

## ENVIRONMENTAL AND SOCIAL ACTION PLAN (ERTIS HYDROMETALLURGICAL PLANT LLP):

No.	Action	Environmental & Social Risks	Requirement (Legislative, EBRD ESR)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status
<b>ESR1</b>	<b>Assessment and Management of Environmental and Social Risk and Impacts</b>						
1.1	<p><b>Environmental and Social Management System (ESMS)</b> Implement an Environmental and Social Management System (ESMS), including environmental and social policies, that aligns with the requirements of EBRD ESR1, good international practice and local E&amp;S regulations and commensurate with the E&amp;S, including climate, risks and impacts of and to the Project.</p>	Management of Environmental and Social risk	EBRD ESR1	Ertis Hydrometallurgical Plant LLP (the Company)	In place prior to construction and operations	Project construction and operation ESMS in place and implemented.	
1.2	<p><b>Environmental and Social Resources</b> Maintain an appropriately resourced E&amp;S team. This will include environmental, social, labour, biodiversity and occupational health &amp; safety functions. The team will include an E&amp;S manager or similar.</p> <p>The E&amp;S team will coordinate and oversee all E&amp;S aspects of the project including implementation of the Project ESMS, contractor oversight and engagement, monitoring and reporting, implementation of this ESAP and engagement with the EBRD and its advisors. The E&amp;S team may be supported by various consultants and other specialists as needed.</p>	Management of Environmental and Social risk	EBRD ESR1	The Company	In place prior to construction and operations	E&S team in place	
1.3	<p><b>Environmental and Social Management Plans</b> Update the ESMP to include:</p> <ul style="list-style-type: none"> <li>• Detailed, standalone topic specific plans (as described in the ESMP) including purpose, objectives, allocation of roles and details of responsibilities, mitigation and management measures, monitoring, and auditing</li> <li>• Detailed monitoring plan including locations, frequency, parameters, and reporting</li> <li>• Implementation schedule for the ESMPs</li> <li>• Statement on applicability of the ESMPs to subcontractors and suppliers</li> </ul> <p>The ESMPs should be extended to cover the following topic plans:</p> <ul style="list-style-type: none"> <li>• Soil and erosion management plan (include soil erosion monitoring, compaction testing, and stored soil quality tracking)</li> <li>• Labour management plan (Local Employment Plan to be expanded with detailed recruitment procedure, retrenchment plan, information on salaries and minimum wages and monitoring including worker welfare checks)</li> </ul> <p>Contractor management plan to be expanded to include supplier management and monitoring.</p>	Management of Environmental and Social risk	EBRD ESR1	The Company	<p>ESMPs developed prior to EBRD's Board meeting.</p> <p>ESMP's maintained and updated as necessary commensurate with Project E&amp;S risks and impacts.</p>	<p>ESMPs satisfactory to the EBRD and commensurate with Project E&amp;S risks and impacts</p> <p>Project implemented in line with ESIA and ESMP's</p>	

