



MTO Gas Chemical Complex in the Bukhara Region, Uzbekistan

Environmental and Social Impact Assessment,
Vol. IV – ESMMP

October 2022

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	16.09.22	S Goncharov E Mokrinskaya	A Strokina	M. Melinte	Volume IV – Draft ESMMP
B	20.10.22	S Goncharov E Mokrinskaya	A Strokina	M. Melinte	Volume IV – Draft ESMMP. Second revision
C	31.10.22	S Goncharov E Mokrinskaya	A Strokina	M. Melinte	Volume IV – ESMMP Final for issue

Document reference: 100100912 | ESIA Vol IV | C

Information class: Standard

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Acronyms

Acronym	Term
ACs	Affected communities
CAP	Community Asset Programme
CEAP	Construction Environmental Action Plan
CEMP	Construction Environmental Management Plan
CLO	Community Liaison Officer
CMP	Construction Management Plan
Company	GAS CHEMICAL COMPLEX MTO CENTRAL ASIA, LLC
CTMP	Construction Traffic Management Plan
DD	Design documents
EBRD	European Bank for Reconstruction and Development
E&S	Environmental and Social
EIA	Environmental Impact Assessment
EHS	Environmental, health and safety
EHSS	Environmental, health and safety and social
EMS	Environmental Management System
EPC	Engineering, procurement and construction
EPRP	Emergency Prevention and Response Plan
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
GBVH	Gender-based violence and harassment
GIIP	Good International Industry Practice
GoU	Government of Uzbekistan
H&S	Health and safety
HR	Human resources
IFC	International Finance Corporation
KPI	Key performance indicator
LRP	Livelihood Restoration Plan
MIGA	The Multilateral Investment Guarantee Agency
MS	Method Statement
OHS	Occupational health and safety
PCRs	Physical Cultural Resources
PDR	Personal development reviews
PEMS	Project Environmental Management System
PPE	Personal protective equipment
PRs	Performance Requirements
PSs	Performance Standards
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
TMP	Traffic Management Plan

1 Introduction

1.1 Overview

The primary objective of an Environmental and Social Management and Monitoring Plan (ESMMP) is to set out the measures to be implemented to mitigate, prevent or offset potential adverse environmental and social impacts and to enhance positive environmental and social impacts associated with the development of the new Gas Chemical Complex in the Bukhara Region of in Uzbekistan (the Project).

The ESMMP includes:

- Measures to ensure compliance with the law of Uzbekistan, including design, construction and operation requirements, environmental and sanitary regulations, health and safety (H&S) requirements, safeguards for labour and human rights
- Measures, including management, reporting and monitoring requirements, to fulfil international lenders' standards (hereinafter "**the applicable international requirements**"). Specifically, the implementation of the ESMMP shall ensure Project environmental, health and safety (EHS) performance is in line with the Equator Principles IV, Environmental and Social Policy (ESP) of the European bank for Reconstruction and Development (EBRD) and embedded Performance Requirements (PRs), Performance Standards for Environmental and Social Sustainability (PSs) of the Multilateral Investment Guarantee Agency (MIGA) and International Finance Corporation (IFC), and relevant IFC sector EHS guidelines (Volume II of the Environmental and Social Assessment (ESIA) Report, Chapter 4). For avoidance of duplication of actions, reporting and monitoring, the lenders' requirements which overlap with the requirements of Uzbekistan Law are not considered separately. Respective notes are included as appropriate
- Recommended best practice in the sphere of impacts management, monitoring and reporting.

Responsibilities for implementation of such measures are defined in the ESMMP, including provision of guidance for:

- GAS CHEMICAL COMPLEX MTO CENTRAL ASIA, LLC (the Company) with respect to ensuring compliance with environmental, health and safety and social (EHSS) requirements of the law and lending agencies
- The EPC Contractor and (sub)contractors involved in the engineering design, procurement and construction regarding the Project environmental and social (E&S) measures to be taken into account within the design and implemented during procurement and construction
- Lenders and insurers with respect to monitoring the Project implementation against requirements of Uzbekistan law and applicable international requirements.

Responsibility for ESMMP implementation is distributed between the Company (all phases of the Project), the EPC Contractor and sub-contractors (design development and construction).

Compliance of any design solutions to meet requirements of Uzbek Law and applicable international requirements specified in the ESMMP should be reflected in the contractual agreements between the Company and the EPC Contractor as the main design contractor.

Where responsibilities fall to the EPC Contractor and construction sub-contractors, these should be implemented via Construction Master Plan, Method Statement (MS) and Construction Environmental

Management Plan¹ (CEMP) as part of the EPC Contractor's own Environmental, Health and Safety Management System (preferably accredited to ISO standards or equivalent).

The Company will actively seek to monitor, audit and assess the compliance of all parties involved in the Project implementation, and ensure that corrective actions are taken when necessary to maintain performance in line with the law and applicable international requirements specified in the ESMMP.

1.2 Background information

The environmental and social management recommendations for the Project in the ESMMP are developed on the following background:

- Information collected by Mott MacDonald (the ESIA Consultant), as part of ESIA studies
- ESIA Consultant's visits to the Project sites in March and June 2021
- ESIA materials and baseline studies (Volumes II and III of the ESIA Report).

1.3 ESMMP structure

Chapter 2 herein presents the various mitigation measures as identified through the ESIA process. For each mitigation measure, relevant standards are identified together with monitoring measures and key performance indicators (KPIs). For each mitigation activity, an implementation route or specific sub-plan has been identified

Chapter 3 provides a more detailed discussion of various implementation plans or sub-plans to be developed by the Company and / or the EPC Contractor, including sub-contractors within the framework of ESMMP to ensure that the mitigation measures identified through the ESIA process are incorporated in a structured manner, defining clear lines of responsibility. The Company should monitor the implementation of these plans.

Chapter 4 outlines the various institutional arrangements to be put in place by the Project to enable the implementation of the ESMMP and its various sub-plans. Where relevant, various capacity building measures have been identified to ensure that institutional arrangements are appropriate and qualified for the allocated tasks.

Chapter 5 provides an overview of monitoring and reporting requirements associated with the activities and commitments contained within the ESMMP. The monitoring and reporting requirements include a "management of change" capacity to the ESMMP reflecting that it is intended to be a live document subject to regular review and update as the Project evolves.

Budget for ESMMP implementation at the construction and operation phases has not been estimated, as the cost of specific environmental measures and equipment, as well as cost of safety measures can be defined only at the design stage. Health and safety costs including provision of individual and collective protection equipment, training, etc. cannot be assessed as long as the list of professions and personnel numbers for construction and operation are not known.

¹ Construction Environmental Management Plan is required by the International Finance Corporation. Requirements to its content are fully addressed in the respective sections of design documentation, Construction Master Plan, MS under Uzbekistan Law. Development of a separate Construction Environmental Management Plan (CEMP) is not required if all measures of ESMMP are covered by CMP and/or MS.

2 Summary of Mitigation Measures

2.1 Overview

The mitigation measures as identified through the ESIA process are summarised in the following sub-sections split between the construction, operation and decommissioning (where relevant) phases of the Project. Furthermore, relevant monitoring recommendations or KPIs are identified for each aspect of mitigation and an implementation route or plan is proposed. The key implementation plans are detailed in Chapter 3.

2.2 The Company's role

The Company will monitor EPC Contractor and sub-contractors' performance on a regular basis throughout the duration of the construction period, including:

- Review contractor documents against the requirements of the ESMMP
- Undertake regular monitoring activities at the construction sites
- Monitoring of records and reporting within the national requirements
- Conduct regular EHS meetings with the EPC Contractor including sub-contractors.

The Company will ensure compliance with the environmental requirements established by Uzbekistan law through control and monitoring of the EPC Contractor and all sub-contractors and will establish a Project Environmental Management System (PEMS) consist of the special policies, plans and procedures. The PEMS should ensure that environmental aspects and risks of any activity or development are identified, assessed and reported, and mitigation of any non-compliances is scheduled and monitored. In order to meet these requirements, the Company should appoint a dedicated person (internal auditor) and train him/her on the methods of identifying potential environmental aspects and risks, environmental management and reporting.

Responsibilities of the internal auditor will also include preparation of acts to record any identified gaps in the EPC Contractor' performance (including sub-contractors) during the construction phase of the Project and instructions to the EPC Contractor and sub-contractors on the required corrective actions. It is expected that the same person(s) will be in charge of environmental management at the construction phase and during operation.

The Company being the owner of the Project will control EPC Contractor' performance (including sub-contractors) through appropriate provisions of contract agreements that will ensure implementation of the ESMMP including:

- Compliance with the Project Human Rights Policy
- Compliance with the Project Human Resources (HR) Policy and procedures
- Compliance with the Project Recruitment Policy
- Signing individual contracts of employment with all Project personnel
- Compliance with the Uzbek labour law, EBRD Performance Requirement 2 (PR2), IFC/MIGA Performance Standard 2 (PS2) and protection of workers, IFC EHS General Guidelines and ILO labour requirements
- Compliance with the Workers' Accommodation Plan
- Engagement with the Project Grievance Mechanism
- Conformance with the Worker Code of Conduct
- Compliance with the Construction Environmental Management Plan
- Implementation of all H&S measures required by law and the ESMMP including implementation of the Occupational Health and Safety Plan

- Provision of medical insurance for all workers
- Implementation of the Emergency Preparedness and Response Plan (EPRP)
- Compliance with the Project Supply Chain Policy.

At the design phase the Company will review the design documents and the CEMP (and associated construction plans) for compliance with the ESMMP. If needed, the Company may require preparation of a separate Construction Environmental Management Plan by the EPC Contractor. During the construction phase the Company will closely monitor all reports received from the EPC Contractor and sub-contractors to monitor compliance.

Mitigation measures described for the operational phase will be implemented and managed using the Company's EMS, instructions and procedures for environmental management.

2.3 The EPC Contractor's role

It will be the responsibility of the EPC Contractor and all sub-contractors to implement the construction phase mitigation measures outlined within this document. Compliance of the EPC Contractor will be managed via contract clauses if needed. The EPC Contractor will be required to undertake regular monitoring and inspections and keep up to date records as prescribed in this section, provide access for the Company's personnel for inspection of the construction site and all temporary facilities, and report regularly to the Company.

2.4 Lenders' Environmental and Social Consultant

An independent Environmental and Social Consultant will be employed by the International Lenders to undertake regular checks during the construction and operation phases of the Project to monitor compliance with this ESMMP. The Company and EPC Contractor (including sub-contractors) will be required to make available all records of monitoring and inspection activities.

2.5 Construction mitigation measures summary

2.5.1 Introduction

The following sub-sections address individual planning, preparation, construction and other activities of the Project identifying specific E&S mitigation, management and monitoring measures to be addressed both by the Company, the EPC Contractor and sub-contractors where relevant and as required.

The major adverse impact of influx of workers and population changes will require a complex of stringent mitigation and control measures by the Project during construction so that the impact is mitigated to being minor adverse. The moderate adverse social impact of the Project construction phase is linked to the ongoing land acquisition process and would require immediate action by the Project in mitigating potential economic displacement of the farmers and planning livelihood restoration actions. Without proper mitigation a moderate risk of the construction phase may potentially impact construction workers in respect of their labour rights and working condition, health and safety, exposure to the construction phase hazards as well as security and wellbeing in the workers' accommodation. Moderate health and safety risk may impact local communities and the Project will need to establish good management practises for the construction to prevent or minimise such risks.

Majority of environmental impacts during planning and construction are assessed to be minor and proposed mitigation will make it possible to reduce environmental impacts further to being negligible impacts. Good housekeeping and good international practices will be applied during construction by the Company and contractors.

Appropriate mitigation measures for the construction phase will be included in the design documentation, Project CEMP and Construction Master Plan or Method Statement, or otherwise (when incorporation into the above documents is not possible) they will be covered in a separate document – Contractor’s Construction Environmental Management Plan.

2.5.2 Social management

Table 2.1: Social management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
1	Equal opportunities at employment and benefits for local communities	Recruitment	<ul style="list-style-type: none"> Develop a Project Recruitment Policy based on principals of non-discrimination and equal opportunities including at recruitment for the Project jobs Include in the Project Recruitment Policy a requirement to prioritise local employment ('local' will be specifically defined in the policy as people originating from directly affected communities (ACs), and secondary priorities will be assigned to people from the wider Area of Influence (Aoi) and Uzbekistan, in that order) for positions that become available Include in the Project Recruitment Policy specific targets for employment and engagement of young adults, women, unskilled and seasonal workers and the unemployed Disclose the Project Recruitment Policy in the ACs via mahallas and local employment centres Include contract clauses for the EPC Contractor and all sub-contractors to adopt and implement the Project Recruitment Policy and hire local people from the ACs Advertise temporary job availability and recruitment processes including information about required skill levels, indicative timeframes for recruitment and likely duration of contracts to provide opportunities for the vulnerable groups in the ACs (such as women, young adults, the unemployed, unskilled people employed in the informal sector or seasonal workers) to benefit from the Project. Notify the local employment centres and mahallas in the ACs of the available jobs. Prioritise employment of women, young adults, unskilled and seasonal workers and the unemployed from the ACs Provide briefings and workplace training for low qualification labour force to allow local people to take advantage of low or unskilled jobs. Of particular note for training considerations for the Project are health and safety training, assistance with what to expect in the recruitment process and labour contracts, specific task familiarisation and the workers' grievance mechanism. 	Uzbek Labour Code. EBRD PR2. IFC/MIGA PS2.	<ul style="list-style-type: none"> Project Recruitment Policy, including a requirement to prioritise local employment, developed by the Company and disclosed to the EPC Contractor and all sub-contractors. Specific targets for employment and engagement of young adults, women, unskilled and seasonal workers and the unemployed included in the Project Recruitment Policy Contract clauses for the EPC Contractor and all sub-contractors to adopt and implement the Project Recruitment Policy and hire local people from the ACs Copies of advertisements of positions made available Copies of notifications to the local employment centres and mahallas in the ACs of the available jobs Records with the number of employed women, young adults, unskilled and seasonal workers and the unemployed from the ACs Records of briefings and workplace training for low qualification labour force 	<ul style="list-style-type: none"> Project Recruitment Policy Contracts with the EPC Contractor and sub-contractors Advertisements and notifications Briefings and workplace training for low qualification labour force
2	Safeguarding human rights in labour for all workers	Human rights management	<ul style="list-style-type: none"> Develop a Project Human Rights Policy Disclose Human Rights Policy to the EPC Contractor, all sub-contractors and construction workers Bind the EPC Contractor and all sub-contractors to adhere to the Project Human Rights Policy Require, through contract clauses, that the EPC Contractor and sub-contractors include the provisions that prohibit discrimination of any kind, child and forced labour and promote equal opportunities for the workers Develop Supply Chain Management Policy 	Uzbek Labour Code. EBRD PR 2. IFC/MIGA PS2.	<ul style="list-style-type: none"> Human Rights Policy developed Sign-up sheets indicating agreement to comply with the Project Human Rights Policy of the EPC Contractor, sub-contractors, and their workers. Contract clauses Supply Chain Management Policy developed Supply Chain Management Plan developed Outside Services Questionnaire developed Supply chain review records 	<ul style="list-style-type: none"> Human Rights Policy Contract clauses Supply Chain Management Policy Supply Chain Management Plan Outside Services Questionnaire

