

Environmental and Social Action Plan (ESAP)

No.	Aspect	Action	Deliverable	Expected delivery
Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts				
1	Identification of Risks and Impacts	<p>1. Prepare an addendum to the ESIA to include the identification of E&S risks and mitigation measures for (i) LDC transmission line and substation; and (ii) CEMIG dedicated transmission line and substation; (iii) access road from LMG-748 to DWP mill site; and</p> <p>2. A cumulative impact assessment on ambient water quality considering water users downstream.</p>	<p>1.1 Completed EIA addendum</p> <p>1.2 Cumulative impact assessment on water quality</p>	<p>1.1 Before Board</p> <p>1.2 Before Board (completed)</p>
2	Environmental and Social Assessment	<p>1. Prepare an update to the ESIA to include (i) the updated noise baseline in line with GIIP; (ii) the revised noise propagation model including fix and mobile sources (i.e. truck traffic) at project fence and at sensitive receptors; and (iii) mitigation measures if required. The noise baseline must include (i) the characterization of background noise levels at potential sensitive receptors both at Fazenda Quilombo (water intake/substation), Fazenda Nova Monte Carmelo (pulp mill); (ii) statistically significant measurement times; and (iii) measurements at sufficient distance from reflective surfaces (i.e. 1.5 m above ground and 3 m from reflective surfaces).</p>	2.1 Completed EIA addendum	2.1 Before Board
3	Management Programs and ESMS	<p>1. Design and adopt an ESMS manual for construction to inform contractors about the elements where they need to focus. The ESMS will include EHS checklists, inspection plans, and KPIs to assess contractors' performance. Deviations will be recorded in a database to allow for analysis and decision making at the managerial level.</p>	3.1 ESMS manual and system adopted for construction	3.1 Before Closing
4		<p>1. Prepare ESMS (policies, plans, procedures) for the operation phase based on the <i>Plano de Controle Ambiental</i> (PCA) and additional mitigation measures identified by the addenda to the ESIA (see ESAP items # 1 and 2) and in line with the requirements of Performance Standard 1.</p>	4.1 ESMS for the operation phase	4.1 Three months Before Start-up
5		<p>1. Repeat HAZOP study and conduct a Quantitative Risk Assessment (QRA) to confirm no negative impact to people or the environment will take place under worst case scenarios. LDC will submit these studies to the IESC for review as part of their scope of work.</p>	5.1 Revised HAZOP and QRA	5.1 One month after detailed engineering is completed

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6		1. Prepare an Environmental Monitoring Plan including (i) parameters to be monitored, (ii) monitoring methodology, (iii) location and frequency of monitoring, (iv) applicable references (i.e. Brazilian Regulation, WBG EHS Guideline, GIIP Guideline (WHO, EU BAT, etc.), and (v) Numerical Standards adopted by the project.	6.1 EMoP for operation	6.1 Three months before start-up
7		1. Establish an adequate E&S team to implement the E&S processes for construction and operation	7.1. Present an organizational structure that defines roles, responsibilities and authority to implement the ESMS	7.1 Before Closing
8	Organizational Capacity and Competency	1. Appoint a Social Expert with adequate expertise to manage and coordinate overall social affairs and plans related to all project components (e.g. socio-economic baseline, stakeholder engagement plan, grievance mechanism, land acquisition procedure, influx management, local hiring strategy)	8.1 Contract with social senior expert, in accordance to the requirements of the position	8.1 Before Closing
9	Identification of Risks and Impacts	Prepare a socio-economic baseline for the project's area of influence according to the level of impact and focused on the identification of vulnerable groups. The baseline will include (1) primary data points or census for people affected by land acquisition and for (2) neighbors adjacent to the project's components (i.e. forest plantations, DWP mill, transmission line, water system, main transportation routes); and (ii) secondary data points or macro-data for the municipalities of Indianapolis, Estrela do Sul, Nova Ponte, Araguari and Uberlandia.	9.1 Socio-economic baseline for people affected by land acquisition (access road, water/effluent system, transmission line). 9.2 Socio-economic baseline for neighbors adjacent to the project's components and municipalities in the project's area of influence.	9.1 Before Board 9.2 Before Closing
10	Ongoing Engagement with Affected Communities	1. Update Stakeholder Engagement Plan (SEP) based on results of socio-economic baseline for all project components. The SEP will include: (i) identification and prioritization of key stakeholders; (ii) stakeholder mapping and categorization; (iii) criteria for identification of vulnerable groups, IP, and traditional communities (i.e. Quilombolas); (iv) information to be disclosed to each stakeholder group ; (v) strategy for information disclosure, consultation, and collection/analysis of feedback; (vi) external grievance mechanism for complaints presented directly or through interaction with contractors; (vii) key performance indicators (e.g. grievances received vs solved, meetings executed vs planned, etc.) and (viii) socio-economic monitoring.	10.1 SEP for all project components	10.1 Before First Disbursement
11		1. LDC will use commercially reasonable efforts to develop a joint water quality monitoring program, as described in the stakeholder engagement plan (SEP).	11.1 Evidence of Implementation of water quality joint monitoring program	11.1 Six-months after First Disbursement