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1.4	<p><b>Contractor management</b> Develop and agree contract documentation for contractors to include environmental, health, safety and social requirements/specifications.</p> <p>Ensure appropriate oversight of contractors to ensure compliance with the EBRD's ESRs.</p>	Contractor risk management	EBRD ESR 1	The Company	Prior to contracting	Contract documentation includes environmental, health, safety, social and labour, including supply chain requirements - evidenced by relevant and validated clauses in documentation.	
<b>ESR2</b>	<b>Labour and Working Conditions</b>						
2.1	<p><b>Working conditions</b> Establish and maintain a Human Resources (HR) policy and procedures developed in line with national law and EBRD ESR2. HR policy and requirements will apply to all Project workers including contractors in line with ESR2</p>	Labour and working conditions risk management	EBRD ESR2	The Company	<p>In place: Prior to first disbursement</p> <p>Implemented: on an ongoing basis</p>	<p>HR policies, procedures and plans satisfactory to lenders and communicated to workers</p> <p>Cascade of HR requirements to contractors.</p>	
2.2	<p><b>Worker Grievance Mechanism</b> Implement a worker grievance mechanism in line with EBRD ESR2. The grievance mechanism should allow for anonymous grievances; allow grievances to be raised in the language(s) of the workforce; and the existence and functioning of the grievance mechanism should be communicated to workers by a variety of channels.</p>	Worker engagement and grievance management	EBRD ESR2	The Company	<p>In place: Prior to first disbursement</p> <p>Implemented: on an ongoing basis</p>	<p>Grievance mechanism developed and implemented</p> <p>Register of grievances maintained</p>	
<b>ESR3</b>	<b>Pollution Prevention and Control</b>						
3.1	<p><b>Water Monitoring and Impact Assessment</b> Update the ESIA based on the ongoing 12-month monitoring campaign that commenced in August 2025. If required, develop updated mitigation and monitoring measures for integration in the Project ESMPs.</p>	Water use and wastewater management	EBRD ESR3	The Company	Within one year of signing the financing agreement	<p>Updated water resources impact assessment.</p> <p>If required, update ESMP including updated mitigation and monitoring.</p>	
3.2	<p><b>Air Quality Monitoring and Impact Assessment</b> Update the ESIA based on the ongoing 12-month monitoring campaign started in August 2025. This should be undertaken for a minimum of 1 month per season (noting potential limitations with cold temperatures), at representative receptor and hot spot locations. Pollutants of interest are oxides of nitrogen (not currently included), nitrogen dioxide, sulphur dioxide and particulate matter (as PM10, PM2.5 and dust). If required, develop updated mitigation and monitoring measures for integration in the Project ESMS.</p>	Ongoing air quality standard compliance	EBRD ESR3	The Company	Within one year of signing the financing agreement	<p>Updated air quality impact assessment.</p> <p>If required, updated ESMP including updated mitigation and monitoring.</p>	

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3.3	<b>Air Quality Dispersion Modelling</b> Carry out screening-level, followed by detailed, dispersion modelling of key emission sources (POX plant main stacks and autoclave vent gas treatment, boiler/exhaust stacks and any significant vents) and: (i) quantify maximum predicted ground-level concentrations and increments at the nearest high-sensitivity receptors (e.g. Moylydy, dachas and residential areas along the M38 corridor) for NO <sub>2</sub> , SO <sub>2</sub> , PM <sub>10</sub> /PM <sub>2.5</sub> and relevant process pollutants; (ii) compare total concentrations (baseline + project) with Kazakhstan MACs, EU AQS and WHO guidelines, and (iii) update the impact significance ratings accordingly.	Air quality assessment and compliance with air quality and control standards	EBRD ESR3	The Company	Screening-level dispersion modelling prior to EBRD's Board  Detailed modelling within one year of signing the financing agreement	Updated air quality impact assessment.  If required, updated ESMP including updated mitigation and monitoring.	
3.4	<b>Wastewater management</b> Ensure domestic wastewater is treated in line with EU Urban Wastewater Directive prior to discharge	Water discharge quality	EBRD ESR3	The Company	During operations	Domestic wastewater is treated prior to discharge	
3.5	<b>Water management</b> Maintain an appropriate water balance for the project including raw water demand, recycling, discharge, losses and water recovery from the sludge storage facility.	Water management	EBRD ESR3	The Company	During operations	Water balance reported to the EBRD	
3.6	<b>GHG</b> Maintain an appropriate greenhouse gas inventory.	GHG tracking	EBRD ESR 3	The Company	During operations	GHG inventory reported to the EBRD	
<b>ESR4</b>	<b>Health, Safety and Security</b>						
4.1	<b>Sludge Storage Facility</b> The new Sludge Storage Facility is to be designed and operated in line with the Global Industry Standard on Tailings Management (GISTM).	Sludge Facility Management	EBRD ESR4 Good International Practice	The Company	As part of design, construction, operation and closure	Sludge Storage Facility aligned with GISTM requirements.	
4.2	<b>Cyanide Code Certification</b> Obtain and maintain certification to the International Cyanide Management Code (ICMC) for the Project.	Cyanide management	EBRD ESR4 Good International Practice	The Company	Within 12 months of operations commencing	Cyanide code certification obtained	
4.3	<b>Process safety</b> Undertake the necessary process and industrial safety assessments to inform the project design, controls and monitoring measures. This may include HAZIDs, HAZOPs, Quantitative Risk Assessment (considering the EU Seveso Directive)	Process safety	EBRD ESR4 Good International Practice EU Seveso Directive	The Company	As part of Project design and operation	Necessary process and industrial safety assessments undertaken and key project stages.  Control and monitoring measures implement	
4.4	<b>Emergency preparedness and response plan</b> Develop an appropriate emergency preparedness and response plan for the Project, including for the construction and operations phases, in coordination with the relevant authorities and, where necessary, with local stakeholders (where a risk to stakeholder exists). The plan will consider the Project including the plant and Sludge Storage Facility.	H&S incident response	EBRD ESR4 Good International Practice	The Company	In place prior to construction and operations. Updated as necessary	Appropriate emergency preparedness and response plan for the Project	

