SHURTAN GAS CHEMICAL COMPLEX UPGRADE PROJECT

FRAMEWORK ESMMP

Prepared by:

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Date:

August 2022



Project №: 2022-147

Assignment: Independent Environmental and Social Consultant for the Shurtan

GCC Upgrade Project

Version: 3

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Issue	Description and status	Date	Reviewer initials	Author(s) initials
A	Draft Framework ESMMP for internal review	02.08.2022	ОТ	SG, PS, MP, EM, AS, KL, AR, NN, OT
1	Draft Framework ESMMP issued to the Client	03.08.2022	IS	SG, PS, MP, EM, AS, KL, AR, NN, OT
2	Draft Framework ESMMP (next revision) issued to the Client	07.10.2022	IS	SG, PS, MP, EM, AS, KL, AR, NN, OT
3	Framework ESMMP issued to the Client	11.10.2022	IS	SG, PS, MP, EM, AS, KL, AR, NN, OT



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ACRONYMS AND ABBREVIATIONS

ACs Affected communities

CMP Construction Management Plan

CEO Chief Executive Officer

DMP Decommissioning Management Plan

E&S Environmental and social

EBRD European Bank for Reconstruction and Development

EIA Environmental Impact Assessment

EMS Environmental Management System

ESHS Environmental, social, health and safety

ESIA Environmental and Social Impact Assessment

ESMMP Environmental and Social Management and Monitoring Plan

GHG Greenhouse Gases

GIIP Good International Industry Practice

GTL Gas to Liquids

HSE Health, safety and environment

HSES Health and safety, environmental and social IESC Independent Environmental and Social Consultant

IFC International Finance Corporation
IFIS International Financial Institutions
IMS Integrated Management System

JSC Joint Stock Company

KPIs Key performance indicators
OHS Occupational Health and Safety
OMP Operation Management Plan
SEP Stakeholder Engagement Plan
SGCC Shurtan Gas Chemical Complex

SGCCUP Shurtan Gas Chemical Complex Upgrade Project

UNG Uzbekneftegaz, Joint Stock Company

VOCs Volatile organic compounds



1. INTRODUCTION

1.1 Background

Shurtan Gas Chemical Complex, Limited Liability Company (the Company), 100% owned by Uzbekneftegaz, Joint Stock Company (UNG), operates the existing gas chemical complex in Uzbekistan and has plans to upgrade the existing facility. Financing of the upgrade investments will be provided by international lenders.

The Company has appointed ENTER Engineering PTE Ltd. to act as an engineering, procurement, construction contractor (the EPC Contractor) for the upgrade and expansion of the Shurtan Gas Chemical Complex (SGCC).

Environ Consult CIS has been appointed by the Company to take a role of an Independent Environmental and Social Consultant of the Company (the Consultant or IESC). The Consultant's scope of work includes gap analysis review of the available project documentation, including Environmental and Social Impact Assessment (ESIA) study completed for the SGCC Upgrade Project (SGCCUP) in 2018, and updating the overarching Framework Environmental and Social Management Plan (ESMMP), i.e., this document.

1.2 Project Overview

The SGCC is an existing facility located in the Guzar district of the Kashkadarya region in Uzbekistan. The SGCC is operated since 2001. The SGCC utilises natural gas from the Shurtan Gas field, to separate ethane and produce ethylene. The ethylene is converted into linear low-density polyethylene, as the primary product. The existing facilities are now over 20 years old.

The SGCC will be upgraded to increase the overall production of polyethylene (PE) and introduce additional production of polypropylene. This will be achieved by using a feed of naptha from the nearby Gas to Liquids (GTL) plant and by increasing the ethane content in the natural gas feed to approximately 60%. The Ethylene / Propylene Plant will additionally produce a by-product – hydrogenated Py-Gas. These new facilities will be located in the western corner of the existing SGCC site within the existing site boundary of the SGCC site and surrounding area at the south and west of boundary.

As part of the SGCCUP external gas supply facilities, a booster compressor station located in the existing site of the Shurtan Head Facilities in the Guzar district (operated by the UNG Oil and Gas Production Division) will be modified. The modified booster compressor station will supply dry raw gas to the Project via a new 30km natural gas pipeline. The new gas pipeline will connect the SGCC and the Head Facilities from the north-west crossing the Nishon and Guzar districts of the Kashkadarya region. The natural gas booster compressor station and the new gas pipeline are considered to be associated facilities. The SGCCUP will also construct a new landfill for industrial and domestic waste to the south-west of the SGCC and the nearby the GTL plant. The landfill will be located in the Nishon district (Figure 1.1).



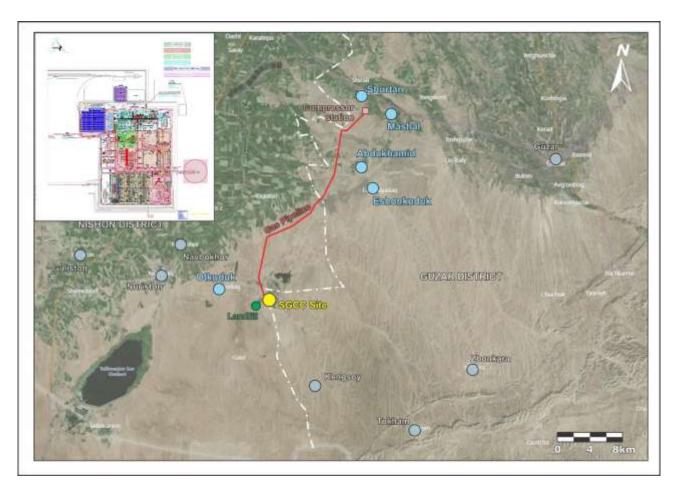


Figure 1.1: Project setting

The SGCCUP plot plan is also provided in Annex A for reference.

The Project upgrade works will be divided between the existing brownfield area of the SGCC and a greenfield location to the immediate east of the existing complex, within the existing site boundary of the SGCC site and surrounding area at the south and west of the site boundary.

1.3 ESMMP Purpose and Objectives

This document describes the framework to establish the ESMMP for the SGCC upgrade works, henceforth referred to as "the Project". This ESMMP aims to address the impacts identified in the ESIA (2018), Human Rights Impact Assessment and Climate Change Risk Assessment that supplemented the ESIA study to meet the national law and applicable international requirements as discussed in Chapter 2. The ESMMP is an overarching document outlining plans, and their scope, for managing these issues during construction, operation and decommissioning periods.

The ESMMP has three key objectives:

- Managing identified Project environmental and social (E&S) risks and impacts and ensure a
 consistent approach towards the identification, control, management and reduction of E&S risks
 and impacts associated with the construction, operation and decommissioning of the Project
 components and associated facilities,
- Ensuring compliance with the multilateral requirements and fulfilment of the SGCCUP commitments during the Project lifecycle,
- Creating an efficient mechanism of the environmental and social management while defining the areas for the development and implementation of other plans and procedures both by the Company, EPC Contractor, and all sub-contractors.

The ESMMP has the following targets:



• Clearly identify the key requirements and high-level measures for effective E&S management and create a mechanism to ensure their implementation,

- Provide a framework that identifies resources necessary for the implementation of mitigation measures.
- Define approaches to auditing, monitoring, and reporting to evaluate performance in implementing mitigation measures.

1.4 ESMMP Scope and Integration

The ESMMP is a part of the Company's Integrated Management Systems (IMS) and has been developed taking into account the requirements of the IMS Policies.

The ESMMP applies to the construction, operational and decommissioning phases of the Project and to all personnel employed on the Project in accordance with their tasks and responsibilities. The ESMMP implementation responsibilities are shared between the Company and EPC Contractor including all subcontractors. The Company and EPC Contractor will be required to develop standalone mitigation and monitoring policies and plans, implementing the requirements contained within this document as a minimum (as discussed in Section 3.3).

Environmental, social, health and safety (ESHS) requirements which apply to the Project, are discussed in Chapter 2 thereof.

The ESMMP sets out the approaches and mechanisms necessary to ensure effective risk management and to minimise adverse impacts of the Project lifecycle.

This ESMMP is a framework for the development of other activity-specific management plans and procedures of the Company and EPC Contractor (including all Project sub-contractors). Topics that will require further development and preparation of supplementary policies, plans and procedures (or updating the existing ones) are described for each phase in Chapters 3, 4 and 5.

For each Project phase, the ESMMP is structured to include:

- A description of the environmental and social management system phase, including organisational capacities and management structure,
- Role (place) of the ESMMP in the corporate system of plans and procedures, and a brief
 description of the sector-specific management plans and certain other plans and procedures
 included in the IMS,
- Implementation responsibilities,
- ESMMP monitoring and control processes and performance indicators,
- ESMMP reporting requirements,
- Training requirements for the Company and Contractors (EPC, servicing and decommissioning)
 raising E&S awareness and building E&S capacities for the implementation of the ESMMP and subplans.

1.5 Change Management

The ESMMP is a working document that is subject to adjustment and revision in several cases. Changes are to be made if replacements, modification, exclusion of any provisions or parts of the document are required or addition of new provisions is needed. Changes in the Project status or design solutions, necessity to adopt new procedures/actions (as a result of internal audits/inspections), as well as changes in laws and regulations could lead to revision of the ESMMP and activity-specific construction management plans (CMPs), operation management plans (OMPs) or decommissioning management plans (DMPs).

To ensure an adaptive management of the ESMMP and respective management sub-plans (CMPs, DMPs) during the construction and decommissioning phases the following actions will apply:

Reviewing and updating ESMMP/CMPs/DMPs in accordance with the Project status as it
progresses. The key information on any changes in the Project will be regularly reviewed, and the
Company's ESHS responsible persons will pay regular visits to the construction/ decommissioning
sites to monitor the actual impacts of the Project,



• During construction, the introduction of new facilities or changes at the existing facilities located within the Project area will be constantly monitored in order to inform the owners of these facilities in a timely manner about potential cumulative effects,

- The findings of monitoring and other studies and operational control may also require changes and amendments to be included into the ESMMP/CMPs/DMPs,
- Regular evaluation of the ESMMP/CMPs/DMPs performance in an ongoing engagement with the stakeholders and Lenders. The ESMMP/CMPs/DMPs will be updated/amended as appropriate to ensure reliable mitigation.

A detailed protocol for interaction of the Company's personnel in case it is necessary to introduce changes into the ESMMP and sub-plans, and other documentation describing labour and production processes that affect health and safety and natural and social environment will be regulated by the *Change Management Procedure* within the Company's IMS and the EPC Contractor's environmental management system (EMS) and occupational health and safety (OHS) management system.

Any changes in the Operation ESMMP and sub-plans will be managed by the Company via the IMS processes.



2. LEGAL AND REGULATORY FRAMEWORK

The ESMMP has been developed to comply with all national laws as well as good international industry practice (GIIP). The overarching reference laws and standards applied are:

- · Laws and regulations of the Republic of Uzbekistan,
- Standards and guidelines of the International Financial Institutions (IFIs), henceforth referred to as "the applicable international requirements":
 - The Equator Principles (EP) IV, 2020,
 - Common Approaches for Officially Supported Export Credits and Environmental and Social
 Due Diligence of the Organisation for Economic Cooperation and Development (OECD), 2016,
 - The International Financial Corporation (IFC) Performance Standards on Environmental and Social Sustainability, 2012,
 - The World Bank/IFC EHS Guidelines, including the General EHS Guidelines and applicable Industry Sector Guidelines,
 - EHS GIIP,
- Environmental Impact Assessment (EIA) by O'ZLITINEFTGAZ, 2022,
- Human Rights Impact Assessment by Environ Consult CIS, 2022,
- Climate Change Risk Assessment by Environ Consult CIS, 2022,
- Environmental and Social Impact Assessment by WorleyParsons Europe United and WorleyParsons Uzbekistan Engineering, 2018, Stakeholder Engagement Plan (SEP), 2018,
- Project design documentation, including associated facilities,
- Internal regulations and procedures of the Company.

The requirements of these documents are taken into account in the ESMMP, as well as in the course of development of other IMS plans and documents. Compliance with these requirements is mandatory for the Company, and also applies to all (contractor/supplier) organisations involved in the Project implementation and providing works and services that have environmental and social aspects. The requirements also apply to the process of engagement with contractors-service providers.

A more detailed list of applicable legal and other requirements along with their brief description is provided in the Project Standards Document.



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3. ESMMP FOR THE CONSTRUCTION PHASE

3.1 Environmental and Social Management

The management system or special policies or procedures related to any construction activities of the SGCC and developed within the existing IMS are not available in the Company. The management system for the construction phase will be developed by the EPC Contractor.

The EPC Contractor will be managing environmental, community and occupational impacts, hazards and risks in line with a well-developed Project management system including at least the following general standards:

- Schedule 2 Attachment 2.4 to the Contract No.SGCCUP-CON-969 with the SGCC establishing the
 environmental, health and safety requirements to the Project works, risks control, monitoring and
 reporting.
- The Environment Management and Monitoring Plan (Procedure for the EPC Contractor)
 No.SGCCUP-EE-0000-EN-PLN-0001 (2022) developed to protect the physical, biological and social
 environment brought about by the activities during the construction phase and to provide the EPC
 Contractor with necessary options to manage all potential impacts of the Project and apply
 adequate and acceptable mitigation measures during the construction phase.
- The Construction Arrangement Design including environmental, health and safety requirements envisaged by the national regulation and applicable to the construction works during the construction phase of the Project.

All environmental, social, health and safety impacts and risks of the Project will be managed and monitored by the Company as part of the SGCC IMS.

3.2 Parties of the Construction ESMMP

The main parties involved in the implementation of the Project and management of its environmental and social aspects during the construction process are:

- Project Operator Shurtan Gas Chemical Complex, Limited Liability Company,
- EPC Contractor Enter Engineering Pte. Ltd.,
- Sub-contractors,
- Suppliers,
- Project Implementation Consultants.

The overall responsibility for the management of the Project, and implementation of the Construction ESMMP lies with the SGCC, which ensures:

- Coordination of the parties involved and their actions:
 - Circulate the requirements of the ESMMP/CMPs and other related plans and procedures among the structural divisions of the SGCC, EPC Contractor and sub-contractors,
 - Supervise the development and implementation of environmental and social management plans and other applicable requirements by all contractors at the Project sites,
- Appropriate monitoring of compliance with the requirements of the Construction ESMMP and other related plans and procedures:
 - Continuous monitoring,
 - Audits and other types of inspections,
 - Corrective actions monitoring.
- Ensuring that structural divisions, contractors, stakeholders, and other interested parties are informed about the purpose and scope of the Construction ESMMP and other related plans and procedures:
 - Familiarisation with the content of the documents,



 Providing environmental, emergency response and OHS trainings for the employees of the SGCC and the management personnel of the EPC Contractor and sub-contractors on the implementation of the ESMMP and other related plans and procedures,

- Interaction with Lenders and their representatives on issues related to the adoption, update, and implementation of the ESMMP s and related plans and procedures.

