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# Project: Aqaba-Amman Water Desalination and Conveyance (AAWDC)

## 2025 Environmental and Social Impact Assessment

### Chapter 2: Policy, Legislation and Standards

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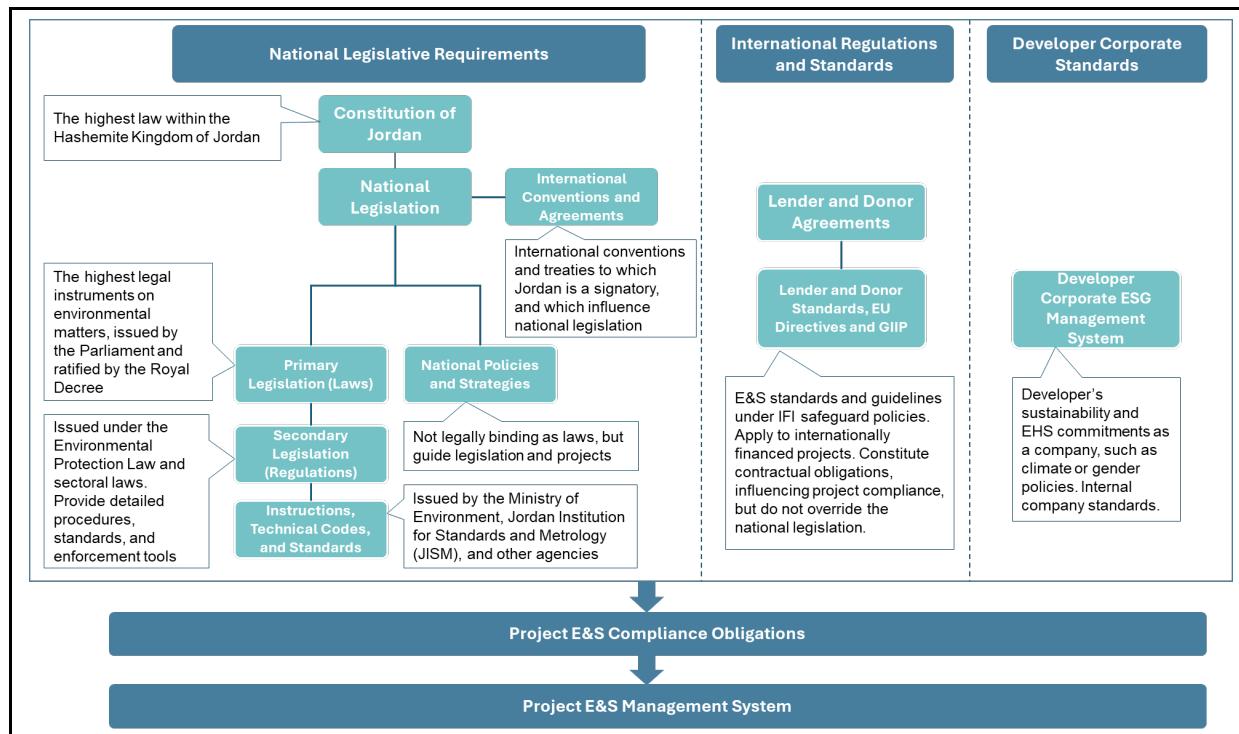
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## 2 Policy, Legislation and Standards

### 2.1 Introduction

This chapter outlines the policies, legislation, and standards applicable to the Project, including relevant international, European, and Jordanian requirements, as well as international agreements to which Jordan is a party. The regulatory hierarchy applicable to the Project is outlined in Figure 2-1.

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



## 2.2 Relevant Institutions

Table 2-1 lists the relevant institutions involved in the Project, highlighting their overall mandates and the specific roles they play in relation to the Project.

**Table 2-1: Institutions and Their Mandates Relevant to the Project**

Entity	Overall Mandate	Project Role
<b>Ministry of Water and Irrigation (MWI)</b>	Manage and regulate water resources, formulate national water policies, and ensure the development and sustainability of water infrastructure.	Oversee water-related projects, allocate water resources and ensure policy compliance during project implementation.  As the Project Owner, MWI has signed the development agreement with NCPC for the Project and will be responsible for ensuring that the Project is developed, constructed, and operated in accordance with the terms of the Project Agreement.
<b>Ministry of Environment (MoEnv)</b>	Maintain and improve environmental quality, develop policies and strategies, enforce environmental legislation, and promote public awareness and cooperation. Set environmental protection legislation (i.e. protection of environmental resources, including air quality, soil and ecology, solid waste, noise, liquid effluents, etc.).	Approval of the ESIA studies and ensuring their compliance with the Environmental Classification and License Regulation No. 69/2020 as amended. Granting environmental permits for major developments and projects, including the AAWDC Project. Monitor Project compliance with environmental legislation. The 2022 AAWDC Project ESIA and the 2025 Renewable Energy Component ESIA have already been approved by the MoEnv. The 2025 AWWDC Project ESIA is considered an update of the 2022 AAWDC Project ESIA, and as such, the MoEnv will review the 2025 AWWDC Project ESIA for approval. Based on discussions with MoEnv, a scoping phase and public hearing will not be required for the 2025 AWWDC Project ESIA. MoEnv requested that a disclosure session be held once the 2025 AWWDC Project ESIA is completed.
<b>Aqaba Special Economic Zone Authority (ASEZA)</b>	Manage the economic development of the Aqaba Special Economic Zone (ASEZ) and facilitate investment. Sole jurisdiction over environmental regulation within the ASEZ, including the entire coastline.	Environmental approval of the Project and monitoring of compliance with environmental legislation.  The 2022 AAWDC Project ESIA, the 2025 Renewable Energy Component ESIA have already been approved by ASEZA within its jurisdiction. The 2025 AWWDC Project ESIA is considered an update of the 2022 AAWDC Project ESIA, and as such, ASEZA will review the 2025 AWWDC Project ESIA for approval. Based on discussions

Entity	Overall Mandate	Project Role
		with ASEZA, a scoping phase and public hearing will not be required for the 2025 AWWDC Project ESIA. ASEZA requested that a disclosure session be held once the 2025 AWWDC Project ESIA is completed.
<b>Aqaba Marine Reserve (AMR)</b>	<p>Officially established under the jurisdiction of ASEZA in accordance with the Environmental Protection Regulation in the Aqaba Special Economic Zone No 21 of 2001, as amended, and ASEZA Law No. 32 of 2000, as amended. The reserve was established to conserve and manage the unique marine ecosystems of the Gulf of Aqaba (GoA), specifically coral reefs, seagrass meadows, and coastal habitats, while promoting the sustainable use of marine resources and eco-tourism.</p> <p>Legally, the AMR operates under ASEZA's Environment and Health Directorate.</p>	<p>Ensures that development activities adjacent to the reserve comply with environmental safeguards and setback requirements. Participates in stakeholder coordination regarding coastal infrastructure.</p> <p>Coral relocation and transplantation undertaken as part of any development project on the coast are undertaken in coordination between Aqaba Development Corporation (ADC) and ASEZA, and the corals are relocated to the AMR area.</p>
<b>Wadi Rum Protected Area Authority (WRPA)</b>	<p>Wadi Rum, Jordan's largest protected area, spanning approximately 720 km<sup>2</sup>, was designated a UNESCO World Heritage Site (WHS) in 2011 for its exceptional natural and cultural significance.</p> <p>The WRPA functions as the management and administrative unit responsible for the conservation, planning, and sustainable development of the Wadi Rum landscape.</p> <p>It operates under ASEZA's Environment and Health Directorate, with delegated authority to manage the protected area in coordination with the Ministry of Environment, the Royal Society for the Conservation of Nature (RSCN), and local Bedouin communities.</p> <p>The legal framework guiding its establishment and operation also aligns with the Natural Reserves and National Parks Regulation No. (29) of 2005, the Environmental Protection Law No. (6) of 2017, and international conventions such as the UNESCO</p>	<p>Follow up with ASEZA on the Project to review the Heritage Impact Assessment (HIA) and ensure the Project phases and activities do not pose any risks to the WHS designation. Additionally, monitor the Project activities during construction and operation to ensure compliance with the HIA and UNESCO requirements.</p>

Entity	Overall Mandate	Project Role
	World Heritage and the Convention on Biological Diversity (CBD).	
<b>Ministry of Energy and Mineral Resources (MEMR)</b>	Ensure sustainable development of energy and mineral resources through policies, strategies, and oversight.	Facilitate energy supply for projects and approve renewable energy components. MEMR is overseeing and facilitating the energy supply for the Project.
<b>Ministry of Tourism and Antiquities / Department of Antiquities (DoA)</b>	Protect and document antiquities and manage heritage sites in Jordan. It maintains the Middle Eastern Geodatabase for Antiquities, Jordan (MEGA-J), a public GIS system for archaeological sites. Responsible for supervising and permitting all archaeological missions and surveys in Jordan. Mandated to protect and maintain archaeological sites, including UNESCO WHS, such as Petra, Wadi Rum, and Qusayr Amra. Collaborates with global organisations, such as UNESCO, for site conservation.	Ensure compliance with regulations concerning cultural and archaeological heritage within the ESIA Study Area and intervene in the event of a chance find. Review the application submitted by the ESIA Team for the archaeological survey and HIA for the part of the Project within the Wadi Rum area and support the ESIA team by participating in the archaeological field survey and providing secondary data and details for Wadi Rum to the ESIA Team.
<b>Ministry of Health (MoH)</b>	Safeguard public health through health policies, strategies, and the regulation of healthcare services.	Monitor public health concerns, including the impact of any Project-related public health risk.
<b>Ministry of Public Works and Housing (MPWH)</b>	Develop and maintain public infrastructure, with a focus on road networks and public buildings. MPWH is responsible for constructing, operating, and maintaining all key roads and highways in Jordan connecting different cities and governorates.	Provide oversight and ensure infrastructure developments meet technical and safety standards, including mitigation of environmental impacts. The EPC Contractors shall coordinate with the 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. The 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 undergo this process before being permitted to

Entity	Overall Mandate	Project Role
		undertake any construction work in Jordan.
<b>Ministry of Planning and International Cooperation</b>	Coordinate and implement social and economic development plans in collaboration with international partners.	Maximise benefits from foreign assistance and ensure alignment with development plans, such as the rehabilitation of irrigation networks.
<b>Ministry of Local Administration (MoLA) / Relevant Municipalities</b>	<p>Oversee local governance and municipal affairs to ensure sustainable development and effective oversight. MoLA and local municipalities are responsible for constructing, operating, and maintaining all internal roads within villages and municipalities.</p> <p>Jordan Axle Weight Regulations are enforced to protect road infrastructure and ensure traffic safety. These regulations are primarily overseen by the MPWH and form part of a broader strategy to maintain and sustain the national road network. MPWH also implements an Axle Weight Control Regulation and system on their roads to prevent road damage caused by overweight vehicles and also to prevent accidents.</p> <p>Local municipalities under MoLA are responsible for providing municipal services, including building permits, solid waste management, and nuisance prevention.</p>	<p>Coordinate with municipalities to address public concerns and ensure access to essential services during the Project implementation. 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. 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.) and MWPH will ensure all measures needed are in place for protecting their main roads, especially for the main desert highway. MWPH will coordinate with the traffic police, local municipalities for signage, and any required detours, as well as civil defence and other relevant authorities, to ensure road safety during construction and maintenance activities.</p> <p>For the Project, municipalities will also provide municipal services and management, each within their jurisdiction.</p>
<b>Ministry of Labour (MoL)</b>	Achieving an active labour market with qualified and productive national employment in a stable and secure working environment through supervising labour and labour affairs and contributing to the organisation of the Jordanian labour market. MoL also provides the regulatory framework to govern occupational health and safety (OHS) in the workplace.	<p>Monitor Occupational Health and Safety (OHS) standards during the construction phase of the Project. MoL has governorate-level offices, which are responsible for facilitating local employment opportunities through training and workforce inspection of projects and companies.</p> <p>For the Project, the MoL, together with other entities, plays an important role in facilitating and managing employment opportunities for local communities. The</p>

Entity	Overall Mandate	Project Role
		<p>EPC Contractor is required to submit their employment plan, which includes a list of skills and positions, numbers, employment timeline, and applicable governorates. Accordingly, these entities will collaborate and guide the employment process.</p> <p>MoL will also review work permit applications submitted by the EPC Contractor for foreign labour and will set and apply specific approved numbers and limits, as well as qualifications or specific positions for foreign labour. The MoL will only approve foreign labour with specific qualifications and skill sets that cannot be met by the local market. Based on this, they will specify the number and positions for which they would issue work permits.</p> <p>MoL will also be responsible for undertaking regular inspections during the construction and operation of the Project to ensure that workers are provided with the required safe labour working environment, Personal Protective Equipment (PPE), orientation and training, and the necessary Environmental and Social (E&amp;S) Management System (ESMS). The MoL will request to review, approve, and certify the Project ESMS, especially the OHS manuals and procedures set for the development of the Project throughout its lifetime. The MoL will also request to check the labour management system documents implemented by the Project and approve the internal policies and procedures to ensure compliance with the national labour legislation.</p>
<b>Ministry of Agriculture (MoA)</b>	<p>Manage rangelands, forests, soil resources, and wildlife. Oversee agricultural research and consultation, and prevent illegal tree cutting, among other activities.</p>	<p>Issue approvals for dealing with flora and fauna and manage the impacts on agricultural areas during the Project implementation.</p> <p>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</p>

Entity	Overall Mandate	Project Role
		construction completion, to compensate for the loss of trees.
<b>Ministry of Interior (MoI):          Public Security Directorate (PSD) / Traffic Department          General Directorate of Gendarmerie          Civil Defence Directorate</b>	<p>Maintain internal security, public order, and civil administration across the country. Ensure public safety, prevent crimes, manage prisons, and regulate traffic. Emergency Response and Disaster Management supervises development projects across governorates.</p> <p>Works to improve services and living standards. Encourages investment and cooperation between the public and private sectors.</p>	<p>Oversee traffic management and enforce safety measures on roads used during the Project implementation. Oversight of the Project, ensuring local security and governance. MoI also has a role in overseeing local employment from communities.</p> <p>The MoI can be requested to act as coordinators and facilitators of the Project development process in the land acquisition and livelihood compensation processes, assisting MWI within the local context to follow up on the implementation of the Project and ensure the avoidance of all forms of complexity and bureaucracy. MoI also assists locally in maintaining peace and security for the Project. The MoI, through the Local Governor, acts as liaison between the Project development parties and the local community representatives to agree on potential local social responsibility and investment schemes to be implemented under the Project.</p>
<b>Ministry of Social Development (MoSD)</b>	<p>Promote social welfare, support and protect vulnerable groups, and provide social services, especially for children, women, the elderly, people with disabilities, and juvenile offenders.</p> <p>For policy and programme development, MoSD develops integrated social policies to improve the quality of life, coordinates with other ministries, NGOs, and international partners to implement social programmes, and aligns with national strategies like the National Social Protection Strategy (2025–2033), which focuses on dignity, social assistance empowerment, social opportunities, and resilience.</p>	<p>Address social issues arising from the Project activities, ensuring community welfare and support.</p> <p>Although the MoSD is not the lead agency for the Project, it can support programmes to ensure social safeguards for communities affected by construction, including vulnerable groups along the route, stakeholder engagement, and grievance redress mechanisms, thereby helping promote inclusive development and equitable access to project benefits.</p>
<b>Aqaba Development Corporation (ADC)</b>	Develop and manage infrastructure and assets in the ASEZ. ADC is the owner of most of the land in the southern industrial zone in Aqaba and is responsible for owning, developing, managing, and operating the southern	Support the development of infrastructure relevant to the Project and ensure compliance with investment and development agreements.

Entity	Overall Mandate	Project Role
	<p>zone and has been empowered to transfer, assign or delegate any right or obligation with respect to the development, design, financing, construction, operation and management of terrestrial and marine developments within the southern zone area to any technically and financially qualified third party pursuant to the agreement between the ADC and ASEZA in accordance with ASEZ legislation.</p>	<p>For the Project, the ADC is coordinating with the MWI regarding the land required for the Project's facilities and marine components within the ASEZ to allocate and lease these lands to the MWI for the Project's lifetime.</p>
<b>Royal Filming Commission (RFC)</b>	<p>Developing a Jordanian film industry that is globally competitive</p>	<p>Responsible Authority for the Wadi Rum Filming Area, which is a globally recognised film area.</p> <p>For the Heritage Impact Assessment (HIA) to be prepared for the Project components passing through the Wadi Rum buffer zone, the RFC is consulted by the Wadi Rum Authority (ASEZA) regarding the planned RE development adjacent to their filming location, and their feedback is obtained in terms of potential impacts and required measures.</p>
<b>Jordan Maritime Authority (JMA)</b>	<p>Regulate, control and develop the maritime sector, including all maritime transportation modes and the related labour force. Responsible for the inspection and regulation of shipping, ship movements, ship safety, and records.</p>	<p>While JMA has a role in regulating on-board equipment, the environmental regulator's role regarding pollution in the marine environment and coastline lies with ASEZA. For the Project, JMA is involved in terms of:</p> <p>Overseeing the marine construction works and ensuring compliance with national maritime legislation and international conventions</p> <p>Acts as one of the entities responsible for reviewing and approving marine permits for dredging, intake, and discharge systems</p> <p>Coordinates with ASEZA to protect the marine water and ecosystems</p> <p>Ensures marine and navigational safety and that project components and the construction works area do not overlap with other activities and ship/port operations</p> <p>Prevents or suspends works in case of any security issues and inform the EPC Contractor when works can resume.</p>

Entity	Overall Mandate	Project Role
		<p>JMA will request the following from the EPC Contractor:</p> <p>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.</p> <p>Information on buoys that will be used, for JMA to issue an update on the international ship and navigational maps to delineate this work area. The update will be communicated to the UK Admiralty to ensure that all modifications and updates are implemented by JMA in accordance with the UK Admiralty's standards.</p>
<b>Joint Control and Coordination Centre – Southern Industrial Zone</b>	<p>The Joint Control and Coordination Centre – Southern Industrial Zone was established in the southern industrial region of Aqaba under the oversight of the Aqaba Ports Operation and Management Company, with funding contributed by industrial companies operating in the zone. Its mandate is to monitor public safety, industrial operations, and environmental and risk-management practices in facilities and factories in the southern zone of Aqaba. The Centre was established following major industrial safety incidents (e.g., the 2022 chlorine tank collapse) to provide a coordinated operations and oversight platform.</p>	<p>The Centre will be involved in monitoring the implementation of public safety procedures within the Project's southern industrial zone, including hazardous-materials risk management, emergency response planning, and occupational health and safety.</p> <p>The Centre will also implement risk-reduction measures in the industrial and port environment, including inspections of facilities, monitoring of adherence to standards, and forwarding non-compliance reports for action by the relevant authorities.</p>
<b>Vessel Traffic Service (VTS)</b>	<p>The regulations governing VTS in Jordan's territorial waters (including the GoA) are set out in the Regulations for Organization of Entry and Departure of Vessels to/from Jordanian Territorial Waters and Organization of Maritime Communications and Vessel Traffic Services (VTS), issued by the JMA under the recommendation of the Board, pursuant to Article (6) of the Entry of Vessels into Jordanian Territorial Waters Regulation No. 109 of 2009.</p>	<p>VTS mandate in relation to the Project:</p> <p>Monitor, regulate and manage the movement of vessels within Jordan's territorial waters, anchorage areas, approach channels, berths and waiting zones.</p> <p>Provide reliable navigational information to vessels (such as traffic intentions, hazards, drift, weather warnings, communication channels) so as to enhance the safety and efficiency of marine traffic.</p> <p>Protect the marine environment, specifically by controlling and supervising</p>

