Project: Aqaba Amman Water Conveyance and Desalination (AAWDC)
Environmental and Social Management and Monitoring Plan

Report Issue Record

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Abbreviations and Acronyms

AAWDC	Aqaba–Amman Water Desalination and Conveyance
AAWDCP	Aqaba–Amman Water Desalination and Conveyance Project
AFESD	Arab Fund for Economic and Social Development
ASEZA	Aqaba Special Economic Zone Authority
ATS	Action Tracking System
BAP	Biodiversity Action Plan
BMP	Biodiversity Management Plan
BOT	Build–Operate–Transfer
CDF	Community Development Framework
CDP	Community Development Plan
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
CLO	Community Liaison Officer
DAFWC	Days Away from Work Case
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EMF	Environmental Management Framework
EMP	Environmental Management Plan
EP	Equator Principles
EPC	Engineering, Procurement and Construction
EPRP	Emergency Preparedness and Response Plan
E&S	Environmental and Social
ESIA	Environmental and Social Impact Assessment
ESG	Environmental, Social and Governance
ESHS	Environmental, Social, Health and Safety
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
EU	European Union
GBVH	Gender-Based Violence and Harassment
GCF	Green Climate Fund
GHG	Greenhouse Gases
GIS	Geographic Information System
GPS	Global Positioning System

Abbreviations and Acronyms

GRM	Grievance Redress Mechanism
HAZID	Hazard Identification
HS	Health and Safety
HSE	Health, Safety and Environment
ICOMOS	International Council on Monuments and Sites
IESC	Independent Environmental and Social Consultant
IFC	International Finance Corporation
ILO	International Labour Organization
JMA	Jordan Maritime Authority
KPI	Key Performance Indicator
MCM/yr	Million Cubic Metres per Year
MoEnv	Ministry of Environment
MPWH	Ministry of Public Works and Housing
MWI	Ministry of Water and Irrigation
NCPC	National Carrier Project Company
NCR	Non-Conformity Report
O&M	Operation and Maintenance
OHTL	Overhead Transmission Line
PC	Project Company
PPE	Personal Protective Equipment
PPP	Public–Private Partnership
PV	Photovoltaic
RO	Reverse Osmosis
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SOP	Standard Operating Procedure
TOR	Terms of Reference
UN	United Nations
USAID	United States Agency for International Development

1 Introduction

1.1 AAWDCP Project Overview

The Aqaba-Amman Water Desalination and Conveyance Project (AAWDCP) represents a landmark initiative by the Hashemite Kingdom of Jordan to address the country's pressing water scarcity challenges and to support long-term socio-economic development. Conceived by the Ministry of Water and Irrigation (MWI), with support from international partners such as USAID, the Project aims to deliver up to 300 million cubic meters per year (MCM/yr) of potable water from the Red Sea to key demand locations, including Aqaba and Amman.

This strategic infrastructure project is being implemented under a Public-Private Partnership (PPP) framework, designed to leverage private sector expertise and financing while ensuring alignment with national water security objectives. The selected Project Company will undertake the Project under a Build-Operate-Transfer (BOT) model, encompassing the full lifecycle of the project - from engineering, procurement, and construction (EPC) to operation and maintenance (O&M) over the contractual term.

The final client and authority overseeing the Project is the Ministry of Water and Irrigation (MWI), which will receive the treated water at designated Delivery Points and Turnouts. The Project scope includes the design, construction, and operation of five major facility groups:

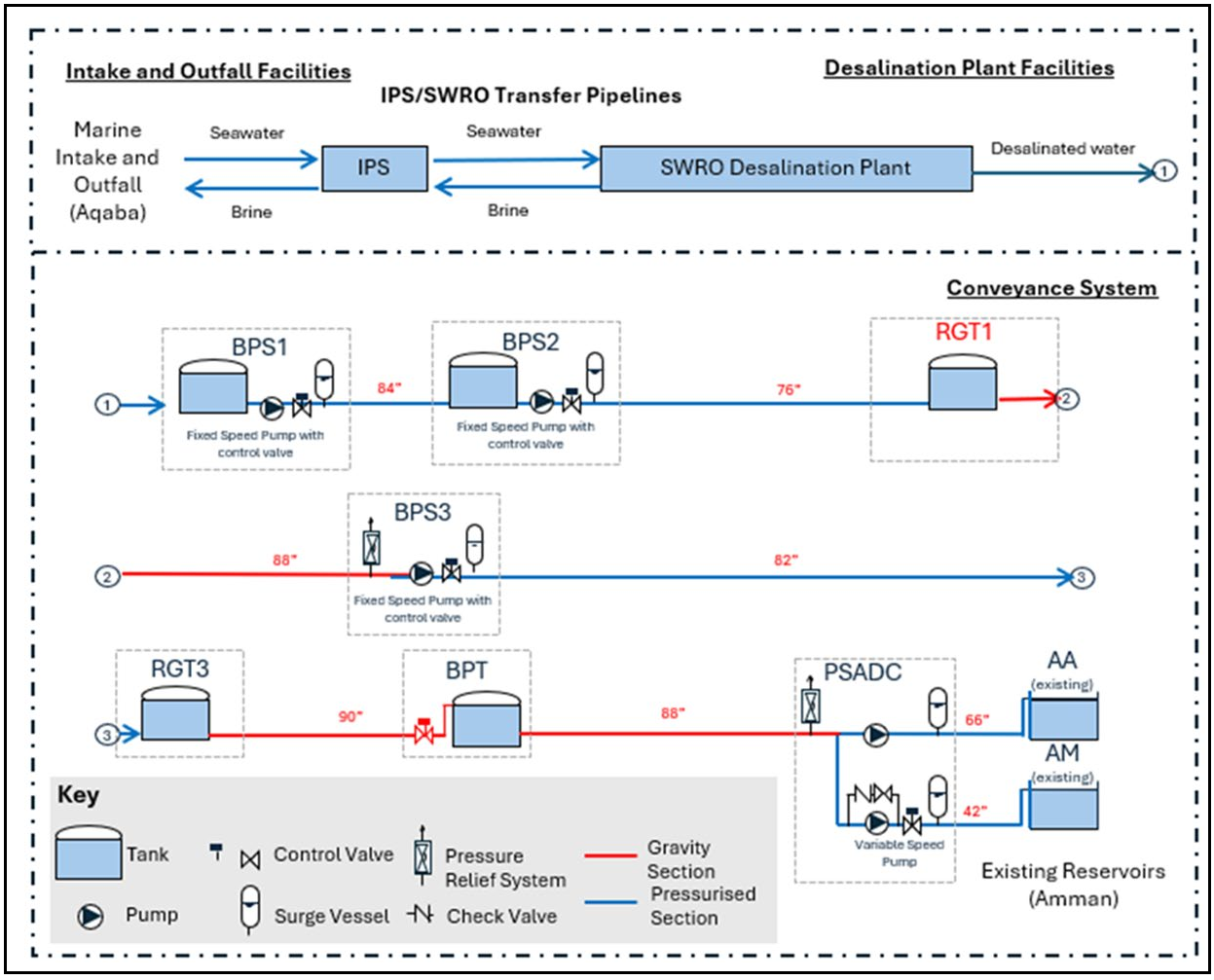
- Marine Works: intake and brine outfall systems in the Gulf of Aqaba
- Desalination Plant: a state-of-the-art reverse osmosis facility near Aqaba
- Conveyance System: a pipeline network with pumping stations and reservoirs extending to Amman
- Renewable Energy Facilities: Solar Photovoltaic (PV) systems to meet greenhouse gas emissions (GHG) limits
- Common Facilities: control, communication, and operation and maintenance infrastructure.

Overview of the facilities is provided in Figure 1-1.

The Project is structured to ensure high operational reliability, energy efficiency, and environmental compliance, with a minimum annual system availability of 97%.

The National Carrier Project Company (NCPC), together with its Sponsors (Meridiam and Suez), plays a central role in facilitating inter-agency coordination and ensuring regulatory compliance. As the entity responsible for delivering the Project, the Project Company must work in close collaboration with MWI while also managing its own network of subcontractors, including the EPC Contractor, the O&M Operator, the Owner's Engineer, and the Environmental & Social Consultant, to ensure that all Project objectives are met.

Figure 1-1: Overview of AADWC Project



1.2 Purpose and Scope

The purpose of this Environmental and Social Management and Monitoring Plan (ESMMP) is to:

- Provide an overview of the Project's environmental and social standards, commitments and oversight and assurance requirements
- Document and direct NCPC and Contractor personnel, as well as other stakeholders, on how Project environmental and social risks will be managed in conformance with applicable standards, Project commitments and oversight and assurance requirements
- Outline organisational structure, key roles and responsibilities associated with environmental and social management and monitoring.

This ESMMP provides an overview of the processes for identifying, avoiding, mitigating, and managing environmental and social risks. The ESMMP is the central document of the Project ESMS (Section 4.2) and is supported by:

- 2025 AAWDC ESIA Commitments Register (Section 2.6)

- E&S Management Processes (Section 4.3) embedded into the Project ESMS to deliver on its intended outcomes
- Environmental and Social Management Frameworks/Plans (Section 5), translating the Project commitments and documenting how they will be implemented and managed on the Project
- Environmental and Social Compliance Monitoring Framework (Section 6), including processes for managing Contractor performance, oversight and assurance, and processes for guiding implementation of Project initiatives.

The scope of this ESMMP covers the construction and operations phases of the Project, in a manner commensurate with the status of Project preparation. This document applies to NCPC, its Contractors and their subcontractors working on the AADWC Project.

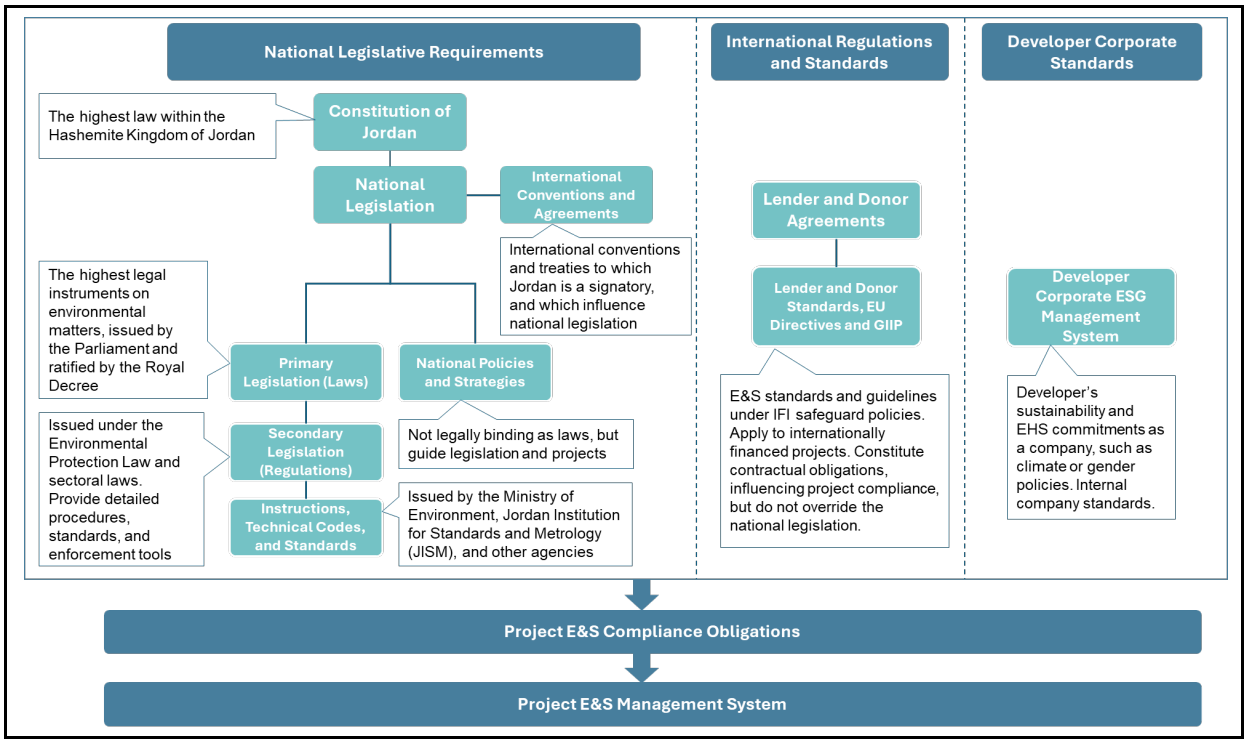
A revised version of the ESMMP will be issued 6 months prior to the commencement of operations to support the start-up and Operations phase of the Project.

2 Policy, Legislation and Standards

The Project is committed to compliance with the applicable policies, legislation, and standards, including relevant international, European, and Jordanian requirements, as well as international agreements to which Jordan is a party. These are detailed in Chapter 2 Policy, Legislation and Standards of the 2025 AAWDC ESIA.

Jordan's environmental regulatory framework is shaped by core primary legislation, sectoral integration, international obligations, and acute natural constraints (especially water scarcity). The regulatory hierarchy applicable to the Project is outlined in Figure 2-1.

Figure 2-1: Policy, Legislation and Standards Applicable to the Project



2.1 Constitution of Jordan and National Legislation

The Project is aligned with the Constitution of Jordan in terms of:

- Ensuring the right to water and public welfare
- Ensuring environmental protection through the preparation of the required environmental and social studies and assessments, and implementing the required measures to ensure compliance with national and international standards
- Encouraging economic growth and national development, especially as it is aligned with Jordan's modernisation vision, aligning with Jordan's public-private partnership targets since the Project is developed as a Build-Operate-Transfer (BOT) transaction
- Protecting private property ownership and fair compensation by ensuring that land acquisition that may be needed is only for public benefit and will be fairly compensated, not only in line with national legislation, but also in accordance with international lender standards.

The key national policies and strategies that support environmental sustainability, climate adaptation, resource efficiency (especially water and energy) and apply to the Project are:

- The Jordan Economic Modernisation Vision (2022)
- The National Water Strategy (2023-2040)
- Jordan's Climate Change Policy (2022 update)
- Jordan's Energy Strategy (2020-2030)

The key national legislation applicable to the Project is detailed in Chapter 2 of the ESIA and includes primary laws and secondary regulations, instructions and standards on environmental protection and permitting, air, water and soil resources, biodiversity, waste and hazardous materials, occupational and public health and safety, employment and labour, cultural heritage, transport and maritime navigation and land acquisition.

2.2 International Conventions and Agreements

Jordan is a signatory to several key global environmental treaties, including those on climate change, biodiversity, desertification, wetlands, hazardous waste, chemicals, and ozone protection. Jordan is also a member of the International Labour Organisation (ILO) and has ratified seven of the eight Core Conventions in addition to 26 other conventions. Chapter 2 of the ESIA details the key international conventions and agreements to which Jordan is a signatory that are relevant to the Project.

2.3 Lender and Donor Standards

The environmental and social standards of the key Lenders that are financing the Project and to which the Project will adhere include:

- EBRD Environmental and Social Policy and E&S Requirements (2024)
- IFC Performance Standards on Environmental and Social Sustainability (2012)
- EIB Group Environmental and Social Sustainability Framework (2022)
- DFC Environmental and Social Policy and Procedures (2024)
- Proparco Exclusion List (2022)
- Harmonised EDFI Exclusion List
- USAID Environmental Procedures (22 CFR 216)
- Green Climate Fund Environmental and Social Safeguards
- Equator Principles EP4 (2020)

The EBRD and EIB, within their policies, include a commitment to ensure that projects are structured in line with European Union (EU) environmental principles, practices, and substantive standards, where applicable, and no less stringent than the host country's environmental standards.

Based on preliminary ESIA studies and supporting documents, EBRD and IFC carried out their own analysis of ethnic groups in the Project area against the four characteristics outlined in their respective Indigenous Peoples Policies to determine whether the Project triggered any standards related to Indigenous Peoples. The results of their analysis concluded that no ethnic groups possessed all four

characteristics and that as a result the Project did not trigger the EBRD and IFC standards related to Indigenous Peoples.

The Green Climate Fund (GCF), however, employs a broader interpretation of the characteristics and has concluded that there are potentially affected people and communities in the proposed Project area that meet the characterising criteria in paragraph 14 of the GCF Indigenous People Policy, and that therefore their Policy could be triggered if these people are impacted. If this is the case, the Project will address these impacts according to GCF requirements.

2.4 Good International Practice and Benchmark Standards

The following Good International Practice and Benchmark Standards are considered applicable to the Project:

- IFC / EBRD Guidance Note on Worker Accommodation: Processes and Standard (2009)
- EBRD Sector Supply-Chain Guidance – Solar Energy
- IFC General Environment, Health and Safety Guidelines (2007) and sector specific guidelines:
  - EHS Guidelines for Electric Power Transmission and Distribution (2007)
  - EHS Guidelines for Water and Sanitation (2007)
  - EHS Guidelines for Ports, Harbours and Terminals (2017)
- IFC Handbook for Addressing Project-Induced In-Migration (2009)
- UNESCO Guidance and Toolkit for Impact Assessment in a World Heritage Context (2022)
- UNESCO / ICOMOS Intangible Cultural Heritage Guidelines
- MWI Guideline on EIA for Sea and Brackish Water Desalination Plants

2.5 Corporate Requirements

Corporate Policies of Meridiam applicable to the Project include:

- Sustainable Development Charter and Sustainability Risk Policy (2025)
- Human Rights Policy (2024), Climate Policy (2024)
- Anti-Bribery and Corruption Policy (2024)
- Shareholder Engagement Policy (2024)
- Responsible Lobbying Policy (2022)

2.6 ESIA Commitments Register

Environmental and Social management controls (design controls, mitigation measures and monitoring requirements) have been described in various chapters of the 2025 AAWDC ESIA, in particular Chapter 9 - Impact Assessment, Mitigation and Monitoring.

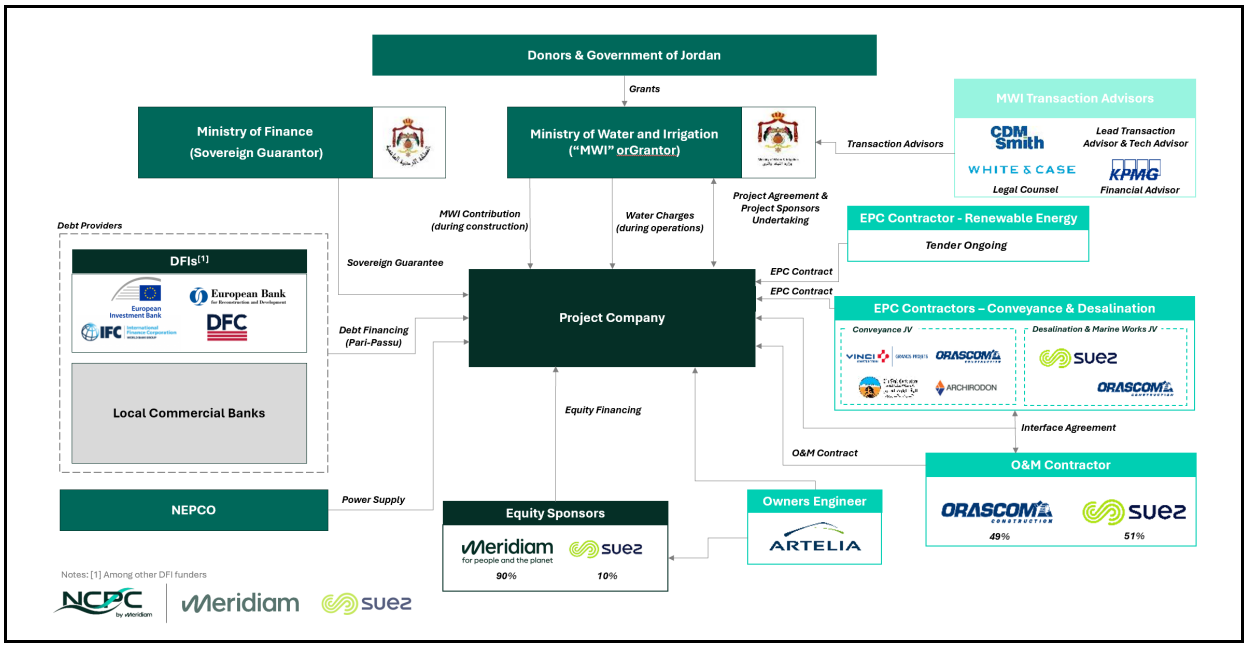
To assist the authorities and stakeholders, an ESIA Commitments Register has been compiled, listing all commitments to be implemented at various stages of the Project. The ESIA Commitments Register serves as the primary link between the ESIA and the Project ESMS. The operational commitments will be implemented through the updated ESMS for the Operations Phase of the Project.

3 Organisation, Roles and Responsibilities

3.1 Overview of the Project Organisation

A simplified overview of the Project contractual structure is provided in Figure 3-1.

Figure 3-1: Project Contractual Structure



3.2 EPC Contractors for the Different Project Components

The main Engineering, Procurement and Construction (EPC) Contractor is led by Vinci, and is a consortium of:

- Suez/Orascom joint venture (Suez leading) for the Desalination Plant and related intake/outfall infrastructure.
- Vinci/Orascom/Arab contractors/Archirodon joint venture (Vinci leading) for the Conveyance System.

The long-term Operation and Maintenance (O&M) Contractor of the Project will be a joint venture incorporated by Suez (as leader) and by Orascom.

The EPC Contractor for the Project Renewable Energy (RE) Facility is currently being appointed. This EPC Contractor will also be responsible for O&M of the RE Facility during the first two years of operation, after which the principal O&M Contractor will take over.

In the present document, the term "EPC", unless otherwise specified, generally means "EPC consortium and RE Facility EPC".

At the time of writing, works associated with the Project are progressing under a Limited Notice to Proceed (LNTP) instruction. The scope of this instruction includes surveys and site investigations, design and engineering, and procurement and sourcing activities. This LNTP phase will be followed by construction in the course of 2026.

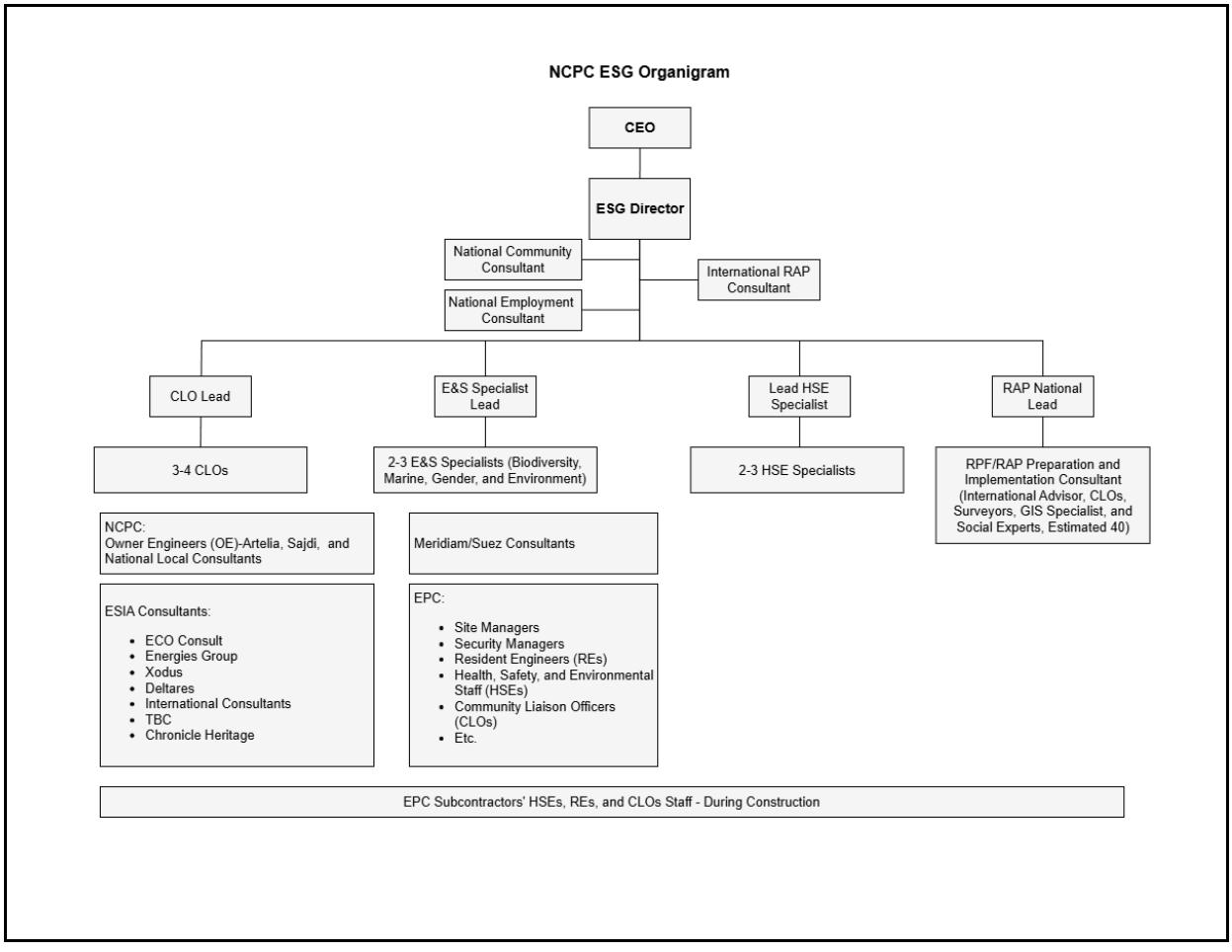
NCPC holds a contract with the EPC consortium for the LNTP. NCPC will enter a new contract with the EPC consortium for the construction phase. The EPC consortium will employ different sub-contractors and suppliers during Project construction.