The Company's engagement with the pool of lenders on environmental and social issues will be facilitated by the Lenders' Independent Environmental and Social Consultant (Lenders' IESC). A Lenders' IESC will conduct regular monitoring site visits during the construction and operation phases of the Project to oversee implementation of the Framework ESMMP, other related plans and procedures. The frequency of monitoring site visits is determined by the Lenders' IESC taking into account applicable requirements, and during the construction phase, such inspections are usually performed twice a year. The SGCC and EPC Contractor will be required to submit all necessary documents and records confirming their compliance with the requirements and proving implementation of the identified measures.

All requirements of the Construction ESMMP, CMPs, and other related plans and procedures are approved by the Order of the SGCC's Chief Executive Officer (CEO) and shall be communicated to the involved structural divisions of the Company and EPC Contractor, which, in turn, shall adopt these requirements and communicate them to sub-contractors. Appropriate briefings and trainings should be provided to ensure a sufficient level of staff competence.

Necessary organisational structures and staffing requirements in the responsible parties' organisations including assigned responsibilities and appropriate qualifications, are discussed in Section 3.3.

3.3 Construction ESMMP Implementation Responsibilities

3.3.1 Environmental and Social Management. SGCC

The environmental and social management system in the SGCC have been developed and certified against the requirements of international standards, including ISO 14001 (Environmental management systems – Requirements with guidance for use) and ISO 45001 (Occupational health and safety management systems – Requirements with guidance for use).

Environmental protection and occupational health and safety (HSE) measures fall under the responsibility of the Department of the Industrial Safety, Occupational Health and Safety, and Environmental Protection which consist of the following units:

- Industrial Safety Unit 15 engineering staff members,
- Occupational Health and Safety Unit 12 engineering staff members,
- Environmental Protection Unit 90 engineering and laboratory staff members.

These units will appoint appropriate number of qualified staff members to monitor and control adequate undertaking of mitigations included into the Construction ESMMP and other CMPs and report on all gaps to the Project Manager and HSE Manager of the Company.

Social issues are regulated by the Human Resources (HR) Unit (18.5 staff for addressing HR and labour-related issues) and the Grievance Management and Follow-up Control Unit (8 staff for managing community and workers' grievances) reporting to the Director General and the Deputy Director General for Economics, Finance and Social Development, respectively.

The Corporate Relations and Social Development Unit is responsible for information disclosure in the Company. Procurement and supplies are managed via the Procurement and Supply Unit. These units also report to the Deputy Director General for Economics, Finance and Social Development.

For the construction phase, the Company will appoint a full-time Labour Officer with the responsibility to monitor and audit working conditions at the Project sites, in accommodation premises as well as compliance of the EPC Contractor (and all sub-contractors') with the national labour law and applicable international requirements. The Labour Officer will also conduct regular audits of the EPC Contractor and all sub-contractors on key workers' rights including those related to child labour, forced labour, occupational health and safety, harassment, abuse and intimidation.

The Company will appoint a Project CLO and assign responsibilities for planning and undertaking external communication with the ACs and other stakeholders as well as managing community grievances during



construction to the CLO. The Project CLO contact details will be disclosed to the ACs via mahallas and other stakeholders via the Project SEP and Company's website. The Project CLO will be responsible for reporting the SEP progress and community grievances to the Company and Lenders during construction.

The roles, responsibilities, and powers of the ESHS personnel are defined in the job descriptions of employees, structural units' regulations, procedures, and other corporate documents adopted in the Company.

Responsibilities for the implementation of the plans and procedures accompanying the Construction ESMMP, as well as other IMS documents, are defined in the relevant plans, procedures, and corporate documents.

3.3.2 Environmental and Social Management. EPC Contractor

The SGCC extensively interacts with the EPC Contractor in development of HSE requirements applicable to them and ensuring compliance with these requirements. Requirements in the field of labour and working conditions, environmental protection, occupational safety and environmental safety, compliance with environmental standards, including requirements for documentation, obtaining permits, arranging and performing works, training, monitoring, reporting, and other aspects are set out in Attachment 2.4 [Health, Safety and Environment] to Schedule 2 [Scope of Work] to EPC Contract No.SGCCUP-CON-969.

The Project Construction HSE Plan (SGCCUP-EE-0000-HS-PLN-0001) is a document that widely defines all HSE activities, investigations and requirements for promotion, development and implementation of the Project HSE Management System at the construction site. The purpose of this HSE Plan is to ensure that all activities, undertaken on site and affecting (or are able to influence) the health and safety of workers and equipment, as well as impacting or potentially having an impact on the environment, are carried out in accordance with the Company Policy, legislative HSE requirements of the Republic of Uzbekistan and the Company, and applicable international standards.

Respective aspects not covered by the above-mentioned addendum to the EPC Contract and the Project Construction HSE Plan will be managed via separate construction management plans. The following construction management plans, procedures and policies are currently in place:

- Industrial, community and occupational safety:
 - Permit to Work Procedure SGCCUP-EE-0000-HS-PRO-0001,
 - Emergency Response Plan SGCCUP-EE-0000-HS-PLN-0002,
 - Night Working Procedure SGCCUP-EE-0000-HS-PRO-0002,
 - Procedure for Control of Materials Hazardous to Health SGCCUP-EE-0000-HS-PRO-0003,
 - Procedure for Lifting Operations and Material Handling SGCCUP-EE-0000-HS-PRO-0007,
 - Procedure for Prevention and Protection of Fires SGCCUP-EE-0000-HS-PRO-0008,
 - Job Safety Analysis SGCCUP-EE-0000-HS-PRO-0009,
 - HSE Training and Awareness Plan SGCCUP-EE-0000-HS-PRO-0010
 - Personal Protective Equipment Procedure SGCCUP-EE-0000-HS-PRO-0011,
 - Working at Height Procedure SGCCUP-EE-0000-HS-PRO-0013,
 - Temporary Barriers and Fencing Procedure SGCCUP-EE-0000-HS-PRO-0015,
 - Safety Task Analysis Risk Reduction Talk SGCCUP-EE-0000-HS-PRO-0016,
 - Hot Work Procedure SGCCUP-EE-0000-HS-PRO-0017,
 - Gas Cylinder Use and Storage Procedure SGCCUP-EE-0000-HS-PRO-0018,
 - Procedure for HSE Audit and Inspection SGCCUP-EE-0000-HS-PRO-0019,
 - Incident Investigation and Reporting Procedure SGCCUP-EE-0000-HS-PRO-0020,
 - Scaffolding Safety Procedure SGCCUP-EE-0000-HS-PRO-0021,
 - Traffic Management Plan SGCCUP-EE-0000-HS-PRO-0023,
 - Task Risk Assessment Procedure SGCCUP-EE-0000-HS-PRO-0024,
 - Lock-out Tag-out Procedure SGCCUP-EE-0000-HS-PRO-0025,
 - Confined Space Entry Procedure SGCCUP-EE-0000-HS-PRO-0026,
- Environmental protection:
 - Environmental Management and Monitoring Plan SGCCUP-EE-0000-EN-PLN-0001,
 - Air Emission and Dust Control Plan SGCCUP-EE-0000-HS-PLN-0004,
 - Waste Management Plan SGCCUP-EE-0000-HS-PLN-0005,
- Construction camps:



- Health, Safety, and Environmental Rules for Contract Workers at the Construction Camp (Enter Engineering, 2018),

- Camp Sanitation and Hygiene Plan SGCCUP-EE-0000-HS-PLN-0006-EN-0,
- Construction workforce:
 - Code of Conduct,
 - Induction for New-starters.

The EPC Contractor will appoint a Community Liaison Officer (CLO) with at least 5 years' experience in managing community grievances and engaging with the ACs during construction and assign responsibilities to the CLO for monthly reporting community grievances and resolution to the SGCC. The EPC Contractor will disclose CLO contact details to the ACs neighbouring the construction site via respective mahallas.

The EPC Contractor and all sub-contractors need to appoint a Workers' Grievance Officer who will manage Project workers' grievances and report (monthly) to the Company and the Project Labour Officer. Sub-contractors will report on workers' grievances and resolution to the Workers' Grievance Officer of the EPC Contractor.

The EPC Contractor will appoint qualified staff managers with at least 10 years' experience in managing of construction HSE impacts, risks and hazards. The following managing staff members will be responsible for the HSE management at the construction site:

- Project Manager has the primary responsibility for the Project HSE management and achievement of HSE targets within the framework of the Project in accordance with the HSE policy and commitments. Project Manager is responsible for ensuring implementation of strategy, objectives and actions resulted from HSE project plan and successful implementation of associated procedures. HSE Manager acts as an advisor, instructor, auditor and administrator for reducing and eliminating the risks associated with the work during construction and monitors implementation of HSE project plans, facilitating risk identification process, ensures safe methods of work, monitors efficiency of trainings, organizes timely conducting of necessary training courses of the Project personnel, monitors construction work in terms of adopted measures on occupational health, safety and environmental protection, provides permanent monitoring and carrying out of inspections to identify potential hazards, preparation of daily, weekly and monthly HSE reports, monitors health and safety of workers on construction site, office and accommodation facilities, organises investigation of accidents, incidents, traffic accidents and emergencies, organises HSE meetings, monitors compliance with requirements of healthcare, traffic safety, fire safety and industrial sanitation, etc.
- Deputy Project Manager responsible for creating healthy and safe working conditions in subordinate units, providing qualified personnel, using their knowledge and experience in creating safe working conditions, organisation of all types of maintenance and repair of equipment, machinery, devices in accordance with technical regulations and safety rules, organization of training and workers' knowledge assessment on safe working methods and techniques, organization of planning of HSE measures and their implementation, propagation of labour protection issues through meetings, lectures, reports, interviews, organization of investigation, registration and reporting of accidents as well as examination of injuries and accidents causes, development and control over implementation of measures aimed at their prevention, ensuring implementation of project HSE plans, project procedures on HSE, etc.
- HSE Manager shall have HSE at least 10 years of HSE related experience in construction and
 official documents confirming his experience or relevant background for working in this sphere.
 He is responsible for development, implementation and monitoring of HSE procedures,
 implementation of FESMMP, identification of HSE risks and development of mitigation measures
 prior any construction activities, giving advice on any health and safety issues arising during the
 construction phase, advising security in minimisation of employee and community member
 interaction throughout the construction phase, increase knowledge and awareness amongst
 community via trainings arranged, related to blood-borne pathogens and bacterial diseases,
- HSE Specialist shall have HSE at least 5 years of HSE related experience in construction and
 official documents confirming his experience or relevant background for working in this sphere.
 He is ensures performance of the HSE management, reports to the HSE Manager about all issues
 related to the HSE, is familiar with entire project HSE documentation, constantly inspects and



 $^{^{\}rm 1}$ Project Construction HSE Plan (SGCCUP-EE-0000-HS-PLN-0001)

monitors workplaces, ensures compliance with all HSE procedures and rules, inspects correct placement and functional reliability of equipment which ensure safety of work, life-saving and fire-fighting equipment, assists in organization and carrying out of HSE trainings and knowledge assessment, preparing periodic statistical reports and provides them to the HSE Manager, keeps a record of all reports on accidents at the construction site and their investigation, monitors implementation of corrective measures identified based on results of accident investigations, collects and delivers to the HSE Manager information on potentially hazardous situations that can arise as a result of their actions, carries out HSE induction meeting for all new employees, visitors and transferees, performs other duties according to the job description, ensures performance of a risk assessment prior to commencement of work during performance of which probability of occurrence of occupational hazards is very high.

- Installation and Construction Work Manager/Site Supervisor responsible for implementation of
 HSE project plan within subordinating site, monitors implementation of HSE plan and compliance
 with procedures, ensures compliance of the plan with objects, arising during project
 implementation, is responsible for provision of necessary PPE to the personnel on construction
 site, ensures effectiveness of HSE plans, ensures compliance of site personnel with HSE
 requirements and is responsible for their implementation, constantly attend a meetings on HSE,
 participates in inspections on compliance with HSE rules jointly with HSE Manager and Engineers,
 reviews all reports of incidents, accidents, participates in the work group to investigate accidents,
 etc.
- Foreman/Master Foreman is responsible for familiarization of workers with HSE activities, provided in the Method Statements and manufacturing plans, instruction of workers at the workplace on safe working methods and techniques with relevant records in a special journal of workplace briefings, maintaining clean and tidy workplace, passages and access roads, as well as adequate lighting of workplaces, control over compliance with norms of carrying heavy loads, providing workplaces with safety signs, warning labels, posters, systematic interviews with workers on an analysis of violations of safety standards and industrial sanitation, control over compliance of workers with HSE instructions, direct management of hazardous operations according to pre-fabricated plan, Method Statement or work permit, control over provision and proper use of PPE (overalls, safety shoes, respirators, safety glasses, and other personal protective equipment) by workers.
- Fire Safety Specialist responsible for fire safety of facilities (sites).
- Traffic Safety Specialist responsible for safe movement of transport, loads and goods on and of construction site, see details in "Traffic management plan SGCCUP-EE-0000- HS-PRO-0023".
- Power Engineer/Chief Power Engineer responsible for ensuring the availability and fulfilment of technical conditions for connecting to the existing electrical installations of the electricity supplier and ensuring electrical safety of the construction works.

Essential HSE training is provided to the EPC Contractor and sub-contractor's staff directly by the EPC Contractor in line with the requirements of the national legislation and IMS requirements prior to commencement of work.

The EPC Contractor is responsible for supplying safety trainers and training facilities. All training shall maintain procedures to ensure and increase competence through appropriate training for EPC Contractor personnel and Sub-contractors' personnel. Detailed information on trainings arrangements is provided in Chapter 3.7.

In order to comply with applicable international requirements, the EPC Contractor and each sub-contractor performing work in the Project area shall ensure compliance with the requirements applicable to their activities and scope of work, as defined in the Construction ESMMP and the plans and procedures developed to implement the Construction ESMMP principles. The process of implementing the requirements of the Construction ESMMP and other related plans developed by the SGCC and EPC Contractor is shown in Figure 3.1.