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> The EPC Contractor to develop a Supply Chain Management Plan Supply chain reviews for child labour, forced labour and occupational health and safety (OHS) issues in the supply chain organisations (via the Outside Services Questionnaire) 			
3	Safeguarding fair treatment, non-discrimination and equal opportunities for all workers	Labour and contractor management	<ul style="list-style-type: none"> Introduce a clause in all contracts with the EPC Contractor and all sub-contractors with the requirement to achieve compliance with the Uzbek statutory labour requirements and applicable international requirements, including EBRD PR2, IFC/MIGA PS2, IFC EHS General Guidelines and ILO labour requirements Issue individual contracts of employment for all Project staff detailing their rights and conditions in compliance with the Uzbek Labour Code, EBRD PR2 and IFC/MIGA PS2 requirements. Contracts should cover rights and obligations of the parties, hours of work, wages, overtime, compensation and benefits such as maternity or annual leave. Update the contract when material changes occur. Require through respective provisions in contracts with all (sub)contractors that they do the same Require through respective provisions in contracts with the EPC contractor and all sub-contractors establish monthly labour performance monitoring and reporting Develop and implement a Contractor Management Plan with the embedded monitoring programme to monitor contractors labour-related and social performance during the contraction phase Appoint a Social and Labour Officer with responsibilities to monitor and report on the EPC Contractor and their sub-contractors labour and social performance, including workers' accommodation audits and workers' grievance management Monitor the EPC Contractor and all sub-contractors to have individual contracts of employment for all Project staff in line with the national Labour Code, EBRD PR2 and IFC/MIGA PS2 toolbox talks on labour law issues twice a year during the construction phase or more frequently if necessary, including for sub-contracted staff EPC Contractor to develop a demobilisation programme, including for all sub-contractors at the end of the construction phase. 	Uzbek Labour Code. EBRD PR2. IFC/MIGA PS2. IFC EHS General Guidelines. ILO labour requirements.	<ul style="list-style-type: none"> Contractor Management Plan Contracts with the EPC Contractor and sub-contractors. 100% individual contracts of employment for all Project staff Labour and Social Officer Appointed Labour monitoring visits monthly during construction to verify availability of individual contracts, correct payment of wages and overtime, non-exceedance of maximum hours and other key labour rights issues Personnel files in line with Uzbek labour law to contain certificates and qualifications, internal and external training, leave records in line with the national Labour Code, EBRD PR2 and IFC/MIGA PS2. Timesheet records. Sub-contractors' payroll system monitored by the EPC Contractor. Records of toolbox talks. Documented reviews of contractors, issues identified, and actions taken. EPC Contractor demobilisation programme developed and agreed 	<ul style="list-style-type: none"> Contractor Management Plan Contracts issued by the EPC Contractor and sub-contractors' HR services for construction workers. Contracts with the EPC Contractor and sub-contractors. Inclusion of toolbox talks on labour issues in the EPC Contractor and sub-contractors' OHS plans. Demobilisation programme of the EPC Contractor.
4	Workers' grievance mechanism during the construction phase	Grievance management	<ul style="list-style-type: none"> Develop, formalise and disclose a workers' grievance mechanism (by the EPC Contractor) for complaints related to staff treatment, working or living conditions without reprisal and make these available to all Project workers, including sub-contracted staff The EPC Contractor to document how workers are informed about the mechanism (including sub-contractors) The EPC Contractor and sub-contractors to maintain the grievance log, including resolutions and timeframes The Company to develop, formalise and disclose its workers' grievance mechanism The Company to allow access to its own grievance mechanism for any Project worker as an alternative redress tool 	EBRD PR2. IFC/MIGA PS2.	<ul style="list-style-type: none"> Documented workers' grievance mechanisms established. Workers' Grievance Manager(s) appointed Contract clauses Documents confirming that construction workers are informed about the mechanism, including sub-contractors' workers. Monthly grievance reporting by the EPC Contractor Monthly monitoring of grievance logs by the Labour and Social Officer to identify patterns or area where actions can be taken to prevent recurrent problems. Annual summary of use of grievance mechanism and resolution of labour grievances. 	<ul style="list-style-type: none"> Company's worker grievance mechanism The EPC Contractor's workers' grievance mechanism. Monthly grievance reporting. Annual reporting on the use of grievance mechanism and resolution of labour grievances. Inclusion of the workers' grievance mechanism

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> • Toolbox talks on the workers' grievance mechanism twice a year during the construction phase, or more frequently if necessary, including for sub-contracted staff • Require, through respective provisions in contracts with the EPC Contractor and all sub-contractors, to: <ul style="list-style-type: none"> – Establish and disclose to all staff the worker grievance mechanism including the confidential procedure for sensitive complaints – Appoint a Workers Grievance Manager who will be responsible for receiving, resolution and responding to workers concerns and grievances and monthly grievance reporting – Hold toolbox talks on labour law issues and the labour grievance mechanism twice a year during the construction phase or more frequently if necessary, including for sub-contracted staff 		<ul style="list-style-type: none"> • Records of toolbox talks. 	<ul style="list-style-type: none"> • toolbox talks in the OHS training plans.
5	Safeguarding safe environment for work and rest	Workers' accommodation management	<p>The Company and EPC Contractor to:</p> <ul style="list-style-type: none"> • Develop an Accommodation Management Plan for each construction camp in line with the EBRD and IFC requirements • Approve the Workers' Accommodation Plans with the International Lenders • Appoint Accommodation Managers at each site • Undertake audits prior to housing workers in the Project provided accommodation using the checklist provided in the IFC/EBRD Workers Accommodation Guidance Note (2009) to make sure it meets the required standards • Undertake monthly workers' accommodation audits • Keep on record audit findings along with the Accommodation Management Plan to resolve any issues and timeframes for close-out • Report quarterly on accommodation management, audits, findings, and recommended improvements • Ensure that all sub-contractors' agreements include: <ul style="list-style-type: none"> – The requirement to achieve compliance with the IFC/EBRD Worker Accommodation Guidance Note (2009) – Monthly reporting to the EPC contractor on accommodation management. 	EBRD PR 2. IFC/MIGA PS2.	<ul style="list-style-type: none"> • Workers' Accommodation Plans develop for each residential complex • No-objection from the International Landers received • Accommodation Managers appointed. • Monthly audit records • Quarterly reports issued • Agreements with sub-contractors 	<ul style="list-style-type: none"> • Workers' Accommodation Plan • Monthly audits • Reporting
6	Preventing conflict and maintaining wellbeing of communities	Management of labour force influx and population changes	<ul style="list-style-type: none"> • Introduce clauses in the EPC Contractor and sub-contractors' employment contracts to ensure compliance with the applicable international requirements and Company's policies, plans and procedures. • A Code of Conduct for all Project workers to be developed by the Company and included as part of employment contracts. This should cover norms related to interactions with the local communities as well as expectations regarding occupational behaviour • The EPC Contractor to include the Workers' Code of Conduct in the employment contract with the contractor's workers (including sub-contractors). • Communicable Disease Exclusion Procedure for the construction phase (by the EPC Contractor). 	EBRD PR1 and PR2. IFC/MIGA PS1, PS2 and PS4 IFC EHS General Guidelines.	<ul style="list-style-type: none"> • Clauses in the EPC Contractor and sub-contractors' contracts. • The Workers' Code of Conduct developed. • Sign-up sheets indicating workers' agreement to comply with Workers' Code of Conduct. • Communicable Disease Exclusion Procedure developed by the EPC Contactor. • Training records. • Contracts with local health care organisations to arrange medical checks. • Medical insurance for all construction workers paid. 	<ul style="list-style-type: none"> • EPC Contractor and sub-contractors' contracts. • EPC Contractor and sub-contractors' contracts with construction workers. • Workers' Code of Conduct • Communicable Disease Exclusion Procedure. • Training programmes for foreign workforce.

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> • COVID-19 awareness, prevention and management training sessions • Cultural awareness training for construction workers sourced internationally. • Cultural awareness events for communities. • HIV/AIDS and sexually transmitted illnesses (STI) awareness and prevention briefings and screenings to be undertaken in a culturally sensitive manner. • Voluntary medical checks for the construction workers. • The EPC Contractor and sub-contractors to provide medical insurance for their workers. 			<ul style="list-style-type: none"> • Opportunities for voluntary medical checks of the foreign workforce.
7	Safeguarding security of local communities and construction workers	Security provision	<ul style="list-style-type: none"> • The Company to deliver a training presentation to the security authorities of the Project with the explanation of the expected level of conduct toward workers and the ACs • Community grievance mechanism related inter alia to behaviour of security guards. 	EBRD PR1 and PR2. IFC/MIGA PS1, PS2 and PS4	<ul style="list-style-type: none"> • A training presentation to the security authorities delivered. • Records of investigations of unlawful behaviour of security guards by the security authorities. • Community grievance log and records of investigations. 	<ul style="list-style-type: none"> • Training presentation to the security authorities. • Community grievance log.
8	Safeguarding health, safety and wellbeing of construction workers	Occupational health and safety (OHS) management	<ul style="list-style-type: none"> • Contractors to develop an Occupational Health and Safety Plan (OHS Plan)² • Emergency Preparedness and Response Plan (EPRP) by the EPC Contractor • Provisions in the contracts with the EPC Contractor and sub-contractors with the requirement to enforce and monitor implementation of the OHS Plans including penalties for non-compliance or compliance incentives. • The EPC Contractor to appoint EHS Managers. • The Company to employ or assign the Project EHS/OHS Managers to manage OHS issues and monitoring EPC Contractor's performance, including: <ul style="list-style-type: none"> – Assess OHS risks at the construction sites and camps and implement preventive and protective measures – Carry out weekly site walkovers to identify hazards and act on findings – Hold meetings with the EPC Contractor and sub-contractors to discuss OHS improvements – Monitor OHS training provision and records by the EPC Contractor and sub-contractors – Keep record of all accidents and occupational diseases or ill health – Follow up to resolve issues and prevent recurrence • Maintenance of personal protective equipment (PPE) and PPE Use Register. 	EBRD PR2 and PR4. IFC/MIGA PS1 and PS2. IFC General EHS Guidelines. National requirements.	<ul style="list-style-type: none"> • Occupational Health and Safety Plan. • Project organogram. • Job descriptions (EHS/OHS Managers). • Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy. • Minutes of meetings. • Results of medical examinations, information on occupational injuries and diseases. • Logs showing accidents and occupational diseases or ill health with supporting investigation and response details. • Monitoring visits monthly during construction to verify implementation of plans. • Contracts with sub-contractors. • Records and PPE Use Register. • Training records for: <ul style="list-style-type: none"> – OHS and hazardous work training – Emergency drills – Use of PPE – First aid • Individual workers training registers. 	<ul style="list-style-type: none"> • OHS Plans of the EPC Contractor, sub-contractors and the Company. • Emergency Preparedness and Response Plan. • Contract clauses. • Job descriptions. • OHS training programme. • Monitoring site visits programme.

² Covering the hazards identified for the Project site, type of work and other Project activities such as driving on public roads; provision of preventive and protective measures for all hazards; H&S training including how to recognise hazards, unsafe areas and occupational disease or injury; information about safe working methods including the production of individual worksheets for discreet hazardous tasks; use of PPE; management of hazardous chemicals; and road safety measures such as speed limits on public roads and on site, etc.

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> • Training programmes for all construction workers (including sub-contractors) in OHS training, use of PPE, specific H&S tasks, first aid training. • Maintain individual training registers for each construction worker which they can retain for obtaining future work. • Maintain records of all Project workers' next of kin in case of emergency. • Record all incidents, accidents and occupational diseases. • Adequate medical facilities to be provided – first aid kits, means of fracture immobilisation and transportation of affected persons, training of team managers and supervising personnel on first aid methods. 		<ul style="list-style-type: none"> • Records of incidents, accidents and occupational diseases. • First aid kits, medical facilities and ambulance cars provided on site and in construction camps. 	
9	Safeguarding health, safety and wellbeing of local communities	Managing communities H&S and wellbeing due to presence of the construction site	<ul style="list-style-type: none"> • Construction Environmental and Social Action Plan to include: • Security arrangements including fencing, locks, security guards, CCTV, signage • Logging system to monitor entries to the site. • Security guards checks and training in the use of force, emergency procedures and relevant equipment with regular refresher training, which will be recorded in training logs (by the security authorities). • Uniforms and identity badges to be provided to security guards. • Investigation of unlawful behaviour by security guards, action taken, and reports made to authorities if necessary. • Vehicles to carry spill kits, first aid kits and fire extinguishers, drivers to have communication devices for emergency use and be first aid trained. • Local communities' representatives (mahallas) to be aware (trained) of construction hazards and provided with an action plan if needed. • Emergency Preparedness and Response Plan by the EPC Contractor • Construction Traffic Management Plan (CTMP) • Chance Finds Procedure (by the Company) • Community grievance mechanism in the EPC Contractor organisation and their sub-contractors. • EPC Contractor's CLO. 	National requirements EBRD PR2, PR4 IFC/MIGA PS4	<ul style="list-style-type: none"> • Construction Environmental and Social Action Plan developed by the EPC Contractor and agreed with the Company • Security guards' records for past abuses and licenses kept in personnel files. • Training records. • Site entry and exit logs. • Logs of security incidents and actions to remedy. • Monitoring of grievance logs to identify if complaints are made about security guards. Action taken and recorded. • Vehicle checks. • EPRP developed by the EPC Contractor and agreed with the Company. • CTMP developed by the EPC Contractor and agreed with the Company. • Community grievance mechanism in the EPC Contractor organisation and their sub-contractors introduced. • EPC Contractor's CLO appointed. 	<ul style="list-style-type: none"> • Construction Environmental and Social Action Plan • EPRP • CTMP • Community grievance mechanism by the EPC Contractor and sub-contractors with oversight by the Company
10	Avoid or minimise displacement	Land acquisition by the Project	<ul style="list-style-type: none"> • Finalise and disclose the Project Resettlement Policy Framework (RPF) to guide any future land acquisition process and plan measures on livelihood restoration. • Identify and complete socio-economic census of the farmers who will be impacted by economic displacement due to construction and operation of the gas pipeline • Draft, disclose, get lenders' approval and implement, a Livelihood Restoration Plan (LRP) developed and implemented based on the RPF. The LRP will include eligibility criteria, an entitlement matrix, livelihood restoration options and a displacement-oriented grievance mechanism. • Undertake consultations with the Project affected people • Manage economic displacement in alignment with the LRP. • Report to the lenders on LRP implementation. 	EBRD PR5. IFC/MIGA PS5. National requirement.	<ul style="list-style-type: none"> • RPF disclosed. • Affected farmers identified and socio-economic census completed. • LRP agreed with the Lenders and disclosed • Detailed records kept of all land transactions • Signed land titles • Recording of grievances in a grievance log showing close-out dates and measures taken to resolve and prevent future grievances • Signed acceptance sheet for each grievance showing complainant's satisfaction with close-out measures • Minutes and other records kept of all consultations with affected farmers 	<ul style="list-style-type: none"> • Project Resettlement Policy Framework • Livelihood Restoration Plan • Grievance mechanism

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
					<ul style="list-style-type: none"> Records of livelihood restoration measures and their effectiveness Reports to the lenders on LRP implementation. LRP close out audit showing livelihoods have been restored or improved 	
11	Avoid temporary land take or loss of properties	Land acquisition during construction	<ul style="list-style-type: none"> The Company will introduce and implement the community grievance mechanism. The EPC Contractor and sub-contractors to avoid as far as possible temporary land take or loss of properties from sensitive land/property users. Incorporate a contract clause with the requirement to contractors to avoid temporary land take Contractors to reinstate/restore the land to its pre-construction conditions (including erosion control measures, re-contouring the land, replacing the topsoil, restoration of vegetation and habitats, regaining its previous use). Property owners be reasonably compensated in case of any damages during construction in alignment with the RPF. 	EBRD PR5. IFC/MIGA PS5.	<ul style="list-style-type: none"> The community grievance mechanism introduced and implemented Documentation of temporary land take Land is reinstated/restored by contractors to its pre-construction conditions Contractor's records/documents/budgets on compensation for the loss of land/property as a result of construction Confirmation of compensation payments to property owners/land users. 	Contract clauses in the contracts with the EPC contractor and sub-contractors.
12	Procurement of goods, works and services	Enhancing procurement opportunities and temporary localised economic development	<ul style="list-style-type: none"> Disclose the Project Supply Chain Policy Develop and introduce the Supply Chain Management Plan Instructing, through contract clauses, the EPC Contractor to conduct a comprehensive demand-and-supply-side analysis to identify and quantify local contractors, sub-contractors and suppliers and engage local firms in the supply chain Prioritise contracts with local and regional sub-contractors and suppliers and set out targets for engaging female-headed businesses Procurement opportunities announced in advance to attract local and regional businesses Procurement training for local and regional sub-contractors and suppliers. 	EBRD PR1 and PR2. IFC/MIGA PS2.	<ul style="list-style-type: none"> Project Supply Chain Policy disclosed Supply Chain Management Plan developed by the EPC Contractor Procurement notices Number of contracts with local and regional sub-contractors and suppliers Targets to engage female-headed businesses Procurement training records. 	<ul style="list-style-type: none"> Supply Chain Policy Supply Chain Management Plan
13	Monitoring contractors' compliance with the national law and applicable international requirements	Management of contractors	<ul style="list-style-type: none"> Advise (sub)contractors on the requirement to comply with the applicable national and international requirements for labour, health, safety and security of workers The Company to employ or assign EHS/OHS Manager and EHS Officers responsible for EHS monitoring of contractors Contractors to appoint EHS Managers Clauses to be inserted in contractors' contracts to ensure compliance with the following documentation and procedures: <ul style="list-style-type: none"> Construction phase ESMMP and sub-plans Project Human Rights Policy Human Resources Policy and procedures Recruitment Policy and procedures Grievance Mechanism Worker Code of Conduct Occupational Health and Safety Plan Emergency Preparedness and Response Plan 	EBRD PR1 and PR2. IFC PS2.	<ul style="list-style-type: none"> Contract clauses provided. EHS/OHS Managers employed or appointed. EHS Managers appointed by the EPC Contractor and subcontractors. Contract clauses. 	<ul style="list-style-type: none"> Contractor Management Plan. Contractors' contracts. EHS monitoring of contractors