3.3 NCPC E&S Organisational Structure

The NCPC Environmental, Social and Governance (ESG) Team (Figure 3-2) will be responsible for overseeing and coordinating all environmental, social, health and safety commitments throughout the Project lifecycle.

The ESG team will be led by the ESG Director, who will provide strategic oversight, ensure compliance with national legislation and lender standards, and be the primary interface with government authorities, lenders, and other key stakeholders. The ESG Director reports directly to the Project CEO.

Figure 3-2: NCPC ESG Organisational Structure



The ESG Team will consist of:

- A stakeholder engagement team comprising Community Liaison Officers (CLOs), responsible for day-to-day engagement with local communities, district and sub-district authorities, municipal representatives, and community-based organisations; this team will manage the GRM and will assist the Social Specialists for the implementation and monitoring of social plans, the CIP and the local recruitment plan.

- Environmental and Social Specialists responsible for implementing and monitoring environmental and social management plans, supporting impact mitigation, and coordinating with EPC Contractor E&S teams. These specialists will also be responsible for planning, data management, maintenance of E&S registers, GIS and E&S performance monitoring.
- A team of Health, Safety and Environment Specialists responsible for overseeing occupational and community health and safety, ensuring contractor construction compliance, monitoring construction on site, and supporting emergency preparedness and response.
- A Resettlement and Livelihood Restoration implementation team, led by a Resettlement Lead. The latter oversees a consultancy firm to prepare and implement the Resettlement Action Plan (RAP). This firm will mobilise a dedicated team of Community Liaison Officers (CLOs) and Social Specialists, led by a combination of local and international resettlement experts, to support on-the-ground engagement, compensation delivery, and livelihood restoration activities in close coordination with MWI.

External advisors, in particular the experts already employed in the ESIA studies, will advise as needed on specific matters such as biodiversity, cultural heritage, inclusion of specific demographic groups etc. Together, the team will have ultimate responsibility for delivering the Project's environmental, social, health and safety obligations, including stakeholder engagement, monitoring compliance with the 2025 AAWDC Project ESIA and associated management plans, managing grievances, and ensuring that all commitments are implemented and tracked.

To effectively cover the geographic extent of the Project, the ESG Team will operate from:

- A main ESG office in Amman, serving as the headquarters for overall project coordination, planning and reporting.
- A satellite ESG office in Aqaba, enabling regular presence at the desalination plant site, ASEZA institutions, and communities in the southern Project areas.

This structure will ensure continuous engagement across the Project footprint, timely response to issues, and close coordination with the EPC Contractor and relevant government entities.

3.3.1 Key E&S Roles and Responsibilities

Key roles and responsibilities for the implementation of this ESMMP are outlined in Table 3-1 below.

Table 3-1: E&S Roles and Responsibilities

Role	Responsibilities
Project Director	• Approval of ESMS, ESMMP and supporting E&S Management Plans • Allocation of resources for implementation
ESG Director	• Maintenance and implementation of the AADCP E&S Management Plans and monitoring program, including maintaining the accredited ISO 14001:2015 • Providing the Project leadership team and functional leaders with environmental and social management system advice, guidance and assurance • Undertake regular reviews and revisions/updates of environmental and social management system

Role	Responsibilities
	• Lead the environmental and social management team • Lead the reporting and review of the environmental and social performance data • Direct liaison with MWI and engagement with high-level national stakeholders • Participates in high-level meetings with the EPC • Reporting to Lenders and sponsors • Managing the E&S budget
Stakeholder engagement team: Lead CLOs (assisted by an international consultant at ESG Director level)	• Day-to-day engagement with local communities, district and sub-district authorities, municipal representatives, and community-based organisations • Management of the GRM • Assistance to the Social Specialists for the implementation and monitoring of social plans such as the CIP and the local recruitment plan • At minimum two CLO's are women • At minimum two CLO's are trained as focal points for GBVH prevention
E&S Lead	• E&S activity planning • Lead the setting up and implementation of the Data Management System and the GIS • Lead the maintenance of E&S registers • Lead the E&S performance monitoring • Organising and supervising Lender advisors' monitoring visits • Remains informed of advances in design and construction (participates in high-level design progress meetings) • Contracts experts and external specialists as needed
Biodiversity expert (marine)	• This expert is likely to be external • Leads the additional marine studies and the marine BAP implementation • Provides advice under the E&S Management of Change • Validates marine pre-construction surveys
Environmental and Social Specialists and Experts	• Contribute to preparation of E&S management plans • Supervise the marine water quality monitoring programme and other environmental monitoring programmes • Implement and monitor the various environmental and social management plans • Advise the HSE specialists if needed on contractor management • Use the DMS and the GIS tools and keep the registers up-to-date • 1 specialist will be responsible for gender aspects • 1 specialist will be responsible for local procurement and employment, assisted by an expert at ESG Director level

Role	Responsibilities
Lead HSE Specialist	• Leads the implementation of the Contractor Management and Monitoring Plan • Remains informed of project progress (participates in weekly project meetings) • Leads a team of HSE specialists and contracts external inspectors when needed
Health, Safety and Environment Specialists	• Assist the HSE lead in overseeing occupational and community health and safety, ensuring contractor construction compliance, monitoring construction on site, and supporting emergency preparedness and response.
Resettlement and Livelihood Restoration implementation team (assisted by an international consultant at ESG Director level)	• Prepare and implement the Resettlement Action Plan (RAP) • Support on-the-ground engagement • Manage compensation delivery • Manage livelihood restoration activities
All Employees	• Comply with company policies and procedures and with the requirements of this Plan
All Contractors	• Ensure operations comply with applicable policies and procedures for site-based activities
All Suppliers	• Comply with applicable company policies

3.4 Responsibilities of MWI

The Ministry of Water and Irrigation (MWI) holds the overall policy mandate and strategic oversight for the AAWDC Project. As the national authority responsible for water governance in Jordan, MWI ensures that the Project is fully aligned with the National Water Strategy, national investment priorities, and the broader sectoral reforms underway within the water sector.

MWI will provide high-level guidance to NCPC on Project implementation, ensuring that all activities are consistent with national legislation, technical standards, and regulatory requirements.

The Ministry will facilitate coordination with relevant governmental bodies, including the Ministry of Environment (MoEnv), ASEZA, and municipalities, to ensure the timely processing of permits, licenses, and any statutory approvals required for construction and operation.

MWI will oversee and participate in high-level stakeholder engagement, particularly with national institutions, governorates, and sectoral authorities, ensuring that community and institutional concerns are addressed in line with national policies and the Project's environmental and social commitments.

3.5 Responsibilities of Electricity Companies

The Electricity Companies[1] (NEPCO, JEPCO and EDCO) are responsible for the planning, design, construction, and long-term operation of the associated electrical works.

[1] The National Electric Power Company (NEPCO) is the transmission operator and wholesale buyer and distributor of electricity across Jourdan. Jordan Electric Power Company (JEPCO) works in the central region, including Amman. Electricity Distribution Company (EDCO) works in southern and eastern regions including Aqaba and Ma'an

MWI will enter a contract with NEPCO for the planning, design, construction, and long-term operation of the OHTL financed by Arab Fund for Economic and Social Development (AFESD).

NEPCO will secure all permits, land access rights, and government approvals required for the OHTL and associated infrastructure. As part of this process, NEPCO will ensure that the environmental and social requirements of this ESMPP are integrated into the design, tender documents, contractor obligations, and construction methodology.

AFESD will hire consultants for the technical and environmental supervision of the works, to ensure compliance with national safety regulations, environmental standards, and the Project's ESMMP and RPF. NCPC will regularly engage with AFESD to ensure compliance.

NCPC will support NEPCO and help structure their Grievance Redress Mechanism (GRM) in line with NCPC's. NEPCO will be responsible for managing stakeholder engagement and grievances specifically related to the OHTL and electrical infrastructure, ensuring timely communication and resolution of community concerns.

Once the works are operational, NEPCO will ensure the safe, reliable, and efficient operation and maintenance of the transmission infrastructure, including continuous monitoring to prevent and mitigate any environmental or community impacts over the long term.

NCPC will monitor E&S performance of the associated electrical works in the overall AAWDCP monitoring and reporting.

4 Environmental and Social Management System

4.1 Introduction

An Environmental and Social Management System (ESMS) is a structured, ongoing framework that organisations use to identify, manage, and improve their environmental and social impacts. It's commonly used by businesses, development projects and financial institutions where activities and operations can affect people, communities, or the environment.

Key purposes of an ESMS are:

- Identify risks and impacts early (e.g., pollution, worker safety, community health, land use)
- Implement measures to avoid, reduce, or compensate for negative impacts
- Engage stakeholders, including workers, communities, and regulators
- Ensure compliance with national laws, industry standards, or lender requirements
- Improve performance over time through monitoring and continual learning.

An ESMS comprises:

- Policy: a formal commitment to environmental protection, social responsibility, and continuous improvement
- Risk and Impact Assessment: identifying environmental and social risks related to operations (e.g., emissions, labour conditions, community displacement)
- Management Programs: plans and procedures to control risks (e.g., waste management plans, worker safety protocols)
- Organisational Capacity and Competency: clear roles, responsibilities, and training for staff and workforce
- Stakeholder Engagement: communication with affected communities, workers, and other stakeholders and a grievance mechanism for concerns or complaints
- Emergency Preparedness and Response: documented arrangements for accidents, spills, or other incidents
- Monitoring and Review: system for performance monitoring, tracking indicators, auditing compliance, and reporting results
- Continuous Improvement: periodic updates to the system based on results and feedback.
- The AADWC Project ESMS will be aligned with the principles of ISO 14001:2015 (an internationally recognised Environmental Management System standard), reflecting applicable standards (national, international and lender standards) outlined in 2025 AAWDC Project ESIA Chapter 2: Policy, Legislation and Standards.
- Section 4.2 details on how Project ESMS is structured and will be developed further. Section 4.3 outlines E&S Management Processes that will be embedded to operationalise the ESMS and deliver on its intended outcomes.

4.2 ESMS Structure and Development

4.2.1 Project ESMS

The Project ESMS consists of this overarching ESMMP and supporting E&S Management Plans and Frameworks on specific topics as presented in Section 5. An overview of the ESMS structure is provided in Figure 4-1.

Project ESMS is developed and implemented by NCPC. The existing Project E&S Management Frameworks will be revised into and superseded by Construction phase E&S Management Plans two months prior to the start of construction, outlining further details on implementation of the Project commitments, NCPC and Contractor(s) specific roles and responsibilities and monitoring and reporting requirements.

A revised version of the ESMMP and the relevant E&S Management Plans will be issued 6 months prior to the start-up to support the commencement of the Project's Operations phase. The operations ESMS will focus on operational aspects such as:

- Data management, compliance and monitoring registers
- Construction close-out inspections and audits (e.g. the RAP audit) if not yet done under previously
- Liaison with MWI, MoEnv, ASEZA and other relevant authorities
- Supervision of the implementation of the Contractor's operations ESMMP and E&S management plan
- Environmental monitoring, including monitoring and management of the discharge quality, and of seawater and biodiversity impacts
- Air quality and noise monitoring (where necessary), including monitoring in response to complaints
- Stakeholder engagement, GRM and ongoing implementation of the social programmes relevant to the operations phase
- Implementation of operations phase Biodiversity Management Plan, Biodiversity Action Plan and associated biodiversity monitoring requirements
- Supervision of E&S Management of Change Procedure, validation of the absence of material change in impacts identified within the ESIA for the operations phase
- Monitoring and reporting.

Development of the ESMS will align with the commitments outlined in Table 4-1.

Table 4-1: E&S Management Commitments

Code	Commitment
Prior to Construction	
ES-PC-01	Relevant implications of international and regional conventions and agreements to the Project in terms of design and operating constraints and environmental performance

Code	Commitment
	will be detailed in the Environmental and Social Management and Monitoring Plan (ESMMP).
ES-PC-02	To ensure that both the operator and relevant contractors fulfil the environmental and social commitments outlined in the 2025 AWWDC Project ESIA, an effective integrated Environmental and Social Management System (ESMS) will be established, implemented, and maintained.
ES-PC-03	A tailored ESMS will be created for the construction phase to outline how the Project will meet these commitments and to monitor its environmental and social performance throughout this period. The overarching Environmental & Social Management and Monitoring (ESMMP) will form part of the ESMS, reflecting the mitigation hierarchy and Good Industry Practice (GIP), and will be supported by topic-specific environmental and social management plans, consistent with the provisions of applicable legislation and other relevant ESRs.
During Construction	
ES-CO-01	The environmental and social risks, impacts and performance of the Project, as well as the effectiveness of mitigation measures, will be subject to regular monitoring. The monitoring program will be designed to address any significant impacts identified during the 2025 AWWDC Project ESIA and during Project execution and include key performance indicators and targets.
During Operations	
ES-OP-01	During the operational phase, NCPC will manage the Project facilities using an ESMS aligned with the ISO 14001 standard. A transition plan will be developed in advance of operations to guide the shift from the construction ESMS to the operational ESMS framework

4.2.2 Contractor ESMS

Contractor(s) will be required to develop their own ESMS that defines policies, strategies, organisation, roles and responsibilities, applicable standards, procedures and processes, as well as expectations, commitments and behaviours to be demonstrated by all Contractor(s) workers and workers of their subcontractor(s) and suppliers.

Contractor ESMS will be designed to identify, manage, and improve Contractor(s) environmental and social impacts and meet the requirements of the applicable standards outlined in 2025 AADWC Project ESIA Chapter 2, this ESMMP and supporting E&S Management Plans.

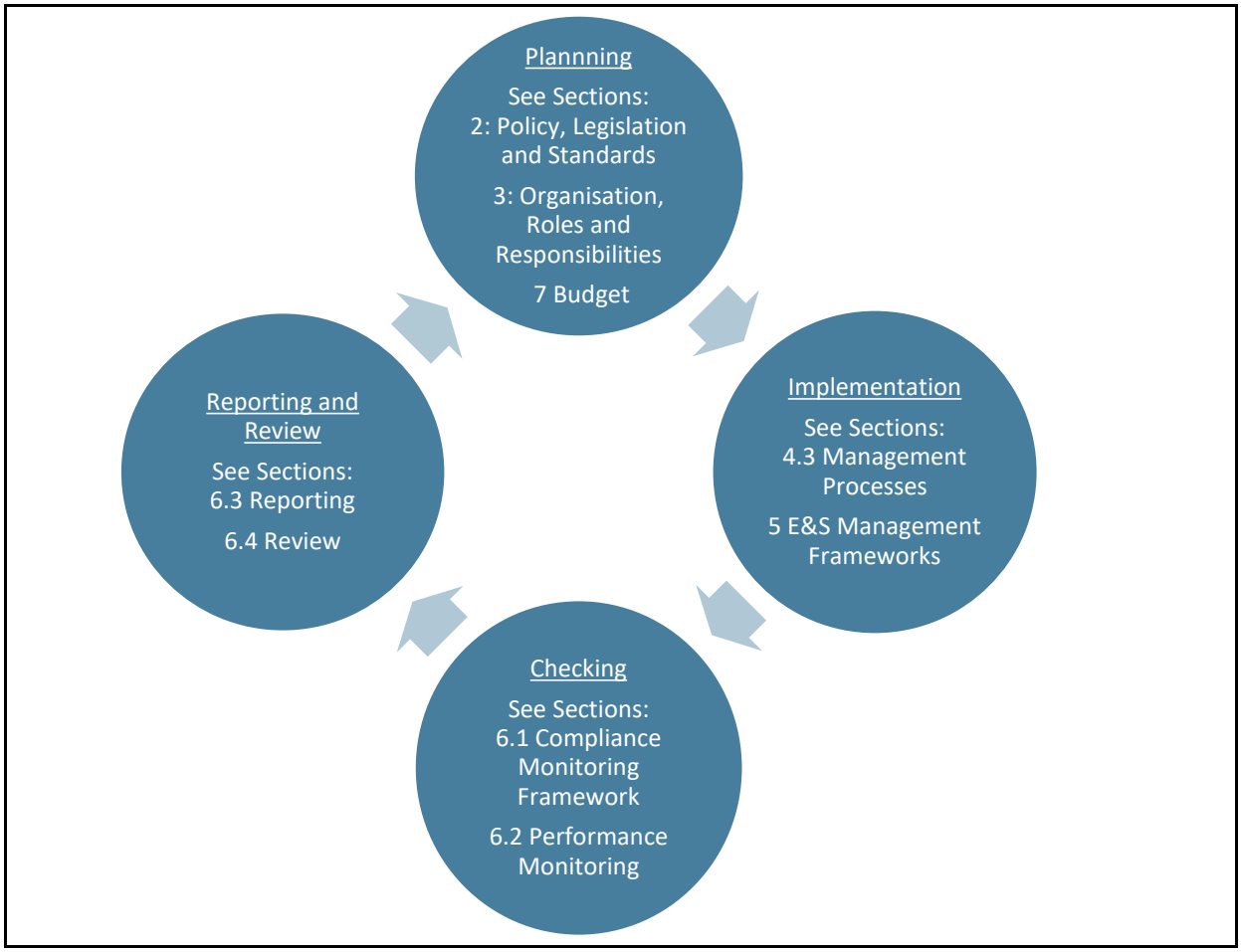
Figure 4-1: Document hierarchy - ESMS Structure

4.3 Management Processes

Management processes are measures that support the implementation of the ESMS. To maintain the effectiveness of the management measures and their relevance to the changing E&S risks and impacts, the Project will adopt a management approach presented in Figure 4-2 aligned with ISO 14001:2015 standard's Plan-Do-Check-Act cycle.

The management processes focus on engineering, procurement and supply chain, pre-construction and construction, including operational readiness of the Project. Operations phase management processes will be outlined in the operations phase ESMMP.

Figure 4-2: Project E&S Management Approach



4.3.1 Design Processes

To ensure that the Project complies with applicable standards and ESIA commitments, a Design Verification Register will be developed to guide verification of engineering controls related to marine and terrestrial construction works, pollution prevention, biodiversity management and noise and vibration, as outlined relevant management Frameworks in Section 5.

The Design Verification Register (see Appendix 1 for a template) will cover the following:

- Relevant standards and their source (e.g. ESIA Chapter 2)
- Evidence from engineering design documents to show compliance with the commitments or applicable standards (e.g. Process and Instrumentation Diagrams (P&IDs), equipment datasheets and Process Basis of Design documents)
- Any further actions necessary to achieve compliance (e.g. where the resolution is ongoing or where additional clarification is needed)
- Any requirements for onsite checks during pre-construction or construction
- Any actions for the Operations Phase
- An explanation for any items that provide an alternative system to that specified in the applicable standards.

E&S Management of Change Process (Section 4.3.4) will be implemented to validate that there is no material change in the impact assessed in the 2025 AAWDC Project ESIA.

The Design Verification Register will remain a 'live' document updated on a regular basis. The process of verification will include commitments outlined in Table 4-2.

Table 4-2: Design Verification Commitments

Code	Commitment
Prior to Completion of Detailed Design	
DV-PD-01	The final outfall and Desalination Plant design and operations and maintenance (O&M) procedures selection process shall incorporate the findings of this assessment and: Assess the feasibility of process controls or treatment that can be integrated into the plant to reduce the discharge concentration of iron Diffuser and port configuration will be designed to maximise dispersion near the diffusers and to minimise the extent of the area where salinity exceeds 2%
DV-PD-02	Once the final operational phase maintenance activities are defined and the associated schedule and underwater sound sources are confirmed, a competent underwater sound expert will validate the absence of material change in impact from underwater sound.
DV-PD-03	Prior to the selection of the outfall and Desalination Plant design and O&M procedures, implement the E&S Management of Change Process to validate that there is no material change in impact
DV-PD-04	Desalination Plant O&M procedures to comply with the discharge standards and the results of this assessment of operational discharges, which will include a reporting system for process controls and chemical usage that are critical to maintain compliance with discharge standards
DV-PD-05	Desalination Plant O&M procedures to comply with the discharge standards and the results of this assessment of operational discharges, which will include: Reporting system for process controls and chemical usage that are critical to maintain compliance with discharge standards
DV-PD-06	EPC to integrate into the final design, operations and maintenance (O&M) procedures the results of an intake entrainment mitigation assessment to select:

Code	Commitment
	Feasibility and optimum bubble curtain design, including the need for an additional deflector curtain (in addition to the curtain across the mouth of the lagoon) (using results of coral/plankton reproduction assessment) Feasibility and optimum design of the fish recovery and return system
DV-PD-07	Permanent equipment design to comply with noise limits
CR-PD-01	Actions in Table 12-10 of the Climate Vulnerability Risk Assessment (CVRA) will be completed prior to completion of detailed design to ensure adequate contingencies and tolerances are built into the design for resilience of the Project facilities to physical climate hazards
CR-PD-02	Upon completion of the detailed design, the Climate Risk Vulnerability Assessment (CRVA) will be revisited to finalise the vulnerability assessment and determine physical climate risk levels.
CR-PD-03	Measures listed in Table 12-15 of the CRVA will be considered prior to completion of detailed design and finalisation of the management system.

4.3.2 Supply Chain and Contractor Management

The Contractor and Supplied E&S Management and Monitoring Framework is provided further in Section 5.

4.3.2.1 Contract Clauses

As part of the Environmental, Social, Health and Safety (ESHS) contract clauses, NCPC will communicate to the Contractor(s):

- NCPC ESHS policy
- NCPC Human Resources policy
- NCPC Sustainable Procurement policy
- NCPC Local Procurement and Local Employment Policy
- NCPC Code of Conduct for all employees including the GBVH/SEAH prevention policy
- The 2025 AAWDC Project ESIA and ESMMP
- The E&S Management Plans identified in this ESMMP.

4.3.2.2 Supply Chain Controls

NCPC will develop a supply chain management system for the Project comprising commensurate policies and procedures for managing and monitoring the performance of contractors and other intermediaries and implementing Lender requirements outlined in 2025 AAWDC Project ESIA Chapter 2.

The supply chain management system will include:

- Requirements on due diligence on potential suppliers and reasonable efforts to select lower-risk suppliers before Full Notice to Proceed

- NCPC will require for the Contractor's to implement the same requirement in relation to their potential suppliers
- Requirements for monitoring of core supply chains to identify any relevant changes and to assess new significant risks or impacts that may arise as a result of these changes as part of the Project E&S Compliance Monitoring Framework
- Lender reporting requirements on any incidences of child labour, forced labour or harm to workers in its core supply chain during construction, including regular reporting on progress on the implementation of prevention and remediation measures
- Requirements to comply with the results and requirements established by the EBRD's Supply Chain Due Diligence
- Requirements on contractual penalties and performance monitoring linked to GBVH/SEAH compliance within the supply chain.

4.3.3 Construction Management Processes

Construction phase management processes will comprise the following measures, as detailed within the relevant topic-specific E&S Management Frameworks outlined in Section 5:

- Pre-construction surveys, assessments and studies to complement the existing baseline data and support hazard, risk and impact identification, management and control
- Forecasts (waste, traffic, workforce headcount, etc.) to support construction planning
- Design of construction sites, layout, equipment specifications, selection of construction methods and site-based controls
- Ongoing engagement with potentially affected communities and relevant institutional stakeholders, including a grievance redress mechanism
- Post construction and pre-demobilisation surveys aimed at verification of commitment closures and management of residual impacts
- Project E&S Compliance Monitoring Framework (Section 6) incorporating reporting requirements.

4.3.4 Management of Environmental and Social Change

ESHS changes shall include the following:

- Activity and physical changes, which were not considered in the ESIA or permitting documents, such as:
    - Project design and footprint changes (e.g., due to geotechnical, topographical, environmental, social, etc. constraints)
    - New planned activity with potential environmental and social impacts
    - Construction timing restrictions that could overlap with seasonal sensitivities
- Changes to environmental, social, health and safety standards and specifications, such as:
- Changes in regulations or new permit conditions

- Changes to NCP standards and specifications
- Change to an avoidance, mitigation or management measure and commitments detailed in the ESIA or the project management documents agreed with the Lenders e.g. the E&S management plans

The objective of managing change is to ensure that changes are systematically screened to identify any environmental, social, health, or safety effects beyond those covered by existing approaches, and to determine whether the mitigation hierarchy should be applied and whether new or additional mitigations are required. The following process steps shall be completed:

1. Change identification
2. Change categorisation and assessment
3. Implementation of the change, including any additional mitigation hierarchy measures and reporting in the Lender report

4.3.4.1 Categories of E&S Change

Changes shall be classified into two categories:

- Category 1 Major changes:
  - Project design and footprint or activity change that may result in a new major negative impact that was not included in the ESIA
  - Changes to commitments to mitigate or avoid potential impacts, specified within the ESIA, that may result in a new major negative impact

Category 2 Non major changes:

- Project design and footprint or activity change that will not result in a new major negative impact that was not included in the ESIA
- Changes to commitments to mitigate or avoid potential impacts, specified within the ESIA, permitting documents or the project management documents agreed with Lenders, that will not result in a new major negative impact

The Company will ensure that all ESHS changes comply with the requirements and the actions implemented for their mitigation shall be included in the lender report.