Figure 3.1: Construction ESMMP implementation process

EPC Contractor's Order on the Communicating the requirements implementation of the Implementing measures to ensure to the workforce: regulations, Construction ESMMP and related compliance with the applicable guidelines, procedures, ESHS Audit conducted by third parties Audit carried out by the SGCC documents requirements Implementing standards audit/monitoring programme Defining the control measures applicable to EPC Contractors' Providing personnel training in the applicable requirements of the activities Supporting documents: Construction ESMMP and related audit/monitoring reports, other documents, maintaining training Distributing implementation supporting documents on results records responsibilities for the compliance with the applicable Construction ESMMP and related requirements documents Preparing an audit/monitoring programme to oversee the Preparing own plans / implementation of the applicable procedures in pursuit of the Preparing reporting documents requirements of the Construction Construction ESMMP and related ESMMP and related documents documents (if required)

Submitting documentation to SGCC for approval

Submitting documentation to SGCC update intermittently (if required)

Submitting documentation to SGCC



3.4 Environmental and Social Impacts and Mitigation Measures

Considering the environmental and socio-economic baseline conditions in the Project area, potential environmental and social impacts described in the ESIA Report and national EIA, as well as the currently developed construction management plans, the SGCC, in its pursuit of developing the ESMMP, is going to prepare and implement additional environmental and social management plans for the construction phase (or update the existing ones, if required).

These documents include specific mitigation and management measures, responsible parties, key performance indicators (KPIs) or performance criteria for monitoring their implementation, as well as monitoring parameters. These plans will apply to the entire construction phase and to the Project Operator, the EPC Contractor and all sub-contractors employed on the Project.

The key environmental and social considerations, as well as the Construction ESMMP supporting documents (activities) aimed at their management, are presented in Tables 3.1 and 3.2 below.

Table 3.1: Key environmental considerations of the Project construction phase

Ref. No.	Environmental impact/aspect	Construction ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Haz	zardous Materials			
1.1	Ensuring safe handling of hazardous materials, including their storage, transportation, and use, as well as preventing their impact on environment and employees.	Hazardous Materials CMP (existing: Procedure for Control of Materials Hazardous to Health SGCCUP-EE-0000-HS- PRO-0003)	Waste CMP Surface and Groundwater CMP Biodiversity CMP Emergency Response Plan	SGCC, EPC Contractor – continuous monitoring EPC Contractor – Implementation of plans Waste transportation and disposal – waste handling contractor
2. Gre	enhouse Gas (GHG) Em	issions		
2.1	Ensuring sustainable nature management aimed at reducing the greenhouse effect through reducing air emissions	Greenhouse Gas Emissions CMP, including measures aimed at GHG emissions reduction, monitoring, and control	Air Quality CMP	SGCC, EPC Contractor – continuous monitoring EPC Contractor – Implementation of plan
3. Soi	l and Groundwater			
3.1	Contamination of underground conditions	Waste CMP (existing: Waste Management Plan SGCCUP-EE-0000-HS-PLN- 0005)	Land Rehabilitation CMP (if required in events of pollution) Hazardous Materials CMP	SGCC, EPC Contractor - continuous monitoring EPC Contractor - Implementation of plans
4. Wa	ste Management			



Ref. No.	Environmental impact/aspect	Construction ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
4.1	Soil contamination	Land Rehabilitation CMP (if required in events of pollution)	Waste CMP Hazardous Materials CMP	SGCC, EPC Contractor – continuous monitoring EPC Contractor – Implementation of the plan
5. Sur	face Water Bodies			
5.1	Pollutant discharge	Surface Water CMP	Biodiversity CMP	SGCC, EPC Contractor – continuous monitoring
5.2	Water use			EPC Contractor - Implementation of the plan
6. Imp	pact on Flora and Fauna			
6.1	Changes in habitats	Biodiversity CMP	Surface Water CMP Waste CMP Hazardous Materials CMP	SGCC, EPC Contractor – continuous monitoring EPC Contractor – Implementation of plan
7. Pol	lutant Emissions and Im	pacts of Physical Factors		
7.1	Air pollution and noise impact on employees / local communities	Air Quality CMP (existing: Air Emission and Dust Control Plan SGCCUP-EE- 0000-HS-PLN-0004) Noise CMP	Biodiversity CMP Air Quality CMP	SGCC, EPC Contractor – continuous monitoring EPC Contractor – Implementation of plan

Table 3.2: Key social considerations of the Project construction phase

Nº	Social impact/aspect	Construction ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Stakeholder Engagement				
1.1	Stakeholder analysis and engagement planning. Disclosure and dissemination of	Stakeholder Engagement Plan SGCC Procedure for External Communications	Non-Technical Summary document	SGCC



Nº	Social impact/aspect	Construction ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
	information and consultation process			
2. La	bour and Working Condit	ions		
2.1	Human resources management and working conditions	SGCC's Human Resource Policy Workers' grievance mechanism	SGCC's Collective Bargaining Agreement SGCC's Ethics Code	SGC
2.2	Accommodation services for construction workers	Workers' Accommodation CMP (existing: Camp Sanitation and Hygiene Plan SGCCUP-EE-0000-HS-PLN-0006-EN-0) Construction Camp Audits Checklist in line with the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards"	Health, Safety, and Environmental Rules for Contract Workers at the Construction Camp (Enter Engineering, 2018)	EPC Contractor
2.3	Supply chain	SGCC's Supply Chain Management Policy EPC Contractor's Supply Chain Management Plan	Suppliers Code of Conduct (by suppliers)	SGCC EPC Contractor
2.4	Demobilisation of construction workers	Workforce Demobilisation CMP		EPC Contractor
2.5	Occupational Health and Safety	Occupational Health and Safety Procedures (existing Project Construction HSE Plan (SGCCUP-EE-0000- HS-PLN-0001)	Traffic CMP Hazardous Materials CMP Waste CMP Emergency Response Plan	EPC Contractor
3. Co	ommunity Health, Safety,	and Security		
3.1	Influx of construction workers	EPC Contractor's Social Management Plan	EPC Contractor's Camp Sanitation and Hygiene Plan SGCCUP-EE-0000-HS- PLN-0006-EN-0 EPC Contractor's Traffic Management Plan SGCCUP-EE- 0000-HS-PRO-0023 EPC Contractor's Local Employment Plan including monitoring of in-migration (to develop) EPC Contractor's Code of Conduct for construction workers (to develop)	EPC Contractor



Nō	Social impact/aspect	Construction ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
			EPC Contractor's Community Engagement Plan (to develop including CLO responsibilities to monitor the local markets prices)	
			Induction for New- starters (including cultural awareness briefing)	
			EPC Contractor's Public Health and Safety Management Plan SGCCUP-EE- 0000-HS-PLN-0007	
3.2	Transport safety during the use of public roads	Traffic CMP (existing: Traffic Management Plan SGCCUP-EE-0000-HS- PRO-0023)	Surface Water CMP Air Quality CMP Biodiversity CMP Waste CMP Hazardous Materials CMP	EPC Contractor
			Occupational Health and Safety Procedures	
4.3	Emergency Situations	Emergency CMP (existing: Emergency Response Plan SGCCUP-EE-0000-HS-PLN- 0002	Hazardous Materials CMP Waste CMP	EPC Contractor
5. La	and Acquisition and Reset	tlement		
5.1	Livelihood restoration planning and implementation. Economic displacement	Resettlement Policy Framework Environmental and Social Action Plan for government-led economic displacement	Community grievance mechanism SEP	SGCC
6. Cı	ıltural Heritage			
6.1	Cultural Heritage protection	Chance Finds Procedure	-	SGCC
7. H	uman Rights			
7.1	Protection of human rights	SGCC's Human Rights Policy	SGCC's Ethics Code Workers' and community grievance mechanisms	SGCC

These documents should be developed or revised to include specific mitigation and management measures with respect to GIIP and lenders recommendations, responsible parties, KPIs or performance criteria for monitoring their implementation, as well as monitoring parameters.



3.5 Monitoring and Control

3.5.1 General Principles

The process of monitoring the implementation of the Construction ESMMP / CMPs and related documents is a key management method to ensure a systematic process of obtaining information on the effectiveness and efficiency of the developed activities, as well as on the IMS as a whole.

The main principles of monitoring and audit are:

- Implementing and maintaining an audit system aimed at evaluation of the performance of the environmental and social management mechanisms of the Company, EPC Contractor and all subcontractors.
- Implementing audit and monitoring system allowing to assess compliance with applicable regulations, rules, and standards, as well as performance and efficiency of the mitigations,
- Ensuring effective implementation and non-redundancy in procedures, using the results of various audits and monitoring to verify the implementation of the CMPs,
- Compliance monitoring should be continuous to exclude violation of applicable requirements between regular audits. In addition, continuous monitoring provides more information on efficiency of mitigation measures and indicates non-chance mistakes and roots of incidents.

3.5.2 HSES Monitoring

The Company shall monitor and undertake audits of construction activities performed to ensure compliance with HSES requirements (mitigation measures envisaged by respective plans are implemented, risks and impacts are controlled at the continuous basis). The procedure for organising and conducting audits and inspections will be determined by the corresponding documents.

The SGCC's Labour Officer will conduct regular audits of the EPC Contractor and all sub-contractors on key workers' rights including those related to child labour, forced labour, harassment, abuse and intimidation as well as workers' grievances and resolution. The EPC Contractor will appoint an in-house Labour Officer and, if necessary, other staff including the sub-contractors' representatives to support the workers' rights audits. The Labour Officer jointly with the EHS Officer will also be responsible for audits of the construction camp.

Statutory labour law compliance audits are carried out by external specialised organisations followed by an Audit Report.

Monitoring and control of the state of the environment shall be carried out by qualified personnel of the SGCC or independent specialised organisations with qualified experts in accordance with approved programmes and methods. The results of monitoring are documented, analysed and used as a basis for compliance analysis and review of environmental action plans, if required.

Audits / monitoring of compliance of Contractors' HSES activities are carried out on a continuous basis throughout the entire period of work in line with the requirements of the CMPs and the Procedure for HSE Audits/Inspections (SGCCUP-EE-0000-HS-PRO-0019). Audits of works should be conducted at least monthly in accordance with the schedule approved by the SGCC and Contractor or more frequently if agreed so by the sides; continuous monitoring should be conducted by all managers and foremen.

Specialists of the SGCC environmental, health and safety units will prepare periodic reports (at least annually) for the SGCC and lenders, if required. These reports contain information on the progress made by the SGCC in fulfilment of its commitments and consider the information on incidents received from the EPC Contractor. As confirmation of fulfilment of the SGCC commitments, the reports will include data obtained through monitoring (e.g., waste collection and disposal data, wastewater discharged, Lost Time Injury Frequency Rate, Lost Time Injury Incidence Rate, Equipment Breakdowns, etc.).

3.5.3 Supervision of Environmental and Social Performance

Adherence to the measures and the effectiveness of their implementation are assessed and supervised during inspections and audits at various levels. Specific features and types of supervision are described in Table 3.3

Table 3.3: Recommended internal audits and inspections



No,	Type of supervision	Intervals
1.	Routine day by day observation of environmental (waste handling and storage, wastewater discharge, dust suppression, noise and air emissions of vehicles, etc.), health and safety (violation of safety rules, PPE use, unsafe behaviour etc.) and social practice of the EPC Contractor and sub-contractors.	Day by day by the SGCC and EPC Contractor responsible managers and OHS officers and foreman. Daily reports should be regularly submitted to the SGCC.
2.	Regular inspections, walkthrough audits of the site, interviews with the Company's and EPC Contractors' employees and sub-contractors, review of documentation and other activities as part of the assessment of the Company's and Contractors' compliance with the requirements and implementation of measures set out in the ESMMP, as well as in other documents containing requirements for the Project, both by the Company and Contractors. They are carried out by the Company's employees.	Regularly and as needed as part of ongoing activities. Reporting – monthly
3.	Regular inspections, walkthrough audits of the site, interviews with employees, review of documentation and other activities as part of the assessment of compliance with the requirements and implementation of measures set out in the Construction ESMMP, as well as in other documents containing requirements for the Project and applicable to the EPC Contractor and each sub-contractor. They are carried out by the EPC Contractor' employees within the internal control and sub-contractors' supervision framework.	Regularly and as needed as part of ongoing activities. Reporting after each weekly meeting, conducted by EPC Contractor with attending key HSE and construction personnel of Company and Contractor/ Subcontractor divisions.
4.	Regular audits (including interviews with employees, review of documentation and worker's grievance logs) by the Company's Labour Officer, EPC Contractor and all subcontractors on key workers' rights including those related to child labour, forced labour, harassment, abuse and intimidation as well as workers' grievances and resolution.	Monthly
5.	Regular audits of the workers' accommodation camp (including workovers, interviews with employees, review of documentation and grievance logs) by the Company's Labour Officer using the checklist in the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards".	Monthly
6.	Regular audits of the EPC Contractor's community grievance management and resolution by the Company's CLO.	Monthly
7.	Regular audits of new supply chain organisations by the EPC Contractor on key workers' rights including those related to child labour, forced labour, occupational health and safety as well as gender-based violence and harassment using the Outside Service Questionnaire.	Prior to contracting

Inspections are carried out on a regular basis in accordance with the approved schedule of inspections. There are also unscheduled (special purpose) inspections conducted as required, e.g., after incidents, emergencies, non-compliance observations. Inspections can be focused on specific issues, or they can be carried out in the form of a site walkthrough audit with consideration of various problems, using checklists and photography. The audits, in their turn, are comprehensive in nature, they are performed according to the approved schedule and cover a wide range of environmental and social issues. It's also



worth noting that audits involve not only a visual inspection of the site but also work with documents and interviewing personnel.

The frequency of audits and inspections can be tailored to existing requirements.

The EPC Contractor develops its own schedule for such audits and inspections, which define the scope of inspection (what exactly is to be supervised over), frequency, responsibility for their implementation, and necessary checklists. These procedures and checklists shall be developed taking into account the requirements of the Construction ESMMP and related documents. Schedules of audits and inspections shall be part of the EPC Contractors' environmental and social management system and agreed by the Company. The results of audits and inspections are submitted by the EPC Contractor to the SGCC as part of periodic reporting.

3.5.4 Identification and Elimination of Non-compliances

The reasons of all registered non-compliance shall be identified, and all inconsistencies identified during audits and inspections shall be eliminated.

Management of non-compliance identified during audits includes the following:

- Identification and primary registration of non-compliance cases,
- Elimination of identified non-compliance, mitigation of their impacts, corrective actions taken to eliminate non-compliance detected,
- Determination of the reasons of non-compliance and assessment of the need for corrective actions eliminating the causes of non-compliances and their recurrence,
- Implementation of corrective actions and registration of their results,
- Effectiveness analysis of the undertaken corrective actions.

If the undertaken corrective actions are ineffective (meaning that after all planned activities have been conducted non-compliance recur), it is necessary to review the causes and plan and implement new corrective actions, which will eliminate the causes of the non-compliance. The review shall include an assessment of options to improve and change the Project management system.

