately. Water will be sourced from onsite wells, and permits for water abstraction will be obtained, if required.

PS4: Community Health, Safety & Security

137. A number of houses are located close to the site, however, the site is complete fenced and guarded therefore there is no risk of community member entering the site. Guards are trained and are unarmed. A community grievance mechanism will be developed.

PS5: Land Acquisition & Involuntary Resettlement

138. The land was leased from the government and no resettlement was necessary.

PS6: Biodiversity Conservation & Sustainable Natural Resource Management

139. The trees for the carpentry will initially be sourced from Bali and will all be FSC or similarly certified to ensure they are sourced sustainably. The client will conduct research on Principe to investigate the viability of producing its own wood on the island. Only if this proves successful and sustainable will the company no longer procure wood from Bali.

J. Future projects

140. Boi Beach, Uba Beach, Santana/Fortaleza and Paciencia

The Client holds concessions for these four sites, however, to date there are only plans to develop a hotel at Paciencia in mid-2014. An ESIA has not yet been developed for the development at Paciencia and therefore the environmental and social impacts will be assessed once the ESIA is complete. ESIA's will be developed for the other three sites once a decision has been made on the projects for these locations.

K. Availability of Documentation

- [Environmental Impact Assessment Principe Airport Expansion](#), ERM April 2012
- EIA Macaco, Boi and Uba beach resorts Matos, Fonseca Associados, April 2013 (In [English](#) and [Portuguese](#))

- EIA Sundry Beach resort Matos, Fonseca Associados, April 2013 (In [English](#) and [Portuguese](#))

The above listed documentation is available electronically as PDF attachments to this ESRS at www.miga.org. It is also available for viewing at the HBD office in Principe and the Omali Lodge Hotel in Sao Tome.