Entity	Overall Mandate	Project Role
	<p>These regulations define Vessel Traffic Services (VTS) as the service provided by the competent authority (JMA) to regulate vessel traffic in the territorial waters, control it, raise safety and efficiency of navigation, protect the marine environment with regard to pollution from vessels, provide navigational information in a timely manner and secure the navigation of vessels within the designated area.</p> <p>The legal basis also references the demarcation of Jordan's territorial waters in the GoA and the role of the VTS as part of marine communications and navigation oversight.</p>	<p>vessel traffic in order to reduce the risk of collisions, groundings, pollution incidents and other accidents.</p> <p>Operate equipment and communication systems (radar, Automatic Identification System (AIS), Very High Frequency (VHF) navigation aids, databases) and qualified staffing to ensure real-time traffic awareness and response capability.</p> <p>Interact with vessel masters, pilots, tug services and port/terminal operators to ensure compliance with the sailing plan, adherence to VTS instructions, coordination of berthing/unberthing, manoeuvring, and departure.</p> <p>Record and archive vessel movement data, incident logs, and communication records, and make them available for investigations (including marine accident investigations) when required.</p>
<b>Royal Jordanian Naval Force (RJNF)</b>	<p>The Royal Jordanian Naval Force (RJNF) was established as the Royal Coast Guard in the city of Aqaba in 1951. It later evolved into the naval branch of the Jordanian Armed Forces, tasked with maritime defence and security.</p> <p>Given Jordan's relatively short coastline (approximately 27km along the GoA), the RJNF's mandate is tailored towards coastal and maritime security rather than large open-sea operations.</p>	<p><b>Maritime Security and Border Protection:</b> The RJNF conducts constant patrols, surveillance, and enforcement operations in Jordanian territorial waters to prevent smuggling, infiltration, illegal maritime activities, and to safeguard critical maritime infrastructure.</p> <p><b>Maritime Domain Awareness (MDA) and Surveillance:</b> It maintains monitoring of vessel movements, marine traffic, and threats to ensure a secure maritime environment. For instance, the RJNF completed a 7-month Capability-Based Assessment focused on maritime domain awareness in 2023.</p> <p><b>Search and Rescue (SAR) / Response to Maritime Incidents:</b> The RJNF participates in operations to respond to maritime accidents, ship groundings, pollution incidents and other emergencies in Jordan's waters.</p> <p><b>Protection of Marine Environment and Infrastructure:</b> While its primary role is military/security, the RJNF also supports protection of marine ecosystems indirectly by securing the zone against activities that may cause harm (e.g., illegal discharges, shipping incidents).</p>

Entity	Overall Mandate	Project Role
		<p>Co-operation and Regional / International Engagement: The force engages in regional and international maritime coalitions (for example, joining the International Maritime Security Construct in 2023) and conducts joint naval exercises with neighbouring states.</p> <p>RJNF may suspend work in the marine area temporarily for security reasons. Regular communication should be maintained with RJNF regarding work schedules and marine activities.</p>
<b>Prince Hamzah Centre for Marine Antipollution</b>	<p>Established in 1996 by the Aqaba Ports Operation and Management Company as a dedicated marine pollution-response unit aimed at protecting the waters of the GoA and Jordan's only oil port in Aqaba.</p> <p>Established with assistance from the Japanese government for major oil-spill containment and recovery equipment.</p> <p>The Centre acts under the national oil-spill contingency framework of Jordan (including the National Oil Spill Contingency Plan 2002) and fulfils the role of the national on-scene commander for marine pollution incidents in Jordanian waters, as executed through the Ports Corporation's Marine Department from the Hamzah Centre.</p>	<p>Oil spill containment and recovery: Deploying rubber booms (<math>\approx 1,500</math>m), absorbent booms (<math>\approx 700</math>m), beach protection carpets (<math>\approx 1,200</math> m) and skimmers to contain and recover oil slicks.</p> <p>Equipment maintenance and readiness: Operating a pollution-control boat (20 m), a second smaller boat (10 m), light craft, trucks and floating tanks for recovered oil.</p> <p>Coastal protection and shoreline clean-up: Managing recovered oil storage, beach protection, and coordinating shoreline operations.</p> <p>Incident management and coordination: Acting as the operational response centre in major spills, coordinating with national/regional partners, and overseeing surveillance and cleanup activities.</p> <p>Training, monitoring and cooperation: Participates in regional trainings and acts as a key stakeholder in the national oil-spill contingency regime.</p>
<b>Marine Science Station (MSS)</b>	<p>Established in 1975 as a joint scientific research institution of the University of Jordan (UJ) and Yarmouk University (YU), with the support of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Environment Programme (UNEP).</p> <p>Located on the northern shore of the GoA and serves as Jordan's principal national centre for marine and coastal</p>	<p>Operate a permanent long-term monitoring program for coral reef health, water quality, and marine biodiversity along the Jordanian coastline.</p> <p>Conduct short courses and workshops on coral-reef monitoring, environmental sampling, GIS and remote sensing applications in marine environments.</p> <p>Offer baseline data and technical expertise for coastal and port developments, oil-spill response</p>

Entity	Overall Mandate	Project Role
	<p>scientific research, monitoring, and education.</p> <p>The MSS operates under the supervision of both universities, and its legal and administrative structure is governed by a joint management council formed under an official memorandum of cooperation between UJ and YU, endorsed by the Council of Higher Education.</p> <p>Its scientific activities are conducted in line with national environmental legislation, including ASEZA's Environmental Protection Regulation in the Aqaba Special Economic Zone No. 21 of 2001, as amended, and the Environmental Protection Law No. (6) of 2017, and in support of Jordan's obligations under regional conventions such as the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) and global agreements like the CBD.</p> <p>The station is recognized by ASEZA and the MoEnv as the primary reference body for marine scientific data, environmental baseline assessments, and long-term ecological monitoring in the GoA.</p>	<p>assessments, and monitoring of coral recovery and sedimentation impacts.</p>
<b>Jordanian National Commission for Women (JNCW)</b>	<p>The national institution for gender equality, JNCW, develops national strategies, monitors the implementation of gender policies, and advises the government on integrating gender considerations across various sectors. It chairs the Inter-Ministerial Committee on Women's Empowerment.</p>	<p>While not directly implementing the Project, JNCW is a key national stakeholder for gender mainstreaming, employment planning, community engagement and benefit-sharing. The Project planning is to align with the National Strategy for Women 2020–2025 and relevant JNCW guidance.</p>
<b>National Centre for Human Rights (NCHR)</b>	<p>Independent institution established under Law No. 51 of 2006, as amended, to protect and promote human rights in Jordan. Monitors the compliance of national institutions with human rights standards and handles complaints related to human rights violations.</p>	<p>The NCHR can provide technical input and guidance on grievance mechanism design and ongoing compliance monitoring for labour rights, human rights, and community safeguards. It can also be engaged in follow-up of issues related to land acquisition and vulnerable group protections.</p>

Entity	Overall Mandate	Project Role
<b>Higher Council for the Rights of Persons with Disabilities (HCD)</b>	Mandated to implement and monitor national disability policy. Ensures compliance with Law No. 20 of 2017 on the Rights of Persons with Disabilities and promotes universal accessibility and inclusion in public and private sector services.	Project infrastructure, facilities, and employment practices are be aligned with HCD guidance to ensure they are inclusive and accessible. HCD sets and monitors standards for meeting national and international obligations on disability inclusion and for ensuring alignment with commitments.
<b>National Aid Fund (NAF)</b>	Governmental fund operating under the Ministry of Social Development. Provides financial and social assistance to the poorest households, in line with Jordan's National Social Protection Strategy.	While not a regulatory body, NAF plays a role in targeted assistance to vulnerable groups potentially affected by the Project, where relevant. Collaboration can enhance the effectiveness of social mitigation measures.
<b>Social Security Corporation (SSC)</b>	Manages social insurance schemes under the Social Security Law No. 1 of 2014 and its amendment, including the amending Law No. 11 of 2023. Covers old-age, disability and death, maternity, work injury, unemployment and public sector insurance. Responsible for registration, contribution collection and benefit disbursement for both Jordanians and registered non-Jordanians.	Ensures all Project employees (contractors, subcontractors, migrant and Jordanian) are registered and contributions paid in line with national law. Verifies compliance with work injury/disability regimes relevant to large infrastructure construction risk. Provides basis for social protection of affected households via pension/disability entitlements in cases of loss of livelihood or demobilisation.
<b>UNESCO</b>	UNESCO's primary responsibility is to ensure that the attributes that make Wadi Rum a World Heritage Site—its cultural landscape, archaeological heritage, rock art, inscriptions, desert morphology, and Bedouin living traditions—are preserved	UNESCO does not approve construction. Instead, it provides advisory opinions, requests mitigation, or warns when a project could negatively affect Outstanding Universal Value (OUV). For any project that may affect a WHS or its buffer zone, the State Party (Jordan) must submit information to the UNESCO World Heritage Centre
<b>Lenders and Donors</b>	Provide financial and technical support for development projects.	Provide Project financing, oversee fund utilisation and promote Project sustainability through compliance with funding conditions, including environmental and social standards.

## 2.3 Constitution of Jordan

The Constitution of Jordan (1952, as amended) establishes the framework for legislation and governance through Articles 117–118, providing a constitutional basis for environmental legislation, ensuring that natural resources are owned by the state and regulated. Environmental protection is indirectly tied to provisions on health, property and the state's role in safeguarding natural resources.

The AAWDC Project is a key strategic project with the main target of addressing and resolving the severe water scarcity of the Jordanian population and ensuring Jordan's water security.

The Project is aligned with the Constitution 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

## 2.4 National Legislation

This section summarises the key national policies and legislation relevant to the Project, including specific provisions applicable to its implementation.

### 2.4.1 National Policies and Strategies

The key national policies and strategies that support environmental sustainability, climate adaptation, resource efficiency (especially water and energy), align with the United Nations Sustainable Development Goals (UNSDGs), and apply to the Project are provided in Table 2-2.

**Table 2-2: National Policies and Strategies Applicable to the Project**

Legislation	Overview of Relevant Provisions
<b>Strategies and Policies</b>	
<b>The Jordan Economic Modernisation Vision (2022)</b>	<p>A ten-year national strategy that targets transforming Jordan's economy and improving the quality of life. It is mainstreamed into two pillars:</p> <ul style="list-style-type: none"><li>• Accelerated economic growth<ul style="list-style-type: none"><li>○ Unleashing Jordan's full economic potential</li><li>○ Creating 1 million new jobs by 2033</li><li>○ Increasing per capita income by 3% annually</li><li>○ Enhancing competitiveness and innovation</li></ul></li><li>• Improved quality of life<ul style="list-style-type: none"><li>○ Expanding access to services like health, education, and water</li><li>○ Promoting sustainability and environmental protection</li><li>○ Doubling citizen satisfaction with living standards to 80%</li></ul></li></ul> <p>There are more than 350 initiatives across 35 sectors, all of which focus on the green economy, smart infrastructure, future services, and sustainable resources. Implementation of these initiatives is planned to be undertaken from 2022 to 2033. Regular reviews and monitoring are undertaken to report progress and provide updates.</p>

Legislation	Overview of Relevant Provisions
	<p>The AAWDC Project is one of the key strategic infrastructure projects aligned with the Jordan Economic Modernisation Vision's (JEMV) goals and feeds into the sustainable resources and green economy sectors. The Project is also aligned with the Vision in terms of job creation, local development, local employment, and capacity building, as well as access to safe water resources and a sufficient supply. Additionally, it promotes energy conservation and offsets part of the energy needs by implementing a renewable energy project component.</p>
<b>The National Water Strategy (2023-2040)</b>	<p>Sets long-term water management goals, including sustainability, resource protection, and efficient water use to tackle water scarcity driven by population growth, climate change, and dwindling traditional supplies. It focuses on building a resilient water sector through a unified approach to comprehensive, socially, economically, and environmentally viable development.</p> <p>Key targets include:</p> <ul style="list-style-type: none"> <li>Reducing non-revenue water (leakage/losses) by 2% annually, aiming for a 25% reduction by 2040</li> <li>Increasing energy efficiency in water operations and expanding renewable energy use across water projects</li> <li>Promoting non-conventional sources, notably large-scale desalination, and significantly boosting treated wastewater reuse, especially in agriculture and tourism</li> <li>Improving supply efficiency for domestic, industrial, agricultural, and tourism demands</li> </ul> <p>The strategy identifies the AAWDC Project as the central solution to future water needs in Jordan.</p>
<b>Jordan's Climate Change Policy</b>	<p>The Policy measures for climate adaptation, mitigation, and reducing greenhouse gas emissions. Sets a dual target: an "unconditional" target of 1.5% reduction of GHG emissions by 2030 compared to the business-as-usual scenario, and a "conditional" target of 12.5% reduction by 2030 if financial assistance by the international community is made available</p> <p>The 2022 update of the Policy (published in 2024) focuses on providing a long-term vision through 2050 for a low-carbon, climate-resilient society aligned with Jordan's Economic Modernisation Vision and the UNFCCC framework. The policy is strategic and principle-based, serving as an overall roadmap to address climate change across all national and sectoral strategies, rather than prescribing specific measures.</p> <p>Within the Policy, the AAWDC Project is recognised as a flagship adaptation infrastructure project enhancing water resilience.</p>
<b>Jordan Energy Strategy 2020-2030</b>	<ul style="list-style-type: none"> <li>Continue to generate electric power in the Kingdom, depending on natural gas, renewable energy, and committed projects.</li> <li>Continue to work on increasing the participation of renewable energy projects in covering the Kingdom's needs of electric power, to increase from 2,400 MW in 2020 to 3,200 MW in 2030.</li> </ul>

## 2.4.2 Primary Legislation, Secondary Legislation and Standards

The key national legislation applicable to the Project is provided in Table 2-3, which includes primary laws and secondary regulations, instructions and standards.

**Table 2-3: National Legislation Applicable to the Project**

Legislation	Overview of Relevant Provisions
<b>Environmental Protection and Permitting</b>	
<b>Environment Protection Law No. 6 of 2017</b>	Cornerstone for environmental protection in Jordan. Consists of 32 articles that aim at protecting the environment and provides that the Ministry of Environment (MoEnv) is the authority responsible for environmental protection. Introduces the need to carry out Environmental Impact Assessments (EIAs) for certain projects prior to their commencement for approval by MoEnv, and names MoEnv as responsible for ensuring ambient quality, environmental protection, and water resources protection against pollution and for securing the quality of irrigation water supplies.
<b>Environmental Classification and Licensing Regulation No. 69 of 2020 and Amendment No. 97 of 2020</b>	Sets out the EIA process in Jordan and is developed by virtue of Clause A of Article 5 of the Environment Protection Law No. 6 of 2017. Its annexes provide screening criteria, listing the types of projects which require a comprehensive EIA or a preliminary EIA study, and those for which neither is needed. For Category 1 projects, a public scoping hearing is required to prepare the EIA Terms of Reference (ToR). The Regulation requires that the EIA describe the project and environmental baseline conditions, cover the impacts to be assessed, and outline the mitigation measures to be developed.  Based on this regulation, the Project is classified as a Category 1 (High Risk) Project, thus requiring a comprehensive environmental impact assessment.
<b>Environmental Inspection and Control Regulation No. 65 of 2009</b>	Establishes Jordan's environmental inspection system, empowering the Ministry of Environment to conduct risk-based inspections, enter facilities, review records, take samples, and issue enforcement notices. Facilities must cooperate and implement corrective actions; non-compliance can trigger administrative measures (warnings, suspension/closure) and referral to prosecution.
<b>Aqaba Special Economic Zone Law No. 32 of 2000, as amended</b>	Article 6 stipulates that all legislation in force in the Kingdom shall apply to the Zone unless superseded by contradiction by the provisions of ASEZA legislation, meaning that more stringent legislation in the ASEZA area will supersede (weaker) national legislation.  Article 10-b assigns the responsibility of protecting the environment, water resources, natural resources, and biological diversity.  Article 11-c The Authority shall also assume responsibility for protecting the environment in the Zone, in accordance with the provisions of this Law, the Regulations issued pursuant thereto, and any pertinent legislation in force.
<b>Regulation No. 21 for the Protection of the Environment in the Aqaba Special Economic Zone of 2001, as amended</b>	Article 4 A requires a permit to engage in an economic activity related to the disposal of solid waste, waste dumps, sewage stations, and oil reception facilities.  Article (6) A states that any activity may be suspended if it causes or threatens to cause environmental pollution in the Zone, or results in deterioration of the quality of water resources.