3.5.5 Key Performance Indicators

When conducting audits/assessments/inspections, compliance will be assessed against key performance indicators (KPIs) or performance criteria which are to be developed for each activity-specific management plan (CMPs), policy and procedure, if applicable.

KPIs are quantitative or qualitative measurements used to verify performance, assess effectiveness of mitigation measures, and demonstrate performance improvements.

Relevant KPIs will be identified in each respective CMP, policy or procedure where possible. KPIs will set minimum environmental and social standards and threshold values for environmental factors. KPIs will be sourced from the Project design documentation, the Project Standards Document, national standards, impact assessment documentation and existing management systems of the EPC Contractor and the Company. If any of the KPI values exceed the levels predicted in the Project Standards Document, then the need to refine mitigation measures will be investigated and implemented as necessary.

All existing CMPs, policies and procedures of the EPC Contractor will be updated to streamline the KPIs with the Project standards.

Sample KPIs for the CMPs, policies and procedures to be developed by the Project for the construction phase are summarised in the table below.

Table 3.4: Sample KPIs for CMPs



KPIs	KPI reference	Respon	sibility
	document	SGCC	EPC Contactor
Total fuel consumption by types (diesel, petrol, etc)	Climate Change Risk Assessment (CCRA)	Yes	Yes
Net Electric power consumption Fuel consumption to power generation ratio	Air Quality CMP EMS documents		
Completion of rehabilitation work undertaken as per rehabilitation plan	Waste CMP Hazardous Materials CMP	Yes	Yes
All waste streams are identified and included into the respective plans	Hazardous Materials CMP EIA, ESIA	Yes	Yes
Percentage of reusable/ recycled material	Project Design Documentation		
Waste reduction rate			
Number of non- compliance with the requirements of the Waste CMP			
Number of non- compliance with design documentation identified during monitoring			
0 local community grievances received			
Effluent quality	Project Standards Document	-	Yes
	Biodiversity CMP		
Area of disturbed habitats Instances of disturbance/death of rare and protected species, commercial species Events of	EIA, ESIA Surface Water CMP Waste CMP Hazardous Materials CMP	Yes	Yes
	Total fuel consumption by types (diesel, petrol, etc) Net Electric power consumption Fuel consumption to power generation ratio Completion of rehabilitation work undertaken as per rehabilitation plan All waste streams are identified and included into the respective plans Percentage of reusable/ recycled material Waste reduction rate Number of noncompliance with the requirements of the Waste CMP Number of noncompliance with design documentation identified during monitoring O local community grievances received Effluent quality Area of disturbed habitats Instances of disturbance/death of rare and protected species,	Total fuel consumption by types (diesel, petrol, etc) Net Electric power consumption Fuel consumption to power generation ratio Completion of rehabilitation work undertaken as per rehabilitation plan All waste streams are identified and included into the respective plans Percentage of reusable/ recycled material Waste reduction rate Number of noncompliance with the requirements of the Waste CMP Number of noncompliance with design documentation identified during monitoring 0 local community grievances received Effluent quality Area of disturbed habitats Instances of disturbance/death of rare and protected species, commercial species Events of	Total fuel consumption by types (diesel, petrol, etc) Net Electric power consumption to power generation ratio Completion of rehabilitation work undertaken as per rehabilitation plan All waste streams are identified and included into the respective plans Percentage of reusable/ recycled material Waste reduction rate Number of non-compliance with the requirements of the Waste CMP Number of non-compliance with design documentation identified during monitoring 0 local community grievances received Effluent quality Area of disturbed habitats Instances of disturbance/death of rare and protected species, commercial species Events of Climate Change Risk Assessment (CCRA) Air Quality CMP EMS documents Hazardous Materials CMP Hazardous Materials CMP Fes Hazardous Project Design Documentation Yes Hazardous Materials CMP Foject Standards Document Biodiversity CMP EIA, ESIA Project Standards Document Biodiversity CMP Foject Standards Document Biodiversity CMP Fila, ESIA Surface Water CMP Waste CMP Hazardous Materials CMP Hazardous Materials CMP



CMPs, policies and	KPIs	KPI reference	Respon	sibility
procedures		document	SGCC	EPC Contactor
	materials or waste leaks Impacts on freshwater habitats (surface water bodies)			
Noise CMP	Number of noise and vibration measurements exceeding standards	Project Standards Document Biodiversity CMP Air Quality CMP	-	Yes
Procedure for External Communications	Number of consultation events Number of public consultation participants Accessibility of engagement activities for vulnerable groups including women and people with disabilities SEP availability via the website and in hard copies at mahallas Appointed CLOs. Meaningful twoway consultation opportunities provided in timely manner Number of Project related publications in mass media Number of stakeholder comments and suggestions received through various feedback channels Type/category of stakeholder comments and suggestions addressed by the	SEP HRIA	Yes	



CMPs, policies and	KPIs	KPI reference	Respons	sibility
procedures		document	SGCC	EPC Contactor
	Project and through what means			Contactor
	Number of stakeholder grievances and claims regarding the Project			
	Key categories of grievances received (land use, environmental issues, labour relations, etc.)			
	Number of grievances resolved, outstanding and appealed			
Human Resource Policy	HR Policy disclosed to 100% staff Individual employment contracts with the 100% 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 Number of workers' grievances related to equal opportunities and gender-based violence and harassment – target 0	Human Rights Impact Assessment (HRIA) SGCC's Collective Bargaining Agreement SGCC's Ethics Code	Yes	



CMPs, policies and	KPIs	KPI reference	Responsibility	
procedures		document	SGCC	EPC
Workers' grievance mechanism	Workers' grievance log Annual summary of use of labour grievance mechanism and resolution of labour grievances	SGCC's Collective Bargaining Agreement SGCC's Ethics Code	Yes	Yes
Supply Chain Management Policy	Senior level commitment to the Supply Chain Management Policy	HRIA	Yes	-
Supply Chain Management Plan	100% Outside Service Questionnaire completion by suppliers to exclude forced labour, child labour and occupational health risks	HRIA	-	Yes
Workforce Demobilisation CMP	Number of non-compliances Number of cases of non-availability or delays with individual demobilization plans in sub-contractors' organisations Number of delays in salary payments prior to demobilization Number of unaddressed demobilisation grievances remaining open beyond 30 days period after acknowledgement or number of demobilization court actions			Yes
Social Management Plan	Number of contractor's camp audits and identified non- compliances	ESIA EPC Contractor's Camp Sanitation and Hygiene Plan	-	Yes



CMPs, policies and	KPIs	KPI reference	Responsibility	
procedures		document	SGCC	EPC
		CCCCUD FF		Contactor
	Number of road incidents – target 0	SGCCUP-EE- 0000-HS-PLN- 0006-EN-0		
	Number of incidents of	EPC		
	livestock loss in	Contractor's		
	road accidents – target 0	Traffic Management Plan SGCCUP-		
	No of scheduled communication	EE-0000-HS- PRO-0023		
	campaign of employment	EPC		
	opportunities	Contractor's Local		
	Percent of local	Employment		
	employees hired who can live at	Plan including monitoring of		
	home	in-migration (to develop)		
	Number of people	EPC		
	from the directly affected	Contractor's		
	communities	Code of		
	employed on the	Conduct for		
	Project with	construction workers (to		
	reference to assigned position	develop)		
	and job description			
		EPC		
	Number of supply contracts with local	Contractor's Community		
	suppliers	Engagement Plan (to		
	Workers' statistics	develop		
	by skills level	including CLO		
	(number of skilled	responsibilities		
	and unskilled workers) and origin	to monitor the local markets		
	(local (from directly affected	prices)		
	communities,	Induction for		
	regional or	New-starters		
	elsewhere in Uzbekistan and	(including cultural		
	international)	awareness briefing)		
	Number of labour			
	inspections by authorities	EPC Contractor's		
	Number of	Public Health and Safety		
	identified non-	Management		
	compliances with labour law	Plan SGCCUP- EE-0000-HS-		
	Percentage of	PLN-0007		
	construction			
	workers who			
	completed			
	induction training – target 100%			
	100,00			



CMPs, policies and	KPIs	KPI reference	Responsibility	
procedures		document	SGCC	EPC Contactor
	All personnel sign Code of Conduct			Contactor
	0 incidents of inappropriate behaviour of workers recorded			
	0 positive drug and/or alcohol use results among construction workers			
	Incidents of cultural clashes recorded			
	Emergency Response Procedures developed and reviewed annually / Agreements with Regional medical facilities in place			
	Acceptance of Camp Management Policy by all personnel residing on the camp			
	Measures in place to scree and test workforce			
	No increase in prices of staple goods and services in local markets			
	Percentage of new starters who completed induction for new-starters – target 100%			
	Number of community health and safety grievances – target 100%			
Resettlement Policy Framework	RPF agreed with the lenders and disclosed	HRIA	Yes	-
Environmental and Social Action Plan (ESAP) for government-led economic displacement	Project affected people (PAPs) identified and	HRIA	Yes	-



CMPs, policies and	KPIs	KPI reference	Responsibility	
procedures		document	SGCC	EPC Contactor
	socio-economic census completed			Contactor
	The number of consultations and disclosure activities for the PAPs.			
	100% PAPs engagement			
	Appointed CLOs			
	Detailed records kept of all land transactions			
	Signed land titles			
	Records of grievances in a grievance log showing close-out dates and measures taken to resolve and prevent future grievances			
	Minutes and other records kept of all consultations with affected farmers			
	Records of livelihood restoration measures and their effectiveness			
	Reports to the lenders on ESAP implementation			
	ESAP close out audit showing livelihoods have been restored or improved			
Cultural Heritage CMP	Number of incidents damaging cultural heritage assets or restricting access to cultural heritage sites	Human Rights Impact Assessment ESIA		Yes
	Number of community grievances in respect of cultural heritage issues			
	Special procedures approved prior to			



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility	
			SGCC	EPC Contactor
	the start of construction works			
Human Rights Policy	KPIs identified in the Human Rights Policy % of managers received training in human rights Numbers of staff trained on human rights topics, dates of courses and refreshers Inclusion of human rights issues in induction training Understanding of human rights topics among workers	HRIA ESIA	Yes	Yes

3.6 Reporting

3.6.1 Internal Reporting

Designated specialists of the SGCC prepare annual reports on the E&S management system performance for senior management. These reports may include *inter alia* information on the effectiveness of the implementation of the Construction ESMMP and measures aimed at managing environmental and social risks and impacts. Decisions made following the IMS performance analysis serve as a basis for introducing changes into the SGCC HSES policies and objectives, internal regulatory documents, as well as for undertaking corrective actions aimed at further improvement of the management system and establishing and adjusting the KPIs.

The EPC Contractor and all sub-contractors are required to submit periodic HSES reports to the SGCC, including daily, monthly, quarterly and annual reports on compliance with applicable requirements. These reports shall include the following information:

- Development of EPC Contractor's internal regulatory documents or their tailoring to the requirements of the ESMMP Framework and relevant plans and procedures of the Project,
- Audits/inspections undertaken,
- Identified non-compliance cases and corrective actions taken,
- Accidents, incidents, emergencies (including information on response and elimination of consequences, as well as corrective actions),
- Other environmental and social information provided for the preparation of HSES reports and information on compliance with the KPIs provided in the CMPs.

Reporting formats are agreed upon between the HSES departments of the SGCC and the EPC Contractor.

3.6.2 External Reporting

Reporting to Lenders and their representatives

The Company prepares periodic reports for the Lenders and their representatives. These reports contain information for assessing the environmental and social status of the Project required by the Lenders' IESC; The nature and structure of the reports will be confirmed as part of the loan documentation.



These reports provide data for the latest reporting period and contain, as a minimum:

- List of persons responsible for the Project and for HSES aspects,
- Review of the Company's and contractors' management systems performance,
- Summary information on the status of environmental permits,
- Summarised data on environmental monitoring and control,
- Information on incidents and non-compliance cases,
- Occupational health and safety data, including information on morbidity, first aid visits, etc. (separately for the Project personnel and contractors' personnel),
- Information on conducted trainings,
- Stakeholder engagement activities,
- Review of grievances received and responses to them,
- Local communities development assistance measures and programmes,
- Summary of the Environmental and Social Action Plan (ESAP) implementation,
- Proposed/adjusted mitigation measures, necessary costs.

The final format and frequency of the Project's environmental and social report will be agreed by the Lender's IESC.

Reporting to stakeholders

In line with international requirements reflected in the SEP, the SGCC will also provide reports on the Project progress and E&S performance to stakeholders and the ACs. Such reporting may be in the format of the information leaflets or other accessible format and will be disclosed via the Company's website and distributed in hard copies in the directly affected communities via respective mahallas. The frequency of the reports will be identified by the Project needs and the construction progress but at least bi-annually.

3.7 Environmental and Social Training

3.7.1 Overview

The SGCC and EPC Contractor systematically develop HSES training programmes and plans for their personnel. The procedure for determining the need for training, personnel training procedures, and qualification records are determined by the national regulations and the SGCC internal practice. The general requirements for such training provided to the staff related to the implementation of the Construction ESMMP are summarised below.

3.7.2 SGCC Staff Training

the training programme shall include the following core modules:

- A set of HSES training programmes provided to all employees in accordance with the legislation of the Republic of Uzbekistan,
- Bespoke HSES training programmes provided to each employee as part of his/her individual personal development plan considering his position and functions.

Thereby, among other training programmes, HSES managers and specialists undergo the following training programmes:

- Performance of HSES audit/inspections,
- In-house security personnel training to raise awareness on:
 - Salient human rights issues (particularly in personnel and community security),
 - Requirements of the applicable international standards,
 - Diverse cultural and ethnic backgrounds of workers present on-site,
- Bespoke training on the requirements and methods for implementing the Construction ESMMP and its supplementary plans.

3.7.3 EPC Contractor and Sub-contractors Training

Training requirements for contractors are summarised as follows:

Contractor's HSE Managers



• Training of HSE managers on the key requirements of the ESMMP Framework, related plans and procedures.

General HSE training of all personnel at the project site

- Timely HSE training in line with the statutory requirements is provided by contractors to their
 employees working on the Project. Training is also provided to employees with appropriate
 qualification prior to arrival at the Project construction site. Documentary evidence that the
 employee has completed this training is required to enter the site,
- All contractors' employees undergo a series of introduction briefings upon arrival at the Project site (a refresher briefing is also conducted if required by law and the Company's internal regulations). Briefings are conducted by the SGCC and EPC Contractor and, among other things, cover the following aspects:
 - Environmental and social risks associated with the Project,
 - Grievance related procedures,
 - The Code of Conduct (including cultural awareness element and interactions with local communities),
 - Workers' rights,
 - General measures to prevent environmental pollution,
 - Measures to control negative impacts,
 - Waste management procedures/instructions,
 - Contractor's HSES management procedures.
- Toolbox talks are provided to employees by site supervisors/foremen prior to the commencement of each new activity, and these cover basic HSES requirements relevant to that activity.