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> Contractors to be made aware of their role in compliance with EBRD PR2, IFC/MIGA PS2 and IFC EHS Guidelines. 			
14	Promoting engagement with local communities	Stakeholder engagement and community grievance management during the construction phase	<ul style="list-style-type: none"> The Company to update and implement the Project SEP and performance of the community grievance mechanism. CLOs (of the Company and EPC Contractor) to carry out analysis of grievance logs to identify common or recurrent problems. CLOs to follow-up grievance issues with the Company management and EPC Contactor and sub-contractors to deal with the causes and identify actions to prevent further recurrence. 	EBRD PR10. IFC/MIGA PS1.	<ul style="list-style-type: none"> Updated SEP for the construction phase. Grievance log for the construction phase. Meetings minutes. Disclosed information dated and kept on file. Communications log. Records as per SEP. 	<ul style="list-style-type: none"> Stakeholder Engagement Plan. Project CLO

2.5.3 Air quality management

Table 2.2: Air quality management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
12	Minimise dust emissions to prevent nuisance and protect human health	Sites / preparation and construction. Traffic and vehicle movements	<ul style="list-style-type: none"> Minimising dust from material handling sources by using covers, water suppression. Minimising dust from open sources, including storage piles, by using control measures such as installing enclosures and covers, and increasing the moisture content. Employ dust suppression techniques such as applying water or non-toxic chemicals to minimise dust from vehicle movements. Limit levelling and other dusty works in windy days Planning of dust management measures in the Construction Management Plan (CMP). No open burning of solid waste, wooden waste and vegetation remains. 	EBRD PR3, PR4, PR6. IFC EHS General Guidelines. IFC PS3. National requirements.	<ul style="list-style-type: none"> EPC Contractor Environmental Manager to undertake visual checks of construction areas ever two weeks. Foreman to undertake daily visual inspections Maintenance of record of violations where observed. 	<ul style="list-style-type: none"> EPC Contractor to implement environmental measures in accordance with the design documents and Construction Master Plan. Contractor Environmental Management Plan. Dust management measures.
13	Minimise construction and vehicle emissions to protect human health	Construction traffic and machinery associated with construction	<ul style="list-style-type: none"> Manage emissions from mobile sources as per IFC EHS guidelines for Air Emissions and Ambient Air Quality. Locate mobile generators and pumps away from receptors (workers' camps and residents). 	EBRD PR3, PR4, PR6. IFC EHS General Guidelines. IFC PS3. National requirements.	<ul style="list-style-type: none"> EPC Contractor Environmental Manager to undertake visual checks of construction vehicles every week (violation to be reported only). Auto mechanic to maintain servicing records for all machinery. 	<ul style="list-style-type: none"> Contractor to implement environmental measures in accordance with the design documents and Construction Master Plan. Company to ensure applicable level of pollutants in exhaust gases in accordance with the national requirements (Company's Environmental Monitoring Plan).

2.5.4 Management of ground conditions and ground water

Table 2.3: Ground Conditions and Ground Water Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
14	Mitigate health impacts by reduction of dust emissions. Minimize disturbance of any existing historic soil contamination	Earthworks	<ul style="list-style-type: none"> Use best practice construction methodology in line with legal regulations and best practice guidelines. Undertake earthworks during periods of low wind strength to minimise the level of potentially contaminated windblown dust. Risk assessment to identify the level of PPE required. Workers to wear PPE to protect against inhalation of dust depending on outcome of risk assessment. Use 'damping down' measures during excavation and movement of contaminated soils to prevent dust migration. 	EBRD PR4 IFC EHS General Guidelines IFC PS3 National requirements	<ul style="list-style-type: none"> Weekly monitoring to be carried out by EPC Contractor OHS Manager. Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy. 	<ul style="list-style-type: none"> EPC Contractor to implement environmental and safety measures in accordance with the design documents and Construction Master Plan. OHS Plan. Company to implement environmental and safety measures in accordance with the national law/
15	Protection of soil quality, groundwater quality and human health.	Accidental leaks and spills of hazardous materials	<ul style="list-style-type: none"> Use best practice construction methodology in line with national regulations and best practice guidelines. Hazardous materials suitably stored to prevent leaks and spills. Drip trays to intercept leaks and spills from equipment and during refuelling. Bunding for all fuel and chemical storage. Development of the Oil Spill Liquidation Plan. Preparation of extract from Oil Spill Liquidation Plan for the construction needs and making construction personnel aware of the Plan. Spill response kits to be maintained on sites and vehicles for their use. Clean-up contaminated material in case of fuel leaks. 	EBRD PR3, PR6 IFC EHS General Guidelines IFC PS3 National requirements	<ul style="list-style-type: none"> Undertake check-up of soil and water quality if required, in case of large spills. Site inspections by Environmental Manager and inspection reports to be made available to Lenders Environmental and Social Consultant. 	<ul style="list-style-type: none"> CMP. Extract from Oil Spill Liquidation Plan for the construction sites and awareness of construction personnel
16	Protection of soil quality, groundwater quality and human health.	Wastewater from construction, integrity testing and cleaning	<ul style="list-style-type: none"> Use best practice construction methodology in line with legal requirements and best practice guidelines. The quality of construction drainage waters not to exceed maximum allowable concentrations for discharge of wastewater to surface water. 	EBRD PR3 IFC EHS General Guidelines IFC PS3 National requirements	<ul style="list-style-type: none"> Monitoring of construction drainage waters quality, results to be made available to external monitors (on request). Regular site inspections. 	CMP

2.5.5 Water resources and water quality management

Table 2.4: Water quality matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
17	Prevention of surface water and groundwater contamination	Temporary storage of chemicals, oil and excavated material	<ul style="list-style-type: none"> Use of hard covered, bunded areas for storage of hazardous chemicals and refuelling, Oil interceptors or settlers in areas where fuel is used or stored, Provision of spill kits and records for their use and appropriate disposal to minimise the impacts of any spillages. Surface drainage and site runoff, particularly during rains sent to temporary sedimentation ponds prior to discharge to water bodies. Store excavated material away from water channels. Cover soil stockpiles. The quality of drainage waters not to exceed maximum allowable concentrations for discharge of wastewater. 	ERD PR3. PR6 IFC EHS General Guidelines and relevant sector guidelines National legislation	<ul style="list-style-type: none"> No spills affecting surface water quality. Company to audit storage areas for construction materials, petroleum products and soil against mitigation requirements, for example, check availability of spill kits, adequate bunded storage for chemicals and fuels. EPC Contractor to monitor surface drainage water in case of spills, results to be reported in construction progress reports and made available to the Company and Lenders Environmental and Social Consultant. 	CMP

2.5.6 Ecology and biodiversity management

Table 2.5: Ecology and biodiversity matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
18	Minimise habitat loss and disturbance	Construction lay down, layout of associated infrastructure and temporary working areas, including workers accommodation.	<ul style="list-style-type: none"> Minimise temporary working area size. Access routes for construction and operational activities outside the existing roads and other disturbed areas (if required) to be kept to a minimum. Artificial lighting used on construction sites and workers accommodation will be minimised, shaded and directed downwards to avoid light spillage and disturbance to birds, bats and other wildlife. 	EBRD PR6 IFC PS 6	<ul style="list-style-type: none"> Monthly audit of construction areas. All laydown and working areas to be within pre-determined areas. 	<ul style="list-style-type: none"> CMP Biodiversity Action Plan
19	Minimise loss of habitats hosting rare animal species and direct impact on rare animal species	Construction, vehicle movements	<ul style="list-style-type: none"> Temporary road should be constructed outside of habitats hosting rare animal species. Prohibition of vehicle movements and parking outside of roads and paved parking. Prohibition of vegetation clearance. Prohibition of visits of these habitats for workers Hunting and catching of rare species is prohibited Fencing of these habitats. 	EBRD PR6 IFC PS 6 National legislation	<ul style="list-style-type: none"> Monthly audit of habitats hosting rare animal species. Annual survey to monitor rare species population size, adverse changes in the quality of the environment 	<ul style="list-style-type: none"> CMP Biodiversity Action Plan
20	Minimise disturbance to reptiles, mammals, and birds	Noise and light from construction and field preparation activities	<ul style="list-style-type: none"> Minimise noise disturbance by using modern, lower noise, equipment and compliance with national noise standards. Minimise noisy working at night and use down lighting to prevent light pollution when lighting is required. 	EBRD PR6 IFC PS 6 EBRD PR 6 National legislation	<ul style="list-style-type: none"> Daily monitoring and monthly audit of construction activities. Report on number of incidents where noise levels exceed national requirements. 	<ul style="list-style-type: none"> CMP Biodiversity Action Plan
21	Control of invasive plant and animal species	Vegetation clearance, earthworks, and spoil disposal during construction and fields preparation.	<ul style="list-style-type: none"> Minimise traffic and the distance it has travelled. Source materials locally where possible. Contain any Alien Invasive Species and report their presence through monitoring. If infested areas are identified a wash-down area is essential before entering non-infested areas Train and raise awareness regarding Alien Invasive Species. Record and report the presence of any Alien Invasive Species. Minimize disturbance to, or movement of, soil and vegetation. Retain as much natural vegetation as possible. Use native plants for landscaping. If invasive species is identified as an issue further details including additional mitigation to be included within the CMP. Annual summer visual inspection by experienced biologist (botanist) to identify presence of invasive species, species to be removed by appropriate means if found 	IFC PS 6 IPIECA Guidelines on prevention and management of alien species National legislation	<ul style="list-style-type: none"> Report detailing the extent of existing alien species across the site. Production of the report including monitoring plan. Annual / Extent of invasive species distribution at project site. 	<ul style="list-style-type: none"> CMP Biodiversity Action Plan

2.5.7 Materials and waste management

Table 2.6: Materials and waste management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
22	Protection of environment from leakage or spillage of liquid wastes Reduction of fugitive emissions Prevention of negative visual amenity impacts	Waste generation, handling and storage	<ul style="list-style-type: none"> List of waste management measures to be included in CMP. Identify suitable temporary storage locations for each waste stream. Both the onsite and offsite waste storage facilities will include the following: <ul style="list-style-type: none"> Separate storage areas for hazardous and non-hazardous wastes. Separate sites, tanks or containers for the waste streams intended to re-use. All tanks and waste containers to have covers. Liquid wastes/oil/chemicals to be stored in banded areas which can hold 110% of the total storage volume. Spill kits containing suitable equipment to be available at all times in waste storage areas. 	EBRD PR3, PR4, PR6 IFC EHS General Guidelines IFC PS3 National legislation	Regular site inspections. Monitoring reports to be made available to external monitors.	<ul style="list-style-type: none"> List of waste management measures included in CMP. Hazardous materials and waste handling rules included in workplace safety instructions.
23	Minimise generation of wastes to be disposed at landfills Minimise waste miles	Waste disposal	<ul style="list-style-type: none"> Minimise waste generation. Where waste streams are unavoidable, highlight potential re-use and recycling opportunities according to the Best Available Technologies. Identify waste handling (recycling) facilities in close proximity to the Project. Review on an on-going basis, the locally available re-use/recycling facilities to ensure they can accept the waste streams. 	EBRD PR3 IFC EHS General Guidelines IFC PS3	Monitoring reports to be made available to external monitors. Documentation of efforts to reduce waste and identify nearby handling and reuse (recycling) facilities.	Company Waste Generation and Handling Plan
24	Minimise adverse health impacts	Hazardous materials handling	Occupational Health and Safety Plan(s) aimed at preventing accidents, injuries and work-related diseases through the identification of the causes of physical, chemical and biological hazards and by prioritising hazard elimination, hazard control and hazard minimisation to be implemented	EBRD PR4 IFC PS2 National legislation	Records of accidents	EPC Contractors' Occupational Health and Safety Plan(s)

2.5.8 Transport management

Table 2.7: Transport management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
25	Minimise delays to road other road users	Delays to road users as a result of number of construction vehicles and trucks	Delivery of construction materials and vehicles to the sites should be conducted out of peak hours. Prohibition of vehicles parking along roads.	International Best Practice	Traffic Management Plan of contractors and the Company	Construction Traffic Management Plan for contractors and the Company Traffic Management Plan
26	Minimise safety issues	Reduced safety of vulnerable road users on the local roads and of residents affected by construction	<ul style="list-style-type: none"> • Delivery of construction materials and vehicles within borders of settlements. • Sharp parts of vehicles moving outside construction sites should be removed or switched in safe position 	IFC PS2 International Best Practice	Standard monitoring on road incidents in line with national requirements. Special monitoring is not required.	Safety instructions for drivers
27	Safeguard the safety of road users on the local roads and of residents in settlements located along the roads	Delivery of materials, abnormal loads and transport of workers	<ul style="list-style-type: none"> • EPC Contractor to develop a Construction Traffic Management Plan and where possible design all delivery routes away from settlements. • Mandatory adherence to speed limits at all times. 	International Best Practice	Company to review the Construction Traffic Management Plan	Construction Traffic Management Plan

2.5.9 Noise and vibration management

Table 2.8: Noise and vibration management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
28	Reduce noise nuisance generated by on-site plant and activities	Activities associated with site excavation, levelling and other works	<ul style="list-style-type: none"> All noisy works at sites adjacent to the sensitive habitats will be conducted during the daytime Unnecessary revving of engines will be avoided, and equipment will be shut down when not in use Internal haul routes will be well maintained Plant and vehicles will be started up sequentially rather than all together Effective exhaust silencing systems or acoustic engine covers will be used as appropriate Machines will always be operated in accordance with manufacturers' instructions Care will be taken to keep site equipment away from noise-sensitive areas Where possible, loading and unloading will also be carried out away from such areas.	EBRD PR4 IFC EHS Guidelines National legislation International Best Practice	All regular monitoring of vehicles noise levels should be carried out at the regular basis	<ul style="list-style-type: none"> CMP EPC Contractors' Community Grievance Mechanism Biodiversity Management Plan

2.5.10 Greenhouse gases management

Table 2.9: Greenhouse gases management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
29	Reduce GHG emissions	Use of vehicles, construction plant and generators with emissions.	<ul style="list-style-type: none"> Use of new and efficient vehicles and construction plant and generators. All equipment should be maintained and switched off when not in use. Use of plant with EURO-5 engines (where possible) 	EBRD PR3 IFC EHS Guidelines	<ul style="list-style-type: none"> EPC Contractor to provide evidence of new plant being employed, record of plant maintenance. EPC Contractor to provide fuel consumption figures in monthly reports to the Company. Fuel consumption should not exceed calculated demand of fuel provided in the design documentation. 	CMP
30	Reduce GHG emissions	Staff vehicle movements	Space restrictions for parking of personal cars of personnel whose job duties do not require visiting various sites. Organized transportation of workers to/from work.	EBRD PR3 IFC EHS Guidelines	Options for joint pick up made available to workers.	CMP Traffic Management Plan

2.5.11 Cultural heritage management

Table 2.10: Cultural heritage management

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
31	Avoid damage to cultural heritage features. Record archaeological finds	Excavation works during construction phase	In the event of unknown archaeological finds or features being identified during the course of Project construction groundworks, a Chance Finds Procedure will be used in order to stop work and allow for the assessment of the archaeological potential of the remains. A 'Chance Finds procedure' will be included within the CEMP. If buried archaeological remains are of significance, then a system will be put in place to mitigate harm. This may involve protecting the remains or a system to excavate and record the remains.	World Bank's Cultural Resources Policy IFC PS8	Monitoring is not required	Chance Finds Procedure

2.6 Operation mitigation measures summary

2.6.1 Introduction

The following sub-sections address individual Project operation activities identifying specific mitigation and monitoring measures associated with environmental and social aspects where relevant and as required.