Legislation	Overview of Relevant Provisions
	<p>Articles 8 – 24 describe ASEZA's process of conducting an ESIA Study within the zone.</p> <p>According to Annex 2 of the regulation, Industrial estate development projects are subject to a comprehensive EIA.</p>
<b>Coastal Zone Management for the Aqaba Special Economic Zone Regulation No. 96 of 2024</b>	<p>Establishes an integrated, sustainable framework for managing the ASEZ's coastal zone, forming a steering committee, requiring marine/coastal spatial plans and detailed zoning, and obligating prior ASEZA approvals for all coastal projects.</p> <p>Sets beach/back-shore use and setback rules; restricts dredging, reclamation, aquaculture, and works near coral unless approved by EIA; protects stormwater outlets</p> <p>Gives ASEZA deadlines and powers to rectify or remove unlicensed violations.</p>
<b>General Electricity Law No. 10 of 2025</b>	<p>Article 21 establishes the conditions under which licensed entities may undertake electricity-related activities, including the extension, installation, or placement of power lines and electrical equipment across, under, or above streets, roads, pathways, open spaces, or properties, excluding heritage sites. The article also requires a notice to be published in two local newspapers at least five days prior to commencing these activities to ensure transparency and compliance with proper procedures.</p> <p>Articles 22-23 outline the general framework for land acquisition in relation to electricity projects, emphasising the need for fair compensation to affected parties for any damages or loss of land use, and provide mechanisms for resolving disputes, including referral to courts if agreements cannot be reached.</p>
<b>Renewable Energy and Energy Efficiency Law No. 13 of 2012 as amended</b>	<p>Provides a legal and regulatory framework for renewable energy in Jordan. It aims to facilitate the development, implementation, and management of renewable energy projects in Jordan</p>

Legislation	Overview of Relevant Provisions
<b>BOT / PPP Framework &amp; Legal Instruments</b>	<p>The Project is structured as a Build-Operate-Transfer (BOT) concession, aligning with Jordan's Public-Private Partnership (PPP) and economic modernisation policies. PPP projects are crucial for maximising the shared interests of both the private and public sectors, while institutionalising their relationship to advance Jordan's developmental goals, as outlined in the Economic Modernisation Vision and its strategic plans.</p> <p>Under the Investment Law No. 21 of 2022, the PPP Unit was integrated into the Ministry of Investment (MoI), positioning the ministry as the primary authority for investment in the Kingdom.</p> <p>The MoI has undertaken several key measures to attract foreign investors, strengthen existing investments, and support their expansion. These include:</p> <ul style="list-style-type: none"> <li>• significant legislative reforms, such as the issuance of the Investment Law</li> <li>• the approval of the Investment Policy</li> <li>• the enactment of the PPP Law</li> </ul> <p>Additionally, the MoI has developed the Executive Plan for Investment Promotion 2023-2026 and launched the "Invest in Jordan" (invest.jo) platform, which features 17 sector profiles and 43 investment opportunities, including those in the water sector.</p>
<b>Water Resources</b>	
<b>Water Authority Law No. 18 of 1988 and its Amendment No. 22 of 2014</b>	<p>The primary water law in force establishes the Water Authority of Jordan (WAJ) and grants it regulatory and operational authority over all water and sewer networks, well licensing, resource surveys, planning, and infrastructure development.</p> <p>Article 12 prohibits the discharge of pollutants into water sources, including rivers, reservoirs, and groundwater, to protect the quality of water.</p> <p>Article 24 stipulates that the Water Authority has the right to install, maintain, or repair private or public pipelines through public roads. In case this is not possible for technical reasons, according to its sole evaluations, the Authority has (as added by Law No. 62 of 2001) the right to install these pipelines within private lands and real estates.</p> <p>Article 26: If WAJ and the Landowner do not agree on the amount of compensation to be paid in exchange for the expropriation of real estate, land, and related rights, or for water or sewage projects, either party may submit a request to the competent court to determine this amount according to the provisions of the applicable Expropriation Law. They may also agree to refer the dispute to arbitration in accordance with the provisions of the applicable Arbitration Law.</p>
<b>Local Administration Law NO 22 od 2021</b>	<p>The law aims to strengthen decentralisation in Jordan by reorganising local governance structures, enhancing the role of municipal and governorate councils, and promoting citizen participation in local development.</p> <p>Article 5 authorises municipalities to prepare and implement sustainable development programs in collaboration with local communities and the private sector. Furthermore, it authorises the municipalities to coordinate with the concerned authorities in order to manage and organise water</p>

Legislation	Overview of Relevant Provisions
	distribution among the population and prevent the pollution of springs, canals, basins and wells.
<b>Groundwater Monitoring Regulation No. 85 of 2002 and Amendment No. 27 of 2025</b>	<p>1. Promotes regulated use of groundwater to prevent over-extraction; 2. Introduces economic incentives and penalties to encourage compliance; 3. Supports data collection through mandatory metering; 4. Encourages Jordanian employment in agricultural water use; and 5. Aligns with Jordan's Water Sector Strategy and Groundwater Sustainability Policy.</p> <p>Article 3 – Amendment to Article 41 of the Original Regulation, which is the core article of the amendment and introduces a framework for temporary extraction permits for unlicensed agricultural wells, aiming to regulate groundwater use while allowing limited legal operation under strict conditions. Mandates the installation of water meters and annual maintenance fees. While focused on extraction, it indirectly supports pollution control by tracking water volumes, ensuring wells are used only for agricultural purposes, and preventing misuse that could lead to contamination.</p> <p>Article 10 introduces restrictions and prohibitions related to the use of groundwater from unlicensed agricultural wells that have been granted temporary extraction permits. The Article includes the following provisions:</p> <ul style="list-style-type: none"> <li>• Prohibition on Selling Water: Well owners cannot sell water extracted under an extraction permit. The only exception is selling to the Water Authority or its affiliated companies</li> <li>• Prohibition on Irrigating Others' Land: Water extracted under the permit cannot be used to irrigate land owned by others</li> <li>• Restrictions on Land Transactions: The land containing the well cannot be sold or mortgaged for five years after the extraction permit is granted</li> </ul> <p>These new provisions of the Article prevent commercial exploitation of groundwater; ensure water is used only for agricultural production on the owner's land; and maintains control over groundwater resources and discourage speculative land transactions tied to water access.</p> <p>Article 16 - ensures that groundwater monitoring data is systematically collected, reported, and made accessible to relevant stakeholders and the public. It requires the Water Authority of Jordan (WAJ) to publish annual reports on groundwater quality. Includes monitoring of water quality indicators, contaminants, pollution sources. Data is made available via the Groundwater Quality Dashboard, supporting public awareness and policy decisions.</p> <p>Article 16 also states that if any areas were found to be polluted or depleted, WAJ's Board of Directors shall take a decision to set the appropriate measures that will put an end to such pollution or depletion including the rationalization or reduction of the extraction rate, to an extent that would allow the halt of pollution or depletion, and the restoration of the natural balance to the aquifer or to the underground water basin</p>
<b>Drinking Water Standards (JS 286/2015)</b>	Specifies the microbiological, chemical, physical and radiological requirements and procedures for monitoring and evaluating the quality of drinking water, whether from public or private sources. Provides the

Legislation	Overview of Relevant Provisions
	<p>minimum required quality of water for drinking purposes. Exceedance of the maximum limit allowed for any parameter is considered a violation of the standards. The Ministry of Health is the responsible agency to ensure compliance of drinking water with the standards.</p> <p>The Project Desalination Plant will be designed to comply with these standards.</p>
<b>Water – Reclaimed Domestic Wastewater (JS893/2021)</b>	<p>This standard outlines the characteristics of treated wastewater resulting from domestic uses and establishes reuse standards for irrigation, groundwater recharge, and discharge to water bodies and wadies. However, it prohibits the discharge of treated domestic wastewater into any wadi leading to the GoA.</p> <p>For reuse of treated wastewater for irrigation, the standard differentiates between four classes:</p> <ul style="list-style-type: none"> <li>• Class A: for parks, playgrounds and roadsides within city limits</li> <li>• Class B: for fruit trees, roadsides outside city limits and landscape</li> <li>• Class C: for field crops, industrial crops and forest trees.</li> <li>• Class D: for flowers customised for use</li> </ul>
<b>Atmospheric Air</b>	
<b>Air Protection Regulation No. 28 of 2005</b>	Framework legislation to protect public health and the environment from pollution resulting from human activities by controlling air pollutants emitted from stationary and mobile sources.
<b>Ambient Air Quality Standards (JS 1140/2024)</b>	Provides definitions of ambient air pollutants and the maximum allowable concentration for each of those pollutants. The standards specify the maximum allowable concentrations of ambient air pollutants, beyond which, responsible parties shall take action.
<b>Maximum Allowable Limits of Air Pollutants Emitted from Stationary Sources (JS 1189/2006)</b>	Specifies the maximum allowable limits of air pollutants emitted from stationary sources.
<b>Motor vehicles – Emissions (JS 1052/1998)</b>	Applies to gaseous pollutants from all road vehicles with positive-ignition (gasoline) engines, and to M1/N1 class vehicles with compression-ignition (diesel) engines. Provides the umbrella Jordanian standard used alongside diesel-specific standards (JS 1053/1054) and later inspection/maintenance methods (JS 1970).
<b>Motor vehicles - Emissions (Diesel engines) (JS 1053/1998)</b>	Sets measurement/requirements for diesel smoke from road vehicles (used in inspections/maintenance)
<b>Motor vehicles - Emissions (Diesel engines) (JS 1054/1998)</b>	Sets gaseous-pollutant limits for vehicles with compression-ignition (diesel) engines.
<b>Soil Resources</b>	
<b>Soil Protection Regulation No. 25 of 2005</b>	Article 3e states that the MoEnv, in coordination with the Ministry of Agriculture, is responsible for studying the sites of development projects and their impact on land and natural resources.
<b>Biodiversity</b>	

Legislation	Overview of Relevant Provisions
<b>Agriculture Law No. 13 of 2015 as amended</b>	<p>Article 33-a prohibits cutting down or burning forest trees and shrubs, stripping them of their bark or leaves, or removing them in any form without obtaining a license from the minister, except in cases and circumstances specified by the minister.</p> <p>Articles 33 and 34 prohibit the cutting down of certain types of trees except with the approval of the Ministry of Agriculture.</p> <p>Article 56 forbids the hunting and trading of wild animals and birds except in accordance with instructions issued by the Ministry of Agriculture.</p>
<b>Regulation for the Classification of Birds and Wild Animals Species Forbidden from Hunting No. 43 of 2008</b>	<p>This regulation categorises all bird species not permitted to be hunted in Jordan into three groups based on their conservation status and population size in the country.</p>
<b>Regulation No. 29 of 2005 on Natural Protected Areas and National Parks</b>	<p>Article 9 prohibits any individual from undertaking any activities within the boundaries of a nature reserve or national park, including the exploitation of natural resources in any form, without obtaining prior approval from the competent authority responsible for managing the nature reserve or national park. Such approval must be granted in accordance with the principles and conditions specified in regulations issued by the minister for this purpose.</p>
<b>Instructions for Protecting Birds and Wild Animals and Regulating Their Hunting and Trade No. G/2 of 2021</b>	<p>Article 5 states that wild animals and wild birds are hunted in the areas and seasons specified by the Minister in the schedule based on a recommendation from the competent committee.</p>
<b>Waste and Hazardous Materials Management</b>	
<b>Solid Waste Management Framework Law No. 16 of 2020</b>	<p>Article 11-b states that waste must be sorted and collected within sites in a manner that reduces environmental risks, and for a specific period of time, in accordance with applicable legislation.</p> <p>Article 28-b states that any entity that disposes of construction waste on roads, pavements or any location that causes damage to public health will be fined.</p>
<b>Hazardous Waste and Materials Management Regulation No. 68 of 2020, as amended</b>	<p>Article 8 lists the prohibited actions related to hazardous substances and waste, including import, circulation, and disposal on the ground, in water, or in the air.</p>
<b>Non-Hazardous Solid Waste Management Regulation No. 44 of 2022</b>	<p>Establishes a solid waste management system that would protect the environment and public health. It also strives to benefit from material found in or resulting from this waste in an environmentally safe manner.</p>
<b>Instructions for the Management of Electrical and Electronic Waste for the Year 2021</b>	<p>Aim to ensure the safe and environmentally responsible handling, collection, storage, transportation, and disposal of such waste.</p>
<b>General precautionary requirements for storage of hazardous materials (JS 431/1985)</b>	<p>Set the baseline for storing hazardous materials by segregating incompatible materials, using rated containers in ventilated/temperature-controlled areas, providing secondary containment and spill control, ensuring fire/explosion protection, labelling and signing, restricting access, maintaining good housekeeping/records, and keeping emergency plans, equipment, and conducting periodic inspections.</p>

Legislation	Overview of Relevant Provisions
	Apply to all sectors as a minimum alongside the MoEnv permit and sector rules.
<b>Public Health and Safety</b>	
<b>Public Health Law No. 47 of 2008 as amended</b>	<p>Framework law that establishes the responsibilities of the Ministry of Health over public health issues, including monitoring of drinking water quality to ensure its safety and adequacy for human consumption (Articles 435-39).</p> <p>The 2017 amendment introduces significant revisions across four key areas: smoke-free regulation, definitions, professional licensing, and enforcement penalties.</p> <p>The 2017 amendment introduces a clearer definition of public spaces, reinforces health accreditation for key professionals, significantly increases fines and penalties, and empowers authorities to take decisive action against repeated violations.</p>
<b>Regulation for the Prevention of Health Nuisances within Municipal Areas No. 68 of 2016, as amended</b>	<p>Prohibits any party from causing any nuisance to anybody or from damaging public health. These nuisances include bad odours, noise, solid and liquid waste or any other practice deemed harmful to public health or sanity. Additionally, it outlines penalties for violators and waste collection fees.</p>
<b>Instructions for the Reduction and Prevention of Noise of 2003</b>	<p>Specify the maximum allowable level of noise for the different types of areas, both during the daytime and at night, in relation to the noise levels outside the work environment (i.e., the fence of the facility).</p>
<b>Employment and Labour</b>	
<b>Labour Law No. 8 of 1996 and its Amendments</b>	<p>Article 5–9 establishes the inspection authority and powers of labour inspectors.</p> <p>Articles 10–13 regulate employment offices, foreign worker permits, and quotas for disabled workers.</p> <p>Articles 15–20 cover contract types, renewal rules, intellectual property rights, and obligations.</p> <p>Articles 21–25 outline valid grounds for termination, notice periods, and compensation for arbitrary dismissal.</p> <p>Article 55–61 sets Working Hours and Leave (8-hour day, 48-hour week, annual leave (Article 61), maternity leave (Article 67), and overtime (Article 57))</p> <p>Articles 78–85 require safe working conditions and define employer responsibilities.</p> <p>Article 46–54 covers wage payment, deductions, and wage discrimination (amended in 2019).</p> <p>Article 29 (amended) defines and penalises sexual harassment in the workplace.</p> <p>Article 92–100 recognises union rights and collective agreements.</p> <p>Article 73 prohibits the employment of juveniles under 16 years under any circumstances.</p> <p>Article 74 prohibits juveniles under 18 from being employed in hazardous or exhausting occupations or those harmful to health.</p>

Legislation	Overview of Relevant Provisions
	<p>Article 82 states that the employees working in any establishment shall abide by the provisions, instructions and decisions related to health and safety precautions.</p> <p><b>Collective Dismissals:</b> Jordan's Labour Law does not define a specific threshold (number or percentage) for what constitutes a "collective dismissal." However, any dismissal based on economic or technical grounds must follow a formal procedure outlined in Article 31 of the law.</p> <p><b>Article 31 – Collective Dismissal Procedure:</b></p> <ul style="list-style-type: none"> <li>• Advance Written Notification to the Ministry of Labour (MoL) <ul style="list-style-type: none"> <li>◦ Employers must notify the MoL before implementing any workforce reduction.</li> <li>◦ The notification must include justifications (economic, technical, restructuring, etc.).</li> </ul> </li> <li>• Tripartite Committee Review <ul style="list-style-type: none"> <li>◦ Upon receiving the notification, the Minister of Labour forms a tripartite committee:</li> <li>◦ Representatives from the government, employers, and workers.</li> <li>◦ The committee has 15 days to investigate and submit a recommendation on whether the dismissals are justified.</li> </ul> </li> <li>• Minister's Decision <ul style="list-style-type: none"> <li>◦ The Minister has 7 days after receiving the committee's recommendation to issue a decision: approve, reject, or modify the proposed dismissals.</li> <li>◦ Dismissals carried out without approval are considered illegal.</li> </ul> </li> <li>• Appeal Process <ul style="list-style-type: none"> <li>◦ Any party may appeal the Minister's decision to the Court of Appeals within 10 days of notification.</li> <li>◦ The court must decide within one month, during which the dismissal is on hold.</li> </ul> </li> <li>• Rehire Priority <ul style="list-style-type: none"> <li>◦ If business conditions improve within one year, the employer must offer re-employment to dismissed workers.</li> <li>◦ This applies if the operation resumes and re-employment is practicable.</li> </ul> </li> <li>• Fair Selection Criteria <ul style="list-style-type: none"> <li>◦ The law requires fairness and non-discrimination in selecting employees for dismissal.</li> <li>◦ Employers must consider: performance, skills, protected statuses (e.g., pregnancy, military service, sick leave)</li> </ul> </li> <li>• Individual Termination Obligations <ul style="list-style-type: none"> <li>◦ Employers must still meet standard termination requirements: one-month written notice, severance pay, timing compliance</li> </ul> </li> </ul> <p>When determining which employees will be laid off in a collective dismissal, the law imposes fairness and anti-discrimination requirements, as well as performance and skills criteria, and provides protection for</p>

Legislation	Overview of Relevant Provisions
	<p>employees in certain circumstances (e.g., pregnancy, military service, annual or sick leave).</p> <p>Beyond the Ministry's involvement, in a collective dismissal, employers must also satisfy the normal termination obligations to the employees themselves (written individual notice of one month as minimum, timing of collective dismissal, severance pay, etc.)</p>
<b>Social Security Law No. 1 of 2014, as amended</b>	<p>Article 3 lists the types of insurance provided under the law: Work Injury Insurance; Old-Age, Disability, and Death Insurance; Maternity Insurance; Unemployment Insurance; and Health Insurance (applied by Council of Ministers decision).</p> <p>Article 4 defines who is covered:</p> <ul style="list-style-type: none"> <li>• All workers subject to the Labour Law</li> <li>• Self-employed individuals (by Council of Ministers decision)</li> <li>• Jordanian workers in foreign missions inside Jordan</li> <li>• Excludes:                     <ul style="list-style-type: none"> <li>◦ Those under civil/military retirement laws</li> <li>◦ Non-Jordanians in diplomatic missions</li> <li>◦ Irregular workers (unless working <math>\geq 16</math> days/month)</li> </ul> </li> </ul> <p>Article 5</p> <ul style="list-style-type: none"> <li>• Apprentices under 16 are covered for work injuries.</li> <li>• Entitled to disability or death pensions if injured.</li> <li>• No contribution required from employers for apprentices.</li> </ul> <p>Article 6 All categories listed in Article 4 are mandatorily covered by the Social Security Corporation's insurance schemes. This includes workers subject to the Labour Law, self-employed individuals (by Council of Ministers decision), and others. This excludes Individuals already covered by civil or military retirement laws; non-Jordanians working in foreign missions or international organisations; Workers with irregular employment relationships, unless they work 16 days or more per month. Domestic workers, agricultural workers, and seafarers may be covered only by a Council of Ministers resolution, based on recommendations from the Social Security Board.</p> <p>Article 6 confirms that covered workers are entitled to: Occupational Injury and Disease Insurance; Old-age, Disability, and Death Insurance; and Maternity and Unemployment Insurance (as defined in Article 3).</p> <p>Article 62 and 79 defines dependents eligible for pensions Includes spouse, children, and other family members under specific conditions.</p> <p>The regulation sets employment quotas based on project value (Articles 3–8), requires inclusion of salaries in bids, and mandates allocating at least 10% of project value to local subcontractors (Article 5). It also incentivises local partnerships in tender evaluations (Article 9), enforces compliance through bid exclusion and potential blacklisting (Article 10), and establishes oversight committees to monitor implementation (Articles 11–12). The regulation aims to promote local employment, build community capacity, and ensure inclusive development.</p>