4.3.4.2 Roles and Responsibilities

Key roles and responsibilities in relation to the Management of E&S Change are outlined in Table 4-3 below.

Table 4-3: Roles and Responsibilities in Management of E&S Change

Party	Responsibilities
NCPC Project Director	• Integration of the E&S management of change into the Project governance documents for the Project execution during the construction and operational phases • Agree and assign accountability with the ESG Director for the implementation of the new mitigations to support category 1 changes

Party	Responsibilities
NCPC ESG Director	• Review, categorize and approve all category 1 and 2 changes. The NCPC ESG Director may request support from the NCPC Project Director for the categorisation of the changes, if required. • Lead preparation of category 1 change forms and maintenance of the E&S management of change register • Notify NCPC Project Director of all potential category 1 changes. • Agree and assign accountability with the NCPC Project Director for the implementation of the new mitigations to support category 1 changes, including the interface with the Lenders for those Category 1 changes which impact is not included in the ESIA • Monitor the implementation of environmental and social changes and supporting new or additional mitigation(s) • Include the Lenders' reports the description of changes and mitigation actions implemented for the same
NCPC Health and Safety Lead	• Review and approve category 1 and category 2 changes that have health and safety implications • Monitor the implementation of health and safety changes and supporting new or additional mitigation(s)
Contractor(s)	• The Contractor(s) will notify NCPC of the potential need to change the design or activity or clarify the details of infrastructure being developed as previously identified as per Section 0 • Support preparation of the process and associated documents, including the justification for the change, any alternatives considered and indicate their preliminary evaluation of the E&S category of the change, when applicable • Implementation of the change and supporting new or additional mitigation(s). • Report the implemented mitigation actions and its effectiveness and monitor them, when required

4.3.4.3 Process

Identification

Changes are identified in a number of different ways and include:

- Changes requested by project planning, engineering and construction teams
- Indirect request identified during meetings attended by the Stakeholders of the project (among others, the EPC Contractor, the Project Company or MWI), reviews, audits, design verification/conformance and general assurance activities (review of project schedules, site inspections, audits, and construction method statement reviews)
- Results of environmental and social surveys or monitoring
- Reviews of changes to regulation or changes to permit conditions

Categorisation and assessment

Categorisation and assessment of the change will involve the following steps:

- Preparation of the draft change form, noting that the assessment section of the change form will use the ESIA impact assessment methodology to assess the potential change impact

- Confirmation if there is the need for regulatory engagement and approval of the change, and assigning supporting actions and accountabilities
- Finalisation of the draft change form for Category 1 Major Changes and record it in a register. Those Category 1 Changes whose impact is not covered under the ESIA will be communicated to the Lenders for their approval and implementation

Management of Change Form Minimum Contents

- Description of the change – including reason, location information, potential health, safety, environmental and social impacts and schedule
- Change assessment – ESIA impact assessment process is to be used, considering the following steps to support the process:
    - Step 1: Identification of Receptors and assessment of sensitivity
    - Step 2: Impact magnitude assessment, considering issues such as:
        - Landscape, visual amenity, noise and nuisance aspects/impacts
        - Biodiversity aspects/impacts
        - Waste and resource usage aspects/impacts
        - Air quality and GHG aspects/impacts
        - Socio-Economic/community impacts
        - Need for additional mitigation, refer to existing commitments and confirm if new commitment(s)/mitigation controls are required
- Confirm legal/permitting requirements
- Confirm and justify change categorisation

Internal accountabilities and action plan with dates to support change implementation and next steps e.g. revision of existing ESMS documents.

4.3.5 E&S Non-Conformance and Corrective Action

E&S non-conformances are unapproved (by NCPC) deviations from applicable standards in Chapter 2 of the 2025 AAWDC ESIA, ESIA commitments, Project ESMS or Contractor ESMS. These will be identified through the E&S Compliance Monitoring Framework, i.e. Contractor self-verification and NCPC oversight and assurance processes, and tracked through to closure, as described in Section 6.

Non-compliance events will be systematically classified according to their severity, potential impact, and urgency, ensuring that each deviation from E&S requirements is addressed in a proportionate and timely manner. Following classification, NCPC will assign a Non-Conformity Report (NCR) to the Contractor(s), detailing the actions required, responsible parties, and deadlines for completion.

NCPC will then verify the implementation and effectiveness of these corrective actions through follow-up inspections, documentation review, and, where relevant, photographic or instrumental evidence. Should non-compliances remain unresolved, recur, or escalate in severity, NCPC will activate a formal escalation path, which may include senior management intervention, issuance of non-conformance notices, instruction for remedial work, or withholding approvals, in accordance with established reporting

procedures. This structured approach ensures accountability, timely resolution, and continuous improvement across all project components.

E&S Non-conformances and associated corrective actions will form part of the Reporting Requirements as detailed in Section 6.3.

The notification and reporting process to Lenders has yet to be finalised. Once the E&S non-conformance categories, the trigger for notification and reporting, timescales, and format of reporting has been agreed with the Lenders, a revision to this ESMMP will be made to detail the agreed process.

4.3.6 Incident Reporting and Investigation

As part of their ESMS, Contractor (s) will be required to develop and implement an Incident Investigation and Reporting procedure that describes how E&S, as well as health, safety and security incidents, will be investigated and reported. The Contractor procedure will be subject to review and approval by NCPC.

Contractor Incident Investigation and Reporting Procedure will detail as a minimum:

- Incident reporting boundaries for the Project
- Formally defined roles and responsibilities of personnel to be involved in incident investigation and the associated training/competency requirements
- The level of management involvement in an investigation based on the actual or potential severity of the incident
- The process used to classify the actual or potential severity of incidents, in alignment with an international standard
- The methods used to ensure that the immediate and root causes of incidents are identified and lessons learnt are communicated
- The process for assessing intentional and unintentional behaviours.

Contractors will be required to maintain the capability to conduct detailed Root Cause Analysis as part of incident investigation. NCPC will reserve the right to conduct its own investigation or participate in Contractor's incident investigation.

CONTRACTOR shall track and report to NCPC actions arising from incident investigations until their completion as part of their self-verification detailed in Section 6.

4.3.6.1 Incident Reporting

Contractor(s) shall issue an initial incident notification to NCPC within twenty-four (24) hours for serious incidents (including injuries requiring emergency room treatment, significant third-party damage, or material environmental spills), while near misses, minor equipment damage, and low-impact events will be consolidated in weekly reports, unless their severity warrants immediate notification.

Initial incident notification shall be followed up by Contractor within five (5) working days with a full Incident Report. Incident Report shall contain details including, not limited to the following:

- Date / time of event
- Exact location
- Incident description and its details such as medical treatment required, occupation and employer of the injured person(s)

- Likely causes
- Immediate actions taken and further actions to prevent re-occurrence
- Information on severity (actual and potential)
- Statutory authorities advised
- Critical Factors
- Possible Immediate and Root Causes.

Contractor(s) will be responsible for incident reporting to local authorities and shall consult with NCPC prior to reporting.

NCPC will report the following to Lenders:

- Any incident or accident related or having an impact on the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers will be promptly notified to the Lenders (e.g. workers fatality, significant pollution, strike, protest from community). Sufficient detail regarding the incident or accident will be provided, indicating immediate measures taken to address it, and include information provided by any contractor and supervising entity, as appropriate.
- The Lenders will be notified by NCPC of any incidences of child labour, forced labour or harm to workers in its core supply chain during construction, and NCPC will report to the Lenders on progress on the implementation of prevention and remediation measures on a regular basis.
- The notification and reporting process to lenders has yet to be finalised. Once the E&S incident categories, the trigger for notification and reporting, timescales, and format of reporting has been agreed with the Lenders, a revision to this ESMMP will be made to detail the agreed process.

4.3.7 Training

NCPC will conduct a formal training needs analysis to define the awareness and training required at each level and function of the Project sites, based on a screening of E&S risks and impacts associated with the work sites and job roles. This will include the NCPC team's workforce, EPC Contractor(s) and their subcontractors.

The EPC Contractors will provide all Project workers at the Project sites with an E&S induction training before commencing work. The induction training will include Project ESMS, applicable standards, labour management policies and procedures, the Worker Grievance Management process, and occupational health and safety topics, as well as relevant topics such as biodiversity, cultural heritage, community health and safety, etc.

NCPC will also identify other training areas and specific technical/vocational and on-the-job training required for specific jobs roles, to build employee capacity in specifically identified fields of work.

4.3.8 Cross Cutting Themes

Across all social dimensions, several cross-cutting themes have emerged that underpin the Project's social commitments and management approach and respond directly to the feedback received from the ESIA stakeholder engagement in September and October 2025.

The commitments in Table 4-4 outline principles that will be embedded in all management processes to ensure robust management and ongoing dialogue with affected people and authorities.

Table 4-4: Cross-cutting Theme Commitments

Code	Commitment
During Construction and Operations	
CC-CP-01	Stakeholder engagement will be guided by principles of transparency, participation and respect, ensuring that information is shared proactively, in formats accessible by the different local stakeholder groups. Engagement processes will be iterative and continuous — not one-off events — enabling concerns, expectations and feedback to shape the Project's ongoing design of management measures and monitoring activities
CC-CP-02	The Project will coordinate actively with relevant authorities and community governance structures to ensure that community engagement, community health and safety, resettlement-related impact management measures, local employment and procurement, and grievance redress mechanisms are implemented in a way that aligns with local administrative systems and enhances institutional and community ownership.
CC-CP-03	The Project recognises that women, youth, and other potentially vulnerable groups can experience impacts differently and may face barriers to participation in decision-making and benefit-sharing. Commitments have, therefore, been made to ensure inclusion of all vulnerable groups, including women and youth, across all Project commitments, from local employment and procurement, community health, safety and security, to stakeholder engagement and community development. Specific attention will be given to safe working environments for women, equal pay for equal work, and ensuring that women also benefit from the Project through local employment and procurement, and that women's perspectives are heard and integrated into community engagement activities, including through women-only consultations and collaboration with local associations
CC-CP-04	The Project engage with the different tribal/clan representatives, women's associations, youth associations, and other interest groups' community-based organisations, ensuring that all segments of the population have a voice in decision-making and benefit from Project-related opportunities
CC-CP-05	A functioning grievance mechanism will be central to maintaining trust and accountability between the AAWDC Project and stakeholders. The mechanism will provide accessible, confidential and culturally appropriate channels for receiving, documenting and resolving concerns. It will prioritise early resolution at the local level wherever possible, through collaboration with municipal and district/sub-district authorities, community liaison officers (CLOs) and representative committees. Clear procedures, timeframes and feedback loops will be established to ensure that grievances are handled promptly and fairly, and that outcomes are communicated transparently to all parties
CC-CP-06	Conduct women-only consultations, where necessary, ensuring women can raise safety concerns freely

5 Environmental and Social Management Frameworks

This Chapter presents topic-specific Environmental and Social Management Frameworks that implement the E&S management approach, as introduced in Section 4.2. These Frameworks will be developed into detailed plans in time for the preparation of construction and/or operation.

Three management plans are provided separately in the 2025 AAWDC ESIA Package: the SEP, RPF and the BAP. These three plans are introduced below before the introduction of the remaining frameworks.

5.1 Stakeholder Engagement Plan and Grievance Redress Mechanisms

Stakeholder engagement and management of grievances throughout the Project will be undertaken in accordance with the Stakeholder Engagement Plan (SEP) that has been prepared and disclosed as part of the 2025 AAWDC ESIA Package.

The aim of the Plan is to clearly communicate how NCPC will approach and implement stakeholder engagement throughout the entire Project cycle – from pre-construction through to construction and operations. Through this Plan, NCPC commits to building and maintaining constructive, respectful and transparent relationships with all Project stakeholders.

NCPC has overall responsibility for the Project stakeholder engagement and for the implementation of the commitments made in this Plan. Implementation of SEP will be carried out in accordance with the commitments outlined in Table 5-1.

SEP includes the Project Grievance Redress Mechanism (GRM) that will be implemented to ensure that all stakeholder comments, suggestions and objections are captured and considered during the various Project phases. Details of the GRM are provided in Appendix 1 to SEP.

To support implementation of the SEP and GRM, the following will be developed as part of the E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed as part of stakeholder engagement and grievance management prior to and during construction
- Key Performance Indicators (KPIs) for evaluating the effectiveness of stakeholder engagement activities and analysis of trends (outreach meetings, formal and informal meetings, inquiries received, stakeholder satisfaction, etc.)
- KPIs for evaluating the effectiveness of the grievance management activities and analysis of grievance trends (numbers and types received, resolution status, complainant satisfaction, etc.

Table 5-1: Stakeholder Engagement Plan Commitments

Code	Commitment
Prior to Construction	
SE-PC-01	The formal disclosure of the 2025 AAWDC Project ESIA will be undertaken once the draft ESIA report is finalised and approved for public release in January 2026. The disclosure package will include the following documents in English and Arabic: • The 2025 AAWDC Project ESIA and a supporting non-technical summary. The 2025 AAWDC Project ESIA will include chapters that describe the Project, the environmental and social context, identify and assess potential environmental and

Code	Commitment
	social impacts and present appropriate avoidance, minimisation, mitigation, management and compensation measures • Environmental & Social Management and Monitoring Plan (ESMMP) that will present the approach to environmental and social management and be supported by topic-specific management plans/frameworks, covering topics such as waste management or biodiversity management • Resettlement Policy Framework that describes the strategy for identifying, avoiding and managing livelihood and resettlement impacts • Project SEP that describes how the Project will engage with Project stakeholders throughout the finalisation of the 2025 AAWDC Project ESIA, as well as throughout the life of the AAWDC Project, including construction and operation.
SE-PC-02	The disclosure process will include a series of public meetings convened at both the Governorate and District levels across the Project area, ensuring that all key stakeholder groups, governorate, district and sub-district authorities, municipal representatives, community members, tribal representatives, community-based organisations and associations, and other interested parties, have the opportunity to participate.
SE-PC-03	The disclosure period will remain open for a minimum of 60 calendar days from the date of publication, allowing adequate time for stakeholders to review and comment on the documents.
SE-PC-04	At the conclusion of the 2025 AAWDC Project ESIA disclosure period, the Project will prepare a Disclosure Summary Report summarising the engagement activities conducted, the comments received, and how key inputs have been considered in finalising the 2025 AAWDC Project ESIA and the associated Environmental and Social Management and Monitoring Plan (ESMMP). This report will also be made publicly available through the same disclosure channels.
During Construction and Operations	
SE-CP-01	Following disclosure and completion of the 2025 AAWDC Project ESIA, NCPC will continue to apply a proactive, transparent, and responsive approach to stakeholder engagement throughout the subsequent Project detailed design, construction, and operational phases. The engagement will be carried out in accordance with the Project SEP
SE-CP-02	In the event the rail project progresses, the Project will engage with the relevant stakeholders to ensure potential cumulative impacts (both environmental and social) are identified, assessed and managed as required.
SE-CP-03	The Project will continue to engage with the relevant stakeholders within the Aqaba Industrial Zone to ensure potential cumulative impacts (both environmental and social) relating to development activities are identified, assessed and managed as required.
SE-CP-04	The Project will engage with the relevant stakeholders to ensure potential cumulative impacts (both environmental and social) relating to Aqaba LNG ORU Project are identified, assessed and managed as required

The SEP will remain a ‘live’ document and will be updated by NCPC as the AAWDC Project moves from the ESIA phase into detailed design and construction. A revised version will then be prepared by NCPC, incorporating:

- Further details on the stakeholder engagement programme for the pre-construction phase, including specific consultation activities linked to the Resettlement Action Plan (RAP), Local Employment and Procurement Plans, Social Investment Plan, and other management plans
- The approach to and programme for stakeholder engagement during construction, outlining communication mechanisms, information disclosure processes, and coordination with local authorities and local advisory committees; and
- The framework for engagement during the operational phase, ensuring ongoing dialogue, grievance management, and monitoring of long-term community relations and benefit-sharing commitments.

The updated SEP will be developed by the NCPC's ESG Team in coordination with the governorate, district, sub-district, and municipal authorities to ensure continued transparency and inclusiveness.

5.2 Resettlement Policy Framework

The Project Resettlement Policy Framework (RPF) has been prepared in accordance with international resettlement standards, including IFC's PS5, EBRD's PR5 (2019) and EIB's Standard 6 (2022) and applicable published IFC and EBRD guidance. As the first step in the Land Acquisition, Resettlement and Livelihood Restoration (LARLR) process it establishes all principles applicable to the LARLR process.

The RFP is disclosed as part of the 2025 AADWC Project ESIA Package. At a later stage of the Project development, when a final footprint is available, the RFP will be completed by a Resettlement Action Plan (RAP). Key objectives of the RAP will include:

- To avoid, and when avoidance is not possible, minimise displacement by exploring alternative project designs
- To mitigate the impacts of land acquisition and restrictions on land by providing compensation at replacement cost for loss of assets and restrictions of access to businesses
- To ensure that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected
- To improve, or as a minimum, restore the livelihoods and standards of living of displaced persons.

Implementation of the RAP will involve negotiating individual compensation and livelihood restoration packages prior to their delivery. RAP will be implemented by sections to allow for phased construction commencement. RAP will be prepared and implemented in accordance with the ESIA commitments outlined in Table 5-2 below.

Table 5-2: Resettlement Action Plan Commitments

Code	Commitment
Prior to Construction	
RA-PC-01	• The Project will implement a Resettlement Policy Framework (RPF) in accordance with EBRD ESR5 and IFC PS5, which will guide the preparation of the Project Resettlement Action Plan (RAP) once final design details and land acquisition requirements are confirmed.
RA-PC-02	• A targeted land use assessment of potential impacts on nomadic and semi-nomadic herders will be included in the RAP, including an assessment of whether

Code	Commitment
	the Project could impact grazing areas, water points, or access to these grazing areas and water points
RA-PC-03	The RPF and RAP will include the following mitigation principles and measures: • Minimisation of land take/access: Continued optimisation of the Project pipeline route and associated working width to avoid or minimise impacts on private and community lands, agricultural areas, and roadside enterprises • Compensation for all affected people: Provision of cash or in-kind compensation for loss of land, crops, trees, and other assets, at full replacement cost, prior to land entry • Livelihood restoration and assistance: Implementation of targeted livelihood restoration support for economically displaced persons, including herders, small-scale farmers, and microbusinesses, to help re-establish income sources and reduce transition impacts • Targeted support for vulnerable groups: Identification of vulnerable households (e.g. female-headed, low-income, informal settlers) and provision of tailored assistance to ensure equal access to entitlements and consultation processes • Temporary access and construction planning: Coordination between the EPC Contractor and local municipalities to minimise the duration of access restrictions and provide alternative routes where feasible. This will also involve a process to minimise business access disruption, as follows: 1) Implementation of a field inventory (direct footprint and near footprint); 2) Detailed pre-construction review with the EPC Contractor; 3) Assessment of all cases where impacts to access or parking space can be avoided or minimised by the EPC Contractor during construction, as well as cases where the impact cannot be avoided; 4) In the case where access issues can be avoided or minimised, the EPC Contractor will prepare site-specific access management plans for implementation during construction; 5) In the cases where access issues cannot be avoided, a valuation of losses (business income, structure, employees) will be carried out and included in the RAP • Stakeholder engagement and disclosure: Continued engagement with potentially affected people, landowners, farmers, farm workers, herders, businesses, local residents and municipal authorities, to ensure transparency of land requirements, timing, and compensation procedures • Grievance redress: Dedicated grievance channels for land and compensation issues, integrated within the Project's overall Grievance Mechanism but tracked separately to ensure timely resolution and documentation • Monitoring and post-construction commitments: Monitoring of resettlement and livelihood restoration will form part of the Environmental and Social Management System (ESMS). Key indicators will include: ○ Number of affected households and categories of impact (land, crops, assets, income) ○ % of affected persons compensated prior to land entry ○ Number of livelihood restoration activities completed and outcomes achieved ○ Number and resolution rate of land-related grievances ○ Project affected people's satisfaction with compensation and restoration measures
RA-PC-04	The Entitlement Matrix is preliminary. The RAP will provide a final version with more details on entitlements and compensation rates.

Code	Commitment
RA-PC-05	A Livelihood Restoration Plan (LRP) will be developed as part of the RAP (and presented as a chapter within the RAP). It will be based upon consultation with affected people, the socio-economic and livelihood baseline information gathered for the RAP, and feasibility assessments for a range of potential livelihood restoration activities.
During Construction	
RA-CO-01	A post-construction audit will confirm the reinstatement of access, the restoration of livelihoods, and the close-out of all commitments prior to the operational phase.

To support implementation of the RAP, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed for RAP preparation and at each phase of RAP implementation
- KPIs for reporting and evaluating the trends (numbers of affected households and types of impact, progress of compensation, progress of livelihood restoration activities, achieved outcomes and satisfaction with compensation and restoration measures).

5.3 Framework Biodiversity Action Plan

Based on the baseline studies and preliminary Critical Habitat Assessments completed so far, the Project is likely to affect Natural Habitat and Critical Habit Features in the Project Area of Influence. The development of a Biodiversity Action Plan (BAP) is necessary to ensure that Net Gain and No Net Loss targets are achieved for the relevant biodiversity values, in line with Lender standards.

As the type and amount of available information currently not sufficient to prepare a full BAP, the Framework BAP, disclosed as part of the 2025 AADWC Project ESIA package, highlights where the Project currently stands in terms of biodiversity management, what needs to be done to fill the gaps and proposes a roadmap for the Project to complete the full BAP as per Lender requirements.

The Framework BAP is provided as a separate document.

The full BAP will be prepared as part of the ESMS development and will include:

- The set of actions to be undertaken and the rationale explaining how the Project's mitigation strategy will achieve net gains (or no net loss)
- The chosen approach for applying the mitigation strategy
- The roles and responsibilities of staff and external partners

5.4 Contractor and Supplier E&S Management and Monitoring Framework

5.4.1 Purpose and Scope

This Framework outlines the key objectives and requirements for Contractor Management and Monitoring, which will be implemented to ensure compliance with the E&S commitments and implementation of the mitigation hierarchy to avoid and manage E&S impacts.

5.4.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-3 below.

Table 5-3: Roles and Responsibilities in Contractor and Supplier E&S Management and Monitoring

Party	Responsibilities
NCPC	• Develop and implement a construction phase Contractor and Supplier E&S Management and Monitoring Plan • Conduct E&S Assessment of the contractors and suppliers and communicate the results back to the contractors and suppliers • Verify that EPCs have done a due diligence of their sub-contractors • Monitor the implementation of mitigation actions associated with the E&S Assessments, including any measures to prevent recurrence of incidences of child labour, forced labour or harm to workers and communities, including GBVH • Communicate relevant E&S documentation, including this ESMMP and supporting Management Plans along with Contract clauses to contractors and suppliers • Monitor and evaluate the performance of the contractors and suppliers in accordance with applicable policies, legislation, regulation and standards, Contract clauses and the Project ESMS • Develop and implement disengagement plans as a last resort after failed attempts by contractor / supplier to prevent or mitigate significant risks or adverse impacts of child labour, forced labour or harm to workers and communities, including GBVH • Verify contractors and suppliers monitoring their own E&S performance and report to NCPC as stipulated in the Contract clauses and Project ESMS • Complete the close-out process, including the contractor/supplier performance review
EPC Contractor(s) / Supplier(s)	• Develop and submit a Contractor ESMMP for execution of their scope on the Project (as required by the Contract clauses and applicable legislation) • Execute their scope of work, including those undertaken by subcontractors, in accordance with applicable legislation, regulation and standards, Contract clauses and the Project ESMMP • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits as required by applicable legislation and Project ESMS • Establish and implement non-conformance and incident management process, including reporting, investigation and corrective actions, in accordance with Project ESMS and applicable legislation • Report to NCPC all incidents, legal or contractual non-compliance issues, worker and 3rd party grievances, incidences of child labour, forced labour or harm to workers (including GBVH) within their supply chains • Investigate, resolve and remedy all worker grievances, reporting to NCPC their resolution status and using the NCPC worker grievance process in the event the Contractor/supplier does not have a worker grievance process

5.4.3 Management Processes

The objectives, commitments, and requirements in this Framework will be further developed in a detailed Contractor and Supplier E&S Management and Monitoring Plan that will supersede and replace this Framework.

A risk-based management approach will be applied to the overall Contractor and Supplier E&S Management and Monitoring:

- Contract Execution Phase:
    - E&S performance and compliance of contractor / supplier to Project ESMS requirements will be monitored and reported upon.
    - Monitoring of contractor / supplier E&S performance will form part of the Project E&S Compliance Monitoring Framework.
        - If the E&S assessment or ongoing monitoring identifies actual incidences of child labour, forced labour or harm to workers (including gender-based violence and harassment (GBVH), the Project will use or seek leverage to work with the contractor / supplier to prevent recurrence
        - Where such adverse impacts are identified, the Project will only continue to procure services / products from these contractors / suppliers after having received satisfactory undertakings or evidence that the contractor / suppliers are committed to implementing measures to prevent such impacts within a reasonable timeframe and to provide remediation as appropriate.
        - As a last resort, after failed attempts to prevent or mitigate significant risks or adverse impacts, and/or when there is no reasonable prospect of compliance, the Project will develop and implement a responsible disengagement plan in relation to the relevant contractor / supplier.
    - Contractor / supplier will be required to carry out self-monitoring and reporting of E&S performance to NCPC
- Close Out Phase:
    - The overall E&S performance of contractor/supplier will be assessed, and the lessons learned considered for changes to the Contractor and Supplier Management and Monitoring process.

