Environmental and Social Action Plan (ESAP) for Rokytne

Update: 27 May 2014

No.	Issue/Action	Source of Requirement (National regulation, EBRD PR #, EU, BAT)	Date to be completed / responsibility	Measure of success
1.	**Corporate Level and Pre-Construction**			
1.1	Monitor project performance, prepare and submit reports on status of ESAP implementation and environmental and social performance, including resolution of grievances, at agreed timescales and for an agreed period (loan duration).	EBRD PR1	Each six months during construction, annually thereafter	Submission of reports on environmental, occupational health and safety, and social (ESHS) performance, demonstrating that predicted environmental and social effects are being satisfactory managed
1.2	Achieve and maintain environmental and social management systems based on principles of ISO 14001.	Best international management practices PR1	By 2016	Include in ESHS report the status of environmental and social management systems
1.3	Achieve and maintain an occupational health and safety (OHS) management system based on principles of OHSAS 18001 or equivalent.	Best international management practices PR2	By 2016	Include in ESHS report the status of OHS management systems
1.4	Appoint responsible manager(s) for environmental and occupational health and safety issues. Train foremen and appropriate staff on each construction and operation team and ensure operations meet the relevant requirements of this ESAP and, as needed, the requirements of EBRD's Performance Requirements.	Best international management practices PR1	Throughout construction and operation	- Appointment of corporate ESHS manager; - Training of foremen and other staff; - Ultimate goal: full compliance with ESAP; - Include in ESHS report updates on appointment(s) and training.
1.5	Obtain all required permits for the new projects and comply with permit requirements, including: a. Construction permit (Construction Phase);	National regulatory requirements PR1	Prior to construction and during operation,	- Identify permits required and received in ESHS reports; - Report on compliance in ESHS reports.

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	b. Air emissions (Operation Phase); c. Waste disposal (Operation Phase); d. Water use and wastewater discharge (Operation Phase).	PR3	as applicable	
1.6	Prepare and implement a Stakeholder Engagement Plan (SEP), including a Grievance Mechanism. Carry out public consulations and inform stakeholders of activities and progress, and receive and respond to grievances.	PR10	2014 and throughout project	Review and approval of SEP by EBRD Information disclosure through suitable means, to be agreed with EBRD Include in ESHS report: - details on grievances and resolution; - consultations and other outreach to the community, including authorities.
2.	**Construction Phase**			
2.1	Establish corporate policy, procedures and plan for oversight of contractor ESHS performance during construction, to include (at a minimum): - Inclusion of appropriate EHS legal requirements in contracts, including requirement for staff/management training; - Assignment of clear responsibilities within developer for contractor oversight of the projects; - Regular inspections/monitoring of sites and contractors' construction camp if applicable; - Contractor reports on performance sufficient to allow inclusion of data in ESHS reports to the Bank, and to allow developer to determine if	Best international management practices PR1 PR2	Prior to, and during construction	ESHS reports to EBRD to include: - Programme description; - Preparation and implementation of contractors' management plan; - Highlights of performance (appointments, inspections, compliance summaries etc.); - Training; - Contractor summaries covering ESHS performance.

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	corrective actions are needed; - Verification of training and professional credentials for contractor environmental and OHS managers and staff.			
2.2	Prepare and implement construction management plan to mitigate general construction impacts, including: a. Noise monitoring and mitigation (controls on construction hours, vehicles and equipment used, routes and timing for deliveries). b. Air emissions: - Controls on vehicle emissions (material deliveries and on-site plant movements); - Control dust emissions in dry periods by considerate siting and access routes, and where necessary using water or other dust suppression methods on roads and construction areas that may generate dust; - Ensure all vehicles carrying spoil and all stockpiles are covered; - Switch vehicles and equipment off when not in use; - Keep all motorised equipment and vehicles well-maintained to reduce emissions. c. Waste generation, storage and disposal: - Procedures for proper handling of all waste	National regulatory requirements PR1, PR2, PR3, PR4	Prior to, and during construction	- Construction management plan, including traffic management plan (see also Item 3.5), prepared, approved and implemented; - Compliance with national requirements and standards; - Contracts with licensed contractors (waste disposal); - ESHS reports to EBRD.

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	generated at the construction site (including hazardous and non-hazardous waste); - Methods to verify proper off-site management of related wastes by contract waste managers; - Measures to minimise waste generation and maximise reuse and recycling. d. Increased traffic.			
2.3	Develop and implement an Occupational Health and Safety (OHS) plan to guide all project-related activities on the project sites during construction and operation to saveguard workers and local community. Also require contractor plan/compliance. Requirements to include: - Job- and task-specific hazard analysis and controls for developer and contractor's activities; - Provision of Personal Protection Equipment (PPE), requirements for use of PPE, and enforcement of PPE use; - Safety training for all personnel, covering hazards for their jobs; - Review and approval of contractors OHS plans, to meet same standards as developer's plan; - Oversight of contractor OHS implementation, including mandatory reporting; - Recording incident statistics, including total work hours; - Analysis of health, safety and security risks to the	National requirements Best international practices PR2, PR4	Plan in place prior to construction (for contractors, prior to site operations). Throughout construction and operation.	- Regulatory compliance - Preparation and implementation of OHS plans for projects; - Review and approval of contractor OHS plans; - Include in ESHS reports to Bank data on performance by developer and contractors (hours worked, incidents/accidents, lost time, etc.).