Legislation	Overview of Relevant Provisions
<b>Regulation for Obligatory Employment of Jordanian Workforce from Surrounding Communities in Development Projects No. 131 of 2016, as amended</b>	Requires the obligatory employment of local communities within development projects to include recent graduate engineers, technicians, labourers, etc. and specifies requirements for training, as well as giving priority to local contractors. The number of job opportunities is specified based on the investment amount of the development project.
<b>Prevention of Human Trafficking Law No.9 of 2009</b>	Prohibits trafficking in persons, creation of offences, prosecution and punishment of offenders, protection of victims of trafficking in persons, and other related matters.
<b>Occupational Health and Safety</b>	
<b>Regulation on Occupational Safety and Health and Prevention of Occupational Hazards in Institutions No. 31 of 2023</b>	Sets the national baseline for Occupational Safety and Health (OSH): employers must assess and control workplace risks, provide training and PPE, ensure safe workplaces/equipment and housekeeping, prepare for emergencies, involve workers, and keep records; the Ministry of Labour may inspect and enforce (including orders, closures, and penalties), and the Minister can issue implementing instructions.
<b>Regulation on Preventive and Curative Medical Care for Workers in Institutions No. 32 of 2023</b>	Requires Jordanian establishments to provide appropriate preventive and therapeutic medical services—such as health surveillance/medical exams, first-aid facilities or clinics with qualified staff, maintaining worker medical records, and cooperating on occupational disease reporting—scaled to the workforce size and risk.  It also empowers the Minister to issue implementing rules (e.g., risk-classification instructions that guide the level of medical services required).
<b>Regulation on Forming Occupational Safety and Health Committees and Appointing Supervisors in Institutions No. 33 of 2023</b>	Requires Jordanian establishments to set up OSH committees and appoint qualified OSH supervisors based on the enterprise's size and the risk classification of its economic activity. Committees, comprising employer and worker representatives, must meet regularly to review risk assessments, accidents/near-misses, training needs, and compliance actions. Supervisors are responsible for conducting day-to-day hazard inspections, maintaining accurate records, providing worker training, ensuring emergency preparedness, and promptly reporting any incidents.
<b>Instructions for Initial Medical Examination of Workers in Institutions of 2025</b>	Issued by the Ministry of Labor in coordination with the Ministry of Health, the 2025 instructions aim to align Jordan's occupational health standards with international best practices.  Outlines the instructions for preliminary medical examinations in workplaces, established to ensure the health and safety of workers in various sectors. It mandates conducting medical evaluations before hiring employees, especially in industries or roles where health risks are significant, such as construction, manufacturing, agriculture, and chemical industries.  Requires mandatory initial and periodic medical examinations for workers, tailored to the specific occupational hazards they may face – risk-based exams. Employers must ensure examinations are conducted before employment begins and at regular intervals thereafter. The type and frequency of medical exams depend on the risk level of the job. Detailed medical registers required for each worker shall be kept by employers.

Legislation	Overview of Relevant Provisions
<b>Instructions for Assessing Risks in the Work Environment of 2023, issued pursuant to Article 10 of Regulation No. 31 of 2023</b>	<p>Require employers to appoint qualified assessors, involve workers/OSH committees, and conduct risk assessments for all workplaces and operations, including mobile work.</p> <p>Employers must identify all potentially exposed persons—including contractors/visitors and vulnerable groups (pregnant/lactating, under-18s, persons with disabilities, non-Jordanian and lone workers)—rate each hazard by likelihood and severity, and issue a signed preventive action plan with hazards, controls, timelines, responsible persons, and budget; review the assessment at least every two years or after changes/incidents/legal actions/legislative updates; include specified content; and retain records ≥2 years. The Instructions apply to institutions with 20 or more workers.</p>
<b>Instructions for Classifying and Identifying the Risk Seriousness level of the Economic Activity for the Year 2023 issued pursuant to Clause (b) of Article 8 of Regulation No. 32 of 2023 and Clause (b) of Article 8 of Regulation No. 33 of 2023</b>	<p>Classify each activity as higher or lower risk for a five-year period using comparative indicators. Higher-risk sectors include:</p> <ul style="list-style-type: none"> <li>• Agriculture, forestry and fishing</li> <li>• Mining and quarrying</li> <li>• Manufacturing</li> <li>• Electricity, gas, steam and alternating current (AC)</li> <li>• Water sanitation and waste</li> <li>• Construction</li> <li>• Transportation and storage</li> <li>• Accommodation and food</li> <li>• Healthcare and social work.</li> </ul> <p>Exclude public administration, defence, social security, household activities, and non-national jurisdiction bodies.</p> <p>Allow the Minister to form a technical committee to review/update every five years, and to issue implementing decisions, as well as repeal prior sector instructions.</p>
<b>Instructions for Identifying the Types of Sources of Occupational Hazards in the Work Environment and the Necessary Preventive Precautions and Measures issued pursuant to the provisions of Article 79 of Labour Law No. 8 of 1996 and Article 10 of Regulation No. 31 of 2023</b>	<p>State that employers are responsible for systematically identifying workplace hazards and the people exposed, involving workers in the process, and putting in place practical controls—training, housekeeping, traffic/storage rules, work permits, record-keeping, and PPE—to keep the workplace safe. The Instructions list over 20 hazard categories (e.g., machinery, hand tools, lifting equipment, work at height, confined spaces, excavations, boilers, electricity, fire, chemicals/biologicals, noise, vibration, lighting, heat/cold stress, radiation, manual handling, ergonomics, office work, and psychosocial risks) and set concrete engineering/administrative measures, safe installation/maintenance and signage, plus rescue/emergency procedures for high-risk tasks.</p>
<b>Fire prevention in the use of cutting and welding processes (JS 1810/2008)</b>	<p>Sets fire-safety requirements for “hot work” to prevent loss of life and property, and directs that the installation and operation of cutting/welding (incl. gas) equipment comply with ANSI Z49.1.</p> <p>In practice, this requires making the area fire-safe (removing or covering combustibles), protecting openings and floors, providing extinguishers and a fire watch where needed, cleaning and neutralising containers before “hot work” and verifying the heated surface controls are consistent with</p>

Legislation	Overview of Relevant Provisions
	ANSI Z49.1 and Occupational Safety and Health Administration (OSHA) 1910.252 hot-work precautions.
<b>Textiles: Protective clothing for use against heat and fire. Assessment of materials when exposed to a source of radiant heat (JS 1049/ 1996)</b>	<p>Adopts the ISO 6942 approach to evaluate materials (single or multilayer) and assemblies for heat-protective clothing when exposed to radiant heat. It specifies two test methods:</p> <ul style="list-style-type: none"> <li>Method A: visual assessment of material changes after defined radiant exposure</li> <li>Method B: measurement of heat transmitted on the cold side to gauge the protective effect.</li> </ul> <p>Reports are to include specimen details, conditioning, heat-flux level/exposure time, observed damage, and transmitted-heat results, which are used to compare materials and support downstream garment classifications (e.g., as per ISO 11612).</p>
<b>Safety requirements: Safety of machinery - Safety distances (JS 1048/1996)</b>	Specifies safety distances from machinery to prevent injury to parts of the human body.
<b>Specification for industrial safety helmets (JS 136/2009)</b>	This standard concerns physical and performance requirements, testing methods and marking for industrial safety helmets.
<b>Personal protective equipment: protective footwear (JS 1909/2022)</b>	<p>Specifies basic and additional (optional) requirements for safety footwear used for general purposes. Includes mechanical risks, slip resistance, thermal risks, and ergonomic behaviour.</p> <p>Specifies requirements for safety footwear equipped with customised in-socks, customised safety footwear, or individually manufactured customised safety footwear.</p>
<b>Personal protective equipment: protective footwear (JS 1919/2022)</b>	Specifies basic and additional (optional) requirements for protective footwear used for general purposes. It includes, for example, mechanical risks, slip resistance, thermal risks, and ergonomic behaviour. It also specifies requirements for protective footwear equipped with customised in-socks, customised protective footwear, or individually manufactured customised protective footwear.
<b>Personal protective equipment: - occupational footwear (JS 1920/2022)</b>	Specifies basic and additional (optional) requirements for occupational footwear used for general purposes. It includes, for example, mechanical risks, slip resistance, thermal risks, and ergonomic behaviour. It also specifies requirements for occupational footwear equipped with customised in-socks, customised occupational footwear, or individually manufactured customised occupational footwear.
<b>Light and lighting: Lighting of workplaces – Part 1: Indoor workplaces (JS 2253-1/2020)</b>	Specifies lighting requirements for humans in indoor workplaces, which meet the needs for visual comfort and performance of people having normal ophthalmic (visual) capacity. All usual visual tasks are considered, including Display Screen Equipment (DSE).
<b>Light and lighting: Lighting of workplaces - Part 2: Outdoor workplaces (JS 2253-2/2020)</b>	Specifies lighting requirements for outdoor workplaces, which meet the needs for visual comfort and performance. All usual visual tasks are considered.
<b>Emergency lighting (JS 2259/2019)</b>	Specifies the luminous requirements for emergency lighting systems installed in premises or locations where such systems are required. It is principally applicable to locations where the public or workers have access.

Legislation	Overview of Relevant Provisions
<b>Ergonomics of the thermal environment: Assessment of heat stress using the WBGT (wet bulb globe temperature) index (JS 2299/2021)</b>	Presents a screening method for evaluating the heat stress to which a person is exposed and for establishing the presence or absence of heat stress. This Jordanian Standard applies to the evaluation of the effect of heat on a person during their total exposure over the working day (up to 8 hours). It does not apply to very short exposures to heat.
<b>Graphical symbols: Safety colours and safety signs Part 1: Design principles for safety signs and safety markings (JS 17-1/2021)</b>	Establishes the safety identification colours and design principles for safety signs and safety markings to be used in workplaces and in public areas for the purpose of accident prevention, fire protection, health hazard information and emergency evacuation. It also establishes the basic principles to be applied when developing standards containing safety signs.
<b>Graphical symbols: Safety colours and safety signs Part 3: Design principles for graphical symbols for use in safety signs (JS 17-3/2021)</b>	Gives principles, criteria and guidance for the design of graphical symbols for use in safety signs as defined in JS 17-1, and for the safety sign element of product safety labels as defined in ISO 3864-2.
<b>Graphical symbols: Safety colours and safety signs Part 4: Colourimetric and photometric properties of safety sign Materials (JS 17-4/2021)</b>	Establishes the colourimetric and photometric requirements and test methods for the colours of safety signs to be used in workplaces and public areas. It provides the colourimetric and photometric specifications for the named safety and contrast colours prescribed in JS 17-1.
<b>Cultural Heritage</b>	<p><b>Antiquities Law No. 21 of 1988, as amended by Law No. 23 of 2004</b></p> <p>Article 2 defines antiquities as movable or immovable human-made objects created before AD 1750, or later objects designated by ministerial decision, including human/animal remains older than AD 600</p> <p>Article 9 prohibits the destruction or damage of cultural heritage sites, including antiquities.</p> <p>Article 13 prohibits licensing of any structure, including buildings or walls, unless it is at least 5 to 25 m away from any antiquities.</p> <p><b>Key Provisions:</b></p> <ul style="list-style-type: none"> <li>• Excavation and Discovery: Only authorised entities may conduct archaeological excavations. Unauthorised digging is prohibited.</li> <li>• Ownership and Protection: All antiquities are considered state property, and their trade or export is strictly regulated.</li> <li>• Ministerial Authority: The Minister of Tourism and Antiquities has the power to designate sites, approve excavations, and enforce penalties.</li> <li>• Penalties: Violations such as illegal excavation, damage, or trade of antiquities are subject to fines and imprisonment.</li> </ul> <p>The Department of Antiquities (DoA) which operates under Ministry of the Tourism and Antiquities is the executive body responsible for implementing the law and responsible for Supervising archaeological excavations and surveys; Documenting and preserving antiquities; Managing archaeological sites, museums, and databases; and collaborating with international bodies (e.g., UNESCO, Getty Institute).</p> <p>Protects tangible heritage and indirectly supports ICH by safeguarding physical contexts embodying cultural practices.</p>

Legislation	Overview of Relevant Provisions
<b>Wadi Rum Development Regulation No. 24 of 2001</b>	<p>Article 9-a prohibits, under legal liability, undertaking any activities, actions, or behaviours that could lead to the destruction or harm of the natural environment, its components, or its aesthetic value within the designated area of Wadi Rum, which include: constructing buildings outside designated zones, unauthorized entry or exit, hunting or harming wildlife, damaging geological formations essential for habitats, defacing natural features, removing or damaging structures, polluting soil, water, or air, and engaging in actions that harm the area's environment, such as lighting fires or improper waste disposal.</p> <p>Additionally, driving vehicles off designated roads is strictly prohibited to preserve the natural landscape and ecosystem</p>
<b>Regulations for Archaeological Projects in Jordan</b>	<p>Establishes standards for archaeological projects, including recognition of both tangible and intangible heritage aspects; outlines permit and documentation procedures.</p> <p>Explicitly integrates ICH into heritage project planning, requiring ICHIA practitioners to assess and document intangible elements in project areas</p>
<b>Protection of Architectural and Urban Heritage Law No. 5 of 2005</b>	<p>The Law aims to conserve, protect, and maintain Jordanian heritage sites. Article 11 of the law states that destruction or damage of any heritage site is strictly forbidden.</p>
<b>Intangible Cultural Heritage</b>	
<b>Copyright Law No. 22</b>	<p>Protects “works of authorship” in literature, arts, and sciences, including folklore expressions performed or recorded by Jordanian citizens or within the country and prohibits unauthorized reproduction or distortion.</p> <p>Enables protection of intangible expressions, like music, oral traditions, and folklore by assessing risks of misappropriation, ensuring community consent, and benefit-sharing in documentation or commercialization.</p>
<b>Patent Law No. 32</b>	<p>Patents are granted for innovative, industrially applicable inventions, excluding those contrary to public order, morality, or environmental safety, and biological processes for plants and animals are not patentable.</p> <p>Ensure projects utilizing traditional knowledge (TK) respect community ownership and prevent biopiracy or patenting of communal knowledge, particularly in ICH where it intersects with innovation.</p>
<b>Geographical Indications Law No. 8</b>	<p>Safeguards names of goods attributed to geographic origin (e.g., “Ajloun olive oil,” “Madaba mosaics”), prohibiting misleading use of Geographically Indicated Names (GIs) or imitation of names.</p> <p>Promote GI registration for traditional crafts or foods, supporting the safeguarding of heritage-based products tied to place and assessing potential development threats.</p>
<b>Trademarks Law No. 33</b>	<p>Allows registration of distinctive marks, including collective and certification marks, but prohibits deceptive or culturally inappropriate marks that contravene public order, morality, or misleading origin.</p> <p>Offers tools for communities to brand and protect traditional crafts or performances, but should assess trademark implications, including misrepresentation, cultural appropriation, and misuse of community symbols.</p>

Legislation	Overview of Relevant Provisions
<b>Trade Secrets and Unfair Competition Law No. 15</b>	Defines unfair competition and protects trade secrets from misuse. Covers misleading commercial practices and unauthorized use of confidential traditional knowledge or formulations. To ensure they do not disclose or exploit protected community knowledge or violate fair competition principles.
<b>Public Consultation</b>	
<b>Law on Securing the Right to Information Access No. 47 of 2007 and Amendments</b>	<p>Article 7 grants every Jordanian the right to obtain the information he/she requires in accordance with the provisions of this Law, if he/she has a lawful interest or a legitimate reason</p> <p>Article 8 requires public access to information and ensures prompt disclosure thereof in the manner set forth in this Law.</p> <p>The 2024 amendments represent the most significant reform, enhancing transparency through proactive disclosure, expanding eligibility for non-Jordanians, and broadening stakeholder representation in oversight bodies:</p> <p>Proactive disclosure obligations: Public bodies are now legally required to self-publish key information (e.g. organisational structure, budget, programs, projects) on their websites</p> <p>Access rights expanded to non-Jordanians: Residents of other nationalities are now allowed to request information, though still relatively restricted by requiring a “legitimate interest” and a formal application process</p>
<b>Data Protection</b>	
<b>Personal Data Protection Law No. 24 of 2023</b>	Requires explicit, informed, and documented consent for data processing, specifying purpose and duration. Provides examples of cases where processing data without consent is permitted, as well as the rights of individuals regarding their personal data. Covers all personal data processing handled by public or private entities—including data collected before or after the date of the effect (i.e. March 2024).
<b>Land Acquisition</b>	
<b>Real Estate Ownership Law No. 13 of 2019, as amended</b>	<p>The legal instrument in Jordan for land acquisition applies to all cases of land acquisition in the country, as outlined in Chapter 9 (Articles 178-213). No land can be acquired unless it is for a public benefit project and there is fair and just compensation. The law requires direct negotiation between the purchasers of a public benefit project and landowners until an agreement is reached. If an agreement cannot be reached between the two parties, cases can be referred to the courts. Any land acquisition must be approved by the Council of Ministers.</p> <p>In April 2025, the Cabinet approved a set of draft amendments to the Law currently under review by Parliament, aimed at facilitating investment and streamlining procedures.</p>
<b>Traffic and Transport</b>	
<b>Traffic Law No. 49 of 2008, as amended by Law No. 18 of 2023</b>	Article 24 states that driving vehicles that are spilling or leaking oils or oil derivatives or any dangerous materials on the road or that are emitting smoke or any other polluting materials while in motion, at non-permissible rates, shall be impounded.