EPC Contractor's procurement and contract managers training

Training on Project human rights principles and policy relevant to their role.

Specialised plans and procedures prepared in pursuit of the Construction ESMMP development may contain additional requirements for the training of the SGCC and EPC Contractor' staff (including all subcontractors), as well as for supporting documents, and shall be considered together with the above requirements.

The EPC Contractor is to provide information on the conducted HSES training in their quarterly reports. Sub-contractors shall also keep records of training completed (valid certificates) demonstrating that employees are properly qualified for the work they perform. This information is provided by the SGCC as part of regular reports.

The Company will deliver a training presentation to the security authorities of the Project construction site and the construction camp with the explanation of the expected level of conduct toward workers and the ACs.



4. ESMMP FOR THE OPERATION PHASE

4.1 Environmental and Social Management

The SGCC has a well-developed and certified Integrated Management System (IMS) covering the quality aspects (ISO 9001), environmental and occupational safety risks and hazards (ISO 14001, ISO 45001), energy management (ISO 50001) and industrial safety. The Company has an IMS Policy on quality, occupational health and safety, environmental protection and energy efficiency adopted in 2019.

All operational environmental, safety and social aspects and risks of the Project will be managed and monitored by the Company as part of the SGCC IMS, community and workers' grievance mechanisms, HR Policy, Human Rights Policy, Project's Supply Chain Management Policy and the Project SEP.

4.2 Parties of the Operation ESMMP

The main parties involved in the implementation of the Project and management of its environmental and social aspects during the operation process are:

- Project Operator SGCC responsible for implementation of mitigation measures and compliance of the Project with the national regulations and Lender's requirements,
- Suppliers of goods and services provision of goods and services produced in a legal way and with a minimum possible impact on environment and community,
- Technology Supplier maintenance of equipment to prevent accidents, emergencies (fire, explosions, emergency emissions), increased impacts on environment, SGCC staff, and communities,
- Project Consultants provision of adequate assistance to the SGCC in achievement of Project compliance with the Lenders requirements.

The overall responsibility for the management of the Project, and the implementation of the Operation ESMMP lies with the SGCC, which ensures:

- Coordination of actions of the parties involved:
 - Circulate the requirements of the ESMMP and other related plans and procedures among the structural divisions of the SGCC.
 - Integrate applicable requirements of the Operation ESMMP and Supply Chain Policy with the procurement process;
 - Monitor quality of goods and services provided to the SGCC.
- Appropriate monitoring of compliance with the requirements of the Operation ESMMP and other related plans and procedures:
 - Continuous monitoring,
 - Audits and other types of control and inspections (discussed in more detail in Section 4.5),
 - Monitoring of corrective actions,
- Ensuring that structural divisions, contractors, suppliers, stakeholders, and other interested
 parties are informed about the content and scope of the Operation ESMMP, OMPs and other
 related plans and procedures:
 - Familiarisation with the content and scope of the documents,
 - Providing environmental, emergency response and OHS trainings for the employees of the SGCC and the management personnel of the contractors on the implementation of the Operation ESMMP, OMPs and other related plans and procedures.
- Interaction with the Lenders and their representatives on issues related to the adoption, update, and implementation of the Operation ESMMP, OMPs s and related plans and procedures.

Engagement of the Company with the pool of lenders on environmental and social issues is carried out with the participation of the Lenders' Independent Environmental and Social Consultant. A Lenders' IESC will conduct regular monitoring site visits during the construction and operation phases of the Project to oversee implementation of the Framework ESMMP, other related plans and procedures. The frequency of monitoring site visits is determined by the Lenders' IESC taking into account applicable requirements, and during the operation phase, such inspections are usually performed once per year. The SGCC, suppliers and contractors will be required to submit all necessary documents and records confirming their compliance with the requirements and the implementation of the necessary measures.



All requirements of the Operation ESMMP, OMPs and other related plans and procedures are approved by the Order of the SGCC CEO and shall be communicated to the involved structural divisions of the Company, suppliers and contractors, which, in turn, shall adopt these requirements and communicate them to their sub-contractors. Appropriate briefings and trainings should be provided to ensure a sufficient level of staff competence (see also Section 7 of the Framework ESMMP).

4.3 Operation ESMMP Implementation Responsibilities

4.3.1 Environmental and Social Management Structure. SGCC

Duties and responsibilities for HSE management and social issues at the operation stage of the Project are set out in the HSEIS IMS Manual of Uzbekneftegaz dated August 12, 2019, and other IMS documentation, e.g., orders on the appointment of persons responsible for HSE and social issues, SGCC's HR Policy, Human Rights Policy, and Supply Chain Management Policy. The roles, responsibilities and authorities of the personnel are defined in the job descriptions of employees, regulations on structural divisions, procedures and other internal organisational and administrative documents.

Implementation of the environmental and occupational health and safety measures is under the responsibility of the Department of the Industrial Safety, Occupational Health and Safety and Environmental Protection (29 staff in total) which is headed by the HSE and IS Manager and consists of the following units:

- Industrial Safety Unit will support fire and explosion safety, operation of hazardous equipment and emergency response at the SGCC,
- Occupational Health and Safety Unit will 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.,
- Environmental Protection Unit will be managing environmental aspects of the SGCC and the
 Project through assessing the scale of environmental pollution, internal environmental audits,
 planning and budgeting of the SGCC environmental activities, licensing, and reporting to the state
 and to the SGCC management.

These units will delegate responsibilities to appropriate number of qualified staff members to monitor and control adequate undertaking of mitigations included into the Framework ESMMP and other operational plans and report on all non-compliance and gaps and propose adequate mitigations to the SGCC CEO.

Social issues are regulated by the HR Unit (18.5 staff for addressing HR and labour-related issues) and the Grievance Management and Follow-up Control Unit (8 staff for managing community and workers' grievances) reporting to the SGCC CEO and the Deputy Director General for Economics, Finance and Social Development, respectively.

The Corporate Relations and Social Development Unit (nine staff in total) is responsible for information disclosure in the Company. Procurement and supplies are managed via the Procurement and Supply Unit. These units also report to the Deputy Director General for Economics, Finance and Social Development.

The Company will appoint a Project CLO for the operation phase and assign responsibilities for planning and undertaking external communication with the ACs and other stakeholders as well as managing community grievances during operation to the CLO. The Project CLO contact details will be updated in the SEP and disclosed to the ACs via mahallas and other stakeholders via the Project SEP and Company's website. The Project CLO will be responsible for reporting the SEP progress and community grievances to the Company and Lenders during operation. The Project CLO will also report on the Project progress and E&S performance to the ACs.

The roles, responsibilities, and powers of the EHSS personnel are defined in the job descriptions of employees, regulations on structural divisions, procedures, and other corporate and administrative documents in force in the Company.

Responsibilities for the implementation of the plans and procedures accompanying the Operation ESMMP, as well as other IMS documents, are defined in the relevant plans, procedures, and corporate documents.



4.3.2 Environmental And Social Management. Service Contractors

The main activities at the Project operation stage will be managed by the SGCC while contractors will be involved for auxiliary functions. The key contractors' functions will be maintenance, housekeeping and cleaning, transport service and specialized machinery providers, medical services. Security, and fire safety services will be provided by the divisions of the state services (Ministry of Defence and Ministry of Emergency Situations). Emergency response (gas rescue) services will be provided by UzVCH (Military department under Uzbekneftegaz JSC).

The SGCC shall develop a document with full and formalised description of the contractors' responsibilities (General Health and Safety, Environmental and Social Requirements to Contractors). Some of requirements are included in the HSEIS IMS Manual of Uzbekneftegaz JSC which is applicable to the SGCC, however, this document does provide for the full range of the service contractors' obligations.

Each contractor working in the Project area must ensure compliance with the requirements applicable to its functions and scope as defined in the Framework ESMMP and respective OMPs. Contractors are required to have valid procedures in place that take into account the Framework ESMMP and OMPs and to develop their own respective plans as appropriate. Contractors must provide continuous progress monitoring of the planned activities within their scope of responsibility, conduct respective audits and inspections, and regularly report to the SGCC (the issues of monitoring and reporting are discussed in Sections 4.5 and 4.6).

4.3.3 Supply Chain Management

To achieve environmental and social goals of the Company, the Supply Chain Policy should be developed. The Supply Chain Policy should be applicable for all contractors and suppliers of goods and services and based on the following principles:

- Production safety zero or low impact on the environment, employees, consumers, population and property of the Company,
- Economic efficiency all goods and services suppliers should ensure low costs and low economic impact on consumers,
- Absence of corruption zero tolerance for bribery and corruption in all supply chain operations,
- Human rights human rights are respected, supported and promoted by all suppliers.

The SGCC should specify at least the following environmental and social requirements for the Supply Chain:

- Goods and raw materials supply,
- Licensed extraction of raw materials and production,
- Certificates of conformity for each for each lot of delivered goods or raw materials,
- Lowest hazardous class of goods and raw material,
- Radiation safety test of all lots of construction raw materials for construction needs,
- Goods and raw materials should be delivered from mines located locally or from the closest production facilities,
- Raw materials should not impact the quality of SGCC products,
- Hi quality of goods or raw materials providing the low or zero waste,
- Package requirements including amount / absence of package, big load packages, reusable
 package, recycled or biodegradable package, forwarding of package to the supplier for reuse,
 etc.,
- Multifunctional machines and equipment with low energy and resource demand,
- Low air and GHG emissions at the production facility of the supplier,
- Low noise generation of machines,
- Suppliers' Code of Conduct,
- Outside Service Questionnaire.

Essential HSE training is provided to service contractors' and sub-contractors' staff directly by contractors/sub-contractors in line with the requirements of the national legislation and IMS requirements prior to commencement of work.



In order to comply with applicable international requirements, the SGCC and each contractor performing works for the Project shall ensure compliance with the requirements applicable to their activities and scope of work, as defined in the Framework ESMMP and the plans and procedures developed to implement the ESMMP principles.

4.4 Environmental and Social Impacts and Mitigation Measures

Considering the environmental and socio-economic baseline conditions in the Project area, potential environmental and social impacts described in the ESIA Report and national EIA, national requirements to environmental, health and safety management, the existing HSEIS IMS of Uzbekneftegaz JSC, and the Lenders requirements the following key Project environmental and social operational management plans will be required:

Table 4.1: Key environmental considerations of the Project operation phase

Nº	Environmental impact/aspect	Operation ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Air (Quality			
1.1	Ambient air pollution	OMP Emissions, Noise and Vibration	OMP Transport and Traffic Safety OMP Waste and Hazardous Materials Supply Chain Policy (requirements for construction works, emissions from vehicles and dust generation)	Environmental Unit Equipment Repair Unit Operation contractors
2. Gree	enhouse Gas Emiss	ions		
2.1	Ensuring sustainable nature management aimed at reducing the greenhouse effect through reducing GHG emissions	Greenhouse Gas Emissions OMP, including measures aimed at GHG emissions reduction, monitoring, and control	OMP Emissions, Noise and Vibration	Environmental Unit
3. Adv	erse Physical Impa	ct		
3.1	Noise impacts at monitoring points at the boundaries of the residential areas Noise impacts on wildlife	OMP Emissions, Noise and Vibration	OMP Transport and Traffic Safety Supply Chain Policy (requirements for construction works, noise generation)	Environmental Unit Operation contractors
4. Soil	Ground and Groun	d Water		
4.1	Mechanical impact on soil Impact on underground conditions	OMP Water and Wastewater Landfill Management Plan	OMP Transport and Traffic Safety OMP Waste and Hazardous Materials	Construction Unit Operation contractors
4.2	Soil contamination	OMP Waste and Hazardous Materials OMP Water and Wastewater	Watering of green areas schedule (prevent salination process)	Environmental Unit Construction Unit Operation contractors



Nº	Environmental impact/aspect	Operation ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
			Supply Chain Policy (requirements for construction works, waste handling)	
4.3	Impact on shallow groundwater level/ groundwater pollution	OMP Water and Wastewater OMP Waste and Hazardous Materials	Supply Chain Policy (requirements for construction works, hazardous materials handling)	Construction Unit Operation contractors
5. Sur	face Water Bodies			
5.1	Pollution of surface water bodies	OMP Water and Wastewater OMP Transport and Traffic Safety OMP Waste and Hazardous Materials	Supply Chain Policy (requirements for construction works, construction wastewater discharge)	WWTP Laboratory Environmental Unit
	6. Impact on Flor			
6.1	Pollution and destruction of vegetation in the Project area and adjacent sites	Biodiversity Management Plan OMP Transport and Traffic Safety OMP Waste and Hazardous Materials	Supply Chain Policy (requirements for construction works, waste and hazardous material handling)	Environmental Unit Construction Unit Operation contractors
6.2	Extinction of animals and loss of their habitat	Biodiversity Management Plan	Supply Chain Policy (requirements for construction works, prohibition of works outside of construction site lighting management, traffic management)	Environmental Unit Construction Unit Operation contractors
6.3	Wildlife nuisance factors (light, noise)	OMP Transport and Traffic Safety OMP Emissions, Noise and Vibration Biodiversity Management Plan Relevant Contractors' Management Plans	Supply Chain Policy (requirements for construction works, movements of vehicles and waste keeping outside the construction sites, lighting and noise management)	Environmental Unit Construction Unit Operation contractors

Table 4.2: Key social considerations of the Project operation phase

No.	Social impact/aspect	Operation ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Info				
1.1	Information disclosure, public consultations and stakeholder engagement planning	Stakeholder Engagement Plan	Operation CLO responsibilities Regular reports/presentations for the ACs	Project CLO jointly with the Corporate Relations and Social Development Unit