To support implementation of the Contractor and Supplier E&S Management and Monitoring Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed at planning, bidding, contract formation, mobilisation, contract execution and close-out phases
- Monitoring tasks to be completed during the contract execution phase
- KPIs for evaluating the effectiveness of contractor / supplier controls and reporting progress against set targets
- KPIs for evaluation of contractor / supplier compliance with contract clauses and overall contractor / supplier performance trends.

5.5 Marine Construction Works Management Framework

5.5.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate Project E&S requirements into the design, planning and execution of marine construction works.

5.5.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-4 below.

Table 5-4: Roles and Responsibilities in Marine Construction Works Management

Party	Responsibilities
NCPC	• Complete the design verification process in relation to the marine components of the Project and marine construction works • Develop a Marine Construction Works Management Plan, including a marine construction specification and monitoring requirements, and communicate it to the marine construction and installation contractor prior to construction • Facilities Project HAZID and spill risk reviews supported by engagement with 3rd party asset owners and competent authorities • Implement the E&S Management of Change Process to validate that there is no material change in impact prior to completion of design, during pre-construction assessments, studies and in the selection of construction methods • Monitor and evaluate the performance of the contractors and suppliers in execution of marine construction works in accordance with the Project E&S Compliance Monitoring Framework within the ESMMP
EPC Contractor(s)	• Develop and submit a Marine Construction Execution Plan incorporating mitigation and monitoring requirements • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Marine Construction Works Management Plan and within the designed footprints • Undertake pre-construction surveys, assessments and studies relevant to their scope • Ensure compliance of all vessels and marine activities with applicable international and Jordanian maritime regulations • Participate in HAZID studies and document the required safeguards in a navigational risk assessment (if deemed necessary) and the spill risk assessments • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits

5.5.3 Management Processes

Prior to completion of the detailed design the relevant ESIA commitments will be implemented as part of the design verification process (Section 4.3.1) to:

- Incorporate findings of the ESIA into final outfall and desalination plant design and operations and maintenance (O&M) procedures selection process

- Validate the ESIA quantification of effluent composition and confirm any design changes needed to increase dispersion
- Confirm sufficient redundancies within plant design and process controls
- Completion of a new discharge modelling study in the event of a change to the data inputs used within the ESIA
- Complete an assessment of potential change to shoreline dynamics from the construction and operation of temporary and permanent shoreline and submerged structures
- Review of the lighting requirements and measures to reduce additional light pollution.

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a Marine Construction Works Management Plan that will supersede and replace this Framework.

The Marine Construction Works Management Plan will address the commitments for pre-construction and construction phases on avoidance, mitigation and monitoring to be implemented on:

- Once the final construction activities and vessel and equipment types are defined, the associated schedule and underwater sound sources are confirmed, E&S Management of Change Process (Section 4.3.4) to validate that there is no material change in impact
- Underwater sound, including the marine mammal observation program, soft start and stop work protocols
- Final design and marine construction methods selection process, including dredging works
- Benthic (seabed) habitat loss and turbidity from dredging and anchor placement/dragging
- Pre-construction risk studies (HAZID, spills, navigational risk) and emergency response, supported by engagement with the 3rd party asset owners and competent authorities
- Refuelling, hazardous management and management of vessel discharges
- Lighting plan for the careful selection and placement of lighting to reduce light pollution
- Daily operational monitoring and reporting
- Adaptive response to defined thresholds on underwater sound, turbidity in the water column and other environmental criteria, within defined timeframes
- The Marine Construction Works Management Plan will also:
- Define marine benthic habitat restoration goals
- Implement the Biodiversity Management Plan, biodiversity protocols, controls, procedures and monitoring requirements
- Finalise how the environmental critical equipment review and environmental monitoring, sampling and reporting system will be integrated into the O&M procedures.

To support implementation of the Marine Construction Works Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed as part of the design verification process and prior to construction

- Monitoring tasks to be completed during construction of marine Project components (parameters, frequencies, locations, applicable standards)
- KPIs for evaluating the effectiveness of construction controls and reporting progress against set targets
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-5: Commitments on Marine Construction Works Management

Code	Commitment
Prior to the Completion of Detailed Design	
MC-PD-01	Prior to the completion of detailed design, undertake a review of the lighting requirements and measures to reduce additional light pollution to the marine environment.
MC-PD-02	The final design and marine construction methods selection process shall incorporate requirements for the avoidance and reduction of impacts, including: • Silt curtain deployment • Consideration of the feasibility of seasonal sensitivities associated with breeding/reproduction periods, especially coral, giant clam and seagrass • Onsite storage of trenched material storage area with appropriate drainage control to prevent impacts to seawater quality, seagrass and coral Post-construction benthic habitat restoration goals
MC-PD-03	An assessment of the construction, temporary, and permanent shoreline and submerged structures will be completed. The assessment will identify appropriate mitigation to avoid impacts associated with changes in shoreline dynamics, which will be incorporated into the design and associated monitoring plans, including the Biodiversity Management Plan
MC-PD-04	Materials and handling methods that will not leach pollutants and affect water quality, including turbidity, will be promoted.
Prior to Construction	
MC-PC-01	Jordan Maritime Authority (JMA) will request the following from the EPC Contractor: A detailed map with coordinates indicating the work area and providing information on the restrictions in this work area, types of marine equipment that will be used, such as barges, as these will have to be inspected and permitted by JMA.
MC-PC-02	A lighting plan for the careful selection and placement of lighting to reduce additional light pollution to the marine environment will be developed for the construction phase
MC-PC-03	Emergency and spill response plans will be developed before construction for marine activities, aligned with the requirements and capacity of the competent authority, and documented training of all accountable and responsible construction personnel
MC-PC-04	Working areas, including anchoring locations, will be defined prior to the start of construction, and procedures developed for continuous monitoring of the construction work to confirm that the work remains within pre-designated areas
MC-PC-05	The Marine Construction Works Management Plan to include underwater sound avoidance, mitigation and monitoring requirements consistent with applicable guidance that will include the JNCC guidance and the IMCA ES005 “Guidance on Mitigation of Underwater

Code	Commitment
	Noise" (2025) and "World Bank Environmental, Health, and Safety Guidelines Ports, Harbors, and Terminals February 2, 2017
MC-PC-06	The Marine Construction Works Management Plan will include an underwater sound adaptive management and reporting system to integrate a marine mammal observation program with construction vessel and trenching equipment management controls that will include a soft start and a stop work protocol in the event underwater sound receptors are observed by Marine Mammal Observers
MC-PC-07	Prepare a Navigation Safety Plan commensurate with the risks and impacts of the construction phase and operation phase, if required
MC-PC-08	The Marine Construction Works Management Plan that will be included in the marine construction and installation contractor specification will include: • Requirements and controls for avoidance/reduction of benthic (seabed) habitat loss • Turbidity, underwater sound, daily operational monitoring and reporting, refuelling, hazardous materials management, waste management, emergency and spill response, including the requirement for all galley waste, solid and liquid waste from vessels, is contained and shipped to shore, all vessel black and grey water is contained, collected and shipped to shore, vessel ballast water is segregated from sources of pollution and vessel deck drainage and wash water will be discharged to sea as long as no visible sheen is observable • Adaptive management requirements to respond to defined thresholds, within defined timescales, to manage construction and operational underwater sound, turbidity in the water column and other environmental criteria
During Construction	
MC-CO-01	Working at night during construction will not occur routinely
MC-CO-02	All vessels and marine activities will be compliant with applicable international and Jordanian maritime regulations, including those controlling ballast water management
MC-CO-03	Underwater sound components during construction, supported by trained Marine Mammal Observers (MMO)

5.6 Terrestrial Construction Works Management Framework

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate Project E&S requirements into the design, planning and execution of terrestrial construction works.

5.6.1 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-6 below.

Table 5-6: Roles and Responsibilities in Terrestrial Construction Works Management

Party	Responsibilities
NCPC	• Complete the design verification process in relation to terrestrial components of the Project and terrestrial construction works

Party	Responsibilities
	• Complete the Ecological Constraints Assessment, updating the Biodiversity Management Plan • Develop a Terrestrial Construction Works Management Plan, including monitoring requirements and communicate it to the construction and installation contractor prior to construction • Facilities spill risk review supported by engagement with 3rd party asset owners and competent authorities • Monitor and evaluate the performance of the contractors and suppliers in the execution of marine construction works in accordance with the Project Compliance Monitoring Framework within the ESMMP
EPC Contractor(s)	• Develop and submit a Terrestrial Construction Execution Plan incorporating mitigation and monitoring requirements • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Terrestrial Construction Works Management Plan and within the designed footprints • Undertake pre-construction surveys, assessments and studies relevant to their scope, including pre-construction environmental survey • Maintain Register of Ecological Constraints to support construction planning and execution • Undertake post-construction surveys and verification of commitment closures prior to demobilisation • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits

5.6.2 Management Processes

Prior to completion of the detailed design an Ecological Constraints Assessment will be implemented as part of the design verification process (Section 4.3.1). The outcomes of the assessment will be included in the Biodiversity Management Plan and prior to construction the assessment will be updated with the results of the pre-construction environmental survey program with a register of constraints maintained to support construction.

The objectives, commitments, and requirements in this Framework will be further developed in a detailed Terrestrial Construction Works Management Plan that will supersede and replace this Framework.

The Terrestrial Construction Works Management Plan will be included in the construction and installation contractor specification. The plan will confirm:

- The controls for the avoidance/reduction of impacts to biodiversity and soil erosion
- Topsoil/surface material storage and preservation
- Micro habitat disturbance management
- Defined terrestrial habitat restoration goals, including erosion controls and habitat enhancement initiatives to support the BAP
- Adaptive management requirements to respond to temporary construction works such as dewatering, temporary storage of material, burrow pit for construction material, temporary access road routing and usage. A fit-for-purpose biodiversity risk assessment protocol will be

developed to assess the temporary construction works, considering the Biodiversity Sensitivities and Constraints Assessment

- Monitoring and inspection protocols, including frequency of inspection
- KPIs to define compliance and performance monitoring and reporting requirements

The Terrestrial Construction Works Management Plan will address the commitments for the pre-construction and construction phases outlined in Table 5-7 on avoidance, mitigation and monitoring to be implemented on:

- Assessment of construction camps to assess and mitigate air quality, dust and noise impacts
- Assessment of groundwater risks on completion of the geotechnical survey
- Assessment of spill risks supported by engagement with the 3rd party asset owners and competent authorities

The Terrestrial Construction Works Management Plan will be implemented for the duration of the construction works and will outline post construction survey and engagement requirements to verify:

- All commitments and mitigation measures have been effectively implemented, including those on reinstatement
- Any residual risks or outstanding community concerns are addressed prior to demobilisation and transition to operations.

To support implementation of the Terrestrial Construction Works Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed as part of the design verification process and prior to construction
- Monitoring tasks to be completed during construction of terrestrial Project components (parameters, frequencies, locations, applicable standards)
- KPIs for evaluating the effectiveness of construction controls and reporting progress against set targets
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-7: Terrestrial Construction Works Management Commitments

Code	Commitment
Prior to Construction	
TC-PC-01	Emergency and spill response plans will be developed for construction stage activities, aligned with the requirements and capacity of the competent authority, and documented training of all accountable and responsible construction personnel
TC-PC-02	Groundwater risks will be assessed upon completion of the EPC contractor's geotechnical survey and confirmation of groundwater usage during construction
TC-PC-03	Prepare a Terrestrial Construction Works Management Plan that will be included in the construction and installation contractor specification. The plan will confirm: • The controls for the avoidance/reduction of impacts to biodiversity and soil erosion

Code	Commitment
	• Topsoil/surface material storage and preservation • Micro habitat disturbance management • Defined terrestrial habitat restoration goals, including erosion controls and habitat enhancement initiatives to support the BAP • Adaptive management requirements to respond to temporary construction works such as dewatering, temporary storage of material, burrow pit for construction material, temporary access road routing and usage. A fit-for-purpose biodiversity risk assessment protocol will be developed to assess the temporary construction works, considering the Biodiversity Sensitivities and Constraints Assessment • Monitoring and inspection protocols, including frequency of inspection KPIs to define compliance and performance monitoring and reporting requirements
TC-PC-04	Incorporate consideration of dust and air quality impacts in the detailed planning for the construction camps and temporary project facilities to inform siting, layout, equipment selection and dust abatement measures (where required)
TC-PC-05	Incorporate consideration of noise impacts in the detailed planning for the construction camps and temporary project facilities to inform siting, layout, equipment selection and noise abatement measures (where required)
TC-PC-06	The EPC Contractors shall coordinate with the local relevant municipalities prior to construction to obtain a no-objection certificate for any construction within the right-of-way of municipal roads, and also to obtain instructions for the management of existing utilities and infrastructure on these roads.
TC-PC-07	If any tree cutting is required for the Project, the EPC Contractor must apply to the MoA for approval. The MoA will provide the EPC Contractor with the required measures to mitigate the associated impacts, such as the restoration and planting of trees after construction completion, to compensate for the loss of trees.
During Construction	
TC-CO-01	Implement the Terrestrial Construction Works Management Plan for the duration of the construction work

5.7 Pollution Prevention Management Framework

5.7.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate requirements on prevention of pollution to air, soils, surface and seawater into Project design, planning and execution.

5.7.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-8 below.

Table 5-8: Roles and Responsibilities in Pollution Prevention Management

Party	Responsibilities

NCPC	• Complete the design verification process in pollution prevention controls, including a critical equipment review, and review of site drainage design for all Project components
	• Develop a Pollution Prevention Management Plan that details:
	  ○ Desalination Plant environmental monitoring, sampling and reporting system to be included to O&M Procedures
	  ○ Construction phase monitoring and reporting program for discharges, emissions, dust and site practices on material and waste storage
	  ○ Protocols for prior notification on construction dust generating activities
	  ○ Material selection and sourcing procedures
	  ○ Monitoring and reporting requirements
	• Monitor and evaluate the performance of the contractors and suppliers in execution of marine construction works in accordance with the Project E&S Compliance Monitoring Framework within the ESMMP

EPC Contractor(s)	• Develop and submit a Pollution Prevention Management Plan incorporating mitigation and monitoring requirements • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Pollution Prevention Management Plan • Ensure compliance of all vessels and marine activities with applicable international and Jordanian maritime regulations on emissions, wastes and discharges • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits and environmental monitoring outlined in the Pollution Prevention Management Plan as relevant to their scopes and report on outcomes of monitoring to NCPC • Investigate all instances of exceedances of applicable standards and any grievances received in relation to construction dust generating activities and implement corrective and preventive measures.

5.7.3 Management Processes

Prior to completion of the detailed design the relevant ESIA commitments outlined in Table 5-9 will be implemented as part of the design verification process (Section 4.3.1) to:

- Define equipment specification for relevant point source emissions
- If technically feasible, it is recommended to conduct an environmental critical equipment review to confirm:
  - Equipment maintenance requirements to ensure compliance with applicable discharge standards
  - Define the Desalination Plant environmental monitoring, sampling and reporting system to be included in O&M Procedures, accounting for intermediate and end-of-pipe monitoring
- Review of the Desalination Plant and its site design to confirm:
  - Compliance of the site drainage routed to the outfall with the brine discharge standard
  - Measures are included to prevent pollution to soils, groundwater and/or surface water

- Review of site drainage design of IPS, Pipeline Conveyance, temporary facilities (e.g. camps), AGIs and RE Facility to confirm measures are included to prevent pollution to soils, groundwater and/or surface water

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Pollution Prevention Management Plan that will supersede and replace this Framework.

The Pollution Prevention Management Plan will address the commitments for the pre-construction and construction phases outlined in Table 5-9 on avoidance, mitigation and monitoring to be implemented on:

- Management of dust, including dust monitoring and reporting program, protocols for prior notifications to communities, disclosure of visual dust monitoring results and management of dust related grievances
- Marine materials selection, storage and handling procedures to select and source materials that will not leach pollutants and affect seawater quality
- Hazardous materials, waste management, drainage and surface water controls for terrestrial construction and marine construction vessels

E&S Management of Change Process (Section 4.3.4) to validate that there is no material change in impact.

To support implementation of the Pollution Prevention Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed as part of the design verification process and prior to construction
- Monitoring tasks to be completed during construction of marine and terrestrial Project components (parameters, frequencies, locations, applicable standards), including use of checklists to support inspection of site/vessel-based material and waste storage, drainage and surface water control practices.
- KPIs for evaluating the effectiveness of pollution prevention controls and reporting progress against set targets
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-9: Pollution Prevention Management Commitments

Code	Commitment
Prior to Construction	
PP-PD-01	Detailed design of the Desalination Plant, Pumping Stations and AGI, to include measures to prevent pollution to soils, groundwater and/or surface water from potentially contaminated drainage.
PP-PD-02	At the detailed design stage, relevant emission source limits will be defined within equipment specifications to ensure that relevant point source emission standards and air quality limits in ESIA Chapter 2 are met

Code	Commitment
PP-PC-01	Construction Phase Pollution Prevention Plan will include hazardous materials, waste management, drainage and surface water controls to be implemented at the IPS to ensure avoidance of discharge to the sea of any potentially polluted drainage or run off
PP-PC-02	Pollution Prevention Plan to include design safeguards, hazardous materials storage and handling, waste management, drainage and surface water, as well as the operational controls, including housekeeping, to be implemented at the Desalination Plant to ensure avoidance of discharge to the sea via the site drainage system of any potentially polluted drainage or run off, including elevated levels of suspended solids.
PP-PC-03	The Pollution Prevention Plan will be prepared for the construction phase and updated for the operations phase and include inspection and monitoring requirements to verify controls effectiveness
PP-PC-04	Develop a spill prevention and management plan for the construction and operations phases, supported by engagement with the 3rd party asset owners and competent authorities integrated into the Pollution Prevention Management Plan
PP-PC-05	Prepare Pollution Prevention Management Plan to: • Prepare a hydrotesting procedure detailing how water will be sourced, describing and assessment the treatment, reuse and discharge activities, ensuring avoidance of pollution and erosion as well as management of water reuse for agricultural purposes • Assess contamination risk at the Project sites, using a risk-based approach Hazardous materials (selection, management and use), drainage, wastewater (including all camp and construction site wastewater) and surface water discharges to comply with applicable standards in ESIA Chapter 2 and avoid risk of pollution
PP-PC-06	Detailed commissioning and operational sampling and monitoring plan to include intermediate sampling points monitoring, not only at the end of pipe, with the frequency of sampling consistent with a review of plant operational variability and O&M activities
PP-PC-07	• An online water quality monitoring station will be installed on the discharged water line, if equipment is available in Jordan and if security authorities allow. This will continuously monitor, at a minimum, turbidity, conductivity, temperature, residual chlorine, pH and pressure • A non-continuous, routine sampling and offline laboratory analysis will be performed of chemical oxygen demand, iron and halogenated organic compounds and other parameters included in the Project Discharge Standards • The plant commissioning sampling schedule will initially be frequent (e.g. at least daily) and ensure that discharges during all modes of plant operation are sampled and analysed • Additional sampling of upstream locations will be defined in the process to provide additional information on items of concern, such as complete neutralisation of DBNPA, and the potential formation of halogenated organic compounds after treatment of the intakes with hypochlorite. The frequent sampling should continue until the chemical profile of the plant effluent has stabilised and a good dataset describing the effluent's variation with operating modes is established and understood • After an initial phase, the sampling frequency should be reviewed to ensure that the sampling schedule is such that robust information is available to demonstrate

Code	Commitment
	compliance of the discharge with respect to discharge standards for iron (0.3 mg/L average, 0.5 mg/l maximum) and halogenated organic compounds (zero) • Feasibility of whole effluent toxicity testing will be assessed, noting a review will be completed of the needs and benefits, including the implications of establishing a locally accredited facility
PP-PC-08	Fixed combustion equipment selected for use for construction activities (including temporary diesel generators at camps where required) shall meet relevant emission source limits as stipulated within national legislation
PP-PC-09	Incorporate the following dust management measures within the Pollution Prevention Management Plan prior to the commencement of works: • Identification of dust generating construction activities and identification and classification of potentially affected sensitive receptors
PP-PC-10	Review and evaluate dust management practices for minimising dust impacts to residents, occupants and animals and minimise potential for sedimentation of watercourses/water bodies due to dust. Practices may include, but not limited to: • Using windbreaks, netting screens or semi-permeable fences • Controlling vehicle speeds to reduce traffic-induced dust dispersion and resuspension by setting and enforcing speed limits • Ensuring trucks hauling sand, dirt or other loose materials are covered (sheeting trucks) • Suspending topsoil stripping and replacement during strong winds • Using a dust collection system for bulk materials unloading Where wet suppression techniques are considered, an evaluation will be required to provide suitable justification including the proposed source of water (with preference for reclaimed water use)
PP-PC-11	Protocols for engagement with residents and occupants to provide advance warning of works taking place where relevant, including the duration and likely dust impacts. In the case of work required in response to an emergency, the local residents and occupants shall be advised as soon as reasonably practicable that emergency work is taking place
PP-PC-12	Dust monitoring program to include: • Location, frequency and approach for undertaking onsite and offsite visual inspections during construction activities to confirm the effectiveness of dust control measures and the need, if required, for additional dust reduction measures and management practices to adequately control dust emissions • Records of inspections and findings to be kept and maintained • Triggers for increasing the frequency of site inspections e.g. when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions • Reporting process related to dust visual monitoring results • Communication/disclosure lines related to dust visual monitoring results, with the affected households and the applicable government entities
During Construction	

Code	Commitment
PP-CO-01	Update the Project Pollution Prevention Plan and ensure the resources to implement the commissioning and operational sampling and monitoring plan are available
PP-CO-02	All machines in intermittent use shall be shut down in the intervening periods between work or throttled down to a minimum. Lorry engines will be switched off when vehicles are stationary
PP-CO-03	Equipment and vehicles shall be used and maintained so that generated atmospheric emissions are not in excess of the threshold emission values set out in applicable standards in ESIA Chapter 2
PP-CO-04	The fleet of vehicles or equipment emitting combustion gases shall be maintained at the intervals and according to the methods specified by the manufacturer.
PP-CO-05	The maintenance records for the fleet of vehicles, machinery, and equipment shall be recorded.
PP-CO-06	When storage, transport and handling of bulk materials is made in the open air and exposed to the wind, the necessary dust abatement measures shall be implemented
PP-CO-07	All dust generating materials transported to and from the construction worksites shall be covered by sheeting
PP-CO-08	The following shall be implemented to the extent possible/practicable: • Minimise storage time of spoil stockpiles • Align stockpiles to prevailing wind to minimise surface area exposed to wind erosion • Minimise stockpile height and use gentle slopes and compact stockpile surfaces • Store materials away from the site boundary and downwind of sensitive receptors Minimise the height and fall of excavation materials during handling
PP-CO-09	• Plan construction layouts so that machinery and dust-causing activities are located away from receptors, as far as is possible
PP-CO-10	Consider the feasibility of erecting solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site
PP-CO-11	Where possible / practicable, fully enclose site or specific operations where there is a high potential for dust production and the site is expected to be active for a prolonged period with adjacent receptors
PP-CO-12	Keep site fencing, barriers and scaffolding clean using wet methods (where feasible to do so)
PP-CO-13	Remove materials that have the potential to produce dust from site as soon as possible unless being re-used on site
PP-CO-14	Cover, seed or fence stockpiles to prevent wind whipping
PP-CO-15	Prohibit bonfires and burning of waste materials
PP-CO-16	Where applicable, re-vegetate earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable. Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable
PP-CO-17	Only remove the cover in small areas during work and not all at once

Code	Commitment
PP-CO-18	Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place
PP-CO-19	Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery
PP-CO-20	For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust
PP-CO-21	Use dust sweepers on the access and local roads (water-assisted where feasible to do so)
PP-CO-22	Avoid dry sweeping of large areas
During Construction and Operations	
PP-CP-01	All raw material suppliers will be licensed, and a supplier screening and selection process will be in place to include the assessment of environmental and social criteria for primary suppliers, including site inspection and an onboarding process to support compliance with the applicable Project standards in ESIA Chapter 2.
PP-CP-02	Construction and operations phase drainage from the Project sites will include: • Rainwater systems, which will be designed to segregate rainfall from sources of contamination • Drainage from areas with hazardous materials, e.g. in areas where hazardous waste or fuel is stored. Drainage from these locations will either be handled as waste and disposed of by licensed facilities or be treated on-site and discharged in accordance with the applicable standards in ESIA Chapter 2
PP-CP-03	Impacts of Project carbon footprint at national and global levels will be assessed by quantifying the greenhouse gases (GHGs) emissions and impacts of climate change on Project facilities and structures.
During Operations	
PP-OP-01	The effluent quality is consistent with the Project's Discharge Standard
PP-OP-02	Implement the operations phase Project Pollution Prevention Plan
PP-OP-03	Operations Phase Pollution Prevention will be developed and will include measures to ensure air quality impacts during operations are minimised, including the need to operate and maintain equipment pursuant to the manufacturer's specifications, managing complaints and conducting air quality monitoring (where necessary) in response to complaints

5.8 Noise and Vibration Management Framework

5.8.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate noise and vibration management requirements into Project design, planning and execution.