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	local community (e.g. traffic, noise) and respective provisions in the Plan.			
2.4	Implement measures to prevent / reduce / control soil and groundwater contamination as a result of spills or seepage of fuel, lubricants and other chemicals: - Store fuels and oils in containers with bunded secondary containment with 110% capacity; - Ensure drip-trays are in place where fuels or oils are stored or used; - Identify a designated bunded refuelling location; - Educate drivers and equipment operators in proper fuel management, including clean-up of spills on- and off-site; - Make spill kits available, and use if necessary to clean up oil spills before contaminants can enter the ground or watercourses.	National regulatory requirements Best international practices PR3	Throughout construction and operation	- Mitigation arrangements in place for potential adverse impacts of soil and groundwater contamination; - Incidence of spills/leakage as documented by internal/external audits and regulatory notices.
2.5	Make provisions to maximise opportunities for local employment and suppliers in project construction and subsequent operation	PR1, PR4, PR10	Prior to, and throughout construction and operation	- Include data on use of local labour and suppliers in ESHS reports; - No comlpaints from local residents.
3.	**Operation Phase**			
3.1	Maintain full compliance of ongoing company operations on ESHS issues, including:	National regulatory requirements PR1	Ongoing	Full ESHS compliance documented by internal or external audits

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	a. Air emissions; b. Solid waste generation and disposal; c. Water use and wastewater treatment.			
3.2	Implement mitigation measures and best management practices to prevent / reduce / control air pollution from operational biogas generation and combustion process and biomass storage. Emissions controls should ensure compliance with applicable Ukrainian standards, including consideration of: - Nitrogen Oxide (NO_x) control (compliance with 500 mg/m^3 national standard); and potentially control on Sulphur (SO_2) if applicable (compliance with national standard 500 mg/m^3); - Particulate matter control (compliance with 50mg/m^3 national standard), storage and disposal of ash if applicable; - Regular Emissions Monitoring; - Controls on dust and methane generated from storage and processing of biomass.	National regulatory requirements Best international practices PR3, PR4	Prior to commissioning, and during operation	- National regulatory compliance, including concentration of air pollutants at SPZ boundary; - Minimal air pollution (including dust generation and odour); - No complaints from local residents.
3.3	Develop comprehensive waste management (generation, storage and disposal) plan for the project. Plans should include: - Preparation of annual waste generation limits and disposal permit;	National regulatory requirements Best international practices PR1, PR3	Prior to commissioning, and during operation	- Preparation and implementation of waste management plan; - Annual waste generation limits and disposal permit; - Compliance with national requirements; - Waste disposal contracts with licensed

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	- Procedures for proper handling and segregation of all waste generated (including hazardous and non-hazardous waste); - Management of feedstock if treated as waste, such as sugarbeet pulp; - Methods to verify proper off-site management/disposal of related wastes by licensed contractor waste managers; - Measures to minimise waste generation and maximise reuse and recycling, including use of solid and possibly liquid digestate as agricultural fertilizers if appropriate.			contractors; - Reporting on plan preparation and waste management compliance status in ESHS report.
3.4	Ensure appropriate streams separation, containment and disposal of industrial wastewater, including reuse and safe disposal of excess liquid digestate, treatment and disposal of sanitary wastewater and contaminated storm water. Take measures to prevent run-off of potentially polluting materials to the soil and groundwater, including: - Keep hard-standing areas and road surfaces clean from mud and oil build up; - Store hazardous and potentially polluting materials in bunded, secure, areas away from watercourse and pathways to watercourses (e.g. drains, ditches).	National regulatory requirements Best international practices PR3	Throughout construction and operation	- Regulatory compliance; - Percentage of water and wastewater reused in the production process; - Reduction in the risk of water / land pollution and impacts on the environment.

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3.5	Develop and implement a traffic management plan to mitigate an increased local road traffic due to transportation of feedstock to the biogas plant and its byproducts, and minimise nuicances to the public, including: - Careful consideration and consultation should be given to the agreement of delivery routes to the site area to avoid close proximity to sensitive receptors (e.g. residences, hospitals and schools); - Design routes so as to avoid unnecessary conflict with other road users, schools, hospitals, and other areas where there may be heavy bicycle, pedestrian or child use; - Notify communities and place signs on public roads and in the vicinity of the site; - Monitor noise levels from project vehicle traffic in the residential areas; - Confine road traffic to daylight hours if possible; - Establish and enforce strict delivery times; - Establish and enforce speed limits on- and off-site; - Cover the raw materials and prevent any spillage during transportation (especially for the manure); - Provide training to all drivers, enforce compliance with traffic plan.	Best international practices PR4	Throughout construction and operation	- Traffic management plan prepared and implemented; - Include in ESHS reports data on all accidents, including traffic-related incidents/accidents; - No complaints from local residents.
3.6	Developer to ensure that the project team has a high level of preparedness for emergencies and major incidents (e.g. explosion, fire, earthquake, etc.), and	National regulatory requirements PR3, PR4	Throughout construction and operation	- Potential major incidents identified and avoided through emergency planning; - If major incidents occur, these are

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	that an appropriate for biogas plant emergency plan that covers risks of gas explosion and other issues is in place and understood by developer and contractor staff. Include the local community in the emergency plan.			handled according to the planned procedures.
4.	**Decommissioning Phase**			
4.1	Prepare and implement a decommissioning plan to dispose off any waste, residues or used equipment in an environmentally sound manner.	Best international practices PR1, PR3	Prior to, and during decommissioning phase	Decommissioning plan prepared and implemented