No.	Social impact/aspect	Operation ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
			Project information leaflets	
			Community grievance mechanism	
2. Labo	ur and Working Co	onditions		
2.1	Non- discrimination and equal opportunities	HR Policy and procedures Ethics Code Internal Labour Regulations	Collective Bargaining Agreement Workers' grievance mechanism	HR Unit Grievance Management and Follow-up Control Unit
2.2	Staff accommodation	Staff Accommodation Management Plan Staff Camp Audits Checklist in line with the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards"	Workers' grievance mechanism	Occupational Health and Safety Unit
3. Supp	oly Chain			
3.1	Supply chain management	Supply Chain Policy Outside Service Questionnaire	Suppliers' Code of Conduct (by suppliers) Human Rights Policy	Procurement and Supply Unit
4. Occu	pational Health ar			
4.1	Conflicts between workers and the local population	Ethics Code Code of Conduct for the Operational Staff Accommodation Camp Due Diligence Review Procedure for recruiting in-	Community grievance mechanism	Occupational Health and Safety Unit Grievance Management and Follow-up Control Unit
4.2	Workplace ambient factors	house security personnel OMP Labour and Working Conditions Emissions, Noise and Vibration OMP	Collective Bargaining Agreement	Occupational Health and Safety Unit
4.3	Occupational health and safety	OMP Labour and Working Conditions OMP Waste and Hazardous Materials OHS Procedures of the HSEIS IMS	Collective Bargaining Agreement	Occupational Health and Safety Unit
5. Com				
5.1	Conflicts between workers and the local population	Ethics Code Code of Conduct for the Operational Staff Accommodation Camp Due Diligence Review Procedure for recruiting inhouse security personnel	Training plan Training presentations to the security authorities Community grievance mechanism	Occupational Health and Safety Unit Grievance Management and Follow-up Control Unit



No.	Social impact/aspect	Operation ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
5.2	Traffic safety during the use of public roads	OMP Transport and Traffic Safety	SEP Community grievance mechanism	Occupational Health and Safety Unit
5.3	State of local transport infrastructure	OMP Transport and Traffic Safety	Community Development Plan	Occupational Health and Safety Unit
5.4.	Emergency situations	Emergency OMP (existing: SGCC's Emergency Response Plans for hazardous production facilities)	-	Industrial Safety Unit
		OMP Waste and Hazardous Materials		
5.5.	Communicable diseases	Public Health and Safety Management Plan	Community grievance mechanism	Project CLO jointly with the Industrial Safety Unit
6. Human Rights				
6.1.	Protection of human rights	SGCC's Human Rights Policy	SGCC's Ethics Code Suppliers' Code of Conduct (by suppliers) Workers' and community grievance mechanisms	HR Unit jointly with the Project CLO Grievance Management and Follow-up Control Unit

Detailed environmental and social management and monitoring activities, responsible parties, Key Performance Indicators for the implementation of these activities are to be developed within the relevant activity-specific management plans for the operation phase.

4.5 Monitoring and Control

4.5.1 General Principles

The process of monitoring and controlling the implementation of the Framework ESMMP / OMPs and related documents is a key management method to ensure a systematic process of obtaining information on the effectiveness and efficiency of the developed activities, as well as on the IMS as a whole.

The main principles of monitoring and verification /audit are:

- Implementing and maintaining an audit system aimed at inspecting performance of the Company and Contractors and assessment of compliance with the applicable regulations, rules and standards,
- Implementing a system of audits to assess efficiency of the OMP activities,
- Ensuring efficient implementation and preventing duplication of the procedures; using the results of various audits to verify implementation of the OMPs.

4.5.2 HSES Monitoring

Environmental, health and safety and social impacts monitoring and verification will be provided in compliance with general commitments identified in this Framework ESMMP, respective OMPs (to be further developed), as well as inspection and operational environmental monitoring programmes of SGCC. The procedure for organising and conducting audits and inspections will be determined by the corresponding documents. Monitoring and control of the state of the environment (Operational Environmental Monitoring and Control) shall be carried out by independent specialised organisations with qualified experts in accordance with approved programmes and methods. The results of monitoring are



documented, analysed and used as a basis for compliance analysis and review of environmental action plans, if required. Assessment of workplace conditions (attestation) is carried out by external specialised contractors followed by an Audit Report.

Audits / monitoring of compliance of contractors' HSES activities are carried out on an ongoing basis throughout the entire period of their work in line with the requirements of the "General Health and Safety, Environmental and Social Requirements to Contractors". Inspections and analysis of identified non-compliances and / or risks with authorised representatives of the contractors to be conducted on a monthly basis.

The HSEIS Unit will prepare periodic (annual) reports to the Lenders' IESC with information on the progress of implementation of the Company's commitments set forth in these OMPs and take into account the information received from the contractors. The reports will include documentary evidence of the monitoring results (e.g., air quality testing, noise monitoring) to demonstrate compliance with the assumed commitments.

In addition, regular monitoring will be provided to verify the implementation progress of the Stakeholder Engagement Plan and management of community and workers' grievances in accordance with the approved corporate procedures (Community and Contractor's Workers Grievance Procedure).

Monitoring of adverse environmental impacts of the pasture and farms' land will be undertaken in consultation with the ACs and designed in a participatory manner. The ACs will be informed of the monitoring findings.

The SGCC will conduct labour audit of new supply chain organisations prior to contracting. For this purpose, the Company will share the corporate Human Rights Policy and the Outside Service Questionnaire to potential suppliers to exclude forced, child labour and occupational health risks in the supply chain. High-risk suppliers will require attention and management actions will apply in line with Supply Chain Management Policy.

4.5.3 Supervision of Environmental and Social Performance

Adherence to the measures and the effectiveness of their implementation are assessed and supervised during inspections and audits at various levels. Specific features and types of supervision are described in Table 4.3.

Table 4.3: Internal and external audits and inspections

Nō	Type of supervision	Intervals
Interna	al Audits and Inspections	
A1	Audits within the Integrated Management System. These audits are carried out in order to analyse the relevance and efficiency of the Company's management procedures and plans and to assess the overall compliance of the IMS and its elements with the requirements of the ISO 14001, ISO 45001 standards. They are carried out by the Company's employees (to be appointed by Order).	The Audit Programme is drawn up and implemented annually in line with the requirements of the Procedure for Planning and Conducting Internal Audits. The nature and structure of the audits will be confirmed in cooperation with the IMS certification body
A2	Regular inspections, walkthrough audits of the site, interviews with the Company's and contractors' employees, review of documentation and other activities as part of the assessment of the Company's and contractors' compliance with the requirements and implementation of measures set out in the ESMMP, as well as in other documents containing requirements for the Project, both by the Company and contractors. They are carried out by the Company's employees.	Regularly and as needed as part of ongoing activities.



Nō	Type of supervision	Intervals
А3	Regular inspections, walkthrough audits of the site, interviews with employees, review of documentation and other activities as part of the assessment of compliance with the requirements and implementation of measures set out in the ESMMP, as well as in other documents containing requirements for the Project and applicable to a contractor. They are carried out by Contractors' employees within the internal control and sub-contractors supervision framework.	Regularly and as needed as part of ongoing activities.
A4	Day by day checks of goods and material compliance against the requirements for each type of procurement indicted at the Supply Chain Policy.	Regularly in event of noncompliance
A5	Regular audits of new supply chain organisations by the procurement staff on key workers' rights including those related to child labour, forced labour, occupational health and safety as well as gender-based violence and harassment using the Outside Service Questionnaire.	Prior to contracting
A6	Regular audits (including interviews with employees, review of documentation and worker's grievance logs) by the Company of contractors and all sub-contractors on key workers' rights including those related to child labour, forced labour, harassment, abuse and intimidation as well as workers' grievances and resolution.	Monthly
A7	Regular audits of the staff accommodation camp (including workovers, interviews with employees, review of documentation and grievance logs) using the checklist in the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards".	Monthly
A7	Regular audits of the contractor's community grievance management and resolution by the Company's CLO.	Monthly
A8	A due diligence review for recruiting in-house security personnel, including provisions for identification of cases of past abuse and checking their qualifications and certifications.	Prior to recruiting
Externa	al Audits	
B1	An audit conducted by the state supervisory authorities of the Republic of Uzbekistan in order to determine the level of compliance with the regulatory requirements.	Regularly in line with applicable requirements; unscheduled - on request
B2	Audit conducted by representatives of Lenders // Lenders' Consultants // IMS certification body.	The nature and structure of the audits will be confirmed as part of the loan documentation and the IMS implementation



Inspections are carried out on a regular basis in accordance with the approved schedule of inspections. There are also unscheduled (special purpose) inspections conducted as required. Inspections can be focused on specific issues, or they can be carried out in the form of a site walkthrough audit with consideration of various issues, using checklists and photography. The audits, in their turn, are comprehensive in nature, they are performed according to the approved schedule and cover a wide range of environmental and social issues. It's also worth noting that audits involve not only a visual inspection of the site but also review of documents and interviewing personnel.

The frequency of audits and inspections can be tailored to existing requirements.

Contractors develop their own schedules for such audits and inspections, which define the scope of inspection (what exactly is to be supervised over), their frequency, responsibility for their implementation, and checklists necessary for their implementation. These procedures and lists shall be developed taking into account the requirements of the Operation ESMMP and related documents. Audits and inspections schedules shall be part of the Contractors' environmental and social management system and agreed by the Company. The results of audits and inspections are submitted by the contractors to the SGCC as part of periodic reporting (see Section 4.6).

4.5.4 Identification and Elimination of Non-compliances

The reasons of all registered non-compliance shall be identified, and all inconsistencies identified during audits and inspections shall be eliminated or mitigated to reach the safe level.

Management of non-compliance identified during audits includes:

- Identification and primary registration of non-compliance cases,
- Elimination of identified non-compliance, mitigation of their impacts, corrective actions taken to eliminate non-compliance detected,
- Determination of the reasons of non-compliance and assessment of the need for corrective actions eliminating the causes of non-compliances and their recurrence,
- Implementation of corrective actions and registration of their results,
- Effectiveness analysis of the undertaken corrective actions.

If the undertaken corrective actions are ineffective (meaning that after all planned activities have been conducted, non-compliance recur) it is necessary to review the causes and plan and implement new corrective actions, which will eliminate the causes of the non-compliance. The review shall include an assessment of options to improve and change the HSES management system.

A separate procedure of non-compliance reporting and elimination should be developed for supply of goods and services for the SGCC needs. The Company should develop a procedure for interaction with suppliers and include it into the standard agreements.

4.5.5 Key Performance Indicators

When conducting audits/assessments/inspections, compliance will be assessed against key performance indicators (KPIs) or performance criteria which are to be developed for each activity-specific management plan (OMPs), policy and procedure, if applicable.

KPIs are quantitative or qualitative measurements used to verify performance, assess effectiveness of mitigation measures, and demonstrate performance improvements.

Relevant KPIs will be identified in each respective OMP, policy or procedure where possible. KPIs will set minimum environmental and social standards and threshold values for environmental factors. KPIs will be sourced from the Project design documentation, the Project Standards Document, national standards, impact assessment documentation and existing SGCC' IMS. If any of the KPI values exceed the levels predicted in the Project Standards Document, then the need to refine mitigation measures will be investigated and implemented as necessary.

All existing OMPs, policies and procedures of the Company will be updated to include new facilities and streamline the KPIs with the Project standards.

Sample KPIs for the OMPs, policies and procedures to be developed by the Project for the operation phase are summarised in the table below.



Table 4.4: Sample KPIs for OMPs

CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
Emissions, Noise and Vibration OMP	Instances of air emissions, noise and vibration levels exceeded Noise readings are within the guidelines	ESIA Project Standards Document Transport and Traffic Safety OMP Waste and Hazardous Materials OMP Supply Chain Policy (requirements for construction works, emissions from vehicles and dust generation)	Environmental Unit Equipment Repair Unit Operation contractors
Greenhouse Gas Emissions OMP	Total fuel consumption by types Total net grid electric power consumption Energy efficiency KPIs Use of modern energy saving equipment and materials Number of energy efficient process flow management schemes % of power demand reduction Optimisation of engines operation Reduction in energy losses % of copper conductors and bus bars in the distribution grid	ESIA CCRA Project Standards Document Emissions, Noise and Vibration OMP	Environmental Unit



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	% of energy saving electrical cables		
Climate change	Design to include allowance for no flood damage from up to 1 in 200-year event	ESIA CCRA	Environmental Unit
Water and Wastewater OMP	Water efficiency target to reduce water consumption 10% year-on-year Number of water pollution events	ESIA Project Standards Document Transport and Traffic Safety OMP Waste and	Construction Unit Operation contractors
	Number of non- compliances with effluent quality standards Top 10% on industry benchmark No change in salinity No change in composition of main species	Hazardous Materials OMP	
Landfill Management Plan	Number of non- compliances cases 0 local community grievances received	Project Standards Document Transport and Traffic Safety OMP Waste and Hazardous Materials OMP	Environmental Unit
Waste and Hazardous Materials OMP	Waste generation by hazard classes Percentage of reusable/recycled material Waste reduction rate by waste streams Amount of hazardous waste disposed illegally Number of non- compliance cases	ESIA Project Standards Document Landfill Management Plan	Environmental Unit



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	Percentage of operators who have completed Spill Response Awareness training – target 100%		
	0 mishandling of waste incidents reported		
	Inspections showing Project Waste Management procedures are being followed		
	0 local community grievances received		
Transport and Traffic Safety OMP	Number of road accidents – target 0	Supply Chain Policy (requirements for construction works,	Occupational Health and Safety Unit
	Number of community grievances in respect of Project transport safety and disturbance	waste and hazardous material handling)	Grievance Management and Follow-up Control Unit
Biodiversity Management Plan	Area of disturbed habitats Instances of disturbance/death of rare and protected species, commercial species Events of hazardous materials or waste leaks	Supply Chain Policy (requirements for construction works, waste and hazardous material handling)	Environmental Unit
	Impacts on freshwater habitats (surface water bodies)		
Human Resource Policy	Senior level commitment to HR policy	HRIA Collective Bargaining Agreement	HR Unit
	KPIs identified in the HR Policy	Workers' grievance mechanism	
	% of staff who signed the HR Policy – target 100%		
	Toolbox talks on HR Policy		



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	Number of workers grievances related to equal opportunities and GBVH issues at workplace		
Ethics Code	% of staff who signed the Ethics Code – target 100% Toolbox talks on Ethics Code Number of workers grievances in respect of GBVH issues	HRIA Collective Bargaining Agreement Workers' grievance mechanism	HR Units
Internal Labour Regulations	% of staff who signed the Ethics Code – target 100% Toolbox talks on Internal Labour Regulations Number of workers grievances	HRIA Collective Bargaining Agreement Workers' grievance mechanism	Trade Union Committee HR Unit
Staff Accommodation Management Plan	Number and frequency of staff camp audits Number of workers grievances in respect of staff accommodation	Staff Camp Audits Checklist in line with the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards" Workers' grievance mechanism	Occupational Health and Safety Unit
Supply Chain Management Policy	Senior level commitment to the Supply Chain Management Policy The number of suppliers inconsistent with the Supply Chain Management Policy % of contract managers received the training 100% Outside Service Questionnaire completion by suppliers to exclude	HRIA Outside Service Questionnaire	Procurement and Supply Unit