Legislation	Overview of Relevant Provisions
	<p>Article 31 imposes imprisonment or a fine for throwing or pouring vehicle loads, such as stones, solid waste, or liquid materials, on the road, and the responsible entity shall bear the cost of removing these materials.</p> <p>Article 35 imposes a fine for driving a vehicle that emits smoke or any other polluting materials.</p> <p>The amendment applies stricter penalties for violations that endanger public safety and the environment.</p> <p>11 new violations added, including: driving vehicles that emit excessive smoke or pollutants; and spilling hazardous materials on roads.</p>
<b>Emergency Preparedness</b>	
<b>Amended Public Security Law No. 14 of 2020</b>	<p>Article 3 The Gendarmerie (Darak) and the Civil Defence Directorate were merged into the Public Security Directorate (PSD). This created a unified security body under the Ministry of Interior.</p> <p>Article 8 states that in the event of an emergency or disaster, and upon authorisation from the Prime Minister, the Minister of Interior may regulate and limit the use of water and electricity resources, their tools, and all their supplies in coordination and cooperation with the authorities responsible for managing and operating them.</p>
<b>Environmental Protection from Pollution in Emergencies Regulation No. 26 of 2005</b>	<p>Sets a framework for pollution emergencies. MoEnv leads a national plan, coordinates through national/local committees, and maintains a hazardous substances information bank.</p> <p>Facilities, especially those handling hazardous materials, must designate a liaison, maintain response resources, remove residues, and submit periodic reports to local committees.</p>
<b>Maritime Navigation</b>	
<b>Regulation for the Entry of Ships into Jordanian Territorial Waters No. 109 of 2009</b>	<p>Defines the boundaries of Jordan Territorial Water starting from the zero-mark on the northeastern shore of the Red Sea in the GoA, extending in a straight line for 2.84 km until it meets the maritime border leading into the Gulf, and from there southward to the point intersecting with the eastern border of the Kingdom of Saudi Arabia opposite the Durra border crossing</p> <p>Article 3: The Authority (Jordan Maritime Authority) shall:</p> <ul style="list-style-type: none"> <li>• Manage the maritime wireless communications centre and regulate the entry of ships into Jordanian territorial waters</li> <li>• Issue non-objection permits for ships departing territorial waters after verifying the absence of any technical or judicial restrictions</li> <li>• Coordinate in advance with relevant entities, including the pilotage and guidance service provider</li> <li>• Equip appropriate communication devices and provide the necessary human resources to fulfil its duties.</li> </ul> <p>The provisions of applicable national legislation and international agreements in force in the Kingdom shall be observed.</p> <p>Article 4: All ships must comply with the instructions issued by the pilotage and guidance service provider in Jordanian territorial waters, based on relevant international agreements, legislation, and practices. The Authority shall notify the flag state of any violations committed by the ship.</p>

Legislation	Overview of Relevant Provisions
	<p>Article 5: Any provision in another regulation that contradicts the provisions of this regulation shall not be applied.</p> <p>Article 6: The Minister shall issue the necessary instructions, based on the Council's recommendation, to implement the provisions of this regulation, including matters related to ship entry and departure from Jordanian territorial waters, maritime wireless communications, and the fees and charges collected from ships.</p>
<p><b>Instructions for the Regulating Entry and Departure of Vessels to and from Jordanian Territorial Waters, and Regulating Maritime Communications and Vessel Traffic Services (VTS) of 2010</b></p>	<p>Instructions issued by the Minister of Transport on the recommendation of the JMA Board of Directors, under Article 6 of the "Regulations of the Entry of Vessels into Jordanian Territorial Waters No. 109 of 2009".</p> <p>Apply to all vessels entering, departing, or transiting Jordanian territorial waters, as defined in the regulations, and to the Vessel Traffic Service (VTS) system established by the JMA.</p> <p>Article 4: Vessels must comply with notification, clearance, and permit requirements before entering or departing Jordanian waters.</p> <p>Article 9: The JMA oversees the issuance of entry and departure permits, ensuring all safety, environmental, and judicial requirements are satisfied.</p> <p>Article 10: Vessel masters remain fully responsible for navigation and manoeuvring decisions, even when a sailing plan is approved by VTS.</p> <p>Article 11: All vessels must maintain continuous communication with VTS as per international maritime standards.</p> <p>Article 5: JMA operates a VTS to regulate and monitor vessel traffic, prevent accidents, and protect the environment. The VTS ensures proper system coverage, communication equipment, trained staff, and documentation compliant with Safety of Life at Sea (SOLAS) Convention, Regulations for Preventing Collisions at Sea (COLREG) and International Organization for Marine Aids to Navigation (IALA) requirements.</p> <p>Article 6: The VTS organises and manages vessel movements from sea to berth, within berthing and anchorage zones, and between port facilities.</p> <p>Article 7: VTS must communicate all relevant instructions and navigation circulars to the JMA and concerned authorities.</p> <p>Article 12: Vessels must report hazards, pollution, or communication failures immediately through the VTS.</p> <p>Article 3: The core purpose is to enhance maritime safety and protect the marine environment by controlling vessel operations and communications.</p> <p>Article 8: Accidents caused by non-compliance with the instructions are investigated by the Marine Accident Investigation Division, and flag States are notified.</p> <p>Article 12: Vessel masters are obliged to report any incidents, hazards, or pollution events promptly to the VTS and JMA.</p> <p>Articles 5–10:</p> <ul style="list-style-type: none"> <li>• JMA manages and operates the VTS, oversees entry/departure permits and vessel monitoring and coordinates with other authorities (pilotage, port, environmental agencies).</li> <li>• Vessel Masters &amp; Agents: Must provide accurate information, obtain required permits, maintain VHF communication, and comply with all VTS directives (Arts. 9–11). Remain responsible for navigational</li> </ul>

Legislation	Overview of Relevant Provisions
	<p>decisions (Art. 10). Article 9 applies to all vessels exceeding 24 m in length, as well as warships and government vessels (in coordination with relevant authorities). Also applies to vessels located within port berths, waiting areas, and marinas.</p> <p>Articles 4–12:</p> <ul style="list-style-type: none"> <li>• Early coordination with JMA for entry and departure is mandatory.</li> <li>• Continuous communication with VTS via VHF and adherence to navigation instructions is required.</li> <li>• Vessel agents must ensure documentation and clearance (customs, health, judicial) are complete before departure.</li> <li>• Non-compliance can result in delays, detentions, or penalties under JMA authority.</li> <li>• Environmental and safety obligations are emphasised throughout to align with international maritime conventions.</li> </ul>
<b>Instructions for the Operation, Licensing, and Monitoring of Navigational Safety for Boats in Aqaba of 2004</b>	<p>Article 3: The Jordanian territorial waters in the GoA are demarcated (from the zero-mark on the north-east Red Sea coast of the Gulf, extending westwards 2.84km, etc.).</p> <p>Article 4: Licensing and oversight authority. The organisation, licensing, registration, control and issuance of navigation licences and related documents for boats/yachts shall be conducted by the Technical Affairs and Maritime Safety Directorate and Ship Registration Directorate at JMA, including:</p> <ul style="list-style-type: none"> <li>• reviewing applications/documents</li> <li>• conducting technical checks for compliance</li> <li>• issuing the sailing licence after conditions are met.</li> </ul> <p>Article 5: Licensing requirements for boat/yacht operations. Conditions for granting navigation licences to boats, yachts, cruise boats, service boats (including those carrying more than 12 passengers and navigating within Jordanian territorial waters) are stipulated.</p> <p>Article 6: Covers marine company vessels, sport fishing boats, parasailing boats, and cruise boats (&gt; 12 passengers) within the ASEZ. Provides requirements for licensing for Commercial and Water-Sports Vessels (ASEZ Area)</p> <p>Article 9: Provides requirements for technical inspections and maintenance</p> <p>Article 10: Provides requirements for vessel registration with JMA</p> <p>Article 11: Provides responsibilities of the driver/owner of vessels</p> <p>Article 12: Provides JMA responsibilities for monitoring and control</p> <p>Article 13: Provides information on penalties and enforcement</p> <p>Article 14: Provides provisions for water sports and leisure activities</p> <p>Article 15: Provides requirements for reporting, documentation, and log keeping by driver/owner</p>
<b>Instructions for Conducting Harbour Master Functions of 2014</b>	<p>Article 4: The “Harbour Master” is the employee assigned to carry out the tasks stipulated under these Regulations and other relevant legislation. The Harbour Master works under the JMA to manage port operations,</p>

Legislation	Overview of Relevant Provisions
	<p>navigation safety, traffic control, and pilotage, among other responsibilities.</p> <p>Article 5: The “Tugboats &amp; Pilotage Service Provider” is defined. The Organisation must ensure that tug/pilotage services are provided. The Harbour Master has oversight of these services in territorial waters and port approaches. The JMA may coordinate with the provider for safe navigation into/out of port.</p> <p>Article 6: Marine Agents (licensed companies or organisations) are required to act in accordance with JMA regulations, port authority rules, customs and maritime communications. The Harbour Master monitors agent performance and enforces compliance.</p> <p>Article 7: The Harbour Master (through the Maritime Communications/Pratique Directorate) monitors ship movements, berthing, anchoring, communications, distress signalling, and ensures compliance with VTS (Vessel Traffic Services). The “Committee (Pratik)” addresses issues related to freedom of communication.</p> <p>Article 8: The Harbour Master has authority to board arriving vessels, inspect certificates (registration, health, International Ship and Port Facility Security Code (ISPS) security, tonnage, crew vaccination), grant “pratique” (free communication permit) only after checks, keep vessel registration certificate until departure, and coordinate with relevant authorities on ship safety and security.</p> <p>Article 9: JMA shall maintain records of vessels, arrival/departure permits, communication logs, tug/pilot usage, anchor/berth occupancy, and collect fees/charges per applicable tariff systems. Non-compliance may affect permit issuance.</p> <p>Article 10: The Harbour Master may order suspension of port services (pilotage/tug) for vessels failing to meet requirements, may detain vessels with technical or judicial holds, coordinate with JMA in enforcement actions and notify relevant authorities.</p> <p>Article 11: The Harbour Master and JMA coordinate with customs, immigration, health, port security, environmental agencies, and pilotage services. They ensure that all party agencies are aware of the vessel's status and clearances before entry/departure.</p> <p>Article 12: The Harbour Master monitors and reports maritime accidents, pollution incidents, and navigational hazards in territorial waters or the port. Information is passed to JMA's Marine Accident Investigation Division.</p>

## 2.5 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. These international commitments form the basis for its Environment Protection Law (No. 6 of 2017) and national strategies.

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.

Table 2-4 lists the key international conventions and agreements to which Jordan is a signatory to that are relevant to the Project. Relevant implications of international and regional conventions and agreements to the Project in terms of design and operating constraints and environmental performance will be detailed in the next revision of the Environmental and Social Management and Monitoring Plan (ESMMP).

**Table 2-4: International Conventions and Multilateral Agreements Relevant to the Project**

International Convention / Multilateral Agreement	General Requirements
<b>Climate and Atmosphere</b>	
<b>United Nations Framework Convention on Climate Change (ratified in 1993)</b>	<ul style="list-style-type: none"> <li>• Stabilisation of greenhouse gas concentrations</li> <li>• Continuing scientific research into the climate</li> <li>• Enabling ecosystem adaptation to climate change</li> <li>• State cooperation for equity and sustainable development</li> <li>• Implementation of commitments</li> </ul>
<b>Kyoto Protocol (ratified in 2003)</b>	<ul style="list-style-type: none"> <li>• Commitment to reduce emissions (emission reduction targets)</li> <li>• Flexible mechanisms such as the Clean Development Mechanism (CDM) and Joint Implementation (JI) to facilitate emissions reductions</li> <li>• Monitoring and Reporting</li> <li>• Flexibility in meeting emission reduction commitments</li> </ul>
<b>Paris Agreement (ratified in 2016)</b>	<ul style="list-style-type: none"> <li>• Long-term temperature goal to reduce temperature increases below 2°C</li> <li>• Aim to reach global peaking of greenhouse gas emissions as soon as possible</li> <li>• Establish binding commitments to prepare, communicate and maintain a nationally determined contribution (NDC)</li> <li>• Encourage conservation and enhancement of sinks and reservoirs of GHGs</li> <li>• Address adaptation to climate change, financial and other support for developing countries</li> <li>• Recognise differences in contribution of developed and developing nations to global environmental problems</li> <li>• Countries submit updated NDCs every five years</li> <li>• Invitation for countries to formulate and submit long-term strategies</li> </ul>
<b>Vienna Convention for the Protection of the Ozone Layer (ratified in 1989)</b>	<ul style="list-style-type: none"> <li>• Cooperation in relevant research and scientific assessments of the ozone</li> <li>• Exchange of information on the effects of human activities on the ozone</li> <li>• Adoption of appropriate measures to prevent harmful activities to the ozone</li> <li>• Implementation of the Convention and its Protocols</li> <li>• Research and systematic observations of the ozone</li> <li>• Aim to reduce global consumption of ozone-depleting substances by 98%</li> </ul>
<b>Montreal Protocol on Substances that Deplete the Ozone Layer (and amendments) (ratified in 1989)</b>	<ul style="list-style-type: none"> <li>• Phase-out of Ozone-Depleting substances</li> <li>• Gradual phase-down of Hydrofluorocarbons (HFCs)</li> <li>• Binding timelines for the phase-out of ODSs</li> <li>• Cooperation and monitoring of the ozone</li> </ul>

International Convention / Multilateral Agreement	General Requirements
	<ul style="list-style-type: none"> <li>Conduct research and scientific assessments of the ozone to support the Protocols implementation</li> </ul>
<b>Biodiversity and Nature Protection</b>	
<b>Convention on Biological Diversity (CBD) (ratified in 1993)</b>	<ul style="list-style-type: none"> <li>Develop and enforce national strategies to conserve biological diversity</li> <li>Ensure the sustainable use of biological diversity and promote its conservation</li> <li>Share benefits arising from the use of genetic resources in a fair and equitable manner</li> </ul>
<b>Cartagena Protocol on Biosafety (ratified in 2004)</b>	<ul style="list-style-type: none"> <li>Ensure the safe handling, packaging, and transportation of living modified organisms (LMOs)</li> <li>Provide accompanying documentation for each LMO</li> <li>Conduct risk assessments before the intentional introduction of LMOs into the environment</li> <li>Implement procedures for the transboundary movement of LMOs</li> <li>Promote public awareness regarding the safe handling and trading of LMOs</li> </ul>
<b>Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (ratified in 1979)</b>	<ul style="list-style-type: none"> <li>Establish a Management Authority to issue import and export permits for CITES-listed species</li> <li>One or more Scientific Authority must advise each Management Authority</li> <li>Implementation of CITES resolutions and decisions</li> <li>Parties must receive capacity building and training</li> <li>CITES promotes international cooperation and collaboration to combat wildlife crime and protect endangered species</li> </ul>
<b>Convention on Migratory Species (Bonn Convention) (ratified in 2001)</b>	<ul style="list-style-type: none"> <li>Prohibit the taking of animals belonging to species listed in Appendix I unless for scientific purposes or breeding enhancement</li> <li>Implement agreements covering the conservation and management of migratory species listed in Appendix II</li> <li>Conduct conservation and management actions that may require international agreements</li> <li>Designate an authority responsible for implementing the agreement</li> <li>Conclude agreements under Article IV (4) of the Convention for any population or geographically separate part of the population of any species or lower taxon of wild animals</li> </ul>
<b>Ramsar Convention on Wetlands (ratified in 1977)</b>	<ul style="list-style-type: none"> <li>Cooperation between countries to further the use of wetlands and their resources</li> <li>Conservation and wise use of wetlands and their resources</li> <li>Designation of Ramsar sites</li> <li>Promote the conservation of Ramsar wetlands and ensure the management of Ramsar Sites</li> <li>Provide scientific advice to support the proposal and designation of Ramsar Sites</li> </ul>

International Convention / Multilateral Agreement	General Requirements
<b>International Plant Protection Convention (ratified in 1979)</b>	<ul style="list-style-type: none"> <li>Implement legislative, technical and administrative measures to prevent the spread and introduction of pests</li> <li>Each party holds responsibility for the fulfilment of requirements within its territories</li> <li>Supplementary agreements to address specific regions, pests, plants and plant products</li> <li>National plant protection organisations to implement the Convention's objectives</li> <li>Training and development of staff to enhance the effectiveness of plant protection measures</li> </ul>
<b>Agreement on the Conservation of African-Eurasian Migratory Waterbirds (ratified in 1999)</b>	<ul style="list-style-type: none"> <li>Coordinated conservation efforts to maintain migratory waterbird species</li> <li>Development of an Action Plan to specify actions Parties should take in relation to priority species and issues</li> <li>Cooperation between Parties for research and monitoring</li> <li>Provide special attention to endangered species and those with an unfavourable conservation status for the protection of species</li> <li>Parties should apply measures prescribed in the Agreement within the limits of their national jurisdiction</li> </ul>
<b>Convention on the Conservation of Migratory Species of Wild Animals (ratified in 1979)</b>	<ul style="list-style-type: none"> <li>Protection of endangered migratory species listed in Appendix I of the Convention</li> <li>Multilateral agreements for the conservation and management of migratory species that require or would benefit from international cooperation</li> <li>Co-operative research activities to support conservation and management of migratory species</li> <li>International cooperation to ensure protection across full range of migratory species</li> <li>Development of Action Plans to protect species of concern</li> </ul>
<b>UNESCO World Heritage Convention (ratified in 1975)</b>	<ul style="list-style-type: none"> <li>Identification and protection of cultural and natural heritage in Parties territories</li> <li>Conserve World Heritage Sites and report regularly on their state of conservation</li> <li>World Heritage Fund for the financial assistance for the conservation of World Heritage properties</li> <li>Develop capacity-building measures</li> <li>Increase public awareness, involvement and support for World Heritage</li> <li>Community roles in the implementation of the World Heritage Convention</li> </ul>
<b>Land and Desertification</b>	
<b>United Nations Convention to Combat Desertification (ratified in 1996)</b>	<ul style="list-style-type: none"> <li>Involve stakeholders and affected communities in the planning and implementation of desertification prevention and control measures</li> <li>Collaboration among governments, NGOs and other stakeholders to address desertification issues</li> </ul>