2.6.2 Social management

Table 2.11: Operational social management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
1	Promote permanent jobs and employment among women, young adults and directly affected communities	Information disclosure at recruitment	<ul style="list-style-type: none"> Review the grievance mechanism for gender-based violence and harassment (GBVH) complaints and satisfactory close-out. Recruitment in line with the Project Recruitment Policy and applicable international requirements Update the Project Recruitment Policy for the operation phase Inclusion in the Project Recruitment Policy a requirement to prioritise local employment ('local' will be specifically defined in the policy as people originating from directly affected ACs, and secondary priorities will be assigned to people from the wider Aol and Uzbekistan, in that order) for positions that become available Include in the Project Recruitment Policy specific targets for employment and engagement of young adults, women, unskilled and seasonal workers and the unemployed in the directly affected ACs and from the wider Aol Bind operational contractors to comply with the Project Recruitment Policy via contract clauses Disclose the Project Recruitment Policy widely in local communities via mahallas, through District Hokimiyats and local employment centres Advertise permanent jobs availability and recruitment processes including information about required skill levels, indicative timeframes for recruitment and likely duration of contracts to provide opportunities for the vulnerable groups in the ACs (such as the unemployed, young adults, unskilled or seasonal workers) to benefit from the Project. Notification of the local employment centres in in Karakul, Alat and Zhondor districts and mahallas in the ACs of the available jobs. Prioritise employment of women, young adults, unskilled and seasonal workers and jobless from the ACs 	EBRD PR1 and PR22 IFC/MIGA PS1 and PS2	<ul style="list-style-type: none"> Project Recruitment Policy updated. Targets to employ women, young adults, unskilled and seasonal workers and the unemployed and promote local employment are set. Copies of adverts, letters of notification. Contract clauses with operational contractors. 	<ul style="list-style-type: none"> Project Recruitment Policy Contract clauses with operational contractors
2	Fair treatment, non-discrimination and equal opportunity of workers	Labour management	<ul style="list-style-type: none"> Develop the overarching HR Policy of the Company that will incorporate provisions for unacceptability of GBVH. Disclosure of the HR Policy and workers' grievance mechanism to all Project staff recruited. Individual contracts of employment for all workers in line with the national labour law. Update contracts when material changes occur. Hold toolbox talks on labour issues and the workers' grievance mechanism annually during the operations phase. 	Uzbek Labour Code EBRD PR1 and PR2 IFC/MIGA PS1 and PS2	<ul style="list-style-type: none"> HR Policy developed. Individual employment contracts with the workers issued by the Company's HR Division. Personnel files in compliance with the national requirement to contain inter alia certificates, internal and external training. Timesheet records. Inclusion of HR Policy and Worker Code of Conduct in workers contract and tender documents. Records of toolbox talks. Workers' grievance log. Annual summary of use of labour grievance mechanism and resolution of labour grievances 	<ul style="list-style-type: none"> Project HR Policy. Contracts of employment. Workers' Grievance Mechanism. Annual grievance reporting.

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
3	Provide qualified human resources for the Project operation	Skills development training	<ul style="list-style-type: none"> • Training via the Company's Training Centre for local people with appropriate skills / qualifications. Compulsory topics to be OHS, labour relations, jobs description and workers' grievance mechanism. • Introduce briefings and workplace training for low qualification workforce • Provide skills improvement training for GCC staff including graduates and unskilled workers 	Uzbek Labour Code EBRD PR1 and PR2 IFC/MIGA PS1 and PS2	<ul style="list-style-type: none"> • Records of briefings. • Training notes. • Workers' training certificates. • Personal files of the recruited staff 	<ul style="list-style-type: none"> • Training Programme by the Company's Training Centre.
4	Support local development	Management of operational phase procurements	<ul style="list-style-type: none"> • Develop the Project Procurement Policy and modify established practices to promote local contracting • Disclose Project Procurement Policy to suppliers and businesses • Establish the following procurement practices to maximise local benefits, especially for women-headed businesses: <ul style="list-style-type: none"> – Disclosure of procurement opportunities well in advance to attract local suppliers and allow them benefiting from the Project – Simplifying tender procedures so it is easier for local companies to participate – Producing tender documents in local languages – Holding tender workshops locally to help in understanding of need and process – Lowering the price of tender documentation – Making prequalification efforts match the contract type and amount – Making price preferences for local firms – Unbundling contracts so that local entrepreneurial services can be tapped – Reserving a proportion of a contract value or a whole contract for local businesses to implement – Wavering or lowering the need for performance bonds – Instructing, through contract clauses, international contractors to engage local firms in their supply chain • Conduct tender workshops locally to help in understanding Project procurement processes • Set Project targets for contracting female-headed business and local female staff. • Publication of procurement adverts at the Company's website and other platforms (e.g., via "Telegram") to promote opportunities for local suppliers. 	Uzbek Law EBRD PR1 and PR2 IFC/MIGA PS1 and PS2	<ul style="list-style-type: none"> • Project Procurement Policy developed • Communications with suppliers and contractors • Project Procurement Procedures • Clauses in suppliers and contractors' contracts • Records of tender workshops • Copies of procurement adverts • Track records of contracts with local female-headed suppliers and businesses 	<ul style="list-style-type: none"> • Project Procurement Policy • Project procurement procedures • Training programmes • Contract clauses
5	Safeguard health, safety, security and wellbeing of workers	Handling, transport and management of hazardous substances, potential for emergency situation	<ul style="list-style-type: none"> • Adjust plans, policies and procedures to reflect different conditions in the operational phase • Establish a dedicated Occupational Health and Safety Unit. This unit will: <ul style="list-style-type: none"> – Be responsible for evaluation of hazards and risks, OHS planning, OHS training, monitoring, incident reporting and investigation, workplace safety and exposure, medical surveillance, personal protective equipment, organisation of hazardous works, etc. – Delegate responsibilities to qualified OHS staff members to monitor and control mitigation measures included into the ESMP and other 	Uzbek Labour Code and other laws EBRD PR2 IFC/MIGA PS2	<ul style="list-style-type: none"> • OHS Unit established • Operation plans, policies and procedures updated • OHS training programme. • OHS training records. • Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy. • Records of OHS risk assessment in line with the WHO standards. • PPE logs. 	<ul style="list-style-type: none"> • OHS management system

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<p>operational plans and report on all non-compliance and gaps and propose adequate mitigations</p> <ul style="list-style-type: none"> – Provide basic health and safety training for all workers including use of appropriate PPE. Training to be also given on how to conduct tasks with specific health and safety risks such as use and storage of hazardous chemicals, working with electric equipment, working at height, road safety and general driver training, use of seatbelts, vehicle checking and dealing with adverse weather conditions on roads such as snow and ice – Retain a log documenting all H&S trainings given to each worker and when refresher courses are due. These logs to be monitored by the EHS Manager and reported on a regular basis to the Company and Lenders. – Maintain a record of occupational incidents, accidents and diseases and follow these up to ensure that corrective measures are taken, and that recurrence is prevented – Retain incident, accident and occupational disease logs for future analysis and monitoring by the Lenders or government inspection authorities <ul style="list-style-type: none"> • The Company to provide insurance for all workers for medical treatment • Personnel files to include next of kin details. • Independent verification of OHS risk assessment (in line with the World Health Organisation (WHO) standards) to be carried out and any actions arising implemented. 		<ul style="list-style-type: none"> • Logs showing incidents, accidents and occupational diseases or ill health. • Medical insurance certificates • EPRP updated for operation • Staff personal files • OHS risk assessments 	
6	Safeguarding safe environment for work and rest	Workers' accommodation management	<ul style="list-style-type: none"> • The Company to develop a Workers' Accommodation Plan for the operation phase. • Approve the Workers' Accommodation Plans with the International Lenders • Appoint EHS Officer responsible for monitoring and monthly auditing of the operational staff accommodation and quarterly reporting of findings to the Company and the Lenders on a regular basis • Worker Code of Conduct to govern workers behaviour on site, in the accommodation and in the ACs 	EBRD PR 2. IFC/MIGA PS2.	<ul style="list-style-type: none"> • Workers' Accommodation Plan develop • No-objection from the International Landers received • EHS Officer responsible for accommodation management appointed. • Monthly audit records • Quarterly reports issued • Workers' Code of Conduct disclosed to all operational staff 	<ul style="list-style-type: none"> • Workers' Accommodation Plan • Monthly audits • Reporting
7	Workers' grievance mechanism during the operation phase	Grievance management	<ul style="list-style-type: none"> • The Company to establish and disclose the workers' grievance mechanism to all staff for the operation phase • The Company to appoint a Workers' Grievance Manager who will maintain a record of worker grievances including how grievances were closed out and in what timeframe. Grievance log to be retained for future analysis and monitoring by the Lenders or government inspection authorities 	EBRD PR2. IFC/MIGA PS2.	<ul style="list-style-type: none"> • Documented workers' grievance mechanism established. • Workers' Grievance Manager appointed • Documents confirming that workers are informed about the mechanism, including operational contractors' workers. • Monthly monitoring of grievance logs by the Workers Grievance Manager to identify patterns or area where actions can be taken to prevent recurrent problems. • Annual summary of use of grievance mechanism and resolution of labour grievances. • Records of toolbox talks. 	<ul style="list-style-type: none"> • Company's worker grievance mechanism • OHS training plans.
8	Procurement of goods, works and services	Primary supply chain management	<ul style="list-style-type: none"> • The Company to develop a Supply Chain Policy and disclose it to all potential suppliers as part of the procurement process • The Company will review the likelihood of the use of child or forced labour or the presence of occupational safety issues within their primary supply chain 	EBRD PR1 and PR2. IFC/MIGA PS2.	<ul style="list-style-type: none"> • Project Supply Chain Policy disclosed • Senior level commitment to the Supply Chain Policy • Procurement notices 	<ul style="list-style-type: none"> • Supply Chain Policy

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> prior to engaging suppliers and not deal with companies where there are unacceptable risks The Company to conduct an assessment of existing Project supply chain organisations to identify suppliers with the highest risk of adverse human rights impacts Contract managers of the Project to receive training on Project human rights principles and policy relevant to their role The labour audit of new supply chain organisations to be undertaken prior to contracting (via the Outside Service Questionnaire) to identify any new risks and take appropriate actions to remedy any significant problems which may be discovered Records of correspondences or other actions taken to review child or forced labour or OHS problems in the supply chain to be maintained by the Procurement Unit or the HSE Manager 		<ul style="list-style-type: none"> Number of contracts with local and regional sub-contractors and suppliers Targets to engage female-headed businesses Procurement training records Numbers of signed Suppliers' Codes of Conducts as a % of Project suppliers 100% of suppliers who completed the Outside Service Questionnaire. 	
9	Safeguarding health, safety and wellbeing of local communities	Managing communities H&S and wellbeing due to presence of the industrial site	<ul style="list-style-type: none"> The Worker Code of Conduct for the operation phase Human Rights Policy Provision of adequate GCC security arrangements, commensurate with the risks posed to the safety of community members accessing operational site. This to include securing of the site with appropriate fencing and locks to prohibit entry by members of the public at any time of day or night, provision of security services of the GCC 24 hours a day and use of CCTV cameras and signage. A Due Diligence Review Procedure to be developed for recruiting in-house security personnel, including provisions for identification of cases of past abuse and checking their qualifications and certifications. All in-house security guards to be vetted prior to recruitment to check for records of historic violence or abuse. Job descriptions for the in-house security personnel to include the requirement that prohibits any acts of force, alcohol and drugs In-house security personnel trainings to be provided to raise awareness on 1) salient human rights issues (particularly in personnel and community security); 2) requirements of the applicable international standards; 3) diverse cultural and ethnic backgrounds of workers present on-site. Training in the use of force, emergency preparedness procedures, and use of equipment with regular refresher training, which is to be recorded in training logs. Security guards to be provided with uniforms and identity badges and a logging system to be used to record entry to and exit of each Project site. A training presentation for the outsourced security authorities with the explanation of the expected level of conduct toward workers and the ACs. Any reports of unlawful behaviour by security guards to be investigated and reported to the appropriate authorities if necessary. All vehicles to carry spill kits and fire extinguishers for dealing with spills or small vehicle fires on public or site roads. Drivers to be equipped with telephones for contacting the emergency services and the Company's head office to enact the EPRP if necessary. 	National requirements EBRD PR2, PR4 IFC/MIGA PS4	<ul style="list-style-type: none"> Updated the EPRP and other plans policies and procedure to include the Project operational phase and activities. Emergency Response Teams established The Worker Code of Conduct for the operation phase developed. Human Rights Policy. GCC security arrangements provided. A Due Diligence Review Procedure developed for recruiting in-house security personnel Internal review records. Job descriptions for the in-house security personnel Security personnel trainings records. Availability of uniforms and identity badges for security personnel. Entry logs and records. Training presentation for security authorities delivered. Investigation reports. Health and safety equipment on all vehicles. Drivers equipped with telephones and first aid kits. Drivers training records. EPRP for the operation phase developed. Traffic Management Plan updated for the operation phase. Communicable Disease Exclusion Procedure updated for the operation phase. The Project CLO appointed for the operation phase 	<ul style="list-style-type: none"> Emergency Preparedness and Response Plan The Worker Code of Conduct Human Rights Policy Due Diligence Review Procedure for recruiting in-house security personnel Training programmes Traffic Management Plan Communicable Disease Exclusion Procedure Project CLO

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> • Drivers to be first-aid trained and equipped with first aid kits which they will regularly inspect and maintain. • The Project to develop an EPRP in collaboration with nearby communities to establish actions and contacts in case of emergency or will collaborate with authorities to ensure effective emergency preparedness and response planning where this responsibility does not fall to the Company under Uzbek Law (i.e., under certain categories of emergency). Review and updating of emergency contact details in all EPRPs will be undertaken quarterly. • Establish Emergency Response Teams. • The Traffic Management Plan to be updated for the operation phase and supplemented with the regulation of interaction with the ACs. • Communicable Disease Exclusion Procedure should be updated for the Project operation phase. • The Project CLO, as described within the SEP, to be appointed and will collect and provide response on any community grievances related to health, safety, security and wellbeing of local residents and this community grievance mechanism will remain effective throughout the Project lifecycle. 			
10	Promote community engagement	Stakeholder engagement and grievance management	<ul style="list-style-type: none"> • Update Project SEP prior to operations • Formalise Community Grievance Mechanism for the operation phase. • The CLO to be responsible for grievances registration and carries out analysis of grievance log to identify common or recurrent problems. • The CLO to categorise the grievances and follow-up issues with the Company's management to deal with the causes and identify actions to prevent further recurrence. • Annual environmental and social performance and sustainability reporting. 	EBRD PR1 IFC PS1	<ul style="list-style-type: none"> • SEP updated for the operation phase • Grievance log. • Meetings minutes. • Disclosed information dated and kept on file. • Records as per SEP. • Annual grievance reporting. • Annual non-financial reports to include environment and social indicators. 	<ul style="list-style-type: none"> • SEP. • Community grievance mechanism. • Annual non-financial reporting.
11	Mitigate social tensions at retrenchment	Labour management	Retrenchment Plan to be developed in the event of significant workforce reduction 18 months prior to the anticipated redundancies.	Uzbek Labour Code EBRD PR2 IFC PS2	<ul style="list-style-type: none"> • Retrenchment Plan. Numbers of people affected by retrenchment will be recorded. • Outcomes of Retrenchment Plan to be recorded. • Minutes of meetings with affected employees. • Letters of notification to the local employment centres. 	Retrenchment Plan.

2.6.3 Air quality management

Table 2.12: Air quality operational management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
15	To ensure health and safety of workers and community	Operation of plant	<ul style="list-style-type: none"> Design and operation mode of the Project equipment shall meet the national regulations in terms of nitrogen oxides and sulphur oxides emissions, and shall ensure minimum feasible levels of such substances in all modes of operation Height of the gas stacks shall be selected to ensure maximum dispersion of emitted pollutants To reduce potential impact of fugitive emission sources, continuous monitoring and timely repair of fuel tanks, pipelines and locking accessories shall be provided. 	EBRD PR2, PR3, PR4 IFC EHS Guidelines National legislation	Quantitative monitoring of pollution emissions from stationary sources should be conducted, and records kept of fuel consumption (natural gas, diesel, gasoline).	<ul style="list-style-type: none"> Strict compliance with limits approved by environmental authority. Environmental monitoring plan
16	To ensure the health and safety of workers and the community	Vehicle movements	<ul style="list-style-type: none"> Project design should consider poor weather conditions, including low mode of emission sources in windy days to minimize pollutants transfer to residential areas. Prohibition of idle running vehicles to ensure lower emission of pollutants. 	EBRD PR2, PR3, PR4 IFC EHS Guidelines National legislation	Non applicable	Monitoring of windy days and planning of low mode works.