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Performance Standard 2: Labor and Working Conditions				
12	Working Conditions and Management of Worker Relationships	1. Prepare and adopt strategy to promote the recruitment and promotion of women during operations both at the mill and forest plantations. The strategy will also identify and address safety risks to women in the worksite (e.g. transportation, work in isolated places, adequate PPE) to ensure safety does not present a barrier to employment opportunities for women in non-traditional roles.	12.1 Documented strategy for promotion of women employment	12.1 One year after First Disbursement
13		1. Prepare LDC Code of Conduct for managers and workers engaged in construction to which adherence will be mandatory. The code of conduct will include expected behavior in the construction site and project area of influence including prevention of sexual harassment in the workplace, sexual exploitation and abuse in local communities, and rules for interactions with local communities. Integrate code of conduct in induction training and in communication campaigns inside the workplace and within communities at risk.	13.1 Code of conduct for construction	13.1 Before Closing
14	Grievance Mechanism	1. Develop and implement policies and procedures addressing sexual harassment (SH) in the workplace. As part of the procedures, ensure employee grievance mechanism is adapted to accept and address issues around SH in the workplace. This will include a mechanism that ensures confidentiality for employees who report SH (survivors and witnesses), involvement of the survivor in decision-making about responses, and consequences for perpetrators of SH in the workplace. Communicate the SH policy internally and to contractors and suppliers.	14.1 Approved SH policies and procedures	14.1 Before First Disbursement
15	Influx Management and Retrenchment	1. Prepare Workforce Management Plan for construction including (i) local recruitment strategy and procedure; (ii) workers' accommodation plan compliant with Brazilian Ministry of Labor NR-18 Regulatory Standard on Working Conditions and the Environment in the Construction Industry and IFC Guidance Note on Workers' Accommodation; and (iii) demobilization plan to mitigate negative impacts on workers and receiving communities (e.g. notice period, mechanism to ensure payment of severance package, proactive programs to ensure re-entry of non-local workers, workers' liabilities in hosting communities such as unpaid bills and damage compensation, etc.).	15.1 Workforce management plan amended central services contract	15.1 Before Closing
Performance Standard 3: Resource Efficiency and Pollution Prevention				

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16	Pollution Prevention and Abatement	1. Install and operate wastewater tertiary treatment plant to reduce the concentration of nutrients and COD in its effluents as necessary.	16.1 Evidence of tertiary treatment plant invested and operating	16.1 By start-up
17		1. Share results of water quality monitoring with the Comitê da Bacia Hidrográfica do Araguari (CBH-Araguari), to the extent that the CBH agrees to promote such meetings; and 2. Share results of effluent monitoring every quarter in open meetings at the Comitê da Bacia Hidrográfica do Araguari (CBH-Araguari), to the extent that the CBH agrees to promote such meetings and receive LDC results.	17.1 Evidence of presentation of water quality results 17.2 Evidence of presentation of water quality and effluent results	17.1 Before First Disbursement 17.2 During Project implementation (ESCR)
18	Solid Waste Management	1. Prepare a Waste Management Plan (WMP) and Database in line with requirements of Performance Standard 3 to ensure that waste is treated and disposed in an environmentally safe manner and guarantee waste traceability and chain of custody.	18.1 WMP for construction	18.1 Before First Disbursement
19		1. Prepare a Waste Management Plan and Database (WMP) for operations in line with requirements of Performance Standard 3 to ensure that waste is treated and disposed in an environmentally safe manner and guarantee waste traceability and chain of custody.	19.2 WMP for operations	19.2 Three months Before Start-up
Performance Standard 4: Community Health, Safety, and Security				
20	Influx Management and Community Exposure to Diseases and GBV/SH	1. Prepare Influx Management Plan to assess, mitigate and monitor impacts from project-induced in-migration on (i) public services (i.e. medical, schools, water and sanitation); (ii) public security; and (iii) gender-based violence (GBV). The plan will focus on vulnerable groups and small municipalities with low capacity to manage impacts. The plan will identify the socioeconomic indicators to be monitored and will consider the implementation of a participatory socio-economic monitoring committee – aimed at small municipalities – to monitor impacts and implement mitigation measures as needed.	20.1 Influx Management Plan for construction	20.1 Before First Disbursement
21	Community Health and Safety – Transport Activities	1. Prepare Transportation Safety Plan to mitigate risks to the environment and communities exposed to increased traffic as a result of project's activities (e.g. transportation of equipment, hazardous materials, wood, finished products, etc.). The plan will include the identification of vulnerable locations and procedures for emergency response, and it will be developed and reviewed by appropriate groups and organizations. The plan will include a damage compensation procedure linked to LDC's external grievance mechanism.	21.1 Transportation Safety Plan for operations	21.1 Six months Before Start-up

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Performance Standard 5: Land Acquisition and Involuntary Resettlement				
22	Livelihood Restoration Planning and Implementation	1. Prepare a Land Acquisition/Leasing Procedure based on the Land Acquisition Framework for forestry plantations expansion focused on avoiding and minimizing negative impacts on vulnerable groups such as physical or economic displacement. The people affected by the acquisition will be surveyed in socioeconomic aspects with the purpose to identify, avoid and mitigate impacts on vulnerable groups (i.e. sharecroppers, renters, guardians, farm workers, traditional communities). Livelihood restoration will be implemented if needed. Land users (besides the owners) will be included. All affected people will be included within the Stakeholder Engagement Plan and will have access to the Grievance Mechanism.	22.1 Land Acquisition/Leasing Procedure for forestry plantations expansion	22.1 Before First Disbursement
23	Economic Displacement	1. Prepare a Land Acquisition Report for land already acquired for the transmission line, water/effluent system, and access road (i) describing the process performed with supportive documentation; (ii) identifying the gaps vis-a-vis the Land Acquisition Framework; and (iii) documenting an action plan to close the gaps. This Land Acquisition Report is intended to identify and mitigate impacts on affected people which were not considered within the compensation process, focusing on potential vulnerable groups which are different from landowners.	23.1 Land Acquisition Report for linear infrastructure	23.1 Before Closing
Performance Standard 8: Cultural Heritage				
24		1. Develop Chance Find Procedure for civil works and communicate procedure to contractors.	24.1 Chance find procedure	24.1 Before Closing