International Convention / Multilateral Agreement	General Requirements
	<ul style="list-style-type: none"> <li>• Long-term strategies that focus on improving land productivity and sustainable management of land water resources</li> <li>• International cooperation and partnership arrangements</li> <li>• Mobilisation and channelling of financial resources to support the implementation of prevention and control measures</li> <li>• Strengthening of relevant legislation</li> <li>• Access to appropriate technology and knowledge to support desertification prevention and control efforts</li> <li>• Prioritise the needs of affected African countries, while not neglecting other regions</li> <li>• Coordination with other relevant international agreements</li> <li>• Joint programmes in research, training and information collection</li> </ul>
Chemical and Hazardous Wastes	
<b>Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (ratified in 1993)</b>	<ul style="list-style-type: none"> <li>• Minimise hazardous waste generation</li> <li>• Conduct waste management in a manner that protects human health and the environment</li> <li>• Parties must obtain Prior Informed Consent (PIC) before any transboundary movement of hazardous wastes</li> <li>• Only authorized persons may transport or dispose of wastes</li> <li>• Wastes must be packaged, labelled, and transported in accordance with internationally recognised standards</li> <li>• Parties must exchange information at various stages of the waste shipment process</li> <li>• Parties must comply with the provisions of the Convention</li> </ul>
<b>Stockholm Convention on Persistent Organic Pollutants (ratified in 2004)</b>	<ul style="list-style-type: none"> <li>• Prohibit or restrict the production and use of internationally produced Persistent Organic Pollutants (POPs)</li> <li>• Restrict trade in POPs</li> <li>• Develop national Action Plans for unintentionally produced POPs and apply Best Available Techniques to control them</li> <li>• Management of stockpiles and wastes that contain POPs</li> </ul>
Regional Agreements	
<b>League of Arab States / Council of Arab Ministers Responsible for the Environment for regional environmental cooperation</b>	<ul style="list-style-type: none"> <li>• Develop a strategy for managing and protecting the environment</li> <li>• Establish, enhance and standardise specifications, standards and indicators for environmental evaluation</li> <li>• Incorporate environmental considerations into all stages of planning</li> <li>• Encourage member states to establish and strengthen structures and institutions responsible for the environment</li> <li>• Promote environmental awareness</li> <li>• Develop a comprehensive systems for environmental protection</li> <li>• Consider the evolution of environmental legislation, regulations and lexicon</li> </ul>

International Convention / Multilateral Agreement	General Requirements
<b>Action Plan for the Conservation of the Marine Environment and Coastal Areas in the Red Sea and Gulf of Aden</b>	<ul style="list-style-type: none"> <li>• Use Marine Spatial Planning to ensure that marine activities are planned and managed to protect and sustain marine environments</li> <li>• Develop and implement sustainable infrastructure that minimises environmental impact</li> <li>• Establish financing mechanisms to support conservation efforts and sustainable development</li> <li>• Promote cooperation among member states to address conservation challenges and share best practices</li> <li>• Implement effective management of marine resources</li> <li>• Conduct regular monitoring of marine environments to assess the impact of human activities and conservation efforts</li> <li>• Promote education and awareness of the importance of marine conservation and the need for sustainable practices</li> </ul>
<b>Maritime Environmental Agreements</b>	
<b>Jeddah Convention (1982), Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment</b>	<ul style="list-style-type: none"> <li>• Cooperation among Parties in marine and coastal environmental protection</li> <li>• Control of marine pollution and the rational management of living marine resources</li> <li>• Scientific and technical assistance to support environmental management</li> <li>• Development of environmental management and the establishment of environmental standards</li> <li>• Protocol concerning the conservation of biological diversity and the establishment of a network of protected areas in the Red Sea and Gulf of Aden</li> </ul>
<b>International Convention for the Prevention of Pollution from Ships (MARPOL)</b>	<ul style="list-style-type: none"> <li>• Prevent accidental and routine pollution from ships</li> <li>• Ships must carry specific certificates for pollution prevention</li> <li>• Ships must have a Garbage Management Plan</li> <li>• Control measures for various types of pollution</li> <li>• Regulations for stowing, handing, and shipping, as well as disposal of ship-generated hazardous waste</li> <li>• Compliance with MARPOL enforced through flag state control, port state control and coastal state control</li> </ul>
<b>United Nations Convention on the Law of the Sea</b>	<ul style="list-style-type: none"> <li>• States have the right to extend their maritime jurisdiction to a belt of sea adjacent to their coastal territory, territorial sea</li> <li>• States have the right to extend their continental shelf beyond their territorial sea to a maximum depth of 200 nautical miles</li> <li>• States have the right to exercise jurisdiction over all maritime activities within their territorial sea and continental shelf</li> <li>• States have the right to establish and manage maritime zones adjacent to their territorial sea</li> <li>• States have the right to establish and maintain sea lanes and traffic separation schemes in straits and other areas of international maritime traffic</li> </ul>

International Convention / Multilateral Agreement	General Requirements
	<ul style="list-style-type: none"> <li>• States have the right to establish and maintain maritime safety measures to protect the safety of maritime navigation</li> <li>• States have the right to establish and maintain maritime safety measures to protect the safety of maritime navigation</li> <li>• States have the right to establish and maintain maritime safety measures to protect the safety of maritime navigation</li> </ul>
<b>International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004</b>	<ul style="list-style-type: none"> <li>• All ships must develop and implement a plan to manage their ballast water and sediments</li> <li>• Ships are required to maintain a record of their ballast water and sediments management</li> <li>• Ships must obtain an International Ballast Water Management Certificate to demonstrate compliance with the Convention</li> <li>• Ships must remove and dispose of sediments from spaces designated to carry ballast water in accordance with the ship's ballast water management plan.</li> <li>• Ships should be designed and constructed to minimise the uptake and undesirable entrapment of sediments, facilitating their removal and providing safe access for sediment removal and sampling</li> </ul>
ILO Core Conventions	
<b>C29 – Forced Labour Convention, 1930 (ratified in 1966)</b>	<ul style="list-style-type: none"> <li>• Suppress the use of forced or compulsory labour</li> <li>• Recourse to forced or compulsory labour may be had during a transitional period for public purposes only and as an exceptional measure, subject to specific conditions and guarantees</li> <li>• Consider the possibility of the suppression of forced or compulsory labour in all its forms without a further transitional period after five years</li> <li>• Define the term "forced or compulsory labour" as all work or service exacted from any person under the menace of any penalty and for which the person has not offered himself voluntarily, with exceptions like military service and work following a court conviction</li> </ul>
<b>C98 – Right to Organise and Collective Bargaining Convention, 1949 (ratified in 1968)</b>	<ul style="list-style-type: none"> <li>• Workers must be protected against acts of anti-union discrimination in their employment</li> <li>• Workers' and employers' organisations must enjoy adequate protection against acts of interference</li> <li>• Machinery appropriate to national conditions must be established to ensure respect for the right to organise as defined in the preceding articles</li> <li>• Measures appropriate to national conditions must be taken to encourage and promote the full development and utilisation of the right to organise and to bargain collectively</li> </ul>
<b>C100 – Equal Remuneration Convention, 1951 (ratified in 1966)</b>	<ul style="list-style-type: none"> <li>• Promote and ensure the application of equal remuneration for men and women's workers for work of equal value</li> <li>• Promotion of objective job appraisal based on the work to be performed</li> </ul>

International Convention / Multilateral Agreement	General Requirements
<b>C105 – Abolition of Forced Labour Convention, 1957 (ratified in 1958)</b>	<ul style="list-style-type: none"> <li>Suppressing and not using forced or compulsory labour as a means of political coercion, education, punishment for holding or expressing political views, labour discipline, or as a means of racial, social, national, or religious discrimination.</li> <li>Effective measures must be taken to secure the immediate and complete abolition of forced or compulsory labour</li> <li>Ratification of the convention by each Member of the International Labour Organisation</li> <li>Registration of formal ratifications with the Director-General of the International Labour Office</li> </ul>
<b>C111 – Discrimination (Employment and Occupation) Convention, 1958 (ratified in 1963)</b>	<ul style="list-style-type: none"> <li>States must implement legislation that prohibits all forms of discrimination and exclusion based on race, colour, sex, religion, political opinion, national extraction, or social origin in employment</li> <li>Establishment of national policies to promote equality of treatment and opportunity</li> <li>Promotion of education programmes</li> </ul>
<b>C138 – Minimum Age Convention, 1973 (Minimum age specified: 16 years) (ratified in 1997)</b>	<ul style="list-style-type: none"> <li>Minimum age for admission to employment or work must be at least 15 years, with the exception of hazardous work, which must be at least 18 years</li> <li>States are required to progressively raise the minimum age for admission to employment or work to a level consistent with the fullest physical and mental development of young persons</li> <li>The types of employment or work that are subject to these provisions are determined by national laws or regulations, after consultation with organisations of employers and workers</li> <li>The convention allows for the denunciation of the minimum age provisions after ten years, with the option to specify a higher minimum age</li> </ul>
<b>C182 – Worst Forms of Child Labour Convention, 1999 (ratified in 2000)</b>	<ul style="list-style-type: none"> <li>Member States must take immediate action to prohibit and eliminate the worst forms of child labour including:</li> <li>Slavery or practices similar to slavery</li> <li>Involvement of children in prostitution and pornography</li> <li>Involvement of children in illicit activities such as drug trafficking</li> <li>Any work likely to harm the health, safety, or morals of children</li> </ul>
<b>Anti-Trafficking and Maritime Labour</b>	
<b>UN Palermo Trafficking Protocol - Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children (ratified 2009)</b>	<ul style="list-style-type: none"> <li>Ratifying states must criminalise human trafficking and develop anti-trafficking laws in line with the Protocol's legal provisions</li> <li>States must provide protection and assistance to victims of human trafficking, ensuring their rights are fully respected</li> <li>States must promote cooperation among themselves to meet the objectives of preventing, suppressing, and punishing trafficking in persons</li> <li>The Protocol establishes a comprehensive framework known as the "3P paradigm," which includes prevention, protection, and punishment measures</li> </ul>

International Convention / Multilateral Agreement	General Requirements
	<ul style="list-style-type: none"> <li>States must cooperate internationally to address trafficking, including sharing information and resources to combat the crime</li> </ul>
<b>United Nations Convention against Transnational Organised Crime, 2000 (Ratified 2009)</b>	<ul style="list-style-type: none"> <li>Establishing domestic criminal offences related to participation in an organised criminal group, money laundering, corruption, and obstruction of justice</li> <li>Adopting new and sweeping frameworks for extradition, mutual legal assistance, and law enforcement cooperation</li> <li>Promoting training and technical assistance to enhance the capacity of national authorities to combat organised crime</li> <li>Criminalising activities of organised criminal groups and other activities</li> <li>Ensuring that domestic law covers all serious crimes involving organised criminal groups</li> <li>Incorporating as predicate offences all serious crimes and the offences established in accordance with the Convention</li> <li>Including a comprehensive range of offences associated with organised criminal groups in legislation</li> <li>Ensuring that the knowledge, intent, aim, purpose, or agreement referred to in the Convention can be inferred from objective factual circumstances</li> </ul>
<b>C200 - Maritime Labour Convention, 2006 (ratified 2016)</b>	<ul style="list-style-type: none"> <li>Minimum requirement for seafarers to ensure that seafarers are not subjected to any form of forced labour</li> <li>Conditions of employment in place to protect the rights of seafarers regarding their employment conditions</li> <li>Adequate living and working conditions must be provided for seafarers</li> <li>Requirement for health protection, medical care, welfare and social security protection to ensure the health and welfare of seafarers</li> <li>Ensuring compliance and enforcement</li> </ul>
<b>Human Rights Core Conventions</b>	
<b>International Covenant on Civil and Political Rights (ratified 1975)</b>	<ul style="list-style-type: none"> <li>States must respect and ensure the rights recognised in the Covenant to all individuals within their territory</li> <li>States must take the necessary steps to adopt laws or other measures to give effect to the rights recognised in the Covenant, where existing legislative measures do not already provide for them</li> <li>States must ensure that any person whose rights or freedoms are violated has an effective remedy, regardless of whether the violation was committed by persons acting in an official capacity</li> <li>States must promote the realisation of the right of self-determination and respect that right, including the rights of peoples to freely own, trade, and dispose of their natural wealth and resources</li> <li>States must ensure equality before the law and equal rights under the law, including the right to equality between men and women in the enjoyment of civil and political rights</li> </ul>
<b>International Covenant on Economic, Social and</b>	<ul style="list-style-type: none"> <li>States must respect and promote the self-determination of all peoples</li> </ul>

International Convention / Multilateral Agreement	General Requirements
<b>Cultural Rights (ratified 1975)</b>	<ul style="list-style-type: none"> <li>States must ensure that all rights are exercised without discrimination</li> <li>States must guarantee equal rights for men and women to all economic, social, and cultural rights</li> <li>States must protect the right to work and provide just and favourable working conditions</li> <li>States must ensure the right to social security and provide special protection to families, especially mothers and children</li> <li>States must ensure the right to education and provide an adequate standard of living</li> <li>States must ensure the right to health and provide access to health services</li> <li>States must respect and protect cultural freedoms</li> </ul>
<b>Convention on the Elimination of All Forms of Discrimination Against Women (ratified 1992)</b>	<ul style="list-style-type: none"> <li>States parties must eliminate all forms of discrimination against women in all fields, including political, social, economic, and cultural spheres</li> <li>States parties must ensure that women have equal rights with men in all matters of life, including marriage, family, nationality, and education</li> <li>States parties must take all appropriate measures to ensure legal protection and effective remedy against discrimination against women</li> <li>States parties must ensure that no public authorities or institutions engage in discrimination against women</li> <li>States parties may adopt temporary special measures to accelerate the achievement of equality for women until the objectives of equality of opportunity and treatment have been achieved</li> <li>States parties must affirm the reproductive rights of women and protect them</li> <li>States parties must submit national reports on measures they have taken to comply with their treaty obligations at least every four years</li> </ul>
<b>Convention on the Rights of the Child (ratified 1991), including protocols on armed conflict and child prostitution (CRC-OP-AC, CRC-OP-SC)</b>	<ul style="list-style-type: none"> <li>Every child has the right to be protected from discrimination</li> <li>The best interests of the child must be a primary consideration in all actions concerning children</li> <li>Every child has the right to life, survival, and development</li> <li>The view of the child must be considered and taken into account in all matters affecting him or her</li> </ul>
<b>Convention on the Rights of Persons with Disabilities (ratified 2008)</b>	<ul style="list-style-type: none"> <li>States parties must ensure that all persons with disabilities have the same rights as everyone else and must take all appropriate measures to ensure their full enjoyment</li> <li>States parties must not discriminate against any person on the basis of disability and must take all appropriate measures to ensure that persons with disabilities can participate in society in equal rights</li> <li>States parties must design products, environments, programmes, and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design</li> </ul>

International Convention / Multilateral Agreement	General Requirements
	<ul style="list-style-type: none"> <li>States parties must provide necessary and appropriate modifications and adjustments to ensure that persons with disabilities can enjoy or exercise all human rights and fundamental freedoms on an equal basis with others</li> <li>States parties must respect the inherent dignity and worth of the human person, recognising the diversity of persons with disabilities</li> </ul>
<b>Convention on the Elimination of All Forms of Racial Discrimination (ratified 1974)</b>	<ul style="list-style-type: none"> <li>Parties must take all necessary measures to eliminate racial discrimination and promote understanding along all races</li> <li>Criminalisation of hate speech and membership in racist organisations</li> </ul>
<b>Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT, ratified 1991)</b>	<ul style="list-style-type: none"> <li>Member States must take effective measures to prevent acts of torture in any territory under their jurisdiction</li> <li>Member States are forbidden to transport people to any country where there are substantial grounds for believing they will be tortured</li> </ul>
Regional Human Rights Instruments	
<b>Arab Charter on Human Rights (ratified 2004) – Reinforces rights to work, health, education, and participation consistent with international law; Jordan reports regularly to the Arab Human Rights Committee</b>	<ul style="list-style-type: none"> <li>Rights to work, health, education, and participation</li> <li>All human rights are universal, indivisible, interdependent, and interrelated</li> <li>Rights of all peoples to self-determination and to control over their natural wealth and resources</li> <li>Promote equality before the law and tolerance among all individuals</li> </ul>
<b>Charter of the Organisation of Islamic Cooperation (ratified 1972) – Includes commitments to social justice, human dignity, and solidarity within member states</b>	<ul style="list-style-type: none"> <li>Protecting and promoting human rights and fundamental freedoms, including the rights of women, children, and minorities</li> <li>Importance of social justice, human dignity, and solidarity among Member States</li> <li>Dissemination and preservation of Islamic teachings and values based on moderation and tolerance</li> <li>Protection and preservation of the environment</li> <li>Commitments to cooperation in social, cultural, and information fields among Member States</li> </ul>

## 2.6 Lender and Donor Standards

The sections below provide an overview of the environmental and social standards of the five key Lenders that are financing the Project and to which the Project will adhere. Table 2-5 provides an overview of the key Lender standards applicable to the Project.

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 requirements/standards to determine whether the Project triggered any requirements/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 requirements/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.

### **2.6.1 EBRD Environmental and Social Policy and E&S Requirements**

The standards of the European Bank of Reconstruction and Development (EBRD) are outlined in its Environmental and Social Policy (ESP) (2024) and a set of ten Environmental and Social Requirements (ESRs), which ensure EBRD-financed projects are environmentally sound, socially inclusive, and consistent with the Bank's commitments to sustainable development and Paris Agreement alignment. The ESRs are the minimum standards and address issues such as environmental management, labour conditions, pollution prevention, biodiversity, land acquisition, and stakeholder engagement.

The EBRD Environmental and Social Exclusion List is included as Appendix A to the ESP outlining projects that the EBRD will not knowingly finance, directly or indirectly through Financial Intermediaries. Amongst others, these include projects that impact the following areas:

- Alliance for Zero Extinction (AZE) sites
- UNESCO Natural and Mixed World Heritage sites
- Free flowing sections of rivers 500km or longer in length

with the exception of those projects specifically designed to contribute to the conservation of such areas

To support the implementation of its ESRs, EBRD has developed Guidance Notes for the interpretation and implementation of each ESR, complemented by additional good practice notes, compliance documents and e-manuals.

### **2.6.2 IFC Performance Standards on Environmental and Social Sustainability**

The International Finance Corporation (IFC) Standards on Environmental and Social Sustainability (2012) provide a framework for identifying and managing environmental and social risks and impacts in private sector projects, which are mandatory for projects seeking funding from the IFC. The standards define how IFC ensures its investments are environmentally and socially sustainable, provide clients with a framework to identify, avoid, mitigate, and manage E&S risks and impacts and are anchored in eight Performance Standards (PSs).

IFC has prepared a set of Guidance Notes corresponding to the Performance Standards on Environmental and Social Sustainability. The Guidance Notes provide guidance on the requirements outlined in the Performance Standards, including reference materials, and offer best practices for sustainable project performance. These Guidance Notes are not intended to establish policy on their own; instead, they explain the requirements outlined in the Performance Standards.

### **2.6.3 EIB Environmental and Social Standards**

The European Investment Bank (EIB) Group Environmental and Social Sustainability Framework (2022) is an overarching policy framework that focuses on sustainable and inclusive development. It commits to a just and fair transition, supporting the development of economies and communities that are climate and disaster-resilient, low-carbon, environmentally sound, and more resource-efficient. It consists of a

Group-wide Environmental and Social Policy and a set of EIB Environmental and Social Standards that describe the requirements all EIB-financed projects must meet.