2.6.4 Soil impacts management

Table 2.13: Soil impacts operational management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
17	Avoid impacts to quality of soil, groundwater and human health	General operational activities Avoid leaks and spills of hazardous materials and wastes	<ul style="list-style-type: none"> Use best practice in line with local regulations and good practice for operation of the Project. Drip trays will be used to intercept leaks and spills from equipment and during refuelling. Develop Emergency Response Plan and a separate Spill Contingency Plan in accordance with local regulations. Clean-up contaminated material in case of fuel leaks. Hazardous materials will be suitably stored to prevent leaks and spills. Adequate bunding will be provided for all fuel and chemicals storage. Prohibition of chemicals discharge to the land, irrigation and drainage system. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Continued soil monitoring. Regular site inspections. Monitoring reports to be made available to external monitors.	<ul style="list-style-type: none"> Environmental monitoring plan Hazardous Materials Handling and Storage Manual
18	Minimise impacts to soil and groundwater quality	Site drainage and effluents	<ul style="list-style-type: none"> No discharge to land – contaminated wastewater to be collected and treated. Monitoring and maintenance of the drainage system, and drainage outfall, in accordance with Site Maintenance Plan. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Monitoring of groundwater quality Monitoring of wastewater quality Monitoring of surface water quality (drainage)	Environmental monitoring plan
19	Minimise impacts to soil and groundwater quality	Earthworks / field levelling	<ul style="list-style-type: none"> Undertake earthworks during suitable weather conditions i.e., low wind strength to minimise the level of windblown dust, which may be potentially contaminated. Workers to wear suitable PPE to protect against inhalation of dust. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Non required	A risk assessment will be carried out to identify the level of PPE required in line with site specific risk factors.

2.6.5 Water resources and water quality management

Table 2.14: Water resources and water quality management

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
20	Protect surface water from contamination	Storage of chemicals and oil	<ul style="list-style-type: none"> Management of surface drainage and site runoff, particularly during showers, to minimise erosion and the potential for high sediment loads entering the canals Storage of excavated material away from drains, and covering stockpiles Prevention of pollution by use of hard covered, bunded areas for storage of liquids, chemicals and refuelling, oil interceptors in areas where fuel is used or stored, provision of spill kits and protocols for their use and appropriate disposal to minimise the impacts of any spillages. 	EBRD PR3 IFC EHS General Guidelines National legislation	Drainage water shall be regularly monitored to identify potential impact of the Project on composition of drainage water.	Environmental monitoring plan
21	Protect surface water from contamination	Storm water	<ul style="list-style-type: none"> Storm water collection and treatment to be provided, such facilities should include grit removal and oil trapping. 	EBRD PR3 IFC EHS General Guidelines National legislation	Regular monitoring of wastewater. Quality of wastewater should be strictly in line with environmental approval	Environmental monitoring plan
22	Protect surface water from contamination	Machinery washing	<ul style="list-style-type: none"> Washing of machinery and other vehicles will be arranged on dedicated sites with water recycling systems. 	EBRD PR3 IFC EHS General Guidelines National legislation	Not required	Environmental Action Plan

2.6.6 Ecology and biodiversity management

Table 2.15: Ecology and biodiversity management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
23	Minimise disturbance to reptiles, mammals, birds	Noise and light from the Project operation	<ul style="list-style-type: none"> Minimise noise disturbance by using modern equipment which complies with the noise standards. Prohibit idle running of vehicles Use down lighting to prevent light pollution when artificial lighting is required. 	EBRD PR6 IFC PS 6	<ul style="list-style-type: none"> Regular site inspections. Monitoring reports to be made available to external monitors 	Environmental Action Plan
24	Enhancement of biodiversity	Providing suitable habitats for animals	<ul style="list-style-type: none"> Planting at the site and beyond. Maximum use of the territory for arrangement of lawns. 	EBRD PR6 IFC PS 6	Annual monitoring of state of plantations.	Housekeeping plan
25	Minimise loss of habitats hosting rare animal species and direct impact on rare animal species	Vehicle movements Waste management Workers' behaviour	<ul style="list-style-type: none"> Prohibition of vehicle movements and parking outside of roads and paved parking. Prohibition of vegetation clearance and planting in habitats hosting rare animal species. Any activities should be prohibited. Any waste / litter keeping in the vicinity of habitats hosting rare animal species should be prohibited. Organise litter collection in habitats hosting rare animal species. Project roads along habitats hosting rare animal species should be equipped with kerb-stone to exclude polluted stormwater runoff from the road. Visits of these habitats for workers should be prohibited Hunting and catching of rare species should be prohibited Fencing / installation of signboards. 	EBRD PR6 IFC PS 6 National legislation	<ul style="list-style-type: none"> Monthly audit of habitats hosting rare animal species. Annual survey to monitor rare species population size, adverse changes in the quality of the environment 	<ul style="list-style-type: none"> CMP Biodiversity Action Plan

2.6.7 Materials and waste management

Table 2.16: Materials and waste management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
25	Minimize waste generation.	Waste generated from operation of the Project	<ul style="list-style-type: none"> • Include the Project wastes into the waste generation and disposal limits. • Reuse waste whenever possible (chemicals remains, wooden wastes, bricks, oil, etc). 	EBRD PR3 IFC EHS General Guidelines IFC PS3 National legislation	Waste management in compliance with the justification document for waste generation and disposal limits. Accounting of all waste streams at the site. Records of hazardous wastes disposed off-site.	Within the scope of Environmental Action Plan
26	Prevention of leakage or spillage of wastes. Prevention of fugitive emissions. Prevention of negative visual amenity impacts	Waste generation, handling and storage of materials	<ul style="list-style-type: none"> • Include the Project wastes into the waste generation and disposal limits. • Both the onsite and offsite waste storage facilities will include the following: <ul style="list-style-type: none"> – Separate areas for hazardous and non-hazardous wastes. – Separate vessels or containers for each waste stream in order to maximise re-use and recycling opportunities. – All containers and waste storage vessels to have a suitable cover. – Liquid wastes/oil/chemicals to be stored(collected) in tanks or drums located in banded areas. – Spill kits to be available in the waste storage areas. 	EBRD PR3 IFC EHS General Guidelines IFC PS3 National legislation	Company to carry out regular inspections of waste collection sites and hazardous liquids storage areas. Monitoring reports to be made available to external monitors. Waste records.	Waste Management instructions.
27	Final waste destination monitoring	Final waste destination	<ul style="list-style-type: none"> • Verify final destination of all wastes. • Maintain waste accounting. • Inspect waste facilities used for disposal (including treatment, decontamination and reuse/recycling) of project wastes. 	EBRD PR3 IFC EHS General Guidelines National legislation	Waste records. Waste accounting data. Inspection reports.	Environmental Action Plan

2.6.8 Transport management

Table 2.17: Operational transport management matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
28	Minimise delays to road other road users	Delays to road users as a result of number of vehicles and trucks	Delivery of construction materials and vehicles to the sites should be conducted out of peak hours. Prohibition of vehicles parking along roads.	International Best Practice.	Traffic Management Plan	Traffic Management Plan
29	Minimise safety issues	Reduced safety of vulnerable road users on the local roads and of residents affected by the Project	<ul style="list-style-type: none"> • Delivery of chemicals and materials should be conducted out of peak hours. Prohibition of vehicles parking within boarders of settlements. • Sharp parts of vehicles moving outside Project site should be removed or switched in safe position. 	International Best Practice.	Standard monitoring on road incidents in line with national requirements. Special monitoring is not required.	Safety instructions for drivers.
30	Safeguard the safety of road users on the local roads and of residents in settlements located along the roads	Delivery of materials, abnormal loads and transport of workers	<ul style="list-style-type: none"> • To develop a Traffic Management Plan and where possible design all delivery routes away from settlements. • Mandatory adherence to speed limits at all times. 	International Best Practice.	Traffic Management Plan	Traffic Management Plan.

2.6.9 Noise and vibration

Table 2.18: Operational noise and vibration matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
33	Avoid noise nuisance from site operation	Project operation	<ul style="list-style-type: none"> All equipment will be regularly serviced and maintained. Prohibition of noisy works out of working hours. Prohibition of idle running vehicles. 	EBRD PR4 IFC EHS General Guidelines National legislation	<ul style="list-style-type: none"> Monitoring of noise impact in accordance with the monitoring plan. Record and investigate complaints via the community grievance mechanism. 	<ul style="list-style-type: none"> Community Grievance Mechanism. Noise monitoring plan

2.6.10 Greenhouse gas emissions

Table 2.19: Greenhouse gas emissions matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
34	Reduce GHG emissions	Use of vehicles with GHG emissions.	<ul style="list-style-type: none"> • Use of new and efficient vehicles. • All equipment should be maintained and switched off when not in use. • Prohibition of idle running of vehicles. 	N/A	Records of plant maintenance	Environmental Action Plan
		Staff vehicle movements	Minimize parking area for personal transport. Provision of transportation scheme for operation staff	N/A	N/A	Environmental Action Plan
		Use of electricity	Efficient use of electricity.	N/A	Amount of energy purchased	Environmental Action Plan
		Fugitive emissions	Regular inspections of pipelines and storages for leaks.	EBRD PR3 IFC EHS General Guidelines	Number of leaks	<ul style="list-style-type: none"> • Environmental Action Plan. • Plant inspection plan

3 Plans, Policies and Procedures

3.1 Introduction

Mitigation activities identified through the ESIA process will be implemented via specific plans and policies of the Company and EPC Contractor, including sub-contractors.

The ESIA identified the following plans and policies which are needed for implementation of mitigation measures as required by EBRD PRs and IFC/MIGA PSs (Table 3.1).

Table 3.1: Policies, plans and procedures to be developed by the Project

Plans/Polices/Procedures	Project phases	Responsibility
Social		
Project Recruitment Policy	For all phases	The Company
Project Human Rights Policy	For all phases	The Company
Project Human Resources Policy	For all phases	The Company
Supply Chain Policy	For all phases	The Company
Project Procurement Policy	Operation	The Company
Supply Chain Management Plan	Construction	EPC Contractor
Project Resettlement Policy Framework	For all phases	The Company
Workers' Code of Conduct	For all phases	The Company and EPC Contractor
Workers' Grievance Mechanism	For all phases	The Company and EPC Contractor
Community Grievance Mechanism	For all phases	The Company and EPC Contractor
Workers' Accommodation Plans	Construction and operation (for each construction camp and the workers' village)	The Company and EPC Contractor
Stakeholder Engagement Plan	For all phases	The Company
Project Livelihood Restoration Plan	Design phase	The Company
Training and Mentoring Policy	Operation	The Company
Retrenchment Plan (end of operation phase)	Decommissioning	The Company
Occupational and Community Health and Safety		
Project Occupational and Community Health and Safety Policy	For all phases	The Company
Occupational and Community Health and Safety Training Plan	For all phases	The Company EPC Contractor
Occupational and Community Health and Safety Management Plan	For all phases	The Company EPC Contractor
Emergency Preparedness and Response Plan	For all phases	The Company EPC Contractor
Hazardous Materials Handling and Storage Guidelines (Manual)	For all phases	The Company EPC Contractor
Security Management Plan	For all phases	The Company EPC Contractor

Plans/Polices/Procedures	Project phases	Responsibility
Traffic Management Plan	For all phases	The Company EPC Contractor
Environmental		
Project Environmental Policy	For all phases	The Company
Environmental Action Plan	For all phases	The Company EPC Contractor
Environmental Training Plan	For all phases	The Company EPC Contractor
Waste Management Plan	For all phases	The Company EPC Contractor
Project Site Housekeeping Plan	For all phases	The Company EPC Contractor
Plant inspection plan	Operation	The Company
Oil Spill Liquidation Plan	For all phases	The Company EPC Contractor
Biodiversity Action Plan	For all phases	The Company EPC Contractor
Alien Invasive Species Plan	For all phases	The Company EPC Contractor
Noise Monitoring Plan	For all phases	The Company EPC Contractor
Air Quality Monitoring Plan	Operation	The Company
Water / Wastewater Monitoring Plan	For all phases	The Company EPC Contractor
Soil / Underground Water Monitoring Plan	Operation	The Company
Cultural Heritage		
Chance Finds Procedure	For all phases	The Company EPC Contractor

Source: Mott MacDonald, Volume II – ESIA Report

The majority of the above documents (or their content) are to a certain extent required by Uzbekistan law and are maintained by the relevant services of the Company and/or included in the mandatory scope of design package. Thus, development of duplicate plans and policies for the Project would not bring any benefits and rather increase documents flow and complicate the work of all Project parties.

Therefore plans, policies or activities which are provided for by the Uzbekistan law are included into the existing procedures with appropriate comment.

The Company will also implement the Stakeholder Engagement Plan (SEP) and update it when there are significant changes to the Project, such as change in phase or identification of new stakeholders. The project performance grievance mechanism will also be implemented throughout the lifecycle of the Project and is described in detail in ESIA Volume II and in the SEP.

3.2 Plans, policies and procedures overview

Table 3.2: Plans, policies and procedures matrix

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Recruitment	Recruitment Policy	<p>The Project Recruitment Policy will be applied for the construction and operation phases.</p> <p>The Policy will prioritise benefits for local people aim to minimise social conflict. It will state the Project’s position on prohibition of the use of child and forced labour, promotion of non-discrimination and equal opportunities.</p> <p>It will specifically include a requirement to prioritise local employment and in particular a requirement to prioritise vulnerable groups, such as women, young adults, unemployed, unskilled, seasonal workers from the ACs.</p> <p>The Company will monitor compliance of the EPC Contractor and sub-contractors with the Project Recruitment Policy.</p>	To be developed and disclosed prior to construction recruitment activities.	The Company is responsible for monitoring the EPC Contractor and sub-contractors’ compliance with the Project Recruitment policy.	<p>EPC Contractor and sub-contractors Mahallas</p> <p>Local employment centres.</p> <p>Local Labour Authorities.</p>
Human rights	Project Human Rights Policy	<p>The Project will develop a Human Rights Policy for the construction phase and will later updated the document for the operation phase. The Project Human Rights Policy will be disclosed to all employees, the EPC Contractor and sub-contractors and their staff during construction, and operation contractors and suppliers during operations.</p> <p>The Policy will reference where to send queries and information as well as the Project grievance mechanism to address grievances on possible violations of human rights.</p>	To be developed and disclosed prior to the start of construction.	The Company is responsible for monitoring the EPC Contractor and sub-contractors’ compliance with the Human Rights Policy.	<p>The Company’s HR Department.</p> <p>EPC Contractor and sub-contractors</p> <p>Project suppliers</p>
Labour management	Project Human Resources Policy	<p>The Project HR Policy will be developed prior to the operation phase.</p> <p>The requirement to comply with the Project HR Policy will be included in employment contracts of the operational staff and operational contractor’s contracts to ensure that contractors and subcontractors involved in Project operation manage the workforce in accordance with national and international standards. This will especially help any foreign contractor(s) to understand what is required of them.</p> <p>Toolbox talks on the content of the Project HR Policy and its visibility on noticeboards at site and in accommodation will help operational workers to understand their rights and will maintain good Project performance on safeguarding the Project workforce.</p>	Prior to operation.	<p>The Company’s HR Department responsible for compliance with the Policy in the Company and for monitoring operational contractors’ compliance with the Project HR Policy.</p> <p>Operational contractors’ HR Departments responsible for compliance with the Policy.</p>	<p>The Company’s HR Department.</p> <p>HR Departments of operational contractors.</p> <p>Local Labour Authorities.</p>