5.8.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-11 below.

Table 5-10: Roles and Responsibilities in Noise and Vibration Management

Party	Responsibilities

NCPC	• Complete the design verification process in relation to noise and vibration, including a vibration risk review
	• Implement the E&S Management of Change Process to validate that there is no material change in impact once the final construction activities are defined, the associated schedule and noise and vibration sources are confirmed
	• Develop a Noise and Vibration Management Plan that details:
	  ○ Equipment specification, site layouts and noise abatement controls
	  ○ Construction traffic noise related controls
	  ○ estimation of the frequencies, duration, days of the week, planned working hours for noisy activities and predicted noise levels
	  ○ Protocols for prior notification on noise generating activities
	  ○ Noise monitoring program aligned with applicable noise standards
	• Monitor and evaluate the performance of the contractors and suppliers in the execution of marine construction works in accordance with Project Compliance Monitoring Framework within the ESMMP

EPC Contractor(s)	• Develop and submit a Noise and Vibration Management Plan incorporating mitigation and monitoring requirements • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Noise and Vibration Management Plan and in compliance with applicable standards • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits and noise monitoring outlined in the Noise and Vibration Management Plan as relevant to their scopes and report on outcomes of monitoring to NCPC • Investigate all instances of exceedances of applicable standards and any grievances received in relation to construction noise generating activities and implement corrective and preventive measures.

5.8.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Noise and Vibration Management Plan that will supersede and replace this Framework.

The Noise and Vibration Management Plan will be aligned with applicable standards on noise and will address the commitments for pre-construction and construction phases outlined in Table 5-11 on avoidance, mitigation and monitoring to be implemented:

- Once the final construction activities are defined, the associated schedule and noise and vibration sources are confirmed, E&S Management of Change Process (Section 4.3.4) to validate that there is no material change in impact, including impacts from construction traffic noise

- A review of vibration risk, including the need to complete a dilapidation survey of structures at risk of vibration damage
- Noise and vibration management controls, including equipment specification and siting, traffic controls, noise abatement and estimation of the frequencies, duration, days of the week, planned working hours for noisy activities and predicted noise levels at all Project Facilities and along the conveyance pipeline
- Protocols for prior notifications to communities and management of noise and vibration related grievances

To support implementation of the Noise and Vibration Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to construction
- Monitoring tasks to be completed during construction of marine and terrestrial Project components (parameters, frequencies, locations, applicable standards), including use of checklists to support inspection of site/vessel-based equipment and noise control practices
- KPIs for evaluating the effectiveness of noise and vibration controls and reporting progress against set targets, including disclosure of the affected households and relevant government entities
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-11: Noise and Vibration Management Commitments

Code	Commitment
Prior to Construction	
NV-PC-01	A review of vibration risk including need to complete a dilapidation survey will be undertaken as part of construction planning.
NV-PC-02	Standard noise abatement equipment shall be fitted to equipment used and maintained in accordance with manufacturers' instructions, e.g., all vehicles and mechanical plant will be fitted with effective exhaust silencers and be maintained in good efficient order
NV-PC-03	Develop a Construction Noise and Vibration Management Plan aligned to national legislation and international standards in ESIA Chapter 2 that includes all feasible and reasonable methods to limit noise emissions and minimise the noise impact on people/properties neighbouring the Project areas/sites.
NV-PC-04	The plan shall include at a minimum: • Estimation of the frequencies, duration, days of the week, planned working hours and predicted noise levels anticipated within the vicinity of the Project construction activities at all Project Facilities and along the conveyance pipeline to be completed by a competent noise assessor Protocols for engagement with residents and occupants to provide advance warning of works taking place where relevant, including the duration and likely noise and vibration impacts. In the case of work required in response to an emergency, the local residents and occupants shall be advised as soon as reasonably practicable that emergency work is taking place

Code	Commitment
NV-PC-05	Within the Construction Noise and Vibration Management Plan include a Noise Monitoring Program ahead of the commencement of works, comprising the following elements: • Identification of noise/vibration sources and identification and classification of potentially affected sensitive receptors • Description of applicable legal requirements related to noise/vibration measuring parameters, measuring locations, frequency of monitoring (intermittent or continuous) and planned monitoring programme for the works, considering the location and sensitivity of the potentially affected receptors • Description of arrangements for noise/vibration mitigation during construction in relation to identified noise sources and sensitive receptors, including selection of quieter equipment and scheduling • Reporting process related to noise/vibration monitoring results Communication/disclosure lines related to noise/vibration monitoring results with the affected households and the applicable government entities
NV-PC-06	All compressors and generators used during construction activities shall be "sound reduced" models and fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use, and all pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers.
During Construction	
NV-CO-01	All pile driving shall be carried out by plant equipped with a noise reducing system or by silent driving systems. Percussive piling shall only be used where no other suitable system is available.
NV-CO-02	Equipment shall be used and construction and transport methods adopted in order not to generate noise levels in excess of values set out in applicable standards in ESIA Chapter 2
NV-CO-03	To the extent possible, heavy vehicles shall not be used at night between 22:00 and 06:00
NV-CO-04	All machines in intermittent use shall be shut down in the intervening periods between work or throttled down to a minimum. Lorry engines will be switched off when vehicles are stationary.
NV-CO-05	Normal working hours in or close to residential areas shall be respected, and in general, night-time working shall be kept to a minimum near those areas. Materials for night-time working shall be delivered during normal hours of working and be placed as close as possible to the work area for which they are required
NV-CO-06	Construction camp specifications for plant and equipment to be procured to support camp operation shall include relevant noise source specifications as stipulated within national legislation. The procured plant and equipment shall be operated and maintained in accordance with manufacturers' instructions and shall be fitted with appropriate noise abatement as required
NV-CO-07	During construction the contractors shall implement the Construction Noise and Vibration Management Plan and Noise Monitoring Program
NV-CO-08	Temporary noise barriers shall be used to reduce noise levels where appropriate and practicable. Such measures can be particularly appropriate for stationary or near-stationary plant such as pneumatic breakers, piling rigs, and compressors. Barriers shall

Code	Commitment
	be located as close to the plant as possible and, in order to provide adequate attenuation, shall have a mass per unit area of at least 7 kg/m2. The screens may include soil mounds, site offices, site huts, acoustic sheds, or partitions.
NV-CO-09	High noise generating works (e.g., piling) shall be planned in line with national regulations and respect maximum ambient noise levels at the nearest receptors
NV-CO-10	Stationary equipment (such as temporary generators and compressors) shall be located as far as possible from nearby receptors (e.g., communities). Equipment known to emit noise strongly in one direction, whenever possible, shall be orientated so that the noise is directed away from any sensitive receptors.
NV-CO-11	As far as practicable, any activities requiring concrete breaking shall be carried out using equipment that breaks concrete in bending in preference to percussive methods.
NV-CO-12	Where reasonably practicable, fixed items of construction plant shall be electrically powered in preference to diesel or petrol driven.
NV-CO-13	All ancillary plant such as generators and pumps shall be positioned so as to cause minimum noise disturbance, and, if necessary, acoustic enclosures should be provided.
During Operations	
NV-OP-01	Operations Phase Noise and Vibration Plan will be developed as part of the Operations ESMMP and will include measures to ensure noise impacts during operations are minimised including the need to operate and maintain equipment pursuant to the manufacturer's specifications, community relation management, managing complaints and conducting noise and vibration monitoring in response to complaints and specify requirement for dedicated point of contact to manage complaints
NV-OP-02	Operational logistics (e.g. deliveries to Project sites) to be planned to minimise noise impacts to communities
NV-OP-03	Noise survey to be carried out at the boundary of the IPS, Desalination Plant and the Conveyance Pumping Stations in the first year of stable operations to confirm the need for subsequent surveys in the event of grievance and if noise exceedances are recorded

5.9 Waste Management Framework

5.9.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate waste management requirements into Project design, planning and execution.

5.9.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-12 below.

Table 5-12: Roles and Responsibilities in Waste Management

Party	Responsibilities
NCPC	• Confirm absence of contaminated land at all Project sites, and if required develop a Contaminated Land Management Plan • Complete waste forecast

Party	Responsibilities

	• Undertake due diligence of waste contractors (transporters and receiving and disposal facilities) to ensure all contractors used comply with applicable project standards
	• Develop a Waste Management Plan that details:
	  ○ Principles of waste minimisation and management
	  ○ Processes for assessment and selection of waste management subcontractors
	  ○ Waste identification and classification system
	  ○ Temporary site storage, segregation and handling requirements
	  ○ Waste transportation and chain-of-custody documentation requirements
	  ○ estimation of the frequencies, duration, days of the week, planned working hours for noisy activities and predicted noise levels
	  ○ Waste tracking, monitoring and reporting requirements.
	• Monitor and evaluate the performance of the EPC and waste contractors in accordance with Project Compliance Monitoring Framework within the ESMMP

EPC Contractor(s), Waste Transporters and Receivers	• Develop and submit a Waste Management Plan incorporating mitigation and monitoring requirements • Support NCPC in completion of the waste forecast • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Noise and Vibration Management Plan and in compliance with applicable standards • Monitor their own activities and those of their subcontractors, undertaking regular internal inspections, reviews and audits outlined in the Waste Management Plan as relevant to their scopes and report on outcomes of monitoring to NCPC • Report generated (or transported or received/disposed waste as the case maybe) to NCPC and provide chain-of-custody documentation • Investigate all instances of unauthorised waste disposal and any grievances received in relation to construction waste and implement corrective and preventive measures.

5.9.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Waste Management Plan that will supersede and replace this Framework.

The Waste Management Plan will be aligned with applicable standards and will address the commitments for pre-construction and construction phases outlined in Table 5-13 on avoidance, mitigation and monitoring to be implemented:

- Confirmation of presence or absence of contaminated land at the Project sites using risk based approach to assess contamination risk
- Completion of a waste forecast (waste types, hazard classification and expected quantities over the course of construction) that accounts for:
  - Construction manning and resource / material consumption levels
  - Site storage requirements and any temporal or volume-based limits on temporary storage to comply with applicable standards and manage risk of pollution, fire and nuisance
  - In-country capacity to receive, treat and dispose of such wastes

- Due diligence of potential waste transporters and receiving and disposal facilities based on the waste forecast
- Waste minimisation and management principles to be implemented on the Project: waste elimination as a first step, followed by waste minimisation and responsible waste management through the application of source reduction, reuse, recycling, recovery, treatment, and controlled disposal.
- Processes for assessment and selection of waste management subcontractors (transporters and receivers)
- Waste Identification and classification system
- Waste segregation, handling and labelling, onsite storage requirements to prevent pollution of soil and water resources, and temporary onsite storage limits – including waste generated by construction vessels
- Waste transportation requirements, including transportation container and vehicle standards and chain-of-custody record requirements
- Waste tracking, monitoring and reporting requirements

To support implementation of the Waste Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to construction, including due diligence of waste transporters and receiving and disposal facilities
- Monitoring tasks to be completed during construction of marine and terrestrial Project components (parameters, frequencies, locations, applicable standards), including use of checklists to support:
  - inspection of site/vessel-based waste segregation, handling and storage practices
  - Inspection of 3rd party waste transporters and receiving and disposal facilities
- KPIs for evaluating the effectiveness of waste management controls and reporting progress against set targets
- KPIs for waste minimisation and reporting against set targets
- KPIs for evaluation of EPC Contractor(s), waste transporter and waste receiving and disposal facilities' compliance with applicable standards, and their performance trends.

Table 5-13: Waste Management Commitments

Code	Commitment
Prior to Construction	
WM-PC-01	Prepare a Waste Management Plan, with sufficient time to enable the selection of an appropriate contractor that will: • Be supported by a waste forecast, that will be used to plan a due diligence of the potential waste transportation, treatment and disposal companies to confirm their capacity to manage the forecasted waste types and quantities in accordance with the project waste standards.

Code	Commitment
	• Define the waste management operational activities to support all activities from segregation to final disposal, in compliance with applicable standards
Construction and Operations	
WM-CP-01	• All waste contractors engaged to store, transport, treat and dispose of waste will be licensed

5.10 Biodiversity Management Framework

5.10.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate biodiversity management requirements into Project design, planning and execution.

5.10.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-14 below.

Table 5-14: Roles and Responsibilities in Biodiversity Management

Party	Responsibilities

NCPC	• Complete design verification and integrate the final outfall and Desalination Plant design and outcomes of Ecological Constraints Assessment into the BMP
	• Develop a Biodiversity Management Plan that details:
	  ○ Pre-construction marine and terrestrial surveys and assessments to be completed
	  ○ Coral translocation program planning and implementation supervision
	  ○ Habitat reinstatement and major wadi crossing protocols
	  ○ Habitat restoration targets for translocated corals, benthic habitats, CHF and PBH as applicable
	  ○ Construction phase monitoring program
	  ○ Post-construction marine and terrestrial surveys and EPC Contractor demobilisation governance requirements
	• Monitor and evaluate the performance of the EPC and waste contractors in accordance with Project Compliance Monitoring Framework within the ESMMP
	• Update the BMP and monitoring program to support implementation of the operations phase BMP and BAP

EPC Contractor(s)	• Undertake pre-construction marine and terrestrial environmental surveys and implement coral translocation program • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Biodiversity Management Plan and in compliance with applicable standards • Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Biodiversity Management Plan as relevant to their scopes and report on outcomes of monitoring to NCPC • Undertake post-construction marine and terrestrial surveys prior to demobilisation to confirm habitat restoration targets have been achieved

5.10.3 Management Processes

Prior to completion of the detailed design the relevant ESIA commitments outlined in Table 5-15 will be implemented as part of the design verification process (Section 4.3.1). The following will be integrated into the Biodiversity Management Plan:

- The outcomes of the outfall and desalination plant design and O&M procedures selection process to inform the development of an appropriate benthic habitat monitoring program
- The outcome of the Ecological Constraints Assessment to confirm the pre-construction environmental survey program

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Biodiversity Management Plan that will supersede and replace this Framework.

The Biodiversity Management Plan will implement the commitments for pre-construction and construction phases outlined in Table 5-15 on avoidance, mitigation and monitoring to be implemented:

- Pre-construction marine and terrestrial environmental surveys, with consideration of baseline data limitations identified in 2025 AAWDC Project ESIA Chapter 6
- Pre-construction evaluation of micro-siting of temporary and permanent shoreline and submerged Project infrastructure
- Pre-construction coral translocation program
- Protocols for habitat reinstatement and wadi crossings for major wadis
- Biodiversity targets for coral translocation, benthic habitats, Critical Habitats and Priority Biodiversity Features (if applicable)
- A construction monitoring program integrating limitations of the existing baseline data and enabling assessment of impacts of selected marine construction methods
- Post construction marine and terrestrial surveys to confirm habitat restoration targets have been achieved
- Update of the BMP and monitoring program to support implementation of the operations phase BMP and BAP.

To support implementation of the Biodiversity Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and post construction
- Monitoring tasks to be completed during the construction of marine and terrestrial Project components, integrating limitations of the existing baseline data and enabling assessment of impacts of selected marine construction methods
- KPIs for evaluating the effectiveness of biodiversity management controls and reporting progress against set targets
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-15: Biodiversity Management Commitments

Code	Commitment
Prior to the Completion of Detailed Design	
BM-PD-01	Completion of a Remotely Operated Vehicle survey of the outfall diffuser and plume area where the 2% salinity criteria is exceeded, to assess presence, abundance and quality of seabed habitats
BM-PD-02	• Design and start a coral settlement field study that will confirm the baseline planktonic larval spawning/reproduction periods, and assuming access to the existing intake lagoon can be arranged, install settlement plates in this lagoon
BM-PD-03	The outcome of the intake entrainment mitigation assessment and confirmation of the construction benthic habitat impacts and coral settlement field study shall be integrated into the Biodiversity Management Plan and updates to the BAP framework
BM-PD-04	An appropriate coral and seagrass monitoring program will initially support the planning, implementation and target setting to achieve measurable goals (No net loss and or Net Gain) for all critical habitat species and habitats, considering potential entrainment impacts and the environmental baseline limitations identified in Chapter 6
BM-PD-05	Before the finalisation of the construction plans and schedule: • Conduct the spring 2026 terrestrial biodiversity survey along the proposed Project works corridor to support the preparation of a Biodiversity Sensitivities and Constraints Assessment
BM-PD-06	• Assess the feasibility of providing suitable habitats for the giant clam that embeds into substrate
Prior to Construction	
BM-PC-01	Prior to the start of construction, complete a pre-construction survey of the shoreline construction to confirm the absence of nesting birds and require the application of appropriate mitigation if nesting sites are found
BM-PC-02	Translocation of all critical habitat (coral and giant clams) within water depths that can be safely accessed by divers.
BM-PC-03	Coral Translocation Plans will be developed in consultation with applicable authorities, and finalised at least 3 months before the start of construction
BM-PC-04	Undertake a pre-construction marine environmental survey, including a diver cultural heritage assessment, before the start of construction, ensuring sufficient time to support: • Focusing on ROV data below 70m, the need for EDNA sampling to confirm the presence of fish and other CH and PBF fauna and the need to quantify coral to be impacted by construction • Survey of coral settlement using settlement tile arrays and assessing the potential to collect and include as supplementary material for the translocation plan • The evaluation of micro-routing of temporary and permanent shoreline and submerged Project infrastructure
BM-PC-05	Prepare the Coral Translocation Plan that will include:

Code	Commitment
	• Detailed mapping of coral/reef substrate within the construction footprint to identify material to be translocated • The process to create an inventory of associated corals to quantify the number, health and types of coral. • How the inventory data will be integrated into defined reinstatement goals
BM-PC-06	Undertake a terrestrial Biodiversity Sensitivities and Constraints Assessment to: • Support the integration of biodiversity sensitivities into the final design and construction methods selection process • Confirmation of the seasonal restrictions where the risk to breeding birds is considered significant, and if required, define seasonal construction restrictions to avoid impacts to CH, PBF and Natural Habitat • Confirmation of spatial restrictions for temporary construction facilities and activities where avoidance is recommended to support the avoidance of impacts to CH, PBF and Natural Habitat • Confirm the scope and schedule for pre-construction environmental surveys • Confirm the locations required for seed collection and replanting. The process for their replanting within the pipeline right-of-way will be defined in the BAP, supported by the BMP that will define construction operational controls, to avoid residual impact on flora • Confirm the location for fauna translocation, including the release location. The process will be defined in the BAP, supported by the BMP that will define construction operational controls, to avoid residual impact on fauna
BM-PC-07	Within the Biodiversity Management Plan, include the outcome of the Ecological Constraints Assessment and confirm the pre-construction environmental survey program and define the below controls: • Demarcation of all areas where construction will occur to ensure that all earthworks will be strictly limited to the required areas, with particular emphasis in areas of natural habitat • The need to avoid all construction activities during the breeding season (mid-February to early June) in areas where Buff-rumped Wheatear or any other PBF species (unlikely) has been found in the current/previous breeding seasons • Install Bird Flight Diverters along the whole OHTL following good international industry practice • Ensure OHTL pylons are wildlife-friendly, meaning that the distance between energised components is enough to prevent electrocutions and/or that these are appropriately insulated, following good international industry practice
BM-PC-08	Undertake the pre-construction environmental survey program, including an assessment of erosion potential/risk and update the Biodiversity Sensitivities and Constraints Assessment
BM-PC-09	• Develop a habitat reinstatement protocol and a wadi crossing protocol to be applied for major wadis
During Construction	
BM-CO-01	Prior to the demobilisation of the marine construction and installation contractor, undertake a diver survey of the construction area to confirm that the marine habitat restoration targets have been achieved

Code	Commitment
BM-CO-02	Prior to demobilisation of the lagoon construction contractor, undertake a walkover survey of the construction area to confirm habitat restoration targets have been achieved and integrate the findings into the Contractor's completion and demobilisation governance system.
BM-CO-03	Update the Biodiversity Management Plan and benthic habitat monitoring program to support the operations phase
BM-CO-04	Integrate the intake entrainment mitigation assessment and O&M controls to support the entrainment mitigation to reduce planktonic larval spawning/reproduction entrainment
BM-CO-05	On an annual basis, undertake a breeding bird assessment survey to assess the construction areas where work will be undertaken during breeding seasons and update the Biodiversity Sensitivities and Constraints Assessment
BM-CO-06	The EPC will prepare an Ecological Constraints Assessment, with the results of the pre-construction environmental survey program and maintain a register of constraints to support construction
BM-CO-07	Prior to the demobilisation of the onshore construction contractor, undertake a walk-over survey of the construction area to confirm the habitat restoration targets have been achieved and integrate the findings into the contractor's completion and demobilisation governance system
BM-CO-08	Following confirmation that the onshore construction biodiversity restoration targets have been achieved, update the Biodiversity Management Plan and biodiversity monitoring requirements to support the operations phase and implementation of the Biodiversity Action Plan
During Operations	
BM-OP-01	The seawater velocity intake will be limited to 0.15 m/s unless demonstrated otherwise. The effectiveness of the seawater abstraction system design in preventing the entrainment of marine megafauna, turtles and fish will be confirmed through routine maintenance and inspection
BM-OP-02	Implement the operations phase Biodiversity Management Plan, Biodiversity Action Plan, associated biodiversity monitoring requirements and support the coral replenishment program
BM-OP-03	Implement the operations phase BMP, BAP and associated biodiversity monitoring requirements including bird post fatality monitoring (PCFM) program monitoring to determine the significance of impacts from the OHTL and inform the need for adaptive management

5.11 Erosion Control and Reinstatement Management Framework

5.11.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate erosion control and reinstatement management into Project design, planning and execution.

5.11.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-16 below.

Table 5-16: Roles and Responsibilities in Erosion Control and Reinstatement Management

Party	Responsibilities

NCPC	• Complete an erosion risk assessment including definition of erosion classes and a minimum erosion performance target
	• Develop an Erosion Control and Reinstatement Management Plan that includes:
	  ○ Soil Erosion and Risk Assessment Register for each section of the Conveyance Pipeline section
	  ○ Requirements for pre-construction survey records
	  ○ Temporary and permanent erosion controls to be implemented
	  ○ Topsoil, subsoil, and waste soil and rock management
	  ○ Scheduling and Right of Way Exposure Management, including access restrictions
	  ○ Reinstatement specifications, completion and handover protocols
	  ○ Habitat reinstatement protocol
	  ○ Oversight and assurance activities by NCPC and monitoring and reporting requirements by EPC Contractor
	• Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP

EPC Contractor(s)	• Undertake pre-construction survey to support the NCPC erosion risk assessment assumptions
	• Develop Erosion Control and Reinstatement Management Plan outlining:
	  ○ temporary and permanent erosion measures to be implemented including their design considering the erosion risk assessment
	  ○ reinstatement measures to NCPC satisfaction
	• Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Erosion Control and Reinstatement Management Plan and in compliance with applicable standards
	• Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Erosion Control and Reinstatement Management as relevant to their scope and report on outcomes of monitoring to NCPC
	• Where required undertake post-construction surveys prior to demobilisation to confirm habitat restoration targets have been achieved

5.11.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Soil Erosion and Reinstatement Management Plan that will supersede and replace this Framework.

The Soil Erosion and Reinstatement Management Plan will address the requirements for pre-construction and construction phases on avoidance, mitigation and monitoring to be implemented:

- Determination of erosion risk at all Project sites as part of the pre-construction environmental survey to quantify likely soil loss along the pipeline easement and to identify and manage erosion risk
- Definition of erosion classes and a minimum erosion performance target to guide interpretation of reinstatement specifications by Contractor and to be used as a benchmark of acceptance of reinstatement by NCPC
- Based on risk assessment, designation of predicted erosion classes to each section of the ROW (without mitigation) and development of the Soil Erosion and Risk Assessment Register that identifies areas of risk, where projected erosion control measures are required to reduce the erosion risk
- Pre-construction survey to facilitate the development of site-specific reinstatement method statements, where deemed necessary, based upon risk, including a photographic record of the site conditions prior to the start of construction
- Temporary and permanent erosion controls to be implemented
- Topsoil and subsoil management
- Trenching requirements, including management of waste soil and rock and community safety
- Scheduling and RoW Exposure Management, including management of 3rd party access restrictions
- Revegetation of earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable to minimise dust impacts
- Reinstatement specification for areas disturbed by construction that are not required to be permanent by the Project
- Reinstatement specification on land and facilities other than Project sites
- Implementation of the habitat reinstatement protocol outlined in the Biodiversity Management Plan
- Completion and handover requirements, including joint visits
- Post-construction surveys, where required to confirm habitat restoration targets have been achieved
- Monitoring and reporting requirements, including oversight and assurance to be undertaken by NCPC

To support implementation of the Erosion Control and Reinstatement Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed during design verification, prior to, during and post construction
- Monitoring tasks to be completed during construction of crossing (parameters, frequencies, locations, applicable standards), including use of checklists to support inspection of site-based practices
- KPIs for evaluating the effectiveness of erosion controls and reporting progress of reinstatement against set targets

- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

5.12 Traffic and Road Safety Management Framework

5.12.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate the requirements of traffic and road safety management into the Project design, planning and execution.