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<b>ESR5</b>	<b>Land acquisition, restrictions on land use and involuntary resettlement</b>						
5.1	<b>Socioeconomic Impact Assessment</b> Update socioeconomic impact assessment to include assessment of temporary impacts to livelihoods (agricultural land and grazing land) linked to the construction of the transmission line. Explicitly include the assumption that resettlement impacts will be avoided. Based on the outcomes of this assessment, evaluate the need or otherwise for a livelihood restoration plan. If necessary, develop a livelihood restoration plan.	Assessment and management of livelihood impacts	EBRD ESR5	The Company	Prior to EBRD's Board	Updated socioeconomic impact assessment. If required, livelihood restoration plan in line with ESR5	
<b>ESR6</b>	<b>Biodiversity conservation and sustainable management of living natural resources</b>						
6.1	<b>Additional Biodiversity Surveys and Impact Assessment</b> Conduct additional vantage point surveys or similar in an adequate buffer around the transmission line to assess potential future effects of the grid connection on migratory birds. Ensure the impact assessment specifically assesses impacts on the Irtys River as an important migratory corridor for birds. Based on results of the impact assessment, develop necessary mitigation measures and evaluate the need for a Post-construction Bird and Bat Fatality Monitoring (PCFM) Plan. If necessary, develop the PCFM Plan.	Biodiversity assessment and conservation of species	EBRD ESR6	The Company	Prior to the start of the construction of grid connection	Biodiversity surveys conducted. Mitigation measures implemented (eg bird diverters) If necessary, develop a PCFM Plan	
<b>ESR10</b>	<b>Information Disclosure and Stakeholder Engagement</b>						
10.1	<b>Stakeholder Engagement Plan (SEP)</b> Adopt and implement the SEP for the life of the Project, updating annually and in advance of key project milestones. Support the implementation of the SEP through the allocation of sufficient Community Liaison Officers including at least one female Community Liaison Officer. Maintain a community grievance mechanism in line with ESR10. The existence and functioning of the grievance mechanism should be communicated to affected people by a variety of channels and reinforced throughout stakeholder engagement activities.	Stakeholder Engagement	EBRD ESR10	The Company	On an ongoing basis	SEP and Grievance Mechanism maintained Register of grievances maintained	
10.2	<b>ESIA updates</b> Disclose updates to the ESIA on the Project website, including ESMPs. ESIAs and ESMPs to remain in the public domain for the life of the Project.	Information disclosure	EBRD ESR10	The Company	Prior to EBRD's Board	Updates to ESIA and ESMPs disclosed	
10.3	<b>ESIA disclosure</b> Disclose a public consultation report summarising the ESIA disclosure phase, feedback received and responses.	Stakeholder Engagement and information disclosure	EBRD ESR10	The Company	Prior to loan signing	Public consultation report disclosed	

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10.4	<p><b>E&amp;S updates</b></p> <p>Disclose updates on Project progress and E&amp;S performance during the construction and operations phases. The information will be publicly disclosed on the Project's website and through appropriate means (newsletters to communities, sustainability reports, etc).</p>	Stakeholder engagement and information disclosure	EBRD ESR10	The Company	Routinely during construction and operations	Project update and E&S performance disclosed.	