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Labour management	Workers' Code of Conduct	Regulates behaviour of workers on site or at work, in the construction camp or offices, and communities. Provides information on specific aspects of local culture and acceptable conduct, use of psychotropic substances and alcohol (including possible testing), need to handle property of the Company and contractors with care, show respect to colleagues and community, information on sexually transmitted diseases, contraceptives, and potential penalties for violations.	Prior to construction	The Company's HR Department to monitor contractors for provision of appropriate training on recruitment. Contractors are responsible for workers' compliance with the Code.	The Company. Local Labour Authorities.
Future land acquisition	Project Resettlement Policy Framework	Guide any future land acquisition processes	Planning and operation	The Company's management, lawyers and external consultant	Approval by the International Lenders
Economic displacement and livelihood restoration	Project Livelihood Restoration Plan	A Livelihood Restoration Plan is to be developed by the Company with the support from the external consultant to provide guidance on the Project economic displacement mitigation in compliance with the applicable international requirements. An LRP is to be based on compensation for losses at full replacement cost.	During land acquisition	The Company's management, lawyers and the external consultant	Approval by the International Lenders
Security management	Construction Security Management Plan	Construction Security Management Plan will be developed for each Project site. It will define security measures to protect construction site against unauthorised access by employers and strangers, and to protect local communities against injury in result of unauthorised access.	Prior to construction	Security Contractor. The Company will monitor the EPC Contractor and sub-contractors' compliance with security arrangements.	Security Contractor Police force
	Security management documentation (operational)	Security management documentation delegate security responsibilities and authority to security personnel, establishes security rules and guidelines regarding access, use of force, etc. Security Management Plan is to identify linkages with local police force, when they will be called to assist etc.	Prior to commissioning	HR, Safety Manager	
Labour Accommodation	Workers' Accommodation Plans during construction and operation)	Workers' Accommodation Plan is required for the construction and operation phases of the Project. At the construction phase two Workers' Accommodation Plans will be developed to provide safe, clean and comfortable living conditions for construction workers in two construction camps At the construction phase these plans will be implemented as part of Contractor Management Plan. The Project will use the Workers' Grievance Mechanism to collect and address grievances regarding workers' accommodations. The Company and the EPC Contractor will appoint an Accommodation Manager for each site who will be responsible for the Workers Accommodation Plan and accommodation maintenance.	Prior to construction	Overall responsibility for implementation of the Workers Accommodation Plan is with contractors. The Company will monitor the EPC Contractor' compliance in regard to workers accommodation.	Local Labour Inspections EHS Managers of contractors. EHS Manager of the Company

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Contractors Management	Contractor Management Plan	<p>The Contractor Management Plan will be used as a tool to assist in managing risk of poor E&S performance of contractors, especially labour and workforce issues.</p> <p>The Contractor Management Plan will detail the contractor selection process, contractor environmental, social, health and safety assessment and need to outline how contract clauses will be used to bind contractors and their sub-contractors to meeting national and international standards.</p>	Prior to contractor selection	The Company's Procurement Department, lawyers.	The Company
Labour Complaints	Workers' Grievance Mechanism	To provide a formalised process by which grievances can be raised by the workforce during construction and operation. The mechanism allows structured investigation by the Company to review the validity, responsibility and response / action of labour grievances.	Prior to construction	<p>The grievance mechanism needs to be formalised and be disclosed to all workers upon recruitment and advertised widely on site.</p> <p>The Company is responsible for monitoring contractors' labour grievance mechanism.</p> <p>Contractor Project Manager responsible for implementation of their own workers' grievance mechanisms</p>	Local Labour Inspections Labour and Social Offices of the contractors. Labour and Social Officer of the Company.
Supply Chain Management	Project Procurement Policy	The Project Procurement Policy will specifically include aspects covering health, safety and labour rights in the supply chain in compliance with the applicable international requirements. The Project Procurement Policy will include references to procurement procedures to be established in the Company to maximise local benefits, especially for women-headed businesses.	Prior to project operation	The Company's management and procurement department.	The Company
	Supply Chain Policy	<p>The Project Supply Chain Policy will identify applicable international standards and key principles in managing risk of child labour or forced labour in the primary supply chain as well as safety issues related to supply chain workers.</p> <p>The Policy will identify responsibilities and management controls over the primary suppliers and contractors and set out KPIs to monitor the Project's primary supply chain on an ongoing basis and identify any significant changes in its supply chain.</p>	Prior to construction	The Company's management and procurement department.	The Company
	Supply Chain Management Plan	The EPC Contractor will develop a Supply Chain Management Plan to comply with the Project Supply Chain Policy and manage risks of child labor and force labor or safety issues related to sub-contractor's workers.	Prior to construction	EPC Contractor	The Company

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Capacity Building	Training and Mentoring Policy	The Project Training and Mentoring Policy will establish strategic priorities for capacity building in the Company through enhancing training, skills and knowledge transfer and securing a pool of skilled human resources to operate facilities for the lifetime of the Project. The Policy will make reference to personal development reviews	Prior to commissioning and procurement of machinery	The Company's management, HR Department, EHS Manager	The Company
Community engagement	Stakeholder Engagement Plan	To keep communities and stakeholders informed while listening and responding to concerns about the Project to allow it to run smoothly. Annual reporting on E&S issues of concern to ACs.	Updated when project changes significantly, e.g. change of phase. Reviewed at least annually	The Company's Community Liaison Officers and management.	Mahalla Local government representatives Authorities
Community Complaints	Community grievance mechanism (See Project SEP)	To provide a formalised process by which grievances can be raised by the local community during construction and operation which allows structured investigation by the Company to review the validity, responsibility and response / action.	During construction and operation.	Overall responsibility of community grievance mechanism is with the Company's Community Liaison Officer.	Project CLO Mahallas Local government representatives Authorities
Labour management at end of operations phase	Retrenchment Plan	To mitigate the adverse impacts associated with job losses. The Plan to include analysis of alternatives, legislative framework, consultation with employees and their representatives, disclosure, grievance mechanism, identification of number of employees affected, severance payments calculation methodology and framework record of payments made, assistance provided to employees.	Developed prior to issuing the Retrenchment Order	The Company's HR Department is responsible for development and monitoring implementation of the Retrenchment Plan	Local Labour Inspections The Company's HR Department.
Environmental Management	Environmental Action Plan	Defines specific mitigation as identified through Environmental Impact Assessment (EIA) and Environmental and Social Impact Assessment (ESIA) processes at the operation and construction phases. Activities within the separate Construction Environmental Action Plan will be covered by the design documents (DD), CMPs, and are mandatory in accordance with Uzbek regulations.	Operation: permanently Construction: DD, CMPs prior to construction	Operation: Director, Environmental Manager. Construction: the EPC Contractor fully responsible for meeting the requirements of DD and CMPs. EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs	-
Environmental Monitoring	Air, noise, water, wastewater, soil, underground water monitoring plans or Environmental Monitoring Plan	Monitoring measures for air emission, water consumption and wastewater discharge, waste generation, soil quality etc.	Operation: after Project commissioning Construction: DD, CMPs prior to construction	Operation: Environmental Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMPs. EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs	Approval by the local environmental authority

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Pollution prevention and control	Waste Management Plan	Plan establishes limits (volumes) on generation of different types of wastes including hazardous wastes, processes generating different types of wastes, ways of safety collection and keeping, disposal options (reuse, recycling, deactivation, disposal at the landfill), and monitoring measures	Operation: after Project commissioning Construction: DD, CMPs prior to construction	Operation: Environmental Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMPs. EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs)	Approval by the local environmental authority
	Oil Spill Liquidation Plan Hazardous Materials Handling and Storage Guidelines (Manual)	Defines control measures against impact of hazardous chemicals on environment, staff and local communities	Operation: after Project commissioning Construction: DD, CMPs prior to construction	Operation: Environmental Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMP (MS). EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs)	-
Biodiversity	Alien Invasive Species Plan	Plan establishes rules on introduction of a new varies of plants and control measures against alien invasive species	Operation: after Project commissioning Construction: DD, CMPs prior to construction	Operation: Environmental Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMP (MS). EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs)	Local agricultural authority, if required
Biodiversity	Biodiversity Action Plan	Measures and monitoring requirements to protect habitats hosting rare species of animals	Operation: after Project commissioning Construction: prior to construction	Operation: Environmental Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMP (MS). EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs)	Local ecology authority
Health and Safety	Community and Occupational Health and Safety Plan	Provide list of mitigation measures to ensure safe and comfortable workplace and environment and public health and safety mitigations.	Operation: after Project start Construction: DD, CMPs prior to construction	Operation: Safety Manager. EPC Contractor fully responsible for meeting the requirements of DD and CMP (MS). EPC Contractor and the Company Project (Environmental) Managers monitor compliance with DD and CMPs)	-
Community Health and Safety	Traffic Management Plan	Content mitigation measures to minimise impacts on traffic and pedestrians	Operation: after Project start Construction: DD, CMP prior to construction	Operation: Safety Manager The EPC Contractor fully responsible for meeting the requirements of DD and CMPs. Contractor's and the Company Project Managers monitor compliance with DD and CMPs	Road Police

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Emergency situations	Emergency Preparedness and Response Plan	Emergency plans for Project sites provide safety and emergency measures in case of fire or explosion	Prior to operation	Operation: Safety Manager	Fire Authorities Police Ambulance
Archaeology	Chance Finds Procedure	To be developed as part of Project MS. In particular, the procedure shall include the following: <ul style="list-style-type: none"> – Procedure upon any discovery – Conditions / requirements for work stoppage – Fencing and protection of the find – Internal reporting. 	Prior to construction	The Company is responsible for monitoring the EPC Contractor and sub-contractors' activities. Project Manager (construction) responsible for implementation at the Project level.	The Ministry of Culture of the Republic of Uzbekistan

3.3 Project Recruitment Policy

The Project Recruitment Policy will be developed by the Company for the construction phase, and it will be updated for the operation phase. The Project Recruitment Policy will include but not be limited to the following:

- Policy statement of the Company's commitment to meeting Uzbek Laws and international best practice with regards to recruitment and labour management including:
 - Non-discrimination and equal opportunities
 - Prohibition of child labour and forced labour
- A requirement to prioritise local employment for positions that become available:
 - First priority will be defined to people originating from the directly affected communities
 - Second priority will be defined to people from the wider area of influence (Alat, Karakul and Zhondor districts)
 - Third priority will be defined to people from the rest of the Bukhara region and elsewhere in Uzbekistan
- A requirement to prioritise employment of vulnerable groups, such as women, young adults, unemployed, unskilled and seasonal workers
- Specific operation phase targets for employment and engagement of women
- Mechanism to identify people of the first, second and third priority for employment and employment procedure
- Policy statement on the types and likely numbers of employment opportunities to be provided to the directly affected local people from the construction phase and from the operation phase of the Project including skills levels, indicative timeframes of recruitment, remuneration and benefits packages and likely duration of contracts
- Description of the local recruitment processes including timely (at least one month prior to recruitment) disclosure of information bulletins about vacancies including notification of the local employment centres, and Heads of the ACs
- The job application procedures for candidates
- Information about how job opportunities will be advertised in the directly affected communities, local employment centres and district hokimiyats. to ensure equal opportunities for all local people.

The Company will monitor compliance of the EPC Contractor and sub-contractors with the Project Recruitment Policy during the construction phase.

3.4 Human Rights Policy

The Project will develop a Human Rights Policy for the construction phase and will later updated the document for the operation phase. The Project Human Rights Policy will be disclosed to all employees, the EPC Contractor and sub-contractors and their staff during construction, and operation contractors and suppliers during operations.

Special clauses in the contracts of the EPC Contractor, sub-contractors and suppliers will bind the EPC Contractor, sub-contractors and suppliers to adhere to the Project Human Rights Policy.

A policy statement may include, for example, that the Company:

- Provide respectful working conditions and seek to promote educational activities enabling professional and personal development, in order to maintain a healthy and safe place to work
- Will not tolerate any type of discrimination and/or harassment of any sort whatsoever, including moral or sexual
- Respects freedom of association, collective bargaining and diversity

- Rigorously selects and monitors security personnel, taking into account prior experience, technical skills and emotional stability
- Educates and trains these professionals to perform activities in accordance with human rights principles, rejecting abuse of power, discrimination, interfering with community privacy or permitting degrading and inhumane treatment.
- Refrains from using force, seeking appealing solutions which ensure the physical integrity of persons, property and information preservation and the maintenance of the production process.

With respect to suppliers and contractors the policy statement may declare, for example, that the Company:

- Seeks to establish relationships with entities that share the same principles and values
- Endeavours to maintain a lasting engagement with communities and implement social, cultural, economic and environmental impacts management, as well as contribute to local sustainable development
- Promotes human rights awareness raising actions, with special focus on the eradication of forced and child labour, in addition to promoting the rights of children and adolescents

The Policy will reference where to send queries and information as well as the Project grievance mechanism to address grievances on possible violations of human rights.

3.5 Project Human Resources Policy

The Company will develop a concise, consolidated Project HR Policy that is compliant with Uzbek Labour Law, EBRD PR2 and IFC/MIGA PS2. The Project HR Policy will be developed prior to the operation phase and will include but not be limited to:

- Protecting the workforce, including commitments in relation to child and forced labour and migrant workers
- Working relationship
- Working conditions and terms of employment
- Workers' organisations
- Non-discrimination and equal opportunity at workplace
- Prohibition of gender-based violence and harassment
- Retrenchment
- Grievance mechanism.
- Occupational health and safety
- Workers engaged by third parties
- Supply chain.

This requirement to comply with the Project HR Policy will be included in employment contracts of the operational staff and operational contractor's contracts to ensure that contractors and subcontractors involved in Project operation manage the workforce in accordance with national and international standards. This will especially help any foreign contractor(s) to understand what is required of them.

Toolbox talks on the content of the Project HR Policy and its visibility on noticeboards at site and in accommodation will help operational workers to understand their rights and will maintain good Project performance on safeguarding the Project workforce.

3.6 Workers' Code of Conduct

A Worker Code of Conduct of the EPC Contractor will be checked by and agreed with the Company. The Workers' Code of Conduct will be used to govern the behaviour of construction workers on site, in their accommodation and in the local communities.

The Workers' Code of Conduct will include but not be limited to:

- Use of drugs, alcohol and smoking with information about testing and penalties for contravention
- Rules regarding safe use of PPE and Project equipment including disciplinary procedures for inappropriate use
- Maintaining a safe and tidy working area
- Reporting of incidents and accidents
- Respect for colleagues and behaviour expectations with regards to harassment and bullying
- Respect for communities and lines of communication
- Rules governing use of resources and utilities including power, water and the Internet
- Cultural awareness issues for workers coming from outside of the wider area of influence
- Guidance about how to behave to prevent the spread of HIV/AIDS and other sexually transmitted diseases
- Driving rules
- Confidentiality of information
- Security Workers' Code of Conduct
- Ethics rules
- Reporting of chance finds
- Prohibition of weapons on site or in accommodation
- Prohibition of hunting wild birds or animals
- Responsibilities of management.

Workers will be issued with the Workers' Code of Conduct upon their recruitment and asked to sign to say that they have received and understand the document.

3.7 Workers' Grievance Mechanism

The workers' grievance mechanism will include but not be limited to the following:

- A policy statement that grievances can be raised by any member of staff without fear of reprisals
- Contact details for staff to whom grievances should be raised
- Response times for grievances categorised according to the severity of the grievance or the issue in question
- A process for logging grievances and when and how they are closed out
- A process for monitoring grievances to identify repeat or unresolved grievances and reporting these issues to senior management in order to expedite remedial action.

The grievance mechanism will be explained to all contractor staff on appointment and a notice (summarising the approach and providing contact details for staff to which grievances should be raised) will be posted at appropriate places at the work site and accommodation areas. Grievance boxes will be placed such that anonymous grievances can be raised via discreet submission of grievance forms, for example in toilet blocks.

The grievance mechanism will be explained to all Project operational staff at recruitment.

3.8 Community Grievance Mechanism

Having a grievance mechanism is a national and international requirement the Project needs to comply with. A grievance can be defined as an actual or perceived problem that might give grounds for complaint. As a general policy, the Project will work proactively towards preventing grievances through the implementation of impact mitigation measures (as identified by this ESMMP) and community engagement.

Anyone will be able to submit a grievance to the Project if they believe a practice is having a detrimental impact on the community, the environment, or on the quality of life. The grievance mechanism allows also submitting comments and suggestions. A good grievance mechanism permits anonymous complaints, respects the confidentiality of the complainant(s) involved, and protects both the complainant and the Project from retaliation.

The Project grievance mechanism will be based on the following principles:

- Being legitimate,
- Easily accessible
- Predictable
- Equitable and transparent
- Rights compatible
- Dialogue based.

The grievance mechanism can help identify critical issues, encourages learning and identifying ways for continuous improvement.

The Project needs to allocate dedicated human resources (CLO) to deal and address any communities' grievances associated with the Project.

The Project SEP (refer to Section 3.10) will outline and advertise the community grievance procedure and contact details of the Project CLO.

The Project SEP will describe the grievance resolution procedure, and the main steps in handling grievances (receive and record, categories, acknowledge, investigate, respond, allow for recourse/appeal and follow-up, and close out).

All grievances will be acknowledged within 7 days and response will be issued within 15 days. If more time is needed to complete the investigation this will be communicated to complainant within 15 days of receiving complaint. All grievances will be logged, monitored and the Project CLO will report to the Company and International Lenders on all grievances associated with the Project:

- Monthly grievance reporting to the Company at the Project planning phase
- Weekly grievance reporting to the Company during the Project development phase
- Biannual grievance reporting to the Company during the operation phase, and
- Annually to inform Annual E&S Report to the International Lenders (for the duration of the Loan Agreement).