5.12.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-17 below.

Table 5-17: Roles and Responsibilities in Traffic and Road Safety Management

Party	Responsibilities

NCPC	• Detailed Project Traffic Forecast and Transport Flows and Routes
	• Develop a Traffic and Road Safety Management that includes:
	  ○ Mechanisms for raising community awareness
	  ○ Management of notifications to the community and relevant authorities
	  ○ Impact avoidance measures (dust, nighttime traffic, peak tourism seasons)
	  ○ Emergency preparedness and response arrangements
	  ○ Compliance with statutory speed limits and vehicle standards
	  ○ Road safety measures for motorised and non-motorised road users
	  ○ Construction site traffic control procedures
	  ○ Driver training and competency standards
	  ○ Vehicle standards and preventive maintenance
	  ○ Project driving standards
	  ○ Road / access track reinstatement requirements
	  ○ Post construction monitoring and consultation
	  ○ Monitoring and reporting requirements, including road safety audits and inspections
	• Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP

EPC Contractor(s)	• Develop and submit a Traffic and Road Safety Management Plan incorporating mitigation and monitoring requirements • Support to NCPC in the detailed Traffic Forecast • Completion of road safety impact assessment • Carry out notifications and disclose Project related information on road safety impacts to communities and relevant authorities under the supervision of NCPC • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Traffic and Road Safety Management Plan and in compliance with applicable standards

Party	Responsibilities
	• Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Community Health, Safety and Influx Management Plan as relevant to their scope and report on outcomes of monitoring to NCPC • Report to NCPC and investigate any traffic road safety incidents, near-misses, or grievances related to construction activities • Reinstate public roads and access tracks where damage has been caused by Project traffic • Where required, undertake post-construction surveys and consultations prior to demobilisation to ensure mitigation measures have been implemented and any residual risks or outstanding community concerns are addressed

5.12.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Traffic and Road Safety Management Plan that will supersede and replace this Framework.

The Traffic and Road Safety Management Plan will address the commitments for pre-construction and construction phases outlined in Table 5-18 on avoidance, mitigation and monitoring to be implemented and will include the following:

- Preparation of a detailed forecast of the Project traffic and transport flows and routes to be used with consideration of community access issues, particularly for women and children, and safety measures around livestock
- Completion of road safety impact assessment for motorised and non-motorised road users
- Mechanisms to raise community awareness of traffic risks associated with construction, including details of Project information to be disclosed such as communities about work schedules, restricted zones, and safety precautions—especially in schools, herding areas, and tourism zones
- Management of notifications to communities and relevant authorities on temporary closures, detours, and particularly sensitive construction locations, oversized load transportation, etc, including liaison with fire, ambulance and other emergency services
- Project traffic and road safety measures on public roads and access tracks used by the Project:
    - Avoidance of construction at night in residential areas and the peak tourism season in Wadi Rum
    - Dust suppression measures
    - Emergency preparedness and response arrangements, including emergency recovery of vehicles
    - Compliance with all statutory vehicle limits (width, height, loading, gross weight) and any other statutory vehicle requirements and compliance of the same by subcontractors
    - Road safety measures for motorised and non-motorised road users, including use of signs, flagmen and signals where necessary (e.g. during diversions)
    - Project traffic speed limits on the Conveyance Pipeline working strip, work sites and access roads and designated parking locations

  - Traffic control procedures, including entering and exiting construction areas and the Conveyance Pipeline working strip identifying emergency service vehicle parking areas
  - Driver training and competency standards, work/rest hours, and communication with control points and vehicle equipment
  - Vehicle standards and preventative vehicle maintenance
  - Project driving standards (designated roads, access tracks, journey management, etc.)
  - Public road and access track reinstatement (for damages caused by the Project traffic)
- Post-construction monitoring and consultations

To support implementation of the Community Health, Safety and Influx Management, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to, during and post construction
- Monitoring tasks to be completed during construction of marine and terrestrial components of the Project, including road safety inspections and audits
- KPIs for evaluating the effectiveness of traffic and road safety controls and reporting, including disclosure of monitoring reports to communities and relevant authorities
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

Table 5-18: Traffic and Road Safety Management Commitments

Code	Commitment
Prior to Construction	
TR-PC-01	Development of a Traffic and Road Safety Management Plan, that is based on a detailed forecast of the traffic and transport flows and routes, to be prepared by EPC Contractor, in close coordination with municipalities and the Ministry of Public Works & Housing (MPWH) and approved by NCPC prior to mobilisation. This Plan should take into consideration community access issues, and safety measures around communities and livestock.
TR-PC-02	The EPC Contractors shall coordinate with the Ministry of Public Works and Housing (MPWH) prior to construction to obtain a no-objection for any construction within the right-of-way of MPWH roads. This coordination will also involve the EPC Contractors obtaining instructions for managing traffic, required signage, and traffic detours, as well as managing existing utilities and infrastructure on these roads.
TR-PC-03	The EPC Contractor is also required to submit a traffic and transport application (construction works and plan, road or lane blockage, detours, placement of warning signs and barriers, use of flaggers or traffic controllers, routes for equipment transport on the MWPH roads as well as the axle weights, etc.)

5.13 Community Health, Safety and Influx Management Framework

5.13.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate the requirements of community health, safety and influx management into Project design, planning and execution.

5.13.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-19 below.

Table 5-19: Roles and Responsibilities in Community Health, Safety and Influx Management

Party	Responsibilities

NCPC	• Maintain resources for community liaison
	• Develop a Community Health, Safety and Influx Management that includes:
	  ○ NCPC expectations on EPC Contractor management of community health, safety and influx risks and potential impacts, including GBVH
	  ○ Requirements for workforce healthcare and management of communicable diseases
	  ○ Requirements for prevention of community exposure to construction risks and hazards, including hazardous materials
	  ○ Emergency preparedness and response arrangements
	  ○ Management of notifications to communities and relevant authorities
	  ○ Worker – community interaction requirements
	  ○ Post construction monitoring and consultations
	  ○ Monitoring and reporting requirements, including joint inspections with relevant authorities and disclosure of monitoring results
	• Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP

Contractor(s)	• Develop and submit a Community Health, Safety and Influx Management Plan incorporating mitigation and monitoring requirements • Identification, evaluation and prevention of risks and potential impacts to health and safety of the affected communities, including those from Project-induced influx • Carry out notifications and disclose Project related information on potential health and safety risks to communities and relevant authorities under the supervision of NCPC • Maintain resources for community liaison • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Community Health, Safety and Influx Management Plan and in compliance with applicable standards • Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Community Health, Safety and Influx Management Plan as relevant to their scope and report on outcomes of monitoring to NCPC • Report to NCPC and investigate any community safety incidents, near-misses, or grievances related to construction activities

Party	Responsibilities
	• Where required undertake post-construction surveys and consultations prior to demobilisation to ensure mitigation measures have been implemented and any residual risks or outstanding community concerns are addressed

5.13.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Community Health, Safety and Influx Management Plan that will supersede and replace this Framework.

The Community Health, Safety and Influx Management Plan will address the commitments for pre-construction and construction phases outlined in Table 5-20 on avoidance, mitigation and monitoring to be implemented and will include the following:

- Identification, evaluation of risks and potential impacts to the health and safety of the affected communities, including those from Project induced influx
- Preventative measures to address these in an appropriate manner to prevent/avoid the risk of impacts over minimisation and reduction, including GBVH
- Mechanisms to raise community awareness of the health and safety risks associated with construction, including details of Project information to be disclosed
- Measures to prevent or minimise the potential for community exposure to hazardous materials that may be released by the Project
- Identification of communicable diseases of concern and an action plan, where appropriate to prevent or minimise the potential for worker and community exposure to vector-borne and other communicable diseases that could result from Project activities
- Management of notifications to communities and relevant authorities, including liaison with NCPC CLOs, on critical dust and noise generating activities, road closures and diversions, oversized goods transportation, marine construction exclusion zones etc.
- Construction works management measures (e.g. provision of alternative access, management of open trenches and excavations, fire safety and spill prevention measures, etc.)
- Healthcare provisions for the Project workforce, including worker health screening
- Project emergency preparedness and response arrangements, including liaison with relevant authorities
- Project traffic and road safety measures on public roads and access tracks used by the Project
- Worker-community interaction measures, worker awareness, education and behaviour
- Management of community grievances
- Post-construction monitoring and consultations

To support implementation of the Community Health, Safety and Influx Management, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to, during and post construction

- Monitoring tasks to be completed during construction of marine and terrestrial components of the Project (weekly and monthly), including joint inspections with local municipalities and districts/sub-districts, and ASEZA.
- KPIs for evaluating the effectiveness of community health, safety and influx controls and reporting, including disclosure of monitoring reports to communities and relevant authorities
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

Table 5-20: Community Health, Safety and Influx Management Commitments

Code	Commitment
Prior to Construction	
CS-PC-01	• Ensure the Project Grievance Mechanism includes the process for handling and responding to dust complaints including requirements associated with conducting reviews of dust management practices and dust monitoring in response to complaints.
CS-PC-02	• Ensure the Project Grievance Mechanism includes the process for handling and responding to noise complaints, including requirements associated with conducting noise and vibration monitoring in response to complaints. This should include consideration for an accelerated process to handle and respond to critical construction-related noise grievances.
CS-PC-03	• Development of a Project Community Health, Safety and Security Management Plan (CHSSMP) to be prepared by the EPC Contractor, in consultation with all affected municipalities and other relevant local authorities and approved by NCPC prior to mobilisation.
CS-PC-04	Specific mitigation measures detailed in the CHSSMP will include: • Measures to address potential construction hazards and disturbance impacts, including: • Avoidance of construction at night in residential areas, wherever feasible • Dust suppression measures to be implemented near communities, schools, grazing areas and farms • Noise and vibration measures to be implemented near communities, schools, grazing areas and farms • Safe storage and controlled laydown of pipes/equipment to avoid creating hazards or attracting anti-social use • Clear site fencing, signage, and lighting around open trenches, machinery yards, and material laydown areas, to prevent accidental access • Hydrological management measures, such maintaining natural drainage pathways, installing temporary diversions where necessary, and avoiding obstruction of wadis
CS-PC-05	Measures to address potential impacts associated with worker influx, including: • Workforce accommodation planning to avoid strain on local services. • Worker camps to have their own medical facilities to avoid putting undue pressure on local health services and facilities in rural and peri-urban Project areas • Worker code of conduct to be implemented for all Project workers, including contractors and sub-contractors.

Code	Commitment
	• Worker GBVH/SEAH Code of Conduct to be implemented for all Project workers, including contractors and sub-contractors, and other GBVH/SEAH prevention measures
CS-PC-06	Measures to address potential impacts on community infrastructure and services, including: • Solid waste and wastewater management measures aligned with municipal capacity. • Coordination with public security and emergency response services to ensure preparedness for accidents or emergencies, including shared response protocols and contact points • Coordination with municipalities to address any impacts on community utilities
CS-PC-07	Measures to address community risks associated with Project security in line with international good practice (e.g., Voluntary Principles on Security and Human Rights), including: • Engagement with public security forces to ensure alignment and coordination over Project security measures • Rigorous screening, training, and monitoring of private security providers on behavioural standards, human rights, GBVH/SEAH prevention, and proportional use of force. • Clear protocols for engagement with local communities, including respectful communication and cultural awareness. • Transparent procedures restricting security personnel from engaging in law enforcement beyond their mandate.
CS-PC-08	• Measures to ensure close coordination during construction with relevant authorities, such as municipalities, districts and sub-districts, ASEZA for the Aqaba section, health directorates, and civil defence
CS-PC-09	• The Project will adopt a survivor-centred, confidential, and zero-tolerance approach to GBVH/SEAH risk management, to comply with Jordanian labour law, as well as with international best practice
CS-PC-10	• Establish and enforce a AAWDC Project-wide GBVH/SEAH Code of Conduct for all workers, managers and subcontractors, translated into Arabic (or other languages if necessary). All workers will be required to read and sign this Worker Code of Conduct (provided in the worker's language), which will also be explained verbally
CS-PC-11	• Require EPC Contractors and subcontractors to implement robust GBVH/SEAH Prevention & Response Action Plans
CS-PC-12	• Mandatory induction and refresher training for all workers on behavioural expectations, boundaries, and consequences of misconduct.
CS-PC-13	• Supervision protocols to prevent worker-community misconduct, including restrictions on worker movement where necessary.
CS-PC-14	• Integrate GBVH-sensitive channels into the Project Grievance Mechanism (GRM), ensuring confidentiality, anonymity, and non-retaliation.
CS-PC-15	• Provide multiple reporting pathways (CLOs, women focal points, hotline, WhatsApp, trusted community intermediaries).

Code	Commitment
CS-PC-16	• Ensure that staff responsible for GRM and CLOs receive specialised GBVH/SEAH training.
CS-PC-17	• Pre-identify and partner with specialised local GBV service providers, including shelters, psychosocial services, and legal assistance, to ensure referral pathways for survivors.
During Construction	
CS-CO-01	The EPC Contractor will ensure the following public engagement: Early notification of construction schedules to governorates, districts/sub-districts and municipalities listed in the Project SEP
CS-CO-02	Advance public awareness and information campaigns before and during construction to alert communities about work schedules, restricted zones, temporary closures, detours, and safety precautions—especially in schools, herding areas, and tourism zones
CS-CO-03	Monitoring of community health, safety and security performance will form an integral part of the AAWDC Project's overall Environmental and Social Management System (ESMS). The EPC Contractor, under supervision of the AAWDC Project ESG team, will maintain a system for continuous observation, recording, and reporting of any community safety incidents, near-misses, or grievances related to construction activities. Key indicators will include the number and type of incidents, response times, grievance resolution rates, and community satisfaction levels
CS-CO-04	Weekly and monthly monitoring reports will be compiled during active construction, supported by periodic joint inspections with local municipalities and districts/sub-districts, and ASEZA (in Aqaba Governorate Project areas). Any emerging risks will trigger immediate corrective action and, if necessary, revisions to the CESMP. Monitoring results and safety bulletins will also be shared transparently with local stakeholders, municipalities, and governorate authorities to maintain trust and accountability
CS-CO-05	Following construction, the Project will implement a post-construction verification and close-out programme to ensure that all commitments and mitigation measures have been effectively implemented, and that any residual risks or outstanding community concerns are addressed prior to commissioning. This will include: • Final safety inspections and road reinstatement verification in coordination with the Ministry of Public Works and local municipalities. • Closure of any temporary access routes, storage yards, and borrow pits with appropriate signage, fencing, and rehabilitation. • Post-construction consultations with municipalities and districts/sub-districts, including land users outside of urban areas (e.g. farmers, herders) to confirm satisfaction with reinstatement and to identify any unanticipated impacts.
CS-CO-06	The results of post-construction monitoring and consultations will be compiled into a Community Health and Safety Close-Out Report, confirming that residual impacts have been effectively mitigated, lessons learned have been incorporated, and that the Project meets both national and lender requirements prior to entering full operational phase.
CS-CO-07	In order to prevent and manage potential community health, safety and security impacts during construction, the AAWDC Project will adopt a comprehensive community health, safety and security management approach, premised on strict adherence to Jordanian

Code	Commitment
	national occupational health and safety regulations and international good practice (e.g. IFC EHS Guidelines).
CS-CO-08	Provide construction updates and worker presence notifications in all urban locations
CS-CO-09	• Include GBVH/SEAH indicators in routine monitoring, including training completion, incidents reported, response times, and status of corrective actions. • Quarterly reporting to NCPC senior management and Lenders. Third-party audits as required

5.14 Labour and Working Conditions Management Framework

5.14.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate requirements on labour and working conditions into Project design, planning and execution.

5.14.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-21 below.

Table 5-21: Roles and Responsibilities in Labour and Working Conditions Management

Party	Responsibilities
NCPC	• Complete Construction Headcount Forecast and Labour Assessment with input from the EPC Contractor(s), including assessment of influx, sexual exploitation, abuse and harassment risks in the workplace and against local communities • Develop Labour and Working Conditions Management Plan that includes: ○ NCPC / Project Policies on non-discrimination, prohibition of harassment, including GBVH, prohibition of forced and child labour ○ Due diligence requirements for brokers / agencies supplying Project workforce ○ Requirements for terms of employment ○ Requirements for freedom of association, collective bargaining and management of industrial actions ○ Worker Code of Conduct ○ Worker accommodation standards ○ Measures for inclusion and protection of female workers ○ Requirements for Project OHS Management System ○ Worker grievance mechanism ○ Workforce Training requirements ○ Requirements on collective dismissal planning, consultation and implementation ○ Monitoring and reporting requirements, including oversight labour audits by NCPC • Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP
EPC Contractor(s)	• Support NCPC on completion of Construction Headcount Forecast and Labour Assessment

Party	Responsibilities
	• Develop and submit a Labour and Working Conditions Management Plan and Occupational Health and Safety Management Plan incorporating mitigation and monitoring requirements • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls and commitments of the Labour and Working Conditions Management Plan and in compliance with applicable standards • Provide workplace and worker accommodation in compliance with the Labour and Working Conditions Management Plan • Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Erosion Control and Reinstatement Management as relevant to their scope and report on outcomes of monitoring to NCPC • Report to NCPC and investigate any workplace OHS incidents, near-misses, instances of discrimination or harassment in the workplace or in local communities in connection to the Project, and any worker grievances

5.14.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Labour and Working Conditions Management Plan that will supersede and replace this Framework.

The Labour and Working Conditions Management Plan will address the commitments for pre-construction and construction outlined in Table 5-22 on avoidance, mitigation and monitoring to be implemented and will include the following:

- Completion of a Construction Headcount Forecast and Labour Assessment that accounts for:
  - Manning levels required at various stages of construction, broken down by skilled and non-skilled resources required
  - Capacity of local communities to supply project workforce, opportunities and limitations and extent of recruitment from local communities
  - Influx risks and supporting mitigation measures
  - Sexual exploitation, abuse and harassment (including GBVH) risks in the workplace and against local communities and supporting mitigation measures
- NCPC / Project policies on non-discrimination, prohibition of harassment, including GBVH, prohibited of forced and child labour
- Due diligence requirements of brokers/agencies supplying workforce to the Project
- Terms of employment for day and non-full-time workers (written contracts, fair wages, rest and work hours, injury compensation and social protection, heat stress management etc.)
- Requirements for freedom of association and collective bargaining
- Management of industrial actions
- Worker Code of Conduct prohibiting discrimination, harassment, GBVH of any kind, forced and child labour, whilst ensuring respect for freedom of association
- Worker accommodation standards to be provided in line with applicable standards

- Measures for inclusion and protection of female workers in the workplace and worker accommodation
- Requirements for the Project Occupational Health and Safety management system in line with applicable standards
- Assessment and provision of management measures for natural hazard risks, including training for workers on recognising natural hazard warning signs, emergency response actions and safe evacuation routes
- Worker grievance mechanism
- Workforce training requirements, including training of supervision and management, on labour rights, health and safety, grievance mechanisms and anti-harassment policies.
- Requirements for collective dismissal planning, consultation and implementation

The Labour and Working Conditions Management Plan will be implemented for the duration of the construction phase of the Project.

To support implementation of the Labour and Working Conditions Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and during construction
- Monitoring tasks to be completed during construction of marine and terrestrial components of the Project, including quarterly labour audits, regular labour inspections and compliance audits supported by documentation review and worker interviews.
- KPIs for evaluating the effectiveness of labour management controls and reporting, including workforce composition (numbers, gender, nationality), training hours and worker grievances
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

Table 5-22: Labour and Working Conditions Management Commitments

Code	Commitment
Prior to Construction	
LM-PC-01	• In order to prevent and manage potential labour management impacts during construction, the AAWDC Project will develop and implement a comprehensive Labour and Working Conditions Management Plan, to comply with Jordanian labour law, as well as comply with international best practice, including ILO Core Labour Standards on non-discrimination, freedom of association, prohibition of forced and child labour, and occupational health and safety, and Lender standards (IFC PS2, EBRD ESR2).
LM-PC-02	EPC to develop a Labour and Working Conditions Management Plan that makes the following commitments for all workers (including day and non-full-time): • Written contract: (Arabic + worker's language) issued for all workers; daily workers registered in a day-labour log with written day-rate terms, scope, hours, overtime rates, rest entitlements, and injury compensation procedure • Fair wages & timely payment: equal to or greater than national minimum wage; overtime at legal rates; no unlawful deductions; transparent payslips

Code	Commitment
	• No fees, no passport retention: workers never pay recruitment/placement fees; identity documents remain with workers • Rest and hours: normal hours not to exceed 8h/day, or 48h/week; at least one 24-hour weekly rest; shift work managed so no individual exceeds 11 hours in any 24h (including breaks); overtime only under legal exceptions and paid at 125–150% • Injury compensation & medical care: immediate first aid and transport; notification and compensation per law; incident logged within 48 hours to Ministry of Labour • Social protection: workers informed of their injury insurance and compensation rights; contractor must evidence coverage (SSC or equivalent accident insurance) for all workers on site, including day labourers, and explain access steps in case of injury • Adverse Weather: Employers must protect workers in adverse weather; following any hours that the Minister may set in which work is prohibited, in accordance with Reg. 31/2023 Art. 9; stop-work or reschedule when ministerial heat bans are announced (e.g., noon-to-afternoon bans during heatwaves), and document compliance in the daily log
LM-PC-03	• The Plan will identify, assess and provide management measures for natural hazard risks such as weather monitoring, early-warning protocols and location specific safe-work procedures such as suspending works in flood-prone areas when rainfall thresholds are reached, and training for workers on recognising natural hazard warning signs, emergency response actions and safe evacuation routes
LM-PC-04	The plan will be supported by a: • Code of Conduct and Employment Terms: All workers will receive written contracts in a language they understand, outlining employment terms, wages, working hours, and benefits. A Project-wide Code of Conduct will prohibit discrimination, harassment, gender-based violence and harassment (GBVH) of any kind, forced and child labour, and ensure respect for freedom of association. All workers will be required to read and sign a Worker Code of Conduct (provided in the worker's language) which will also be explained verbally
LM-PC-05	• Occupational Health and Safety (OHS): EPC Contractors will implement an OHS Management Plan meeting national and international standards, outline processes and procedures to identify hazards, assess risks, and develop proactive and preventive measures appropriate to the location, size, and nature of the Project, in accordance with the hierarchy of controls and GIP. It will cover training, supervision, incident reporting, and emergency response.
LM-PC-06	• Worker Accommodation Standards: Where workers are housed in temporary facilities, these will comply with the requirements in ESIA Chapter 2, ensuring adequate space, sanitation, potable water, and access to medical care
LM-PC-07	• Grievance Redress Mechanism (GRM): A dedicated worker grievance system will be established, confidential, accessible, and separate from the community grievance mechanism, allowing workers to report issues without retaliation
LM-PC-08	• Foreign Worker Protection: The Project will ensure recruitment agencies are licensed and ethical, no recruitment fees are charged to workers, and passports or ID documents are not withheld
LM-PC-09	• Women Workers' Inclusion and Protection: Contractors will provide gender-sensitive facilities (e.g. Female changing rooms, toilet facilities, and prayer rooms will be kept separate from men. All such facilities will have lockable doors with

Code	Commitment
	adequate numbers provided). The AAWDC Project will enforce zero-tolerance policies for all forms of harassment, including gender-based violence and harassment (GBVH) and sexual exploitation and abuse (SEAH), and ensure equal pay and maternity rights as per law
LM-PC-10	• Training and Awareness: All workers, supervisors, and managers will undergo training on labour rights, health and safety, grievance use, GBVH/SEAH and anti-harassment policies
LM-PC-11	Monitoring and Reporting: • Contractors will report monthly on metrics that will include workforce numbers, gender, nationality, training, incidents, and grievances.
LM-PC-12	• The NCPC ESG team will maintain oversight of all contractors through regular labour inspections and compliance audits, supported by documentation review and worker interviews.
LM-PC-13	• Worker accommodation will be provided in accordance with the requirements of the IFC / EBRD Guidance Note on Worker Accommodation: Processes and Standard (2009).
LM-PC-14	• The risks and adverse impacts to Project workers and affected communities assessed and managed by the Project will include risks to physical health and safety, risks of gender-based violence and harassment (GBVH) and child sexual abuse, traffic and road safety risks, risks of exposure to diseases, risks of major accidents and risks of security services. In relation to Project workers specifically, identified, assessed, and managed risks will include psychosocial risks, risks to vulnerable Project workers, and gender-related risks that have specific physical, physiological, and psychological effects. Assessment and management of risks and impacts to workers will extend to worker accommodation.
During Construction	
LM-CO-01	• Maintain worker accommodation in compliance with IFC/EBRD Worker Accommodation Guidelines.
LM-CO-02	• Prohibit alcohol and drug use in worker accommodation or near communities.
LM-CO-03	• Immediate dismissal and legal referral for confirmed GBVH/SEAH violations.
During Construction and Operations	
LM-CP-01	• The Project will ensure compliance with national labour, employment laws and social security laws applicable to the Project throughout its lifecycle.

5.15 Local Employment and Local Procurement Framework

5.15.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate local employment and local procurement management requirements into Project design, planning and execution.

5.15.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-23 below.