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	forced, child labour and occupational health risks		
Code of Conduct for the Operational Staff Accommodation Camp	% of residents who signed the Ethics Code of Conduct – target 100% Toolbox talks on the Code of Conduct Number of accommodation incidents reported Number of workers' grievances in respect of staff accommodation Number of community grievances due to the presence of the staff camp Number of conflict incidents with communities Number of infection disease cases among staff	Collective Bargaining Agreement Workers' grievance mechanism Community grievance mechanism Training plan Training presentations to the security authorities Community grievance mechanism	Occupational Health and Safety Unit Grievance Management and Follow-up Control Unit
Due Diligence Review Procedure for recruiting inhouse security personnel	% of identified cases of abuse among security staff 100% of required qualifications and certifications 100% awareness of the job descriptions requirements. % of staff trained. Training Plan implementation	HRIA Grievance mechanism	Occupational Health and Safety Unit Grievance Management and Follow-up Control Unit
Labour and Working Conditions OMP	Cases of non- compliance with labour law (in respect of availability of labour agreements, salary payments, overtime pays, hours for rest and work, etc.)	Collective Bargaining Agreement	HR Unit Occupational Health and Safety Unit Grievance Management and Follow-up Control Unit



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	Number of workers' grievances in respect of labour and working conditions		
OHS Procedures of the HSEIS IMS	Number of reported accidents/incidents (LTIFR, accidents per thousand employees) – target 0 Days without incidents Number of near misses (ratio of near misses to accidents) Behavior-based safety (e.g., number of safety observations) Audit/inspection scores (ratio of conducted audits to planned audits, ratio of non-conformities to corrective measures, etc.) Equipment breakdowns % of management and employees trained in H&S	Collective Bargaining Agreement Training plan	Occupational Health and Safety Unit
Human Rights Policy	Senior level commitment to human rights policy Review the grievance mechanism for GBVH complaints and satisfactory close-out. Number of staff trained on human rights topics, dates of courses and refreshers. Inclusion of human rights issues in induction training.	Ethics Code Suppliers' Code of Conduct (by suppliers) Workers' and community grievance mechanisms	HR Unit jointly with the Project CLO Grievance Management and Follow-up Control Unit



CMPs, policies and procedures	KPIs	KPI reference document	Responsibility
	Understanding of human rights topics (such as GBVH) among workers.		
Retrenchment Plan (at least 18 months prior to decommissioning	Numbers of people affected by retrenchment Outcomes of the Retrenchment Plan recorded Minutes of meetings with affected employees Letters of notification to the local employment centres Number of workers' grievances during the retrenchment process Number of statutory labour inspections and court suits due to the retrenchment process grievances	Collective Bargaining Agreement Workers' grievance mechanism	HR Unit Trade Union Committee Grievance Management and Follow-up Control Unit

4.6 Reporting

4.6.1 Internal Reporting

Designated specialists of the SGCC prepare annual reports on the environmental and social management system performance for senior management. These reports may include *inter alia* information on the effectiveness of the implementation of the Operation ESMMP and measures aimed at managing environmental and social risks and impacts. Decisions made following the IMS performance analysis serve as a basis for introducing changes into the Company's HSES Policies and Objectives, internal regulatory documents, as well as for undertaking corrective actions aimed at further improvement of the Company's management system and establishing and adjusting the KPIs.

Contractors are required to submit periodic HSES reports to the SGCC, including quarterly compliance reports. These reports shall include the following information:

- Development of the Contractor's internal regulatory documents or their tailoring to the requirements of the ESMMP Framework and relevant plans and procedures of the Company,
- Audits/inspections undertaken,
- Identified non-compliance cases and corrective actions taken,
- Accidents, incidents, emergencies (including information on response and elimination of consequences, as well as corrective actions),
- Other environmental and social information provided for the preparation of HSES reports and information on compliance with the KPIs provided in the OMPs.

Reporting formats will be agreed upon between the HSES departments of the Company and the contractors.



4.6.2 External Reporting

Reporting to Lenders and their representatives

The Company prepares periodic reports for the Lenders and their representatives. These reports contain information for assessing the environmental and social performance of the Project required by the Lenders' IESC; The nature and structure of the reports will be confirmed as part of the loan documentation.

These reports provide data for the latest reporting period and contain, as a minimum:

- List of persons responsible for the Project and for HSES aspects,
- Review of the Company's and Contractors' management systems performance,
- Summary information on the status of environmental permits,
- Summarised data on environmental monitoring and control,
- Information on HSE incidents and non-compliance cases,
- OHS data, including information on morbidity, first aid visits, etc. (separately for Project personnel and Contractor personnel),
- Information on conducted trainings,
- Stakeholder engagement activities,
- Review of complaints received and responses to them,
- · Local communities development assistance measures and programmes,
- Summary of the Environmental and Social Action Plan (ESAP) implementation,
- Proposed/adjusted mitigation measures, necessary costs.

The final format of the Project's Environmental and Social Report will be agreed by the Lender's Consultant.

Reporting to stakeholders

In line with international requirements reflected in the SEP, the Company will also report to the ACs and other stakeholders on the Project environmental and social performance. Such reporting may be in the format of the Project's periodic brochure or other accessible format describing the Project development and achieved results.

4.7 Environmental and Social Training

4.7.1 Overview

The Company and its contractors systematically develop HSES training programmes and plans for their personnel. The procedure for determining the need for training, personnel training procedures, and qualification records are determined by the Company's internal regulations. The general requirements for such training provided to the staff of the Company and contractors related to the implementation of the Operation ESMM are summarised below.

4.7.2 Company Staff Training

Company's staff training programme shall include the following core modules:

- A set of HSES training programmes provided to all employees in accordance with the national legislation,
- Bespoke HSES training programmes provided to each employee as part of his/her individual personal development plan considering his position and functions.

Thereby, among other training programmes, HSES managers and specialists undergo the following training programmes:

- Performance of HSES audit/inspections,
- Bespoke training on the requirements and methods for implementing the Operation ESMMP and its supplementary plans,
- In-house security personnel training to raise awareness on:
 - Salient human rights issues (particularly in personnel and community security),



- Requirements of the applicable international standards,
- Diverse cultural and ethnic backgrounds of workers present on-site,
- Procurement and contract managers training:
 - Supply chain management,
 - Human rights principles and policy in assessing supply chain.

4.7.3 Contractor Training

Training requirements for contractors are summarised as follows:

Contractor's HSE Managers

 Training of Contractor's HSE managers on the key requirements of the Framework ESMMP, related plans and procedures, as well as training on the implementation of these requirements within the Contractor's own management system

General HSE training of all Contractor's personnel

- Timely HSE training in line with the statutory requirements is provided by contractors to their employees working on the Project. Training is also provided to employees with appropriate qualification prior to arrival at the Project construction site. Documentary evidence that the employee has completed this training is required to enter the site.
- All contractor's employees undergo a series of introduction briefings upon arrival at the Project site (a refresher briefing is also conducted if required by law and the Company's internal regulations). Briefings are conducted by the SGCC and, among other things, cover the following aspects:
 - Occupational health and safety, environmental and social (HSES) risks associated with the Project,
 - Grievance related procedures,
 - Code of Conduct (including cultural awareness element and interactions with local communities),
 - Workers' rights,
 - Emergency response,
 - General measures to prevent environmental pollution,
 - Measures to control negative impacts,
 - Waste management procedures/instructions,
 - Contractor's HSES management procedures.
- Toolbox talks are provided to employees by site supervisors/foremen prior to the commencement of each new activity, and these cover basic HSES requirements relevant to that activity.

Specialised plans and procedures prepared in pursuit of the Operation ESMMP development may contain additional requirements for the training of the Company's and contractors' staff, as well as for supporting documents, and shall be considered together with the above requirements.

Contractors are to provide information on the conducted HSES training in their quarterly reports. Contractors shall also keep records of training completed (valid certificates) demonstrating that employees are properly qualified for the work they perform. This information is provided by the SGCC as part of regular reports.

The Company will also deliver a training presentation to the security authorities' teams at the Project facilities with the explanation of the expected level of conduct toward workers and the ACs.



5. ESMMP FOR THE DECOMISSIONING PHASE

5.1 Environmental and Social Management

Considering the nature of impacts and risks of the decommissioning phase, the SGCC will be guided by the existing IMS procedures and the additional DMPs developed for specific needs and components of the Project.

Prior to the decommissioning activities, the SGCC will assess all possible risks and impacts of each installation and Project associated facilities and develop the Decommissioning Plan.

The overall responsibility for the management of the Project, and implementation of the Framework ESMMP, Decommissioning Plan and DMPs lies within the SGCC, which ensures:

- Coordination of the parties involved in decommissioning and their actions:
 - Circulate the requirements of the Framework ESMMP, Decommissioning Plan/DMPs and other related plans and procedures among the structural divisions of the SGCC, Decommissioning Contractor and sub-contractors,
 - Supervise the development and implementation of environmental and social management plans and other applicable requirements by all parties.
- Appropriate monitoring of compliance with the requirements of the Framework ESMMP and other related plans and procedures:
 - Continuous monitoring,
 - Audits and other types of inspections,
 - Corrective actions monitoring.
- Ensuring that structural divisions, contractors, stakeholders, and other parties are informed about the purpose and scope of the Framework ESMMP and other related plans and procedures:
 - o Familiarisation with the content and scope of the documents.

Providing environmental, emergency response and OHS trainings for the SGCC' employees and the management personnel of the Decommissioning Contractor and sub-contractors on the implementation of the ESMMP and other related plans and procedures.

5.2 Parties of the Decommissioning ESMMP

The requirements to the Decommissioning Contractor and workforce, including licensed firms for works with hazardous materials and waste, soil reclamation etc. will be assessed at the early stage of the Project decommissioning. Responsibilities for the HSES aspects will be delegated to each party.

The main parties involved in the Project decommissioning and management of its environmental and social aspects are:

- Project Operator SGCC,
- It is assumed that decommissioning works will be carried out by a Decommissioning Contractor involving sub-contractors to perform special tasks, if necessary. These tasks may include the following works:
 - o dismantling of vessels, tanks and pipelines with hazardous content,
 - o dismantling of grids and power supply equipment,
 - o collection, deactivation and disposal of hazardous waste,
 - recycling of waste,
 - landfill recultivation,
 - soil remediation,
 - restoration of vegetation; and others.
- State authorities monitoring of impacts and statutory compliance,
- Local employment authorities assistance to redundant workers.



5.3 Decommissioning ESMMP Implementation Responsibilities

5.3.1 Environmental and Social Management. SGCC

The environmental and social management of the decommissioning activities will be managed by the SGCC through the ESMMP, Decommissioning Plan, and DMPs developed and disclosed to the Decommissioning Contractor and all sub-contractors.

The SGCC will appoint appropriate number of qualified staff members to monitor and control adequate undertaking of mitigations included into the ESMMP, Decommissioning Plan, and other DMPs and report on all gaps to the Project Manager and HSE Manager of the Company.

For the decommissioning phase, the Company will appoint a full-time Labour Officer with the responsibility to monitor working conditions at the Project sites, in accommodation premises as well as compliance of the Decommissioning Contractor (and all sub-contractors') with the national labour law and applicable international requirements. The Labour Officer will conduct regular (monthly) audits of the Decommissioning Contractor and all sub-contractors on key workers' rights including those related to child labour, forced labour, occupational health and safety, harassment, abuse and intimidation.

The Company will appoint a Project CLO for the decommissioning phase and assign responsibilities for planning and undertaking external communication with the ACs and other stakeholders as well as managing community grievances during decommissioning to the CLO. The Project CLO contact details will be disclosed to the ACs via mahallas and other stakeholders via the updated Project SEP and Company's website. The Project CLO will be responsible for reporting community grievances to the Company during decommissioning.

The roles, responsibilities, and powers of the ESHS personnel are defined in the job descriptions, structural units' regulations, procedures, and other corporate documents adopted in the Company.

Responsibilities for the implementation of the plans and procedures accompanying the ESMMP, as well as other IMS documents, are defined in the relevant plans, procedures, and documents.

5.3.2 Environmental And Social Management. Decommissioning Contractor

The Decommissioning Contractor should develop appropriate management structure to ensure that all activities undertaken are carried out in accordance with the ESMMP, Decommissioning Plan, DMPs, national legislative HSE requirements, and applicable international standards. Labour protection, environmental protection, occupational health and safety and environmental safety, organization and performance of work requirements provided in the ESMMP, Decommissioning Plan and DMPs, should be communicated to the personnel in the form of trainings, job descriptions, safety sheets and in other forms.

The Decommissioning Contractor will appoint qualified staff managers with at least 10 years' experience in managing of HSE impacts, risks and hazards at construction or demolition sites. Sub-contractor's HSE managers should have at least the similar experience.

The Decommissioning Contractor will appoint a Community Liaison Officer with at least 5 years' experience in managing community grievances and engaging with the ACs during construction or demolition and assign responsibilities to the CLO for monthly reporting community grievances and resolution to the SGCC. The EPC Contractor will disclose CLO contact details to the ACs neighbouring the demolition site via respective mahallas.

The Decommissioning Contractor and all sub-contractors need to appoint a Workers' Grievance Officer who will manage Project workers' grievances and report (monthly) to the Company and the Project Labour Officer. Sub-contractors will report on workers' grievances and resolution to the Workers' Grievance Officer of the Decommissioning Contractor.

5.4 Environmental and Social Impacts and Mitigation Measures

Most of environmental, OHS and social impacts and risks will be similar to construction phase of the Project and require same mitigation measures. At the same time, the following environmental and social aspects should be managed via specific DMPs as described in the tables below.