3.9 Workers' Accommodation Plan Framework

3.9.1 Background

The Workers' Accommodation Plans will be developed on the basis of Uzbek regulations and taking into account the requirements of the guidance note "Worker's Accommodation: Processes and Standards" developed jointly by IFC and EBRD, referencing to the best practice in managing workers accommodation. The Plans will be included into the management system and implemented by the EPC Contractor at each site during the construction phase and by the Company for the staff accommodation camp during the operation phase.

3.9.2 Objectives

The overarching goal of the four Plans will be to ensure that workers' accommodation complies with the best practice.

Specific objectives of the plan include ensuring that workers' accommodation is:

- Provided free of charge to workers
- Provides adequate living space for each worker
- Provides sanitary, laundry and cooking facilities
- Provides potable water
- Has adequate health, fire safety measures including ambulance and medical facilities
- Has adequate heating and ventilation
- Non-restrictive to workers' freedom of movement to and from the accommodation.

3.9.3 Approach and Activities

A Workers' Accommodation Plan will be developed and followed for all new construction and operation accommodation facilities prior to them being inhabited. These Plans will address the following:

- Assessment of the need for workers' accommodation (how many workers will come from outside the area and the capacity needs of the accommodation and availability of existing housing)
- Assessment of impacts of workers' accommodation on communities including:
 - Specific impacts during the construction and operation phases
 - Community infrastructure
 - Community services and facilities
 - Local businesses and local employment
 - Community health and safety
 - Community cohesion
 - Land acquisition and resettlement
 - Dismantling and reinstatement
- Demonstrating how national and international best practice standards for workers' accommodation will be met in relation to:
 - General living facilities
 - Room/dormitory facilities
 - Sanitary and toilet facilities
 - Canteen, cooking and laundry facilities
 - Standards for nutrition and food safety
 - Medical facilities
 - Leisure, social and telecommunication facilities
- Description of the management and monitoring approach, structure, roles and responsibilities of the accommodation area in relation to:
 - Management and staff structure
 - Charging fees for accommodation and services
 - Health and safety on site
 - Workers' rights, rules and regulations

- Consultation and grievance mechanisms
- Management of community relations.

3.9.4 Staff and Resources

The EPC Contractor and the Company will be required to appoint or assign duties to an Accommodation Manager at each site to implement the Workers' Accommodation Plan and make sure that the accommodation is well maintained.

The Company's (Project OHS Manager or support staff) will audit the accommodation facilities and workers' grievance log in relation to these areas on a monthly basis and will implement corrective actions where non-compliance with the Plan is identified. Monitoring reports will feed into the overall reporting schedule for the Project as explained in Chapter 5. Workers will be able to submit complaints directly to the Company at any time through the workers' grievance mechanism although a first step of addressing the complaint to their own employer will be promoted.

3.10 Stakeholder Engagement Plan

The purpose of the SEP is to manage stakeholder engagement activities for the lifetime of the Project.

SEP needs to be reviewed periodically during Project implementation and updated as necessary prior to the Project major phases, any new or changed operations, modifications in the Project design or if new stakeholders are identified.

The Project SEP will identify and provide details on applicable national and international requirements with regard to Project consultations, information disclosure and Project grievance resolution (refer to Section 3.8).

The Project SEP will undertake identification and analysis of stakeholders and assign communication and enjoyment methods for each group of key Project stakeholders. The Project stakeholder engagement programme will be drafted and included in the SEP to:

- Disclose appropriate information about the Project
- Providing relevant stakeholders with the opportunity to voice their opinions, preferences and grievances

The stakeholder engagement programme will describe engagement activities, propose timing and assign responsibilities for their implementation. The overall responsibility for the SEP implementation, updates and SEP reporting will be with the appointed Community Liaison Officer (CLO),

The SEP will be reviewed by the CLO throughout the Project planning phase as deemed necessary or at least once, before and after the Project construction phase and annually once the Project is operational. Additional updates influenced by the Project development may be required, for instance due to Phase II land acquisitions process.

3.11 Retrenchment Plan

Retrenchment of staff may be an issue on the Project, especially at the end of the operational phase where roles may become redundant. Prior to implementing any collective dismissals, the Company will carry out an analysis of alternatives to retrenchment and consider the possibility of internal transfer or other options first. If the analysis does not identify viable alternatives to retrenchment, a retrenchment plan will be developed and implemented to reduce the adverse impacts of retrenchment on workers. The Retrenchment Plan will be developed at least 18 months prior to the Project decommissioning to mitigate adverse impact of the Project workers.

The Plan will be based on the principle of non-discrimination and will reflect consultation with workers, their organisations (e.g., worker's unions), and, where appropriate, the employment authorities, social welfare

authorities, and where relevant, local government, and comply with the Company's collective bargaining agreement.

The retrenchment plan will consist of several components, namely:

- Consideration of alternatives to retrenchment
- Legislative framework and collective bargaining agreement
- Information disclosure and consultation undertaken with employees and their organisations
- Grievance mechanism
- Retrenchment methods and procedures
- Selection criteria
- Number and schedule of dismissals, if unavoidable
- Notice periods
- Severance payments methodology and record of payments made
- Offers of alternative employment or assistance in retraining efforts
- Job placements.

The Company's retrenchment procedure for the Project workers will also be included in the Project HR Policy (refer to Section 3.4).

3.12 Project Resettlement Policy Framework (RPF)

The RPF establishes the policy principles and guidelines for managing land acquisition and resettlement impacts in alignment with the reference framework.

The objective of the RPF is to guide the development of livelihood restoration and/or resettlement plans that enable land acquisition and resettlement activities for all economically and physically displaced people in a socially sustainable and consistent manner.

The RPF guiding principles will be used by the Project to:

- Minimised or avoided where possible any involuntary resettlement so that land acquisition minimises adverse impacts on cotton farmers, local communities and other land users and businesses. If acquisition of land use rights is unavoidable, effective management measures will be identified to minimise adverse impacts
- Avoid forced evictions
- Carefully deal with affected people without clear land titles so that the Project will not hinder their eligibility for resettlement and livelihood restoration support. Resettlement affected people without clear land titles can have access to entitlements for resettlement assistance and compensation for the loss of non-land assets and land
- Consult displaced persons, including untitled land users
- Negotiate settlements with the displaced persons (willing buyer/willing seller or willing leaser/willing lessee)
- Sustainably manage resettlement mitigation measures. Access to social services (schooling, health, employment, training, etc), social networks, transportation routes, and basic sanitation services (water, electricity, plumbing) will be taken into account when defining relocation sites, with the goal of minimizing changes and impacts on these aspects as much as possible. Particular attention will be given to the most vulnerable displaced persons
- Arrange compensation measures such as assistance required for relocation or livelihood restoration before displacement or restriction to access are in place

- Identify compensation levels that are sufficient to replace the assets at full replacement cost in local markets (using current market prices)
- Design livelihood restoration activities with the involvement of local communities to restore the livelihoods of economically displaced people in a long-term and sustainable way
- Monitor adherence to land agreements and undertake resettlement plans
- Prepare evaluation close out reports.

3.13 Livelihood Restoration Plan (LRP)

A Livelihood Restoration Plan will be developed by the Company to provide guidance on the economic displacement mitigation in compliance with the applicable international requirements. The LRP is based on compensation for losses at full replacement cost and mitigating seasonal jobs cut, if any, resulted from ceased farming operations.

The LRP includes:

- Description of the socio-economic baseline
- An introduction to the Project and regulatory framework
- A description of the Project activities that create economic displacement impacts and actions to minimise displacement
- Asset inventory and valuation
- A detailed description of compensation and other resettlement assistance including entitlement to participation in alternative livelihoods development activities
- Results of consultations with displaced people (landowners and land users) about acceptable alternatives
- A description of institutional responsibility for implementation and procedures for grievance redress
- Arrangements for implementation and monitoring
- A timetable and budget detailing all costs, including compensation, administrative costs and monitoring fees.

Livelihood restoration measures will focus on sustaining solutions that provide meaningful compensation for loss of access to the livelihood provisions, including capacity-building, alternative income generation, trainings or knowledge sharing. The study areas are:

- Commitment and implementation of appropriate strategies to maximize opportunities for local communities
- Provision of upskilling training and other support programmes for local people and businesses
- Ensuring that local communities benefit from activities like the upgrading of roads, public services and community facilities
- Training for community women in different agricultural production techniques and scouting.
- Financial management capacity building to support small business activities and manage cash compensation.

Based on IFC PS5 and EBRD PR5, those affected by involuntary resettlement are entitled to compensation at replacement cost³ for lost assets. Replacement cost means that the affected person can replace the affected asset to the same condition. Full replacement cost typically reflects market value (when a property market exists) without deduction of transaction costs, transfer or retitling fees, or depreciation and salvageable materials. The Project Company will use full replacement cost as a basis for identifying fair and transparent negotiated settlements for permanent and temporary land acquisition.

³ The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any.

3.14 Security Management Plan

3.14.1 Construction Phase of the Project

A Security Management Plan, and supplementary documentation such as a security workers' code of conduct and use of force policy, will be prepared for each construction site of the Project in compliance with the applicable international requirements. In the same time, by national requirements, construction site security measures should be envisaged by design documentation package (see 3.23.2) and implemented by the EPC Contractor or by the Project owner.

3.14.2 Operational Phase of the Project

The Company will develop a package of security management documentation in line with national regulations and international standards including:

- Operational security management plans
- Job description of security personnel which establishes their rights and responsibilities
- Safety data sheets for security personnel defines personal safety and security measures
- Entrance and exit rules will be envisaged in Access Control Procedure
- Guidelines for different types of security incidents
- Use of force policy
- Security workers' code of conduct

Roles and responsibilities of security personnel during emergency situations will be ensured by the Emergency Preparedness and Response Plan.

3.15 Training and Mentoring Policy

The Project will adopt at a corporate level a Training and Mentoring Policy to sustain skills and knowledge transfer for the Project and secure skilled human resources for the lifetime of the Project.

The Training and Mentoring Policy will identify types of training and programmes that will be accessible to all employees in the Company. Such programmes may include:

- On-the-job training and apprenticeship - when a seasoned employee teaches a relatively inexperienced worker how to perform job functions. This is usually skill-based training that involves learning processes or procedures for technical positions or jobs that require knowledge and expertise.
- Job shadowing – involves two similarly experienced workers with an interest in each other's function area of expertise.
- Mentoring – sometimes the best learning opportunities happen in human interactions. Mentoring program improves employee retention and job performance, etc.

The Training and Mentoring Policy will also reference the Company's Training Centre to be established by the Project for operators to secure a pool of skilled workers to operate Project facilities for the lifetime of the Project.

3.16 Environmental Action Plan

3.16.1 Annual Environmental Action Plan

Annual Environmental Action Plan required by the law and is focussed on planning and budgeting of routine environmental actions including the following aspects:

- Environmental management

- Environmental monitoring
- Waste handling
- Air and water pollution control
- Land use, etc.

Annual Environmental Action Plan establishes list and volume of mitigation measures required by law, estimated timeframe, responsibilities and expected budget.

It is recommended to implement in this plan all environmental actions which are not directly required by national law but focused on environmental mitigation. This will ensure adequate and timely budgeting and funding of all required environmental measures including mitigation of gaps and risks identified within the future Environmental Management System.

3.16.2 Construction Environmental Action Plan (CEAP)

3.16.2.1 Background

Development of the list of environmental mitigation measures for construction phase (CEAP) of any project is required by national law as a part of design documentation package and it is focussed to avoid, mitigate and minimise environmental impacts associated with construction activities.

Content of the Construction Environmental Management Plan required by the IFC EHS Guidelines is largely covered by national requirements on development of CEAP. As IFC EHS Guidelines establish the priority of legal compliance, there is no need for issuing Construction Environmental Management Plan as a separate document.

Designer should incorporate mitigation measures developed in line with EBRD and IFC requirements and provided in the ESMMP into CEAP as part of the design documentation ("Environmental Measures" section of design documentation, Construction Master Plan, Method Statement, etc.).

3.16.2.2 CEAP Implementation Monitoring by EPC Contractor

The EPC Contractor will be responsible for the implementation of the CEAP plans and associated activities, and also for monitoring and assessing how environmental and social management is undertaken. This monitoring will include the activities undertaken by their sub-contractors. Routine monitoring will be undertaken in order to ensure that the requirements and measures specified in the CEAP are properly implemented and that the impacts are minimised or mitigated.

The monitoring will be conducted by the EPC Contractor's EHS personnel who will prepare and maintain reports of their inspections and ensure that corrective actions are taken when necessary and to track performance.

3.16.2.3 Monitoring and Auditing of the Implementation of CEAP

The EPC Contractor are obliged to implement all reasonable measures with regards to noise and vibration, soil erosion, air quality, waste, hazardous materials, wastewater discharges, and contaminated land.

The Company will monitor CEAP compliance assessment at each construction site, and a system of non-conformance assessment will be put in place to prioritise action according to importance and severity.

The non-conformance procedure includes three levels:

- Work must be stopped in the event of a serious non-compliance situation
- Work can be continued provided that non-compliance is removed under supervision of the Company
- Investigation is required to identify the cause and prevent reoccurrence.

Periodic auditing will also take place, two months after construction has commenced and at least six-monthly audit after that, to verify conformance and that the proper procedures are in place.

Together, the above activities will allow evaluation of implemented measures, analysis of causes of problems, assessment of compliance with contractual and legal requirements, and enable identification of required corrective actions.

3.16.2.4 Staff and Resources

As indicated above, the preparation, approval, implementation, and monitoring of the various activities will require specialist environmental staff both from the Company, the EPC Contractor and sub-contractors.

Dedicated equipment or engagement of laboratory services may be required to undertake the monitoring of the various parameters.

Construction contract agreements should include the following provisions:

- implementation of CEAP and all EHS measures specified in the design documents, CMPs, and required by law
- hiring qualified EHS personnel to work at the Project site
- supervision by the Company.

The Company will appoint a dedicated EHS Managers (one Environmentalist and one Safety Specialist) for the Project who will be a permanent member of the Company staff for routine works and monitoring the EPC Contractor and sub-contractors' activities.

3.16.2.5 Budget

The cost of implementation of environmental, occupational health and safety measures by the contractor is part of the overall Project cost and should be clarified at the design stage.

3.17 Environmental Monitoring Plan

Environmental Monitoring Plan will be required in line with national rules and will be developed for construction and operational stages of the Project:

- Construction Environmental Monitoring Plan will be developed during the design stage as a part of the Construction Master Plan or the Method Statement. This Plan will include monitoring measures on waste generation, disposal and reuse, air emissions, generation and discharge of surface wastewater, air emissions, soil handling, and noise generation.
- Annual Environmental Monitoring Plan will be developed based on the final Project options after Project commissioning and will include monitoring measures for air emission, water consumption and wastewater discharge, waste generation, soil quality etc. Limits of impacts are to be approved by the local environmental authority (Air Emission Permit, Sanitary Protection Zone Permit, Waste Generation and Disposal Limits, Wastewater Discharge Permit, etc.).

3.18 Waste Generation and Handling Plan

Waste Generation and Handling Plan and Limits on Waste Disposal will be developed at the design stage for construction phase, and by results of the Project design for the operation phase and approved by the local environmental authorities. Waste Generation and Handling Plan for construction phase of the Project will be developed as part of the Construction Master Plan or Method of Statement.

This plan establishes limits (volumes) on generation of different types of wastes including hazardous wastes, processes generating different types of wastes, ways of safety collection and keeping, disposal options (reuse, recycling, deactivation, disposal at the landfill), and monitoring measures.

Waste Generation and Handling Plan and Limits on Waste Disposal should be revised and reapproved by the local environmental authority during the Project operation in case of increase of waste volume, change of production processes, and generation of wastes not included in the latest revision of the document.