Table 5-23: Roles and Responsibilities in Local Employment and Local Procurement Management

Party	Responsibilities

NCPC	• Register on the Ministry of Labour's (MoL) National Employment Program (NEP)
	• Development of a Project Local Employment and Local Procurement Framework, in coordination with the EPC Contractor, and consultation with local districts/sub-districts and municipalities outlining measures on:
	  ○ Advance communication with local authorities
	  ○ Transparent employment procedures
	  ○ Fair local procurement
	  ○ Coordination with Local Authorities, Tribal Representatives and local community associations
	  ○ Inclusive participation
	  ○ Supply chain requirements, including contractual penalties and performance monitoring linked to GBVH/SEAH compliance
	  ○ Monitoring and reporting requirements
	• Work with the Ministry of Labour, NEP and relevant vocational training centres to promote skills training and pre-employment preparation
	• Produce quarterly monitoring summaries shared with lenders, local authorities, and communities through governorate, district/sub-district, and municipal offices, as part of its transparency commitment

Contractor(s)	• Register on the Ministry of Labour's (MoL) National Employment Program (NEP) • The EPC Contractor will develop local employment and procurement plans in consultation with the NCPC ESG team and local authorities, integrating the approach set out by NEP and the overall AAWDC Local Employment and Procurement Framework • Agrees with MPWH a specific percentage of local content as part of the registration process • Submission of Employment Plan to MPWH which includes a list of skills and positions, numbers, employment timeline, and applicable governorates • Manage employment and procurement related grievances and report resolution to NCPC • Report to NCPC on local employment and procurement indicators • Implement a post-construction verification and close-out programme to confirm that local employment and procurement commitments have been met, lessons have been learned, and any outstanding community concerns or grievances have been addressed

5.15.3 Management Processes

Prior to construction, the objectives, commitments and requirements of this Framework will be further developed in a detailed Local Employment and Local Procurement Management Plan that will supersede this Framework.

In order to manage local employment and local procurement, enhance potential benefits and mitigate any potential negative impacts, the Project will adopt a proactive and comprehensive approach to local

employment and procurement, with a strong emphasis on transparency and fairness, in alignment with the Jordanian 2016 By-Law on local employment and procurement.

The Local Recruitment and Local Employment Management Plan will address the commitments for the pre-construction and construction phases outlined in Table 5-24 on avoidance, mitigation and monitoring to be implemented:

- Advance communication with local authorities
- Transparent employment procedures
- Fair local procurement
- Coordination with Local Authorities, Tribal Representatives and local community associations
- Inclusive participation
- Supply chain requirements, including contractual penalties and performance monitoring linked to GBVH/SEAH compliance
- Monitoring and reporting requirements

The Local Employment and Local Procurement Plan will be implemented for the duration of the construction phase of the Project.

To support implementation of the Local Employment and Local Procurement Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and during construction
- Monitoring and KPIs, including number and percentage of local hires (by district/sub-district, gender, age, and skill level), number and value of contracts awarded to local suppliers, number and value of contracts awarded to local women associations/cooperative suppliers, number of grievances related to employment or procurement and their resolution rate, participation levels in training and skills programmes (disaggregated by gender), community satisfaction levels measured through periodic engagement (disaggregated by gender), including workforce composition (numbers, gender, nationality), training hours and worker grievances
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

Table 5-24: Local Employment and Local Procurement Commitments

Code	Commitments
Prior to Construction	
LC-PC-01	EPC Contractor and NCPC to Register on the Ministry of Labour's (MoL) National Employment Program (NEP), which is a government flagship, performance-based wage-subsidy and placement program to stimulate private-sector hiring of Jordanians, especially youth and women. The program blends (i) temporary wage support, (ii) social security and transport top-ups, and (iii) on-the-job & short classroom training, tied to actual signed work contracts.
LC-PC-02	Development of a Project Local Employment and Local Procurement Plan in coordination with the EPC Contractor, and consultation with local districts/sub-districts and municipalities in order to design the most effective, transparent and fair local employment and local procurement processes for each Project locality. This Plan will

Code	Commitments
	integrate the Ministry of Labour NEP process. Further consideration will also be given to different ways to ensure transparency and fairness, including the consistent request from engaged stakeholders in the Badia for inclusive Local Advisory Committees (LACs) to be set up through the Districts/sub-districts with oversight from the local governors. Consideration will also be given to learning from positive examples of employment processes in past infrastructure or construction projects, reported by engaged community and local authority stakeholders.
LC-PC-03	The EPC Contractor will develop local employment and procurement plans in consultation with the NCPC ESG team and local authorities, integrating the approach set out by NEP and the overall AAWDC Local Employment and Procurement Framework. These plans will set realistic targets for local employment and local procurement, prioritising residents of the directly affected districts and sub-districts. These plans will specify the number and the types of roles specifically targeted to local employment (unskilled, semi-skilled, and skilled), and the procedures for verification and record-keeping, as well as the measures to address local procurement.
LC-PC-04	Advance Communication with local authorities: The EPC Contractor will share expected criteria for local procurement selection pre-construction through municipalities, districts and sub-districts, so that local businesses can have additional training if required
LC-PC-05	Transparent Employment Procedures: All employment opportunities during construction will be announced publicly and in advance through accessible local channels (municipalities, social media, district/sub-district offices). Recruitment criteria will be clear, based on merit and relevant skills. Selection will take place through a diverse selection committee in coordination with local authorities
LC-PC-06	Fair Local Procurement: The Project and EPC Contractors will identify and pre-qualify local suppliers and service providers wherever feasible, subject to compliance with health, safety, environmental, and ethical standards. Procurement procedures will prioritise local companies from within the Project districts/sub-districts, particularly SMEs and cooperatives
LC-PC-07	Coordination with Local Authorities, Tribal Representatives and local community associations: Recruitment and local contracts will be coordinated through governorate, district/sub-district, and municipal authorities, ensuring alignment with official labour regulations and fairness across tribes/clans and localities (including women and youth). Where relevant, Local Advisory Committees (LACs), with inclusive representation (women, youth, etc) will be used to facilitate communication, ensure transparency, and defuse potential grievances over hiring or contract distribution
LC-PC-08	Inclusive Participation: Targeted outreach through local community-based associations and cooperatives, as well a social media platforms (e.g. Facebook) will be made to under-represented groups, including women, youth, and disabled youth and small businesses, ensuring that employment and procurement opportunities are accessible to all segments of the population, not only to well-connected individuals or families.
LC-PC-09	Require subcontractor compliance as a condition of contract award.
LC-PC-10	The Ministry of Public Works and Housing (MPWH) is also responsible for registering international contractors under a local contractor company established by the Contractor. As part of this process, the MPWH negotiates and agrees with the contractors a specific percentage of local content to be applied to projects, including local employment, procurement, and supply of materials. International contractors must

Code	Commitments
	undergo this process before being permitted to undertake any construction work in Jordan.
LC-PC-11	The EPC Contractor is required to submit their employment plan, which includes a list of skills and positions, numbers, employment timeline, and applicable governorates.
During Construction	
LC-CO-01	Capacity Building and Skills Development: NCPC and the EPC Contractor will work with the Ministry of Labour, NEP and relevant vocational training centres to promote skills training and pre-employment preparation, particularly targeting youth (including disabled youth) and women to help them qualify for construction-related jobs and contracts.
LC-CO-02	Grievance Redress and Oversight: Any grievances related to employment and procurement will be received, documented, and resolved promptly through the Project GRM.
LC-CO-03	Monitoring and reporting indicators will include: • Number and percentage of local hires (by district/sub-district, gender, age, and skill level) • Number and value of contracts awarded to local suppliers • Number and value of contracts awarded to local women associations/cooperative suppliers • Number of grievances related to employment or procurement and their resolution rate • Participation levels in training and skills programmes (disaggregated by gender) Community satisfaction levels measured through periodic engagement (disaggregated by gender)
LC-CO-04	• The Project will produce quarterly monitoring summaries shared with lenders, local authorities, and communities through governorate, district/sub-district, and municipal offices, as part of its transparency commitment
LC-CO-05	Prior to the demobilisation of the EPC contractor, implement a post-construction verification and close-out programme to confirm that local employment and procurement commitments have been met, lessons have been learned, and any outstanding community concerns or grievances have been addressed. This will be captured in a Local Employment and Procurement Close-Out Report, summarising achieved benefits, residual issues, and recommendations for enhancing community economic participation and benefits during the operational phase.
LC-CO-06	Contractual penalties and performance monitoring linked to GBVH/SEAH compliance.

5.16 Cultural Heritage Management Framework

5.16.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate cultural heritage management requirements into Project design, planning and execution.

5.16.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-25 below.

Table 5-25: Roles and Responsibilities in Cultural Heritage Management

Party	Responsibilities

NCPC	• Develop a Cultural Heritage Constraints Register based on cultural heritage baseline
	• Develop a Cultural Heritage Management Plan that includes requirements for:
	  ○ Avoidance and where not possible prevention of damage to known cultural heritage resources and pre-construction survey records
	  ○ Protection measures to avoid impacts on cultural heritage resources
	  ○ Archaeological supervision of excavation works
	  ○ Chance find procedure, reporting and documentation
	  ○ Provision of alternative access to resources in use by local communities
	  ○ Interface with government authorities and ongoing stakeholder engagement
	  ○ Training requirements
	  ○ Monitoring and reporting requirements
	• Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP

Contractor(s)	• Develop and submit a Cultural Heritage Management Plan incorporating Chance Find Procedure, mitigation and monitoring requirements • Undertake pre-construction survey to record condition of cultural heritage resources with above ground components within 50m of Project footprint • Integrate the information from Cultural Heritage Constraints Register into mitigation planning and selection of construction methods • Execute their scope of work, including those undertaken by subcontractors, in accordance with controls of the Cultural Heritage Management Plan and in compliance with applicable standards • Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Cultural Heritage Management as relevant to their scope and report on outcomes of monitoring to NCPC • Report to NCPC and investigate any instances of chance finds, accidental damage to cultural heritage resources and grievances received

5.16.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Cultural Heritage Management Plan that will supersede and replace this Framework.

The Cultural Heritage Management Plan will address the commitments for pre-construction and construction outlined in Table 5-26 on avoidance, mitigation and monitoring to be implemented :

- Development of Cultural Heritage Constraints Register prior to construction, based on the information and georeferenced datasets of known tangible and intangible cultural heritage resources from the cultural heritage baseline survey

- Record of condition and structural integrity of sites with above ground components located within 50m to the Project footprint prior to construction as part of the pre-construction survey
- Requirements for avoidance, and where not possible, prevention of damage to known cultural heritage resources during construction, including requirements for a reduced working strip and selection of construction methods
- Requirements for protection measures to avoid impacts to cultural heritage resources (fencing, dust control, etc.), including protection from vibration
- Requirement for a full-time archaeological supervision of excavation works and regular reporting of observations from archaeological monitoring to NCPC and relevant authorities
- Chance find procedure including stop work protocol, required reporting to NCPC and relevant authorities and chance find documentation requirements
- Reporting protocol of finds requiring notification to civil authorities (e.g. human burials, munitions or unexploded ordinance, animal disease burial pits)
- Requirements for the provision of alternative access to cultural heritage resources in use by local communities
- Interface with government authorities and ongoing stakeholder engagement
- Training requirements on heritage awareness, chance find reporting, and site protection

To support implementation of the Cultural Heritage Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and during construction
- Monitoring tasks to be completed during construction (parameters, frequencies, locations, applicable standards), including use of checklists to support inspection of site-based practices
- KPIs for evaluating the effectiveness of cultural heritage controls and reporting, including chance finds, observations of archaeological monitoring, accidental damage instances, and regular ongoing reporting to relevant authorities
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Table 5-26: Cultural Heritage Management Commitments

Code	Commitments
Prior to Construction	
CH-PC-01	Contractor to select equipment and construction methods such as to minimise the potential for cultural heritage impacts including minimising vibration, lighting and dust generation
CH-PC-02	Contractor to record the condition and structural integrity of heritage sites with above-ground components located within 50 m of the Project footprint prior to construction in cooperation with the competent authorities. The condition and structural integrity of those features will be monitored periodically for signs of degradation caused by vibration and for signs of pollution (most commonly in the form of dust and soot) in cooperation with the competent authorities. If dust from the project damages a CH site,

Code	Commitments
	the site will be cleaned by professional conservators and protected from further damage.
CH-PC-03	Prohibition of employee activities that might interfere with or damage cultural heritage sites to be included into the workers' Code of Conduct
CH-PC-04	Contractor to develop and adhere to a sensitive backfilling and site clean-up methodology, such that construction areas are returned to their original condition and appearance (excluding new, permanent above-ground infrastructure) following the completion of the construction phase.
CH-PC-05	The Project will develop a formal Chance Finds Procedure (CFP) in accordance with lender policies that details the process to be followed in case an archaeological find is made during construction or any required operational maintenance works. The management of any finds will be handled in accordance with Jordanian national requirements and IFC and EBRD performance requirements.
CH-PC-06	The required CFP should include a requirement for the archaeological monitoring of all construction (and, as applicable, maintenance) activities by a professional archaeologist or archaeological team under the supervision of the Department of Antiquities, and a commitment to temporarily stop work in the vicinity of any new archaeological discovery.
CH-PC-07	Construction activities at a chance find will resume after the implementation of government-approved mitigation measures, in accordance with Jordanian Law and IFC and EBRD performance requirements.
CH-PC-08	If government-approved mitigation measures include a requirement for further evaluation of chance finds or sites, the Project will engage the appropriate Jordanian authorities in this further evaluation and the use of intrusive and non-intrusive methods, according to the Jordanian Law.
CH-PC-09	If archaeological rescue is required at a chance find or site, the rescue will be conducted according to international and Jordanian standards and with supervision and involvement of the appropriate government institutions.
CH-PC-10	A detailed CFP and archaeological monitoring methodology should be submitted to, and approved by, the Jordanian DoA in advance of the commencement of any Project works.
CH-PC-11	Detailed archaeological and cultural heritage survey, X months prior to construction, on the different pipeline sections and construction sites, aligned on construction schedule. This includes a systematic walkover survey of the pipeline alignment and all ancillary areas, supported by specialist analysis of LiDAR, aerial imagery, and any available subsurface datasets. Ground-truthing will be undertaken where anomalies or potential heritage features are identified. The results will establish a verified dataset of heritage constraints and will be used to refine the final design, avoid sensitive areas, and prepare site-specific management measures. No construction will proceed until this baseline is complete and agreed upon with the Department of Antiquities
CH-PC-12	The Project commits to updating the framework CHMP into a fully detailed, implementable Cultural Heritage Management Plan once the baseline surveys, relevant recommendations made within the ESIA relating to avoidance are evaluated and final construction footprint are complete. This updated CHMP will specify site-specific mitigation measures, monitoring requirements, access controls, and reporting procedures. It will include all DoA feedback and lender requirements and will be

Code	Commitments
	submitted for approval before Notice to Proceed. The approved CHMP will be integrated into the Project's ESMS and contractor documentation.
CH-PC-13	The Project will implement a formal Chance Finds Procedure, approved by the DoA, prior to mobilisation. All workers and contractors will be trained to recognise and correctly report potential finds.
CH-PC-14	Where known heritage sites are identified, the Project will prioritise avoidance through design modifications, micro-siting, buffer zones, and access restrictions. Where avoidance is not feasible, the Project will agree a mitigation strategy with the DoA, which may include controlled excavation, documentation, or protective engineering measures.
CH-PC-15	Construction planning will incorporate measures to avoid unnecessary disruption to community access or cultural practices. Where access restrictions are unavoidable, the Project will provide agreed alternatives and communicate them clearly through the Community Liaison Officer.
CH-PC-16	All project personnel engaged in ground-disturbing activities will receive mandatory induction training on heritage identification, reporting procedures, and cultural sensitivity. Supervisors, machinery operators, and contractors will receive enhanced training on the Chance Finds Procedure and on their legal responsibilities under Jordanian law.
CH-PC-17	Before construction begins, the Project will integrate all verified cultural heritage constraints into engineering design and construction planning. This includes repositioning access routes, adjusting pipeline alignment, modifying pylon locations, and adjusting construction methods to reduce risks to heritage. These design measures will be developed in consultation with the DoA and will be documented in the final CHMP.
CH-PC-18	Responsibilities for implementation will be defined in a CHMP and ESMMP, with oversight by the cultural heritage advisor and specialist team. Contractors will incorporate relevant measures into their construction environmental management plans and schedules.
CH-PC-19	Contractors will be required to integrate all relevant mitigation and monitoring measures into their construction ESMMPs and associated work schedules. These requirements will form part of contractual obligations and will be verified through routine supervision, site inspections, and compliance audits.
CH-PC-20	The community liaison will ensure that mitigation measures remain aligned with local priorities and are adjusted as needed through ongoing consultation.
CH-PC-21	Monitoring indicators for heritage continuity, participation, and safeguarding outcomes will be defined in the CHMP and reported through the overall project monitoring framework.
CH-PC-22	Detailed institutional roles, reporting frequencies, and coordination mechanisms will be developed as part of the ESMMP and CHMP development. All cultural heritage management actions will be consistent with the approved governance framework and international best practice
During Construction	
CH-CO-01	Contractor to visually monitor dust generation and airborne concentrations in the air during construction and operational maintenance activities. If dust is visible, mitigation measures, will be implemented with the aim of avoiding causing disturbance within the setting of heritage assets or to the quality of the historic landscape character

Code	Commitments
CH-CO-02	Contractor to periodically monitor noise and vibration at cultural heritage sites within the AOI during construction activities. If harmful levels are identified, the works should cease until suitable mitigation measures have been implemented and the levels reduced to an acceptable level
CH-CO-03	In the case that part or all of a cultural heritage site is damaged due to excessive vibration, the relevant authorities will be informed, consulted and building conservators will be called in immediately to repair the structure with conventional conservation techniques.
CH-CO-04	The Project will maintain continuous consultation with the Department of Antiquities, ASEZA, and, where relevant, UNESCO, to ensure that all archaeological and cultural heritage requirements are fully coordinated and also ensuring compliance with legal and international obligations.
CH-CO-05	All archaeological survey permits, investigations, approvals, and mitigation strategies will be reviewed and endorsed by the DoA.
CH-CO-06	For the WRPA section, requirements identified by ASEZA and the UNESCO representative, including full monitoring of ground-breaking activities, will be fully implemented.
CH-CO-07	All project ground-breaking and ground-clearance works, including trenching, grading, foundation excavation, access road formation, laydown areas, and any earthworks within the WRPA, will be monitored by qualified Cultural Heritage Monitors under the supervision of the Cultural Heritage Specialist. This commitment includes daily reporting, GPS-based recording, photographic documentation, and immediate escalation of potential heritage discoveries. Monitoring coverage will be continuous until the DoA confirms that risks are fully addressed.
CH-CO-08	The Project will enforce strict protection of known heritage sites from vibration, dust, and visual impacts and will monitor their condition throughout construction.
CH-CO-09	The Project will work with local communities to identify the intangible cultural heritage associated with the Project area, including traditional practices, rituals, pastoral routes, and place-based meanings.
CH-CO-10	Training will be repeated periodically and reinforced through toolbox talks.
CH-CO-11	The Project will maintain detailed records of all archaeological monitoring, chance finds, mitigation measures, and communications with regulatory authorities. Daily, weekly, and monthly reports will be produced by the Cultural Heritage Specialist, consolidating field observations, finds, and actions taken. All data—including GIS files, photographs, and descriptions—will be archived in the Project's cultural heritage database and submitted to the DoA for permanent record.
CH-CO-12	The Project will undertake regular internal reviews and independent audits of CHMP implementation, monitoring performance, and compliance with national and lender requirements. Any non-conformance will trigger corrective action, updated procedures, and retraining of personnel. The CHMP will be revised when significant project changes occur or when monitoring results indicate the need for improved controls.
During Construction and Operations	
CH-CP-01	In the event of a discovery, work will stop immediately within a minimum 50-metre radius, and the area will be secured. The Cultural Heritage Specialist will assess the find, notify the DoA, and implement mitigation required by the authorities. Construction will

Code	Commitments
	not resume until written clearance is issued. The procedure applies to all project phases, including construction, and operational maintenance.
CH-CP-02	ICH mitigation and management measures will be implemented through the Project's management systems and coordinated across design, construction, and operation phases.
During Operations	
CH-OP-01	During operations measures will be incorporated into the operational ESMMP relating to the need to select equipment and methods for undertaking maintenance activities that does not result in unacceptable impacts in terms of disturbance and visual intrusion to cultural heritage assets or create unacceptable vibration or other physical risks

5.17 Community Development Framework

5.17.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented in supporting sustainable and inclusive development in the Project areas.

5.17.2 Roles and Responsibilities

NCPC will first revise this framework into a comprehensive Community Development Framework (CDF) that will serve as a guiding structure for the creation of tailored Community Development Plans (CDPs) at various community levels.

The CDPs will be managed and financed by NCPC. Financing of the community initiatives may be ensured directly by NCPC or through support to existing organised programs. Dedicated budgets will be allocated, and co-financing opportunities explored.

5.17.3 Management Processes

Recognising that each community may face distinct challenges and priorities, specific CDPs will be designed to address the unique needs of local stakeholders, including vulnerable groups. Both the overarching CDF and the individual CDPs are intended to be dynamic, evolving documents that will be reviewed and updated as necessary throughout the duration of the Project.

The comprehensive CDF and CDPs will be developed and implemented in accordance with the commitments outlined in Table 5-27 for the CDPs to remain sustained and adapted in response to ongoing impacts and emerging needs.

The beneficiaries of the proposed community projects will be community members directly and indirectly affected by the Project development. The Project will put emphasis on integrating women, youth and vulnerable members of the community who may be disproportionately affected by the externalities of development.

To support implementation of the CDF and CDPs, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and during construction

- Monitoring tasks to be completed during construction
- KPIs for evaluating the effectiveness of community development programs, development investments made and feedback from beneficiaries.

Table 5-27: Community Development Commitments

Code	Commitments
Prior to Construction	
CD-PC-01	To ensure timely and effective implementation, NCPC will undertake the following steps in Q1 2026: • Carry out stakeholder engagement and the community development assessment • Finalise the design of CDPs
During Construction and Operations	
CD-CP-01	NCPC commits to implementing Community Development Plans (CDPs), aligned with the IFC Community Development Guide (2020), and guided by principles of fairness, transparency, and inclusivity. The Plans will set out feasible and proportionate measures to reinforce positive contributions where they align with the Project's objectives, technical feasibility, and timelines
CD-CP-02	Both the overarching CDF and the individual CDPs are intended to be dynamic, evolving documents that will be reviewed and updated as necessary throughout the duration of the Project
CD-CP-03	• A community development assessment will be conducted to understand community needs and potential impacts, which will inform the design of the community development approach.
CD-CP-04	Using data from baseline studies, stakeholder engagement and the community development assessment findings, NCPC will design CDPs aligned with its CDF and focusing on the identified needs of the communities as well as the national and international development goals. Initial efforts will focus on small-scale pilot initiatives to build trust and demonstrate commitment. The implementation schedule of these plans will be synchronised with the project's construction and operational phases.
CD-CP-05	Wherever possible, CDPs will prioritise local hiring, foster skills development, and promote inclusive economic participation through partnerships with local businesses and institutions
CD-CP-06	Partnerships and Governance: NCPC will collaborate with NGOs and community-based organizations to leverage local knowledge. Coordination with government entities will ensure alignment with municipal and national development plans. A governance structure, including a steering committee with community representation, will be established to oversee CDPs implementation (this could be the Local Advisory Committees (LACs) set up for the wider AAWDC Project)
CD-CP-07	Implementation and Monitoring: The CDPs will be managed and financed by NCPC. Financing of the community initiatives may be ensured directly by NCPC or through support to existing organized programs. Dedicated budgets will be allocated, and co-financing opportunities explored
CD-CP-08	A robust Monitoring & Evaluation (M&E) framework will be developed, including KPIs and feedback mechanisms to assess impact and adapt programs as needed

Code	Commitments
CD-CP-09	The beneficiaries of the proposed community projects will be community members directly and indirectly affected by the Project development. The Project will put emphasis on integrating women, youth and vulnerable members of the community who may be disproportionally affected by the externalities of development.

5.18 Emergency Preparedness and Response Framework

5.18.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to ensure emergency preparedness and an adequate response in Project execution.

For the LNTP Phase, the EPC has limited plans for the crisis management system, evacuation plan and medical emergencies.

5.18.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-25 below.

Table 5-28: Roles and Responsibilities in Cultural Heritage Management

Party	Responsibilities

NCPC	• Develop an overarching Project Emergency Preparedness and Response Plan (EPRP):
	  ○ based on EPC Contractor(s) EPRPs
	  ○ in accordance with the requirements set out by the MWI in the Project Agreement
	  ○ in conformance with all Statutory Requirements and Government Authorisations
	• Develop and submit separate EPRPs for construction and operations phases.
	• The EPRP for the Construction Period shall be submitted 2 months before the start of construction activities.
	• The EPRP for the Operational Period shall be submitted no later than three (3) months prior to the Project Commercial Operation Date or to the Interim Commercial Operation Date (if applicable)
	• Review and update the EPRP jointly with all Parties as frequently as necessary, and at least within thirty (30) days of the end of each contract year
	• In the event of an Emergency:
	  ○ immediately, but in no event later than four (4) hours after it became aware of the emergency or the period required by Statutory Requirements, notify MWI and any other Government Authority having proper jurisdiction over the matter of the occurrence or existence of such emergency and provide MWI and such Government Authority with all the information regarding such matter as it becomes available, and
	  ○ immediately after it became aware of the emergency, take all necessary and appropriate corrective and mitigative actions required by this Agreement, any Statutory Requirements or Government Authorisations, and implement the emergency plan specified in Article 8.16(a) to the extent it is applicable to the situation.