Table 5.1: Key environmental considerations of the Project decommissioning phase

Nº	Environmental impact/aspect	ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Haz	zardous Materials			
1.1	Hazardous materials stock should be fully used before Decommissioning phase or sold and transferred to the other party Storage, transportation, and	Production Plan Hazardous Materials DMP	Excavation Works Plan Supply Chain Management Policy	Environmental Unit Construction Unit Decommissioning contractors
	handling of hazardous materials in stock should be managed to prevent their impact on environment and employees			
2. Air	and Greenhouse Gas Emissions			
2.1	Generation of dust during demolition works and vehicle movements	Air Emission DMP	Excavation Works Plan	Environmental Unit Construction Unit Decommissioning
	Emission of volatile organic compounds (VOCs) during dismantling of vessels, tanks, pipelines			contractors
	Emission of methane during dismantling of natural gas pipelines			
3. Soi	l and Groundwater			
3.1	Soil contamination by waste during demolition works Damage of underground vessels, tanks and pipelines with hazardous content during excavation works	Waste DMP Excavation Works Plan	Soil Reclamation Plan Supply Chain Management Policy	Environmental Unit Construction Unit Decommissioning contractors
4. Wa	ste Management			
4.1	Recycling of waste from dismantling of production equipment Soil contamination Landfill remediation may require removal of non-neutralised hazardous waste	Waste DMP Soil Reclamation Plan	Supply Chain Management Policy. Landfill Recultivation Plan	Environmental Unit Construction Unit Decommissioning contractors
5. Sur	face Water Bodies			
5.1	Discharge of untreated wastewater into waterbodies	Surface and Groundwater DMP	Hazardous Materials DMP	Environmental Unit Construction Unit Decommissioning contractors
6. Im	pact on Flora and Fauna			



Nº	Environmental impact/aspect	ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
6.1	Disturbed lands after equipment and buildings removal should be recultivated Biodiversity of water reservoir should be assessed, and mitigation measures provided	Remediation Plan Water Reservoir Decommissioning Plan and Biodiversity Management Plan, if required		Environmental Unit Construction Unit Decommissioning contractors

Table 5.2: Key social considerations of the Project decommissioning phase

Nº	Social impact/aspect	ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
1. Co	mmunity Grievances			
1.1	Community grievance management and resolution	Community grievance mechanism	SEP for the decommissioning phase CLOs	SGCCUP CLO for the decommissioning phase Decommissioning contractors
2. Lal	bour and Working Conditions			
2.1	Retrenchment	SGCC's Retrenchment Plan	SGCC's Collective Bargaining Agreement Workers' grievance mechanism	HR Unit Grievance Management and Follow-up Control Unit
2.2	Accommodation services for workers	Worker's Accommodation DMP of the Decommissioning Contractor	Staff Camp Audits Checklist in line with the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards" Workers' grievance mechanism	Decommissioning contractors
2.3	Demobilisation of workers	Workforce Demobilisation DMP of the Decommissioning Contractor	Workers' grievance mechanism	Decommissioning contractors
2.4	Occupational health and safety of the Decommissioning Contractor's and sub-contractors' workers	HSE Plan of the Decommissioning Contractor	Traffic DMP Hazardous Materials DMP Waste DMP Emergency Response Plan of	Decommissioning contractors



Nο	Social impact/aspect	ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
			the Decommissioning Contractor	
3. Sup	oply Chain			
3.1	Supply chain management	SGCC' Supply Chain Policy Supply Chain Management Plan of the Decommissioning Contractor	Human Rights Policy	Procurement and Supply Unit Decommissioning contractors
4. Cor	mmunity Health, Safety and Secu	rity		
4.1	Transport safety during the use of public roads	Traffic DMP	Hazardous Materials DMP Waste DMP HSE Plan of the Decommissioning Contractor	Decommissioning contractors
4.2	Emergency situations	Emergency Response Plan of the Decommissioning Contractor	Hazardous Materials DMP Waste DMP HSE Plan of the Decommissioning Contractor	Decommissioning contractors
4.3	Conflicts between demolition workers and local population	Code of Conduct	Community grievance mechanism	Decommissioning contractors
4.4	Communicable diseases	Communicable Disease Exclusion Procedure	Community grievance mechanism	Decommissioning contractors
5. Lan	nd Acquisition and Resettlement			
5.1	Economic displacement and livelihood restoration planning due to temporary land take for the decommissioning phase	Livelihood Restoration Plan (if applicable)	SGCC's Resettlement Policy Framework Community grievance mechanism	SGCC
6. Cul	tural Heritage			
6.1	Protection of cultural heritage	Chance Finds Procedure	-	SGCC
7. Hui	man Rights			
7.1	Protection of human rights	SGCC's Human Rights Policy	SGCC's Ethics Code Workers' and community	SGCC



Nº	Social impact/aspect	ESMMP supporting plans and other documents	Linked aspects and plans	Responsibility
			grievance mechanisms	

Detailed environmental and social management and monitoring activities, responsible parties, KPIs for the implementation of these activities will be given in the relevant activity-specific management plans for the decommissioning phase.

5.5 Monitoring and Control

5.5.1 HSES Monitoring

The Company shall monitor and undertake control of decommissioning activities performed to ensure compliance with HSES requirements. The procedure for organising and conducting inspections will be determined by the corresponding documents.

Statutory labour law compliance audits are carried out by external specialised organisations followed by an Audit Report.

The SGCC's Labour Officer will conduct regular audits of the Decommissioning Contractor and all sub-contractors on key workers' rights including those related to child labour, forced labour, harassment, abuse and intimidation as well as workers' grievances and resolution. The Labour Officer will also be responsible for audits of the workers' accommodation camp.

The SGCC's Labour Officer will also be responsible for monitoring the retrenchment process and grievance resolution.

Environmental monitoring and control is carried out by qualified personnel of the SGCC or independent specialised organisations with qualified experts in accordance with approved programmes and methods. The results of monitoring are documented, analysed and used as a basis for compliance analysis and review of environmental plans, if required.

HSES compliance monitoring of the Decommissioning Contractor and sub-contractors is carried out on an ongoing basis throughout the entire period of work in line with the requirements of the DMPs. Inspections and analysis of identified non-compliances and / or risks with authorised representatives of the Decommissioning Contractor are conducted on a weekly basis.

HSE managers will prepare periodic (monthly) reports to the SGCC management with information on the progress of implementation of the Company's commitments set forth in this ESMMP and DMPs and take into account the information received from the Decommissioning Contractor. The reports will include documentary evidence of the monitoring results (e.g., air quality testing, noise monitoring, incidents) to demonstrate compliance with the assumed commitments.

In addition, the SGCC will monitor community and workers' grievances and their resolution in line with the SEP and the Retrenchment Plan.

5.5.2 Supervision of Environmental and Social Performance

Adherence to the measures and the effectiveness of their implementation are assessed and supervised during inspections at various levels. Specific features and types of supervision are described in Table 5.3.

Table 5.3: Internal and external audits and inspections

Nō	Type of supervision	Intervals
Internal	Audits and Inspections	
A1	Audits within the Integrated Management System. These audits are carried out in order to analyse the relevance and efficiency of the Company's	



Nō	Type of supervision	Intervals
	management procedures and plans and to assess the overall compliance of the IMS and its elements with the requirements of the ISO 14001, ISO 45001 standards. They are carried out by the Company's employees (to be appointed by Order).	
A2	Regular inspections, walkthrough audits of the site, interviews with the Company's and contractors' employees, review of documentation and other activities as part of the assessment of the Company's and contractors' compliance with the requirements and implementation of measures set out in the ESMMP, as well as in other documents containing requirements for the Project, both by the Company and contractors. They are carried out by the Company's employees.	Weekly
A3	Regular inspections, walkthrough audits of the site, interviews with employees, review of documentation and other activities as part of the assessment of compliance with the requirements and implementation of measures set out in the ESMMP, as well as in other documents containing requirements for the Project and applicable to the Decommissioning Contractor and sub-contractors. They are carried out by the Decommissioning Contractors' employees within the internal control and sub-contractors supervision framework.	Weekly
A4	Regular audits (including interviews with employees, review of documentation and worker's grievance logs) by the Company's Labour Officer of the Decommissioning Contractor and all sub-contractors on key workers' rights including those related to child labour, forced labour, harassment, abuse and intimidation as well as workers' grievances and resolution.	Monthly
A5	Regular audits of the workers' accommodation camp (including workovers, interviews camp residents, review of documentation and grievance logs) by the Company's Labour Officer using the checklist in the IFC/EBRD Guidance Note "Workers' accommodation: processes and standards".	Monthly
A6	Regular audits of the Decommissioning Contractor's community grievance management and resolution by the SGCC's CLO.	Monthly
A7	Regular audits of the retrenchment grievances and resolution by the SGCC's Labour Officer.	Weekly
A8	Assessment of the Retrenchment Plan implementation	Upon completion of redundancies
A9	Regular audits of new supply chain organisations by the Decommissioning Contractor on key workers' rights including those related to child labour, forced labour, occupational health and safety as well as gender-based violence and harassment using the Outside Service Questionnaire.	Prior to contracting
External	Audits	



Nō	Type of supervision	Intervals
B1	An audit conducted by the state supervisory authorities of the Republic of Uzbekistan in order to determine the level of compliance with the regulatory requirements.	requirements; unscheduled - on

Inspections are carried out on a regular basis in accordance with the approved inspections schedule. There are also unscheduled (special purpose) inspections conducted as required. Inspections can be focused on specific issues, or they can be carried out in the form of a site walkthrough audit with consideration of various problems, using checklists and photography. The audits, in their turn, are comprehensive in nature, they are performed according to the approved schedule and cover a wide range of environmental and social issues. It's also worth noting that audits involve not only a visual inspection of the site but also work with documents and interviewing personnel.

The Decommissioning Contractor develops its own schedules for such audits and inspections, which define the scope of inspection (what exactly is to be supervised over), frequency, responsibility for their implementation, and necessary checklists. These procedures and checklists shall be developed taking into account the requirements of the Decommissioning ESMMP and related documents. Schedules of audits and inspections shall be part of the Decommissioning Contractors' environmental and social management system and agreed by the Company. The results of audits and inspections are submitted by the Decommissioning Contractor to the SGCC as part of periodic reporting.

5.5.3 Identification and Elimination of Non-compliances

Audits and inspections will identify reasons of all registered non-compliances and inconsistencies to be eliminated.

Management of non-compliances identified during audits includes the following:

- · Identification and primary registration of non-compliance cases,
- Elimination of identified non-compliances, mitigation of their impacts, corrective actions taken to eliminate non-compliances detected,
- Determination of the reasons of non-compliance and assessment the need for corrective actions eliminating the causes of non-compliance and their recurrence,
- Implementation of corrective actions and registration of their results,
- Effectiveness analysis of the undertaken corrective actions.

If the undertaken corrective actions are ineffective (meaning that after all planned activities have been conducted, non-compliance recur) it is necessary to review the causes and plan and implement new corrective actions, which will eliminate the causes of the non-compliance. The review shall include an assessment of options to improve and change the HSES management system.

5.5.4 Key Performance Indicators

When conducting audits/assessments/inspections, compliance will be assessed against key performance indicators (KPIs) or performance criteria which are to be developed for each activity-specific management plan (DMPs), policy and procedure, if applicable.

KPIs are quantitative or qualitative measurements used to verify performance, assess effectiveness of mitigation measures, and demonstrate performance improvements.

Relevant KPIs will be identified in each respective DMP, policy or procedure where possible. KPIs will set minimum environmental and social standards and threshold values for environmental factors. KPIs will be sourced from the Project design documentation, the Project Standards Document, national standards, impact assessment documentation and existing management systems of the EPC Contractor and the Company. If any of the KPI values exceed the levels predicted in the Project Standards Document, then the need to refine mitigation measures will be investigated and implemented as necessary.

DMPs, policies and procedures of the Decommissioning Contractor will be developed similar to the construction phase management plans to include KPIs streamlined with the Project standards.



5.6 Reporting

5.6.1 Internal Reporting

Designated specialists of the Company prepare monthly reports on the E&S management system performance during decommissioning for senior management. These reports may include *inter alia* information on the effectiveness of the implementation of the Decommissioning ESMMP and measures aimed at managing environmental and social risks and impacts.

The Decommissioning Contractor and all sub-contractors are required to submit periodic HSES reports to the SGCC, including monthly reports on compliance with applicable requirements. These reports shall include the following information:

- Audits/inspections undertaken,
- Identified non-compliance cases and corrective actions taken,
- Accidents, incidents, emergencies (including information on response and elimination of consequences, as well as corrective actions),
- Other environmental and social information provided for the preparation of HSES reports and information on compliance with the KPIs provided in the DMPs.

Reporting formats are agreed upon between the HSES Units of the SGCC and the Decommissioning Contractor.

5.6.2 External Reporting

In line with international requirements reflected in the SEP, the Company will also provide reports on the Project decommissioning progress and E&S performance to stakeholders and the ACs. Such reporting may be in the format of the information leaflets or other accessible format and will be disclosed via the Company's website and distributed in hard copies in the directly affected communities via respective mahallas.

5.7 Environmental and Social Training

5.7.1 Company Staff Training

Company's staff training programme shall include the following core modules:

• A set of decommissioning HSES training programmes provided to all HSE managers and workers involved into the Project decommissioning phase.

Thereby, among other training programmes, HSES managers and specialists undergo the following training programmes:

- · Performance of HSES audit/inspections,
- In-house security personnel training to raise awareness on:
 - o Salient human rights issues (particularly in personnel and community security),
 - Requirements of the applicable international standards,
 - o Diverse cultural and ethnic backgrounds of workers present on-site,
- Bespoke training on the requirements and methods for implementing the Decommissioning ESMMP and its supplementary plans.

5.7.2 Decommissioning Contractor and Sub-contractors Training

Training requirements for contractors are summarized as follows:

Contractor's HSE Managers

• Training of Decommissioning Contractor's HSE managers on the key requirements of the ESMMP, Decommissioning Plan, DMPs, and procedures, as well as training on the implementation of these requirements within the Contractor's own management system.

General HSE training of All Contractor's Personnel

• Timely HSE training in line with the statutory requirements is provided by all contractors to their employees working on the Project. Training is also provided to employees with appropriate



qualification prior to arrival at the Project construction site. Documentary evidence that the employee has completed this training is required to enter the site.

- All Decommissioning Contractor and sub-contractors' employees undergo a series of
 introduction briefings upon arrival at the Project site (a refresher briefing is also conducted if
 required by law and the Company's internal regulations). Briefings are conducted by -the
 Decommissioning Contractor and cover the following aspects:
 - Environmental and social risks associated with the decommissioning activities,
 - Grievance related procedures,
 - The Code of Conduct (including cultural awareness element and interactions with local communities),
 - General measures to prevent environmental pollution,
 - Measures to control negative E&S impacts,
 - Waste management procedures/instructions,
 - o Decommissioning Contractor's HSES management procedures,
- Toolbox talks are provided to employees by site supervisors/foremen prior to the commencement of each new activity, and these cover basic HSES requirements relevant to that activity

Decommissioning Contractor's procurement and contract managers training

• Training on Project human rights principles and policy relevant to their role.

Specialised plans and procedures prepared in pursuit of the Decommissioning ESMMP development may contain additional requirements for the training of the Company's and Decommissioning Contractor' staff (including all sub-contractors), as well as for supporting documents, and shall be considered together with the above requirements.

The Decommissioning Contractor is to provide information on the conducted HSES training in their monthly reports. Sub-contractors shall also keep records of training completed (valid certificates) demonstrating that employees are properly qualified for the work they perform.



ANNEX A SGCCUP PLOT PLAN