3.18.1 Highlights to Development of Waste Generation and Handling Plan

- Identify who is responsible for overall waste management for the Project and inform individuals of their responsibilities. They will be required to hold sufficient authority to ensure compliance
- Identify the types and quantities of waste - all waste streams that will be produced require to be identified
- Duty of Care - outline waste management procedures and records required to demonstrate appropriate handling and final disposal of all wastes
- Identify suitable waste management sites (the most local sites should be used to minimise transportation costs). Use waste disposal contractor(s) that comply with the environmental legislative requirements of the local and national area
- Training - all staff must be trained to ensure they understand the requirements
- Plan - using the steps above, establish indicative percentages of the waste quantities to be produced over the life span of the Project
- Measure - the quantities of wastes produced should be recorded on a monthly basis, and where possible measures taken to re-use, reduce or recycle waste as appropriate; and
- Monitor - throughout the Project life cycle, waste management on site should be monitored, to ensure compliance
- Hazardous Classes – hazardous wastes should be classified according to national requirements
- Identify waste management options - a waste hierarchy of reduce, reuse, and recycle and needs to be considered and prepared. Where hazardous wastes are being generated, particular attention to the arrangements for identifying and managing such waste will need to be addressed and procedures put in place.

3.19 Oil Spill Liquidation Plan

Oil Spill Liquidation Plan will be required as the Company will deal with volumes of hazardous organic chemicals and fuel. As soon as Oil Spill Liquidation Plan required by Uzbekistan law and content of this document is strictly limited by state instructions, Oil Spill Liquidation Plan should be developed in line with national rules.

This plan should include at least the following information:

- Number of vessels, their volume and location, vessels content and labelling
- Bunding and leaks protection measures
- Leaks liquidation measures (step by step)
- List of leaks liquidation equipment
- Safety rules
- Disposal of wastes
- First aid measures.

Oil Spill Liquidation Plan including handling of contaminated soils and waters for construction phase will be prepared separately as part of the Construction Master Plan or Method of Statement at the design stage.

3.20 Housekeeping Plan

Housekeeping Plan to be developed for each site of the Company and establishes routine works on housekeeping, cleaning, maintenance of buildings and facilities etc.

3.21 Biodiversity Action Plan

This plan should be focused on development and support of the safe environment for the rare species hosted by the nearby located habitats (watered depression) including the following:

- Fencing / designating of these habitats
- Prohibition of visits and hunting / catching of animals
- Design recommendations (roads, lighting, noise, waste collection, spills and leaks)
- Monitoring and Reporting, etc.

3.22 Alien Invasive Species Plan

Alien Invasive Species Plan is required because the Company will trade with another territories of Uzbekistan and foreign companies and use international rail transportation services.

The Company should implement strict control measures to protect local habitats from invasive species of plants and animals.

3.23 Occupational Health and Safety

3.23.1 Annual Occupational Health and Safety Plan

Planning of occupational health and safety works is envisaged by national legislation and consist of a number of measures focused on prevention and minimisation of health and safety risks at work. National requirements on development of annual (quarterly) Occupational Health and Safety Plan establishes form of this plan and development guidelines.

Indicative content of the Annual (Quarterly) Occupational Health and Safety Plan:

- Occupational health and safety trainings and attestation
- Emergency aid trainings
- Provision of safe working environment
- Check-ups of equipment and buildings
- Improvement of working environment and equipment
- Automatization of processes
- Renovation of equipment and buildings
- Cleaning
- Provision of personal protection equipment
- Provision of rest and dining rooms
- Provision of showers, toilets
- Provision of cloak-rooms with separate lockers for working and private cloth
- Medical check-ups
- Provision of special medical treatment
- Provision of meals and drinks
- Provision of soap, detergents and cream for some professions

- Provision of first-aid kits, etc.

Considering well developed national health and safety requirements which are quite similar to the EBRD and IFC requirements, to exclude excessive work and duplication of documentation it is recommended to use form and content of Occupational Health and Safety Plan provisioned by national regulation.

3.23.2 Construction Occupational Health and Safety Plan

The EPC Contractor and sub-contractors are obliged to implement all reasonable precautions to protect the health and safety of workers. Various aspects which should as a minimum be take into consideration include: the integrity of workplace structures, severe weather and facility shutdown, workspace and exit, fire precautions, lavatories and showers, potable water supply, clean eating area, lighting, safe access, first aid, disease prevention, communication and training, over exertion, slips and falls, work at heights, struck by objects, moving machinery, dust, confined spaces and excavations, protective equipment, etc. All these aspects should be well developed and envisaged by the Construction Master Plan or Method of Statement.

The EPC Contractor and sub-contractors are obliged to manage the risks and protect the community from physical, chemical, or other hazards associated with construction sites, hazards associated with the increased traffic, communicable and vector-borne diseases associated with the population of workers. Mitigation measures should be envisaged by the Construction Master Plan or Method of Statement as well.

3.24 Emergency Preparedness and Response Plan

In accordance with industrial safety regulations of the Republic of Uzbekistan, as well as other safety requirements for explosive and inflammable production sites, the Company have to develop and implement the Emergency Preparedness and Response Plan for the Project site, as well as special workplace safety instructions relating to specific occupational hazards.

The Emergency Preparedness and Response Plan includes the following information:

- Overview of operational processes and risk assessment for the operational site
- List of process and area specific hazards
- Actions in case of threat or actual occurrence of accidents, and emergency situations including:
 - procedures in case of threat of major operational accidents, emergency situations and natural disasters
 - procedures to support functioning of the forces and means engaged for emergency response and rescue operations, and to protect production process and facilities, workforce and personnel, and property
 - emergency rescue operations to prevent immediate risks to human life and health, and to restore production process; means and forces engaged for the task
 - liaison with local authorities, emergency panels, civil society organizations for engagement of emergency response forces and means
 - management of the operations.

3.25 Framework Chance Finds Procedure

The Chance Finds Procedure should be implemented to ensure safety of the hidden physical cultural resources during the excavation and construction works. “Chance finds” are defined for the purposes of this procedure as physical cultural resources encountered unexpectedly during project implementation.

“Physical Cultural Resources” are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, palaeontological, historical, architectural, religious, aesthetic, or other cultural significance. Their cultural interest may be at the local, provincial, national or international level.

3.25.1 Ownership

Any chance finds that may be discovered are property of the Republic of Uzbekistan.

3.25.2 Training

So that the contractors and construction workers such as equipment operators and supervisors on the Project can identify physical cultural resources, training will need to be given. Prior to commencement of works contractors (in collaboration with the Company) will consult with the authorities mentioned above in order to arrange training for its employees. The Company will monitor this process to ensure that effective training is given to the correct members of the workforce.

3.26 Hazardous Materials Handling and Storage Manual

The overall objective of Hazardous Materials Handling and Storage Plan is to ensure that all hazardous materials stored during the construction and operational phase of the Project are managed appropriately in order to prevent potential impacts associated with spills, leaks, fugitive emissions and health impacts to workers.

Development of a Hazardous Materials Handling and Storage Manual for the construction and operation phase will improve management efficiency by providing a structured summary of the available information on the hazardous materials and their handling requirements.

The following key steps will need to be considered for the Hazardous Materials Handling and Storage Plan:

- Identify who is responsible for overall hazardous materials for the Project and inform individuals of their responsibilities
- Identify the types and quantities of hazardous materials to be stored during the construction and operational phases
- Identify suitable hazardous waste storage sites
- Ensure that the storage sites have the appropriate mitigations such as bunds
- Training - all staff must be trained to ensure they understand the requirements of the Plan
- Hazardous materials should be stored according to national requirements
- Provide safety data sheets, emergency actions and emergency aid arrangements.

The cost of implementation of the Hazardous Materials Management and Use Manual at the construction phase is part of the Project cost and subject to updating at the stage of design development.

3.27 Traffic Management Plan Framework

Adverse impact of vehicles on road traffic and local communities is not expected for this Project but if applicable, it is recommended to develop Traffic Management Plan or Manual for heads of transportation units. In addition, this plan will help to safety engineers in development of occupational safety instructions for drivers. This plan should content at least the following mitigation measures to minimise impacts on traffic and pedestrians:

- Delivery of materials, chemicals, vehicles to / from sites should be conducted out of peak hours
- Parking of vehicles along roads, within borders of settlements and on unpaved soils (roadsides) is prohibited
- Sharp parts of vehicles moving outside construction / Project site should be removed or switched in a safe position
- Delivery routes should be planned away from settlements
- Mandatory adherence to speed limits at all times.

4 Institutional Arrangements and Implementation

4.1 Construction Project Structure

Proposed management structure for the Project construction phase is shown Table 4.1 based on the existing the Company organisation structure and ESIA findings.

4.1.1 Construction Environmental, Health and Safety Management

4.1.1.1 The Company Management Structure

The Company will recruit sufficient number of staff members of required qualifications who can easily deal with Project aspects and cover all environmental, health, safety, labour and social responsibilities and commitments of the Project under the loan agreement.

The Company will appoint permanent staff member(s) in its relevant departments to act as Environmental, Health and Safety Manager(s)/Officers who will deal with EHS aspects of the Project including monitoring visits to the multiple construction sites and compulsory Project reporting. If necessary, the Company will provide workplace(s) for Environmental, Health and Safety Manager(s)/Officers, Social and Labour Officers (at least two) at the construction sites.

4.1.1.2 Contractor Environmental, Health, Safety and Social Management

The EPC Contractor and sub-contractors will be encouraged to have management systems (Environmental Management System, Occupational Health and Safety Management System) equivalent to standards ISO 14001 and OHSAS 18001. These standards place strong emphasis on the need for continuous improvement of the management systems and resultant performance.

The appointed EPC Contractor and sub-contractors will be required to perform the following actions:

- Implement environmental, health and safety measures specified in CMP, and design documents, the framework for which is set out in Section 3.2.
- Where necessary, elaborate their own plans, the framework for these is set out in Sections 3.3 -3.19
- Provide all training necessary to oversee and implement the requirements of CMP, and design document
- Appoint two full-time engineers per each site with dedicated EHS responsibilities to oversee works on site.

All sub-contractors will be required to have dedicated environmental, health, safety, labour and social staff to implement plans and procedures, to monitor and manage this on an on-going basis. The sub-contractors' staff will be required to liaise closely with the contractor staff including the provision of monthly reports and participation in weekly construction review meetings, etc.

Table 4.1: Proposed Staffing

Role	Number	Responsibility
EPC Contractor Project Manager	1	Overall responsibility for environmental, health and safety performance of Project contracted works, including sub-contractor(s).
Construction Site Manager	1	Responsible for practical implementation of environmental, health and safety requirements at site and for onsite performance
Environmental, Health and Safety Manager(s)	1	Monitoring and reporting of project environmental, health and safety performance
EPC Contractor Environmental Officer	1*	Management and monitoring of plans implementation and environmental issues and performance

Role	Number	Responsibility
EPC Contractor Community Liaison Officer	1	Community liaison on behalf of contractor. Close cooperation with the Company's CLO.
EPC Contractor Health and Safety Officer	1	Management and monitoring of plans implementation, reporting.

* Number of officers may vary depending on the level of construction activity

4.1.1.3 Environmental, Health and Safety Manager

The EPC Contractor and sub-contractors will be required to nominate an officer(s) to take the primary responsibility for day-to-day environmental, health and safety activities. The formal job description to implement the requirements listed herein would be generally include the following:

- Take responsibility for implementation of environmental, health and safety measures (with support from the EPC Contractor Construction Site Manager), and ensure all sub-contractors are in compliance with the requirements listed herein
- Review and report the contractor's performance to the Company
- Review sub-contractors' environmental, health and safety activities
- Report any non-compliances to the Construction Site Manager
- Carry out regular awareness sessions and assist personnel in applying standards on site
- Act as the contractor's first point of contact on environmental, health and safety matters, for the government authorities, other external bodies and the general public.

There are certain criteria that the contractor Environmental, Health and Safety Manager will be required to have knowledge and experience in, including:

- An understanding of the international standard techniques of environmental management
- Familiarity with local environmental and labour legislation
- Practical operation of environmental monitoring techniques
- Ability to summarise environmental data in order to produce concise and conclusive reports
- Hold the confidence to enforce strict, but pragmatic, environmental control procedures and to motivate the construction staff to a high level of environmental awareness; and
- Minimum of five years practical experience on construction sites.

4.1.1.4 Construction Site Manager

The Construction Site Manager will need to work to co-ordinate efforts based on inputs from the Environmental, Health and Safety Manager(s) and assist in the allocation of staff.

It is envisaged that the Construction Site Manager will:

- Ensure that the Environmental, Health and Safety Manager is adequately qualified to understand and implement the requirements listed in this document
- Nominate personnel to assist the Environmental, Health and Safety Manager as required; and
- Be responsible for communications with the Company with regard to environmental, health and safety issues and non-compliances.

5 Monitoring and Reporting Requirements

5.1 Introduction

Effective reporting is essential for rendering an ESMMP of practical value, while routine independent auditing provides the necessary impetus for continual improvement. Performance monitoring, reporting and auditing should be carried out to ensure compliance with the requirements of this ESIA. The following provides an outline approach which is aligned to the requirements of the series of international management standards ISO 14001, ISO 9001 and ISO 45001. The final scope and format of all reports proposed herein will be agreed with the EBRD prior to them being required and produced.

5.2 Adaptive Management

The ESMMP and plans contained herein will adopt an adaptive management approach throughout the life cycle of the Project. The creation of the plans at the Project outset is a process needed to ensure that the management objectives and performance indicators tailored to the current Project investment programme and objectives of the project. The ESMMP utilises to the extent possible existing Project knowledge to fully address the actual environmental and social impacts of the Project at the time and allow flexibility in environmental and social management decisions made on the Project.

The following actions are required to ensure adaptive management of the ESMMP:

- The ESMMP should be reviewed and amended in accordance with the Project design and status as it evolves. Information about any changes to the Project which might influence its environmental and social performance should be regularly reviewed and appropriate changes should be made to the records and corrective measures, and site visits should be undertaken by the Company staff to identify the true impacts of the changes.
- On-going evaluation of the effectiveness of measures included in the ESMMP should be undertaken on a regular basis as the project evolves through construction, operation and decommissioning of the project. The evaluation is conducted through on-going communication with the EPC Contractor and sub-contractors, stakeholders and lenders and is supplemented by site audit and monitoring data review to rectify any weaknesses in management systems and ESMMP through the Project lifetime.

5.3 Monitoring and Reporting by the Company and Others

5.3.1 Contractors' Monthly Internal Reports

The EPC Contractor and sub-contractors will be required to prepare brief monthly reports for issue to the Company EHS Manager. These reports should summarise the following:

- Progress in implementing CMP and parallel management plans
- Findings of the monitoring programmes, with emphasis on any breaches of the control standard or standards of general site management
- Outstanding Non-Compliance Reports
- Summary of any complaints by external bodies and actions taken/to be taken
- Relevant changes or possible changes in legislation.

Any breaches of legal requirements and/or this ESIA should be reported to the Company, using a form of Non-Compliance Report.

5.3.2 The Company Monitoring of Construction Activities

The Company will undertake, on a daily basis, compliance monitoring of the EPC Contractor and sub-contractors' environmental and social activities as per ESMMP. Internal audits will be undertaken within two months of commencement of construction and thereafter every three months focussing on the progress of ESMMP implementation.

Any breaches of the acceptable standards specified by law or ESMMP through the Company monitoring of the EPC Contractor and sub-contractors will be reported to the contractor, using a Non-Compliance Report Form.

A copy of each completed Non-Compliance Report (whether prepared by contractor or the Company) should be held on file by the EHS Officer, to be replaced by copy of corrective action response when it is received. A record of corrective actions should also be made and tracked to their completion.

During the construction phase, the Company will undertake quarterly reporting, based on their own monitoring results as a project requirement.

5.3.3 Monitoring of Operational Activities

Environmental and social impacts that will occur during the operation phase will be managed and monitored through the commitments outlined in this ESMMP. The Company EHS Officer will prepare annual reports for issue to the Lenders Environmental and Social Consultant or EBRD summarizing progress against implementation of the ESMMP obligations through the operational phase. This will include full reporting of monitoring results where relevant.

Adherence to the Occupational Health and Safety Action Plans will be taken seriously and audited frequently. A warning system for violations and non-compliance will be established and implemented for the monitoring system to be effective.

Regular performance monitoring of the project grievance mechanism and stakeholder engagement will take place.

5.3.4 Statutory Reports

Adhering to the external reporting requirements as set out in Uzbek Law is important. A register of all necessary external stakeholder reporting requirements under Uzbek Legislation and for regulatory compliance purposes should be developed and form part of the action plans. The frequency of reporting, the required reporting format and the persons (divisions) responsible for producing the report, as well as details of contractors engaged (in case of outsourced functions) is to be noted in the register.

The Company will ensure that all the necessary reports are produced and submitted in a timely fashion in order to achieve on-going regulatory compliance throughout the life of the Project. Meeting regulatory reporting requirements is to also form part of the scope for any internal audits and management reviews.