Party	Responsibilities
	• Maintain adequate emergency response arrangements on the Project, including competent personnel and ensure such arrangements are established and maintained by EPC Contractors and their site-based subcontractors • Communicate with EPRP to EPC Contractors and conduct regular joint exercises and drills on various emergency scenarios • Ensure emergencies are investigated and reported in accordance with the Project Compliance Monitoring Framework
EPC Contractor(s)	• Prepare an Emergency Preparedness and Response Plan for their respective scope of work, as a requirement of their contract • Maintain adequate emergency response capacity for their respective scope of work, including competent personnel • Carry out inspection and maintenance of the emergency response equipment and emergency response exercises on various scenarios on a regular basis • Ensure essential emergency preparedness and response information is included in H&S training

5.18.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in an Emergency Preparedness and Response Plan that will supersede and replace this Framework.

For the purposes of this Framework, “emergency” includes vandalism against the guarded and unguarded sites, or any situation that seriously endangers the security or presents an imminent physical threat to workers, the general public, the Project Facilities or the environment.

The EPRP shall:

- Clearly define roles and responsibilities of all parties, including:
    - those of MWI, at its election, to reasonably intercede and take, or direct the NCPC to take, any and all actions required in response to any emergency
    - for interaction and co-ordination with the appropriate Government Authorities and other public bodies of Jordan
- Conform to all Statutory Requirements and Government Authorisations
- Provide for standby employees who can be ready to address any emergency in an expeditious manner
- Address and include spill prevention and response measures.

EPRP shall include, as a minimum:

- Identification of potential emergencies based on hazard assessment. These include, but are not limited to:
    - Damage to pipelines and intake towers (particularly the brine diffuser) due to wayward ship actions/anchor dropping)
    - Algae bloom or jellyfish events in the vicinity of the Marine Works Facilities

  - High Total Suspended Solids events in the vicinity of the Marine Works Facilities
  - Chemical or oil spills in the vicinity of the Marine Works Facilities
- Procedures to respond to the identified emergency situations, to shut down equipment, to contain and limit pollution, for decontamination, for rescue and evacuation, including a designated meeting place outside the facility
- Location of sampling points, alarms and schedule of maintenance
- List and location of equipment and facilities for employees responsible for responding to the emergency (fire-fighting equipment, spill response equipment, personal protection equipment for the emergency response teams, first aid kits and stations)
- Protocols for the use of the emergency equipment and facilities
- Schedule for periodic inspection, testing and maintenance of emergency equipment
- Clear identification of evacuation routes and meeting points
- Schedule of trainings (drills), including with local emergency response services (firefighters)
- Procedures for emergency drills and for planned and unplanned overflows
- Emergency contacts and communication protocols, including with MWI and affected communities when necessary, and procedures for interaction with the government authorities
- Procedures for periodic review and update of emergency response plans.

The Emergency Preparedness and Response Plan will be implemented and tested throughout the duration of the construction phase of the Project. A separate plan will be developed prior to the start of the operations phase.

To support implementation of the Emergency Preparedness and Response Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to and during construction
- Monitoring tasks to be completed during construction of marine and terrestrial components of the Project, including drills, emergency response equipment inspections and emergency preparedness audits.
- KPIs for evaluating the effectiveness of emergency preparedness controls and reporting, including training hours on emergency preparedness and response, number of drills and scenarios covered, etc.
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends

5.19 Security Management Framework

5.19.1 Purpose and Scope

This Framework sets out the key objectives, requirements and commitments which will be implemented to integrate erosion control and reinstatement management into Project design, planning and execution.

5.19.2 Roles and Responsibilities

Key roles and responsibilities in relation to this Framework are outlined in Table 5-29 below.

Table 5-29: Roles and Responsibilities in Security Management

Party	Responsibilities

NCPC	• Complete a security review, including an assessment of security risk at Project sites and share the review with Contractor(s)
	• Develop Security Management Plan that includes:
	  ○ Security arrangements that will be put in place for camps, construction sites, laydown areas and construction vessels
	  ○ Application of Voluntary Principles on Security and Human Rights (VPSHR) and relevant training requirements for security personnel
	  ○ Rules of engagement with local communities on security matters
	  ○ Due diligence requirements of security service providers
	  ○ Mechanisms for raising community awareness on risks of trespass
	  ○ Mechanisms for liaison with security authorities
	  ○ Monitoring and reporting requirements, including security audits and reporting of security incidents and grievances on security arrangements
	  ○ Oversight and assurance activities by NCPC and monitoring and reporting requirements by EPC Contractor
	• Monitor and evaluate the performance of the EPC Contractor(s) in accordance with Project Compliance Monitoring Framework within the ESMMP

EPC Contractor(s)	• Integrate the findings of the Security Review into Contractor Security Management Plan
	• Develop Security Management Plan outlining:
	  ○ Security arrangements for onshore construction sites, camps and construction vessels
	  ○ Due diligence of security subcontractors and compliance to VHPSR including training for security personnel
	  ○ Awareness of local communities on risks of trespass
	  ○ Rules of engagement with local communities
	  ○ Liaison with security authorities
	• Execute their scope of work, including those undertaken by subcontractors, in accordance with controls of the Security Management Plan and in compliance with applicable standards
	• Monitor their own activities and those of their subcontractors, undertaking monitoring outlined in the Security Management Plan as relevant to their scope and report on outcomes of monitoring to NCPC
	• Report to NCPC and investigate any security incidents or grievances related to security arrangements

5.19.3 Management Processes

Prior to construction, the objectives, commitments, and requirements in this Framework will be further developed in a detailed Security Management Plan that will supersede and replace this Framework.

The Security Management Plan will be developed in accordance with applicable standards and will address the requirements on avoidance, mitigation and monitoring to be implemented:

- Completion of a security review prior to start of construction, including an assessment of security risks based on local conditions at the Project sites
- Requirements for security arrangements to restrict unauthorised access to, or use, of Project worksite facilities, including fencing of camps and Conveyance Pipeline laydown yards and signage at construction sites
- Requirements for security arrangements on Project construction vessels
- Training to be provided to security personnel on security issues related to the camps and surrounding communities and rules of engagement with local communities
- Assessment of risks posed by Project security arrangements to those within and outside the Project site or facilities, including the requirement for the Project's security arrangements (safeguarding of personnel and property) to respect local community interests
- Management of all aspects of Project security activities and relationships according to the Voluntary Principles on Security and Human Rights and participation of security contractors and subcontractors in all relevant training
- Due diligence requirements for all security service providers
- Mechanisms for raising community awareness on risks of trespass and disclosure of Project-related information
- Mechanisms for liaison with relevant security authorities, including port authorities

To support implementation of the Security Management Plan, the following will be developed as part of the Project E&S Compliance Monitoring Framework (Section 6):

- Compliance tasks to be completed prior to the start of construction and any mobilisation to the Project sites
- Monitoring tasks to be completed during construction, including security audits
- KPIs for evaluating the effectiveness of security controls and reporting of security incidents and grievances on security arrangements
- KPIs for evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

6 Compliance Monitoring Framework

6.1 Approach

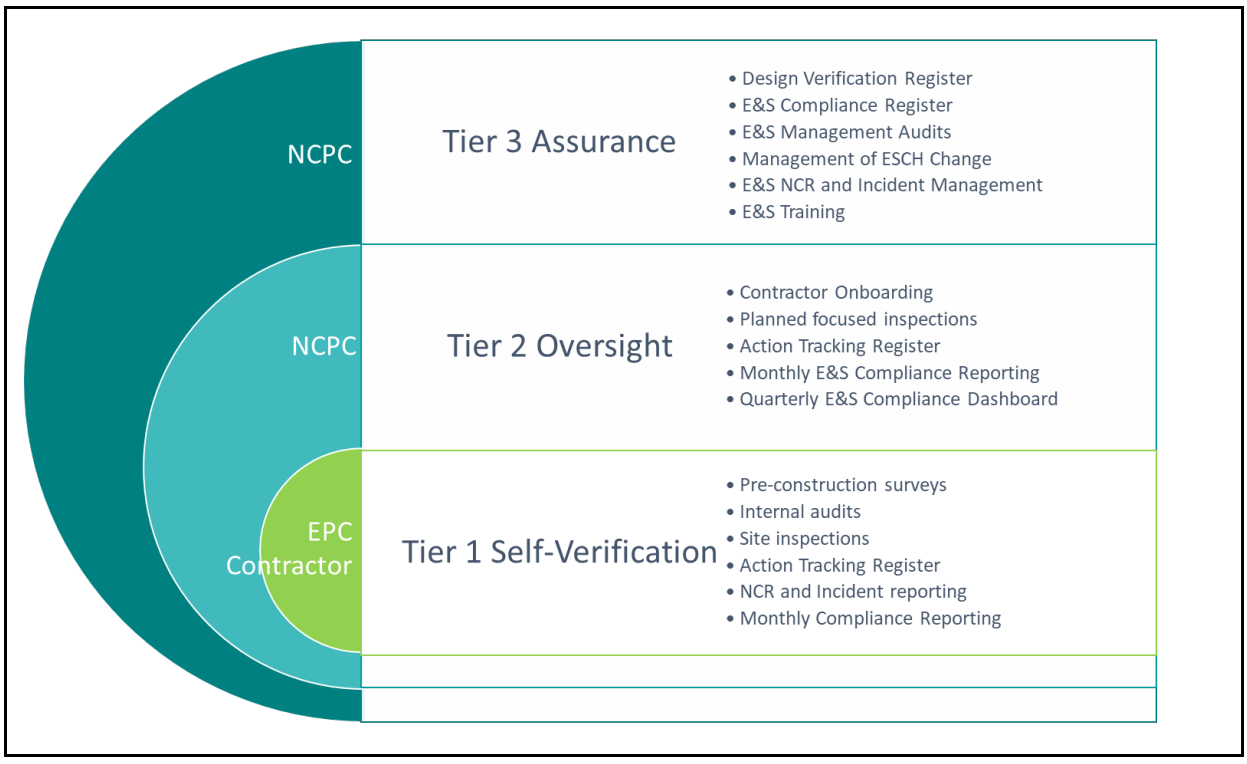
The Compliance Monitoring Framework ensures systematic and consistent oversight of all Environmental, Social, Health and Safety (ESHS) risks and performance requirements across every component of the AAWDC Project, including the desalination plant, the conveyance system, the renewable energy (RE) site, and all associated facilities. The framework establishes a unified approach to monitoring and verification applicable to construction and operational activities at each of these project elements, ensuring that compliance with lender standards, national regulations, and NCPC requirements is maintained throughout the entire project footprint

NCPC and the Contractors will apply a multi-tiered monitoring system. This includes routine daily inspections conducted by the Contractors as part of their self-monitoring obligations, covering site housekeeping, equipment condition, worker safety practices, and implementation of mitigation measures.

In parallel, NCPC carries out independent verification monitoring through scheduled and unscheduled inspections, audits, and technical reviews to validate EPC data, assess compliance, and identify areas requiring corrective action. Additionally, community-level monitoring is undertaken through the NCPC Community Liaison Officers (CLOs), who provide continuous on-the-ground insight into community concerns, land access issues, construction-related nuisances, and the effectiveness of stakeholder engagement efforts.

Together, these tiers ensure comprehensive oversight, timely detection of non-compliances, and transparent reporting aligned with lender and regulatory expectations (Figure 6-1).

Figure 6-1: Approach to Compliance Monitoring



6.1.1 Tier 1 EPC Self-Verification

involves EPC Contractor's 'self-verification' of its own ESMS system, in alignment with the principles of ISO:14001. Self-verification refers to the checking by the implementing party on itself, to demonstrate compliance with commitments or requirements, and provides evidence that it is meeting its obligations.

6.1.1.1 EPC Contractor Pre-construction Surveys

As part of pre-construction surveys EPC Contractor(s) will be required to identify E&S risks and support mitigation planning and implementation. EPC Contractor(s) will be responsible for ensuring that planning and execution of pre-construction surveys are performed with sufficient time in advance of construction initiation.

6.1.1.2 EPC Contractor Inspections and Audits

To provide assurance that the provisions of EPC Contractor(s) ESMS are implemented effectively, EPC Contractor(s) will be required to implement a programme of documented inspections and audits as outlined in the Project E&S Management Plans. This includes undertaking inspections during construction activities at sites and impacted areas (such as local communities in the vicinity of the worksites) to visually monitor that mitigation measures are being implemented, undertaking joint inspections with NCPC using focused inspection checklists and engagement with project-affected parties and stakeholders under the supervision of NCPC.

EPC Contractor internal audits will be performed in line with their ESMS requirements approved by NCPC. As a minimum E&S internal audits will be performed by EPC Contractor(s) on an annual basis by an interdisciplinary team of environmental, social and cultural heritage auditors appropriately qualified. NCPC ESG staff may join the audit team and participate in the EPC Contractor(s) internal audits.

6.1.1.3 EPC Contractor Action Tracking System and Reporting

In response to all issues, observations, non-conformances and incidents that occur EPC Contractor(s) will be required to propose appropriate corrective actions and record these in their own Action Tracking System (ATS). In addition to the corrective actions, the ATS will record the responsibilities and timescale for completing the actions. NCPC ESG team will review the EPC Contractor(s) ATS on a regular basis and follow-up on progress and confirm closure actions.

EPC Contractor will be required to report to NCPC E&S KPIs as defined in the E&S Management Plans, including but not limited to incidents, near misses, NCRs, third party and worker grievances, status of ATS and outcomes of audits and inspections.

6.1.2 Tier 2 NCPC Oversight

Tier 2 oversight checks will be conducted by NCPC of EPC Contractor compliance, to provide independent monitoring that the self-verification conducted by CONTRACTORs has been carried out sufficiently, providing NCPC with an additional layer of compliance assurance.

Oversight is a key element of the Project ESMS aimed at monitoring works activities so that various levels of assessment can be undertaken to determine whether E&S mitigation measures are effective in achieving compliance. Daily assurance monitoring will generate intelligence and inform an assessment as to whether Project requirements are being met effectively, i.e. are avoiding and minimising impacts as intended, or whether work practices require revision.

Oversight activities include review of EPC Contractor ESMS documentation, monitoring, NCR and incident reports, formal focused inspections, undertaking performance quarterly reviews, verification of EPC Contractor(s) action closure, readiness reviews prior to start of major construction activities and interface meetings with EPC Contractor(s) to drive performance and raise issues.

6.1.2.1 EPC Contractor Onboarding

The EPC Contractor onboarding process will be implemented prior to the EPC Contractor mobilisation to the project sites. It will involve:

- Review of EPC Contractor scope of work, schedule and planning
- Readiness and NCPC approval of applicable ESMS documentation
- Review of mitigation measures to be implemented and monitoring to be undertaken during the execution of works
- Verification of completion of pre-construction surveys
- Verification of completion of E&S Training by EPC Contractor and their subcontractor personnel
- Identification of high E&S risk / impact areas that will require focus of the NCPC oversight and assurance activities.

6.1.2.2 Focused inspections

Focused inspections will be undertaken by designated NCPC ESG team members and construction supervision as they visit construction sites or Project affected areas as part of their daily work. Observations are discussed with senior E&S staff (Site Lead (Greece), Environmental Advisors (Albania) or ESCH Experts), and TAP Senior Site representatives to determine whether further actions are necessary.

Focused inspections will be conducted at predetermined intervals as specified in the E&S Management Plans and will utilise a checklist focused on a specific E&S Management topic (erosion control, pollution prevention, noise, traffic and road safety, etc.). They include:

Indication of the Project location/area inspected
Indication of the construction activities performed/inspected
Observation notes providing a description of positive aspects, good practice or issues identified
Photographic evidence of the observations made/issues identified

Where site monitoring identifies required actions, these will be discussed and agreed with the EPC Contractor(s). Elevated action tracking may also occur through non-conformance reports (NCR), incident reporting and the document management system (including formal correspondence), where the nature of actions requires elevation to achieve closure of an issue.

6.1.3 Tier 3 NCPC Assurance

Tier 3 assurance activities will be performed by NCPC, targeting both EPC Contractor and NCPC activities, assuring Project compliance by personnel not directly involved in the activities being checked. Assurance will be conducted through targeted audits and formal reviews focussing on defined risk areas or guided by feedback from the results of the self-verification and oversight activities. Assurance activities are intended to provide an additional layer of assurance above and beyond Tiers 1 and 2 activities.

An initial risk-based E&S audit program of all EPCs will be implemented in the first 3 months of construction. The results of the initial E&S audits will form the basis of the E&S assurance programme going forward.

The E&S audits will be conducted by NCPC against an agreed Terms of Reference communicated to the EPC Contractor(s) in advance, and cover subjects such as construction pollution prevention, erosion control, road safety, labour management, waste management and security.

Completion of the audits will be tracked and reported as compliance tasks forming part of the E&S Compliance Register.

EPC Contractor(s) will be expected to have an E&S audit program as part of the self-verification process covering the EPC Contractor's own scope and the scope of their subcontractors throughout the construction works and report to NCPC on the outcomes of the assurance audits.

On completion of construction and prior to transition to operations, NCPC will conduct an audit on closure of all construction phase Project commitments, including audits on erosion control and reinstatement and restoration of livelihoods.

6.2 Monitoring Requirements

The Monitoring Framework will encompass all major thematic areas relevant to the AAWDC Project.

The Contractor(s) will be required operate their own internal monitoring system and tools, which may include daily inspection forms, digital reporting platforms, equipment checklists, environmental logbooks, and specialised instruments for measuring noise, air quality, and marine conditions. These systems form the basis of the EPC's self-monitoring obligations and support the timely identification of site-level issues.

However, NCPC will develop and maintain a comprehensive and independent Project-wide Monitoring Plan that covers all the thematic areas outlined in this framework, therefore, environmental, social, health and safety, biodiversity, marine, RAP/land and livelihood, and stakeholder engagement, each linked to clearly defined Key Performance Indicators (KPIs).

NCPC's monitoring will include weekly verification inspections, targeted audits, review of EPC reports, community-level monitoring via CLOs, and the deployment of additional tools such as GPS-based verification, photographic evidence, and turbidity meters. This ensures that NCPC is not reliant solely on EPC self-reporting but instead applies a robust, multi-layered oversight system aligned with international lender requirements.

An E&S Compliance Monitoring Register will be utilised to support the implementation of the Management Frameworks / Plans shown in Figure 4-1. Each monitoring item included in the E&S Compliance Monitoring Register will be directly linked to a corresponding mitigation measure set out in this ESMMP and is associated with one or more Key Performance Indicators (KPIs) defined within this ESMMP and supporting Management Frameworks / Plans.

For each Framework / Management Plan the E&S Compliance Monitoring Register will outline:

- Compliance tasks to be completed as part of the design verification process, prior to, during and post construction
- Implementation of the assurance program (inspections, audits and reviews) (see Section 6)
- Management of cross-cutting E&S topics such as climate and gender
- E&S Training

- E&S Management of Change, E&S Non-conformances and E&S Incidents
- Monitoring tasks to be completed during construction of marine and terrestrial Project components (parameters, frequencies, locations, applicable standards), including use of checklists to support inspection of site/vessel-based equipment and practices, including:
- Environmental monitoring items such as air quality, noise, waste management, and resource use
- Social monitoring items covering labour management, community impacts, and worker welfare
- Health and safety monitoring items focused on occupational risk control and incident prevention
- Biodiversity monitoring items addressing terrestrial habitat protection and species conservation
- Marine monitoring items related to water quality, turbidity, and sensitive marine ecosystems
- RAP, land, and livelihood monitoring items to ensure proper management of land acquisition and compensation processes
- Stakeholder engagement and grievance mechanism (GRM) monitoring items to track community engagement, information disclosure, and grievance resolution performance

KPIs will evaluate the effectiveness of management processes, reporting progress against set targets and allow evaluation of EPC Contractor(s) compliance with applicable standards, and EPC Contractor(s) performance trends.

Each monitoring task will have what is monitored, how it is monitored, frequency, KPI, evidence required, responsible party, and verification method.

NCPC will develop a set of monitoring flowcharts that illustrate both the high-level governance structure and the detailed operational workflow for ESHS monitoring across all project components. These diagrams will map the sequence of activities undertaken by the Contractor(s), NCPC HSE and E&S teams, and the CLO network, from routine data collection and verification to non-compliance identification, corrective action implementation, closure verification, and upward reporting to senior management and lenders. The flowcharts will serve as visual tools to enhance clarity, support consistent application of procedures, and ensure that all parties understand their roles, responsibilities, and coordination pathways within the monitoring system.

The Project will manage the data in a robust Data Management System. The DMS will include, or will be linked to, a Geographic Information System (GIS) with the possibility to issue dynamic maps. By including the commitments registers and ESMMP KPIs, the system will ease the regular monitoring of Project performance.

6.3 Reporting Requirements

NCPC's reporting system will ensure timely communication of ESHS performance and compliance across all Project components. It will include the review and consolidation of daily site logs submitted by the Contractor(s), weekly verification summaries prepared by NCPC's HSE and E&S teams, and monthly comprehensive ESHS performance reports issued by the Contractor(s).

In addition, NCPC will compile and submit quarterly consolidated ESHS reports to lenders, providing an integrated assessment of environmental, social, health and safety performance, progress against KPIs, non-compliance trends, corrective actions taken, and any emerging risks or community issues.

This tiered reporting structure will support transparency, promote consistent oversight, and ensure alignment with international lender expectations.

The information from the E&S Compliance Monitoring Register along with any further actions required to improve E&S compliance and overall E&S performance will be submitted to Lenders on regular basis (e.g. every 4 months to be agreed with Lenders).

E&S Non-conformances and E&S Incidents will be reported as detailed in Sections 4.3.5 and 4.3.6 of this ESMMP.

The Project will undertake E&S regulatory reporting to competent authorities as required under the applicable national legislation, Project environmental permits and approvals.

6.4 Review

6.4.1 Management Review

NCPC Management will periodically (annually as a minimum) review the overall effectiveness of the E&S management system. The purpose of the Management Review will be three-fold:

- Provide management with a summary of E&S performance over the year particularly regarding suitability, adequacy, effectiveness and alignment with NCPC strategic direction
- Identify where environmental and social improvements can be made, and
- Summarise the significant E&S risks and their proposed mitigation, in the following period.

The management review shall include:

- Status and follow up of actions from previous management reviews
- Changes in circumstances, including changes in compliance obligations, external and internal issues relevant to the ESMS, significant environmental aspects and risks and opportunities
- The extent to which the ESMS objectives are achieved
- Information on trends in E&S performance
- The results of participation and consultation exercises
- Relevant communications from interested parties, including complaints
- Adequacy of resources
- Process performance and conformity of service.

The outputs of the management review shall include conclusions on the continuing suitability, adequacy and effectiveness of the ESMS and possible changes to the management processes.

6.4.2 External Review

In line with the CTA, Project facilities will be subject to monitoring visits by the Independent Environmental and Social Consultant (IESC) with 4 visits per year during construction and 1 visit per year during the operations phase. The objectives of the visits will be to:

- Verify that Project is executed in accordance with this ESMS, including this Plan, the 2025 AAWDC ESIA and the Environmental & Social Action Plan (ESAP)
- Identify any Environment, Social, Health and Safety related impacts, risks or liabilities which have not been properly mitigated or controlled by the Project

- Identify areas where risks are potentially not being managed or mitigated as estimated in the 2025 AAWDC ESIA, and therefore residual risks are present that require addressing
- To assist the Lenders review and approval of revisions to Project commitments under the Management of Change process
- To assist the Lenders' technical consultant with completion / performance testing.

The outcomes of the IESC monitoring visits shall form part of the overall E&S Compliance Monitoring Framework and will be subject to Project management review and further action, where necessary.

During RAP implementation, an external auditor will be mobilised by NCPC to perform independent compliance monitoring during the RAP implementation and a completion audit to assess achievement of the RAP objectives and assess livelihood restoration.

Appendix 1 Design Verification Register Template

Figure 1-1: Design Verification Register Template

AWWDC PROJECT DESIGN VERIFICATION REGISTER

Date:

Facility Key: IPS = Intake Pump Station
DESAL = Desalination Plant Facilities
BPS1 = Booster Pumping Station 1
BPS2 = Booster Pumping Station 2
BPS3 = Booster Pumping Station 3
RGT1 = Regulating Tank 1
RGT3 = Regulating Tank 3
RE = Renewable Energy
PS ADC = Pump Station Amman Dev. Corridor
AAR = Abu Alanda Reservoir
AMR = Al Muntazar Reservoir

Compliance Status Key:
- Compliant
- Not compliant
- To be confirmed
- HOLD (awaiting vendor information)
- Not an ESIA commitment

ID	Project Standards/ESIA/Other Requirements	Reference	Requirement Details	Facility & System	Tender specifications/document references	Vendor design detail/ document references	Compliance Status	NCPC Comments	Vendor Response Received	NCPC Review Comment	Comment Open/Closed/NA	Outstanding Comments	Outstanding Actions	Responsible Party	Due Date