**Table 2-5: Summary of EBRD, IFC and EIB Standards**

EBRD E&S Requirements 2024	IFC E&S Sustainability Standards 2012	EIB E&S Standards 2022
<p><b>ESR 1: Assessment and Management of Environmental and Social Risks and Impacts</b></p> <p>Foundation of the ESP — applies to all projects. Requires clients to conduct E&amp;S assessments proportional to the risks/impacts (including those within supply chain and contractors), establish an ESMS, apply the mitigation hierarchy, prepare an Environmental and Social Action Plan (ESAP) where gaps exist. Includes for project monitoring and reporting and consideration of climate risks (mitigation/adaptation), human rights, cumulative impacts.</p> <p>Guidance Note - Performance Requirement 1: Assessment and management of environmental and social risks and impacts</p>	<p><b>PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b></p> <p>Requires identification, assessment, and management of E&amp;S risks throughout the project lifecycle via a systematic stakeholder engagement process and an Environmental and Social Management System (ESMS)</p> <p>Guidance Note 1: Assessment and Management of Environmental and Social Risks and Impacts</p>	<p><b>Standard 1: Environmental and Social Impacts and Risks</b></p> <p>Sets out the promoter's responsibilities for assessing, managing, monitoring and reporting on the impacts and risks associated with the project and for maximising positive outcomes throughout the project</p>
<p><b>ESR 2: Labour and Working Conditions</b></p> <p>Protects workers' rights and welfare. Requires compliance with national labour law and ILO Core Conventions, prohibits child and forced labour, requires non-discrimination and equal opportunity, establishment of OHS management systems, fair and safe working and living conditions, and workers' grievance mechanisms. ESR 2 applies to contracted workers, supply chain workers, and community workers, as applicable.</p> <p>Guidance Note ESR 2: Labour and working conditions</p>	<p><b>PS 2: Labour and Working Conditions</b></p> <p>Ensures fair treatment of workers, promotes safe and healthy working conditions, prohibits forced or child labour, ensures non-discrimination, equal opportunity, freedom of association, provision of fair compensation, working conditions, occupational health and safety, and requires grievance mechanisms and protection for vulnerable groups.</p> <p>Guidance Note 2 Labour and Working Conditions</p>	<p><b>Standard 8: Labour Rights</b></p> <p>Ensures compliance with the core labour standards of the ILO and with national labour and employment laws. Sets the need for a workers' grievance mechanism, defines standards to protect migrant workers and workers affected by collective dismissals, as well as requirements for worker-management relationships</p>
<p><b>ESR 3: Resource Efficiency and Pollution Prevention and Control</b></p> <p>Promotes efficient resource use and pollution minimisation.</p>	<p><b>PS 3: Resource Efficiency and Pollution Prevention</b></p> <p>Promotes energy and water efficiency, sustainable resource</p>	<p><b>Standard 3: Resource Efficiency and Pollution Prevention</b></p> <p>Encourages the identification, design and use of technologies,</p>

EBRD E&S Requirements 2024	IFC E&S Sustainability Standards 2012	EIB E&S Standards 2022
<p>Requires improvement in energy, water, and material efficiency, reduction in waste, emissions, and greenhouse gases (GHGs), prevention of pollution to air, water, and land and compliance with EBRD and EU environmental standards, and Best Available Techniques (BAT). Includes requirements for sustainable waste management and principles of the circular economy, and noise and vibration</p> <p>Guidance Note – ESR 3: Resource efficiency and pollution prevention and control</p>	<p>use, prevention or minimisation of pollution, and management of GHG emissions.</p> <p>Guidance Note 3: Resource Efficiency and Pollution Prevention</p>	<p>processes and services best suited to achieve environmental quality objectives.</p> <p><b>Standard 5: Climate Change</b> Stipulates that promoters must explicitly address and incorporate climate change mitigation and adaptation considerations into the decision-making process by assessing and minimising GHG emissions and physical climate risk</p>
<p><b>ESR 4: Health, Safety, and Security</b> Protects both workers and affected communities from project-related health and safety risks. Covers infrastructure safety (e.g., dams, transport), emergency preparedness and response, traffic and transport safety, and use of security personnel. Requires gender- and vulnerability-sensitive approaches</p> <p>Guidance Note – ESR 4: Health, safety and security</p>	<p><b>PS 4: Community Health, Safety, and Security</b> Addresses risks to communities from project activities, infrastructure, and security arrangements.</p> <p>Guidance Note 4: Community Health, Safety and Security</p>	<p><b>Standard 9: Health, Safety and Security</b> Outlines the responsibilities of promoters and workers to safeguard the health, safety, and security of workers and affected people and communities. Further reinforces requirements to prevent gender-based violence.</p>
<p><b>ESR 5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement</b> Aims to avoid or minimise displacement. Where unavoidable, compensation is required at full replacement cost, restoration, or improvement in livelihoods and living standards, along with meaningful consultation with affected individuals and special support for vulnerable groups. Applies to both physical (relocation) and economic (loss of access or income) displacement.</p> <p>Guidance Note – ESR 5: Land acquisition, restrictions on land use and involuntary resettlement</p>	<p><b>PS 5: Land Acquisition and Involuntary Resettlement</b> Requires the avoidance or minimisation of displacement and ensures fair compensation and livelihood restoration where displacement is unavoidable.</p> <p>Guidance Note 5: Land Acquisition and Involuntary Resettlement</p>	<p><b>Standard 6: Involuntary Resettlement</b> Seeks to avoid involuntary resettlement in the first instance, and minimise and define the appropriate mitigation measures to counter the adverse impacts of involuntary resettlement and restoration of livelihoods</p>

EBRD E&S Requirements 2024	IFC E&S Sustainability Standards 2012	EIB E&S Standards 2022
<p><b>ESR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b></p> <p>Aims to protect and conserve biodiversity using a precautionary approach, to safeguard and, when appropriate, enhance ecosystems and the biodiversity they support, so as to contribute to achieving the overall goals and targets of the Kunming-Montreal Global Biodiversity Framework</p> <p>Requires the application of the mitigation hierarchy to biodiversity impacts, with a focus on achieving no net loss of biodiversity, specifically a no net loss of where projects impact Priority Biodiversity Features and a net gain when critical habitats are impacted, as well as sustainable management of living natural resources, consideration of ecosystem services, and protection of protected areas. ESR6 also considers biodiversity risks in project supply chains.</p> <p>Guidance Note – ESR 6: Biodiversity conservation and sustainable management of living natural resources</p>	<p><b>PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b></p> <p>Aims to protect biodiversity and ecosystem services, especially in critical habitats. Includes requirements for:</p> <ul style="list-style-type: none"> <li>Application of the mitigation hierarchy</li> <li>Meeting No Net Loss (NNL) for Natural Habitat and Net Gain (NG) for Critical Habitat</li> <li>No projects for Alliance for Zero Extinction (AZE) and UNESCO Natural and Mixed World Heritage Sites (WHS), unless project is beneficial to the conservation of their values</li> <li>Additional requirements for projects located in Legally Protected Areas (LPAs) and Internationally Recognised Areas (IRAs)</li> </ul> <p>Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</p>	<p><b>Standard 4: Biodiversity and Ecosystems</b></p> <p>Sets out the requirements and measures to achieve a “no loss” of biodiversity and, where required, a net positive impact and addresses the sustainable management and use of living natural resources</p>
<p><b>ESR 8: Cultural Heritage</b></p> <p>Protects tangible and intangible cultural heritage affected by projects. Requires identification and protection of heritage sites, artefacts, traditions, and cultural resources, chance find procedures for archaeological discoveries and respectful use of cultural heritage for commercial purposes (with community consent).</p> <p>Guidance Note - ESR 8: Cultural heritage</p>	<p><b>PS 8: Cultural Heritage</b></p> <p>Protects cultural heritage from project impacts and requires consultation with stakeholders and relevant authorities</p> <p>Guidance Note 8 Cultural Heritage</p>	<p><b>Standard 10: Cultural Heritage</b></p> <p>Aims to identify and assess project risks and potential impacts affecting tangible and intangible cultural heritage and covers the management and monitoring of related mitigation measures, including the need for a chance find procedure.</p>
<p><b>PR 10: Stakeholder Engagement and Information Disclosure</b></p> <p>Requires early, continuous, and inclusive stakeholder engagement,</p>	<p>See PS 1: Assessment and Management of Environmental and Social Risks and Impacts and associated Guidance Note 1</p>	<p><b>Standard 2: Stakeholder Engagement</b></p> <p>Requires an inclusive, systematic, continuous and transparent</p>

EBRD E&S Requirements 2024	IFC E&S Sustainability Standards 2012	EIB E&S Standards 2022
including the identification and analysis of stakeholders (particularly vulnerable groups), a Stakeholder Engagement Plan (SEP), the provision of timely, accessible, and understandable information, a grievance mechanism for affected individuals, and the integration of gender and accessibility considerations. Guidance Note – Performance Requirement 10: Information disclosure and stakeholder engagement	Assessment and Management of Environmental and Social Risks and Impacts	approach to engaging constructively with project stakeholders.

## 2.6.4 DFC Environmental and Social Policy and Procedures

The purpose of the Development Finance Corporation (DFC) Environmental and Social Policy and Procedures (ESPP 2024) is to set out DFC's commitments for environmental and social screening, review, risk mitigation, and monitoring that will help ensure the environmental and social sustainability of DFC-supported projects. This ESPP also includes guidance for what DFC clients need to prepare, submit, and implement

DFC's E&S Policy and Procedures are based on the IFC Performance Standards for E&S Sustainability, supplemented with United States policy priorities such as climate change mitigation, biodiversity protection, human rights, and transparency. DFC conducts thorough due diligence to ensure that financed projects promote sustainable development and do no harm to people or the environment.

## 2.6.5 Proparco Exclusion List

As part of its commitment to responsible investment, Proparco applies a strict Exclusion List (2022) that defines activities it will not finance, ensuring alignment with international standards on environmental protection, human rights, and ethical practices. The list, consistent with other lender policies, reflects Proparco's dedication to sustainable and inclusive development.

In terms of biodiversity, Section B of the Exclusion List excludes:

1. Any financing in the (a) sites of the Alliance for Zero Extinction (AZE)<sup>1,2</sup>, (b) natural and mixed sites on the UNESCO World Heritage List<sup>2</sup> and (c) legally protected areas (IUCN categories)<sup>3</sup> and,

<sup>1</sup> Unless the area of influence of the funded activities and their associated facilities does not encroach on zones that effectively meet the criteria for being designated as an AZE site – <https://zeroextinction.org/site-identification/aze-site-criteria/>

<sup>2</sup> Unless the financing aims to conserve or restore these areas

<sup>3</sup> Unless the financing aims to conserve or restore these areas or complies with the management and spatial planning plans for the latter, such as those formalised in plans with international standards relating to the activities being financed – categories I-VI in World Database on Protected Areas | IUCN.

2. Any operation leading to an adverse and irreversible<sup>4</sup>, residual<sup>5</sup> impact on a critical habitat<sup>6,7</sup>
3. Any forest project or agricultural project with a broad coverage (>100 ha) that does not implement a methodology<sup>8</sup> ensuring zero-deforestation.

## 2.6.6 Harmonised EDFI Exclusion List

The Harmonised European Development Finance Institutions (EDFI) Exclusion list outlines activities that members of EDFI will not finance, based on their "Principles for Responsible Financing". It includes activities like those involving forced or child labour, certain types of fossil fuel projects, illegal activities, the cross-border trade of waste, amongst others and the financing of products like weapons.

In terms of biodiversity, the list prohibits activities or materials involving the destruction of High Conservation Value<sup>9</sup> areas.

## 2.6.7 USAID Environmental Procedures (22 CFR 216)

The United States (US) Agency for International Development's (USAID) uses the Environmental Assessment process to evaluate the potential impact of USAID's activities on the environment prior to implementation. USAID's environmental procedure ensure that the potential adverse impacts of development activities on ecosystems, environmental resources, and human health and welfare are identified prior to implementation; that this information fully informs the decision of whether or not to proceed to implementation; and that activities are designed and implemented to minimise these impacts. The procedures are a life-of-project process for achieving sustainable actions that promote community self-reliance.

The 22 CFR 216 (Regulation 216) is the US federal regulation defining USAID's pre-implementation environmental impact assessment process. The output of this process is Regulation 216 documentation, i.e. Requests for Categorical Exclusion (RCEs), Initial Environmental Examinations (IEEs) and Environmental Assessments (EAs). All EAs and most IEEs establish mandatory environmental "conditions" (or mitigation measures) that must be fulfilled during the implementation of the project or activity to protect the environment and human health and welfare.

Based on USAID's environmental safeguards and procedures, the EIA process consists of two main phases: Screening or Preliminary Assessment and Detailed EIA Study. A detailed EIA study is required for projects that are likely to have a significant effect on the environment, such as:

- A large-scale infrastructure and construction project
- A project significantly affecting natural ecosystems

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<sup>4</sup> Irreversible impact: permanent conversion or degradation of biodiversity or of the ecological functions or characteristics that warranted the critical habitat designation

<sup>5</sup> Residual impact: a project's measurable impact on a biodiversity value, after implementation of avoidance and mitigation measures, but before implementation of restoration and compensation measures

<sup>6</sup> Critical habitat: within the meaning of the World Bank's Environmental and Social Standard 6 – 2018 or IFC-GN PS6 2019

<sup>7</sup> Unless the said project is of overriding general interest for the destination country, in which case a derogation can be presented to the Group's governance for a decision.

<sup>8</sup> Methodology including (i) a reference tool equivalent to the HCS approach, allowing for forest classification, (ii) a guarantee that no high carbon stock forest will be converted under the project and (iii) monitoring of forest cover (field or satellite monitoring).

<sup>9</sup> High Conservation Value (HCV) areas are defined as natural habitats where these values are considered to be of outstanding significance or critical importance.

- A project involving involuntary resettlement
- A project with global or transboundary impacts

## 2.6.8 Green Climate Fund Environmental and Social Safeguards

The Green Climate Fund (GCF) integrates Environmental and Social Safeguards to manage risks in its climate finance projects, ensuring they do not harm communities or ecosystems. The Safeguards are part of the GCF's Environmental and Social Management System, which includes its Environmental and Social Policy and a set of standards that require projects to mitigate risks, achieve co-benefits, and promote equitable development.

The GCF adopted the IFC E&S Sustainability Standards as interim safeguards (with the exception of Indigenous People) and is in the process of developing its own specific set of standards.

## 2.6.9 Equator Principles

Equator Principles 4 (EP4) 2020 is a financial industry benchmark for determining, assessing and managing environmental and social risk in large infrastructure and industrial projects. Equator Principles Financial Institutions (EPFIs) implement the 10 Equator Principles through their internal environmental and social risk management policies, procedures and standards in order to align with the Equator Principles. Through this implementation, negative impacts on project-affected ecosystems, workers and communities are avoided where possible; and if unavoidable, negative impacts should be reduced, mitigated and/or compensated for appropriately.

Robust application of the EP4 involves borrowers and users of finance to demonstrate good international industry practice in their identification, assessment and subsequent management of environmental and social impacts and risks.

## 2.6.10 EU Directives

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. Table 2-6 provides an overview of the relevant EU Directives that are considered most relevant to the Project, noting that EBRD does not apply the EU Biodiversity Directives outside of the EU.

**Table 2-6: EU Directives Relevant to the Project**

Directive	Relevant Provisions
<b>The EIA Directive 85/337/EEC (as amended)</b>	Applicable to both public and private projects. Provides a new definition of EIA and standardisation of the EIA screening process across Member States, with information that developers must provide for the screening process to be prescribed. Includes: <ul style="list-style-type: none"><li>• A clarification that the cumulative impact of a project and other existing or approved projects should be considered as part of the screening process</li><li>• A requirement for the main reasons behind the screening decision or screening opinion to be published at the same time</li><li>• A new time frame for the screening process (to be carried out within 90 days).</li></ul>

Directive	Relevant Provisions
	Based on the types of projects listed in Annex II of the EU EIA Directive 2011/92/EU and the above discussion, the proposed AAWDC Project would require an EIA study.
<b>The Drinking Water Directive 98/83/EC (as amended by Directive 2015/1787)</b>	Regulates the quality of water intended for human consumption with the objective of protecting human health and providing essential water quality standards at the European Union (EU) level. Applies to all distribution systems serving more than 50 people or supplying more than 10m <sup>3</sup> per day, and also to distribution systems serving fewer than 50 people / supplying fewer than 10m <sup>3</sup> per day if the water is supplied as part of an economic activity. Requires regular monitoring and testing of 48 microbiological, chemical, and indicator parameters. In general, the World Health Organisation (WHO) guidelines for drinking water and the opinion of the Commission's Scientific Advisory Committee are used as the scientific basis for the quality standards in drinking water.
<b>The Urban Wastewater Treatment Directive 91/271/EC (as amended by Directive 98/15/EC)</b>	Adopted to protect the water environment from the adverse effects of discharges of urban wastewater and from certain industrial discharges. Sets out provisions on the collection, treatment and discharge of urban wastewater and the treatment and discharge of wastewater from certain industrial sectors. The areas into which urban wastewater entering the collecting systems shall be discharged are divided into: <ul style="list-style-type: none"><li>• Sensitive areas</li><li>• Less sensitive areas for which specific discharge limit values apply (Annexe I and Annexe II of the Directive).</li></ul> The amendment clarified the requirements for discharges from urban wastewater treatment plants to sensitive areas, which are subject to eutrophication, and subsequently updated Table 2 of Annex I.
<b>The Air Quality Directive 2008/50/EC</b>	Cornerstone of EU air policy that: <ul style="list-style-type: none"><li>• Sets binding limit and target values for major pollutants</li><li>• Requires assessment, monitoring, and plans in case of exceedances</li><li>• Introduces special rules for PM2.5 exposure</li><li>• Guarantees public access to information</li><li>• Forms part of the European Green Deal &amp; Zero Pollution Action Plan, moving towards cleaner air standards</li></ul> In October 2022, the Commission proposed a revision of the directive to align EU standards more closely with the WHO Air Quality Guidelines (2021); therefore, stricter limits are expected in the near future.
<b>The Environmental Noise Directive 2002/49/EC</b>	Relates to the assessment and management of environmental noise and is the main instrument to identify noise pollution levels and the necessary action, both at Member States and at the EU level: <ul style="list-style-type: none"><li>• Requires noise mapping for big cities, major transport routes, and airports</li><li>• Obliges action plans to manage noise exposure</li><li>• Ensures public information and consultation</li><li>• Provides a harmonised EU framework for monitoring and tackling noise pollution, which is recognised as a public health issue</li><li>• The Directive does not specify noise limits.</li></ul>
<b>The Waste Framework Directive 2008/98/EC</b>	Sets the general framework of waste management requirements and the basic waste management definitions for the EU:

Directive	Relevant Provisions
	<ul style="list-style-type: none"> <li>• Sets the hierarchy of waste management (prevention → reuse → recycling → recovery → disposal)</li> <li>• Defines key concepts like waste, by-products, and end-of-waste</li> <li>• Establishes rules for hazardous waste, permits, and producer responsibility</li> <li>• Requires national plans, prevention programmes, and recycling targets</li> <li>• Forms the foundation of the EU circular economy and zero waste policies</li> </ul>
<b>Directive 2009/147/EC On the Conservation of Wild Birds</b>	<p>Provides a legal framework for the protection of all wild birds in the EU, including their eggs, nests, and habitats. It also prohibits the sale, transport for sale, keeping for sale and the offering for sale of live or dead birds and of any readily recognisable parts or derivatives of such birds.</p> <p>The directive also requires the designation of Special Protection Areas (SPAs) for threatened and migratory species, forming the backbone of the EU's Natura 2000 network alongside the Habitats Directive.</p>
<b>Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora</b>	<p>This directive addresses the conservation of natural habitats and wild fauna and flora, aiming to promote the maintenance of biodiversity while considering economic, social, cultural, and regional requirements:</p> <ul style="list-style-type: none"> <li>• Protects habitats, fauna, and flora of European importance</li> <li>• Requires designation of Special Areas of Conservation (SACs)</li> <li>• Works with the Birds Directive to create the Natura 2000 network</li> <li>• Sets strict rules on species protection and project assessments.</li> </ul>
<b>Directives relating to Public Participation</b>	<p>The EU Directives on public participation guarantee that:</p> <ul style="list-style-type: none"> <li>• The public has early access to environmental information (Access to Environmental Information Directive 2003/04/EC)</li> <li>• The public can participate in decisions on projects, plans, and programmes (EIA Directive 2011/92/EU, Strategic Environmental Assessment Directive 2001/42/EC, Industrial Emissions Directive 2010/75/EU, Water Framework Directive 2000/60/EC).</li> <li>• Input must be considered by decision-makers</li> <li>• Citizens and NGOs can challenge decisions (Public Participation Directive 2003/35/EC on Aarhus alignment)</li> </ul>
<b>Directives related to Labour and Working Conditions</b>	<p>The EU labour acquis is built on five pillars:</p> <ul style="list-style-type: none"> <li>• Working time and leave (working hours, rest, holidays, maternity/parental rights)</li> <li>• Contractual conditions (written contracts, protection for part-time, fixed-term, agency workers)</li> <li>• Health and safety (general framework and specific risks, protection of vulnerable groups)</li> <li>• Equality and non-discrimination (gender, race, age, disability, parental rights)</li> <li>• Worker participation and information (works councils, redundancy, transfers, posting)</li> </ul> <p>Key directives relevant to the Project include:</p> <ul style="list-style-type: none"> <li>• The Equal Opportunities Directive 2006/54/EC</li> <li>• The Equal Treatment Directive 2000/78/EC</li> </ul>

Directive	Relevant Provisions
	<ul style="list-style-type: none"> <li>Directive 2002/14/EC on Informing and consulting employees</li> <li>OHS Framework Directive 89/391/EEC</li> <li>Directive 2009/104/EC on Use of Work Equipment</li> <li>Directive 89/656/EEC on Use of Personal Protective Equipment</li> <li>Directive 92/58/EEC on Safety and/or health signs</li> <li>Directive 89/654/EEC on Workplace requirements</li> <li>Directive 2009/161/EU on Occupational exposure limit values</li> <li>Directive 2012/18/EU on Major-accident hazards</li> <li>Directive 90/269/EC on Manual handling of loads</li> </ul>

## 2.7 Applicable Emissions, Discharge and Environmental Quality Standards

### 2.7.1 Discharge Standards

#### 2.7.1.1 Project Discharge Water Quality Standard

Discharge Water shall be discharged outside of the protected coastal zone as defined by the authorities and the requirements outlined in the 2025 AAWDC Project ESIA. Discharge quality standards are summarised in Table 2-7.

**Table 2-7: Project Discharge Water Quality Standard**

Parameter	Unit	Proposed Limit
Dissolved Oxygen	mg/L	≥ 3.5
Turbidity	NTU	≤ 5 NTU + ambient seawater intake turbidity measured at IPS (90% ntile) ≤ 10 NTU + ambient seawater intake turbidity measured at IPS (100 % ntile)
Total Iron	mg/L	≤ 0.3 AVG ≤ 0.5 MAX
Residual Chlorine	mg/L	0
pH	-	7.0 – 9.0

#### 2.7.1.2 JS 893/2021 Reclaimed Water for Discharge into Streams, Valleys, or Surface Water Bodies

Reclaimed water may be discharged into streams, valleys, or surface water bodies only if its quality meets the characteristics and standards specified in Table 2-8. Discharge into valleys leading to the Gulf of Aqaba is strictly prohibited.

**Table 2-8: Permissible Limits, Characteristics and Standards for the Quality of Reclaimed Water Discharged into Streams, Valleys or Surface Water Bodies**

Parameter	Symbol	Permissible Limit (mg/L, unless otherwise stated)
<b>Biochemical Oxygen Demand (Five Day)</b>	BOD <sub>5</sub>	60 <sup>(a)</sup>
<b>Chemical Oxygen Demand</b>	COD	150 <sup>(b)</sup>
<b>Dissolved Oxygen</b>	DO	≥ 1
<b>Total Suspended Solids</b>	TSS	60 <sup>(b)</sup>
<b>pH</b>	pH	6 – 9 <sup>(c)</sup>
<b>Nitrate – Nitrogen</b>	NO <sub>3</sub> – N	20
<b>Total Nitrogen</b>	T-N	70 <sup>(d)</sup>
<b>Escherichia Coli</b>	E. coli	1000 (MPN/100 mL) <sup>(e)</sup>
<b>Intestinal Helminth Eggs</b>	–	≤ 1 egg/L <sup>(f)</sup>
<b>Fat, Oil and Grease</b>	FOG	8
<b>Methylene Blue Active Substance</b>	MBAS	25
<b>Phenol</b>	–	0.02
<b>Total Dissolved Solids</b>	TDS	1500
<b>Phosphate – Phosphorus</b>	PO <sub>4</sub> – P	5
<b>Chloride</b>	Cl	500
<b>Sulphate</b>	SO <sub>4</sub>	500
<b>Bicarbonate</b>	HCO <sub>3</sub>	400
<b>Sodium Adsorption Ratio</b>	SAR	6.0 <sup>(g)</sup>
<b>Aluminium</b>	Al	0.2
<b>Arsenic</b>	As	0.05
<b>Beryllium</b>	Be	0.1
<b>Copper</b>	Cu	1.0
<b>Fluoride</b>	F	1.0
<b>Iron</b>	Fe	5.0
<b>Lithium</b>	Li	2.5
<b>Manganese</b>	Mn	0.4
<b>Molybdenum</b>	Mo	0.27
<b>Nickel</b>	Ni	0.2
<b>Lead</b>	Pb	0.2
<b>Selenium</b>	Se	0.05

Parameter	Symbol	Permissible Limit (mg/L, unless otherwise stated)
<b>Cadmium</b>	Cd	0.01
<b>Zinc</b>	Zn	5.0
<b>Chromium (Total)</b>	Cr	0.05
<b>Mercury</b>	Hg	0.0006
<b>Vanadium</b>	V	0.1
<b>Cobalt</b>	Co	0.05
<b>Boron</b>	B	2.4
<b>Cyanide</b>	CN	0.1

(a) The BOD<sub>5</sub> value shall be calculated after the filtration process in natural treatment plants or those that include polishing ponds

(b) A value twice as high is permitted for natural treatment plants or those that include polishing ponds

(c) Unit

(d) For small population communities, the permissible limit during rainy days is 100mg/L

(e) E. coli — Most Probable Number (MPN) or Colony Forming Unit (CFU) per 100mL

(f) 1 egg per litre (for newly designed plants, the seasonal average shall be calculated and must achieve  $\leq 1$  egg/L in 90% of the samples, allowing for rare occasional high readings)

(g) SAR = Sodium Adsorption Ratio %.

When reclaimed water passes through areas that overlay or lead to groundwater basins, measures must be taken to prevent the infiltration of reclaimed water into groundwater.

When reclaimed water is discharged into streams, valleys, or surface water bodies that are exposed to direct contact with the public, one of the appropriate disinfection methods must be used to protect public health. When chlorine is used as a disinfectant, the free residual chlorine in the reclaimed water must not exceed 1 mg/L.

Natural treatment plants are allowed to exceed the permissible values of Escherichia coli when discharging reclaimed water into valleys leading to dams, provided that the stored water is fully used for irrigation purposes. However, if the reclaimed water is used before reaching the dam for reuse or irrigation purposes, its quality must comply with the specific reuse standards stated in this Jordanian Standard.

The reuse of reclaimed water for the artificial recharge of groundwater basins is permitted when its quality complies with the standards specified in Table 2-9.

**Table 2-9: Permissible Limits and Characteristics of Reclaimed Water for Artificial Groundwater Recharge**

Parameter	Symbol	Permissible Limit (mg/L, unless otherwise stated)
<b>Biochemical Oxygen Demand (Five Day)</b>	BOD <sub>5</sub>	15
<b>Chemical Oxygen Demand</b>	COD	50

Parameter	Symbol	Permissible Limit (mg/L, unless otherwise stated)
<b>Dissolved Oxygen</b>	DO	> 2
<b>Total Suspended Solids</b>	TSS	50
<b>pH</b>	pH	6 – 9 <sup>(a)</sup>
<b>Turbidity</b>	Turbidity	10 <sup>(b)</sup>
<b>Nitrate – Nitrogen</b>	NO <sub>3</sub> – N	7
<b>Ammonium</b>	NH4	4
<b>Total Nitrogen</b>	T-N	20
<b>Escherichia Coli</b>	E. coli	≤ 1.1 <sup>(c)</sup>
<b>Intestinal Helminth Eggs</b>	–	≤ 1 <sup>(d)</sup>
<b>Fat, Oil and Grease</b>	FOG	8
<b>Methylene Blue Active Substance</b>	MBAS	25
<b>Phenol</b>	–	0.02
<b>Total Dissolved Solids</b>	TDS	1500
<b>Phosphate – Phosphorus</b>	PO <sub>4</sub> – P	5
<b>Chloride</b>	Cl	350
<b>Sulphate</b>	SO <sub>4</sub>	300
<b>Bicarbonate</b>	HCO <sub>3</sub>	400
<b>Sodium Adsorption Ratio</b>	SAR	6.0 <sup>(e)</sup>
<b>Aluminium</b>	Al	2.0
<b>Arsenic</b>	As	0.05
<b>Beryllium</b>	Be	0.1
<b>Copper</b>	Cu	2.0
<b>Fluoride</b>	F	2.0
<b>Iron</b>	Fe	2.0
<b>Lithium</b>	Li	2.5
<b>Manganese</b>	Mn	0.4
<b>Molybdenum</b>	Mo	0.27
<b>Nickel</b>	Ni	0.2
<b>Lead</b>	Pb	0.2
<b>Selenium</b>	Se	0.05
<b>Cadmium</b>	Cd	0.01
<b>Zinc</b>	Zn	5.0
<b>Chromium (Total)</b>	Cr	0.05

Parameter	Symbol	Permissible Limit (mg/L, unless otherwise stated)
<b>Mercury</b>	Hg	0.006
<b>Vanadium</b>	V	0.1
<b>Cobalt</b>	Co	0.05
<b>Boron</b>	B	2.4
<b>Cyanide</b>	CN	0.1

(a) Unit  
 (b) Nephelometer  
 (c) E coli – Most Probable Number (MPN) or Colony Forming Unit (CFU) per 100 mL  
 (d) Egg/L  
 (e) Sodium Adsorption Ratio %

The use of reclaimed water for artificial recharge of groundwater aquifers intended for drinking purposes is not permitted.

Necessary technical studies must be conducted before using reclaimed water for the recharge of groundwater aquifers designated for irrigation, to ensure that such use does not affect aquifers designated for drinking purposes.

The reclaimed water reused for irrigation must comply with the standards and characteristics specified in Table 2-10.

**Table 2-10: Required Characteristics and Quality Standards for Reclaimed Water Used for Irrigation**

Parameters and Characteristics	Permissible limits according to type of use mg/L (unless otherwise stated)			
	Parks, Playgrounds, and Roadsides within Cities	Fruit Trees, Roadsides outside Cities, and Green Areas	Industrial Crops, Field Crops, Forest Trees	Cut Flowers
<b>Biochemical Oxygen Demand (BOD<sub>5</sub>)</b>	30	100	200	15
<b>Chemical Oxygen Demand (COD)</b>	100	200	300	50
<b>Dissolved Oxygen (DO)</b>	>2	-	-	>2
<b>Total Suspended Solids (TSS)</b>	50	100	100	15
<b>pH (Hydrogen Ion Concentration)</b>	6 – 9 <sup>(a)</sup>	6 – 9 <sup>(a)</sup>	6 – 9 <sup>(a)</sup>	6 – 9 <sup>(a)</sup>
<b>Turbidity</b>	10 <sup>(b)</sup>	-	-	5 <sup>(b)</sup>
<b>Nitrate – Nitrogen (NO<sub>3</sub>–N)</b>	16	16	16	16
<b>Total Nitrogen (T–N)</b>	70	70	70	70

Parameters and Characteristics	Permissible limits according to type of use mg/L (unless otherwise stated)			
	Parks, Playgrounds, and Roadsides within Cities	Fruit Trees, Roadsides outside Cities, and Green Areas	Industrial Crops, Field Crops, Forest Trees	Cut Flowers
<b>Escherichia Coli (E. coli)</b>	100 <sup>(c)</sup>	1000 <sup>(c)</sup>	-	1.1> <sup>(c)</sup>
<b>Intestinal Helminth Eggs</b>	≤ 1 <sup>(d)</sup>	≤ 1 <sup>(d)</sup>	≤ 1 <sup>(d)</sup>	≤ 1 <sup>(d)</sup>
<b>Fat, Oil, and Grease (FOG)</b>	8	8	8	2
<b>Methylene Blue Active Substance (MBAS)</b>	100	100	100	15
<b>Total Dissolved Solids (TDS)</b>	1500	1500	1500	1500
<b>Phenol</b>	0.02	0.02	0.02	0.02
<b>Phosphate – Phosphorus (PO<sub>4</sub>–P)</b>	10	10	10	10
<b>Chloride (Cl)</b>	500	500	500	500
<b>Sulphate (SO<sub>4</sub>)</b>	500	500	500	500
<b>Bicarbonate (HCO<sub>3</sub>)</b>	400	400	400	400
<b>Sodium Adsorption Ratio (SAR)</b>	9.0 <sup>(e)</sup>	9.0 <sup>(e)</sup>	9.0 <sup>(e)</sup>	9.0 <sup>(e)</sup>
<b>Aluminium</b>	5.0	5.0	5.0	5.0
<b>Arsenic</b>	0.1	0.1	0.1	0.1
<b>Beryllium</b>	0.1	0.1	0.1	0.1
<b>Copper</b>	2.0	2.0	2.0	2.0
<b>Fluoride</b>	2.0	2.0	2.0	2.0
<b>Iron</b>	2.0	2.0	2.0	2.0
<b>Lithium</b>	2.5	2.5 (0.075 for citrus trees)	2.5	0.075
<b>Manganese</b>	0.4	0.4	0.4	0.4
<b>Molybdenum</b>	0.27	0.27	0.27	0.27
<b>Nickel</b>	0.2	0.2	0.2	0.2
<b>Lead</b>	0.2	0.2	0.2	0.2
<b>Selenium</b>	0.05	0.05	0.05	0.05
<b>Cadmium</b>	0.01	0.01	0.01	0.01
<b>Zinc</b>	5.0	5.0	5.0	5.0

Parameters and Characteristics	Permissible limits according to type of use mg/L (unless otherwise stated)			
	Parks, Playgrounds, and Roadsides within Cities	Fruit Trees, Roadsides outside Cities, and Green Areas	Industrial Crops, Field Crops, Forest Trees	Cut Flowers
<b>Total Chromium</b>	0.1	0.1	0.1	0.1
<b>Mercury</b>	0.006	0.006	0.006	0.006
<b>Vanadium</b>	0.1	0.1	0.1	0.1
<b>Cobalt</b>	0.05	0.05	0.05	0.05
<b>Boron</b>	2.4	2.4	2.4	2.4
<b>Cyanide</b>	0.1	0.1	0.1	0.1

(a) Unit  
 (b) Nephelometer  
 (c) E coli – Most Probable Number (MPN) or Colony Forming Unit (CFU) per 100 mL  
 (d) Egg/L  
 (e) Sodium Adsorption Ratio %

It is not permitted to use reclaimed water for the irrigation of vegetables that are eaten cooked or raw.

It is not allowed to use sprinkler irrigation, except for golf courses, in which case irrigation must be carried out at night using mobile sprinklers that are not exposed for public use during the day.

Irrigation must be stopped two weeks before harvest when reclaimed water is used for irrigating fruit trees and fallen fruits or those in contact with the soil must be excluded.

Warning signs must be placed along reclaimed-water-irrigated green areas, clearly indicating that these areas are irrigated with reclaimed water.

#### 2.7.1.3 IFC General Environmental, Health and Safety Guidelines

Discharges of process wastewater, sanitary wastewater, wastewater from utility operations or stormwater to surface water should not result in contaminant concentrations in excess of local ambient water quality criteria or, in the absence of local criteria, other sources of ambient water quality<sup>10</sup>. Receiving water use<sup>11</sup> and assimilative capacity<sup>12</sup>, taking other sources of discharges to the receiving water into consideration, should also influence the acceptable pollution loadings and effluent discharge

<sup>10</sup> An example is the US EPA National Recommended Water Quality Criteria

<http://www.epa.gov/waterscience/criteria/wqcriteria.html>

<sup>11</sup> Examples of receiving water uses as may be designated by local authorities include: drinking water (with some level of treatment), recreation, aquaculture, irrigation, general aquatic life, ornamental, and navigation. Examples of health-based guideline values for receiving waters include World Health Organization (WHO) guidelines for recreational use ([http://www.who.int/water\\_sanitation\\_health/dwg/guidelines/en/index.html](http://www.who.int/water_sanitation_health/dwg/guidelines/en/index.html))

<sup>12</sup> The assimilative capacity of the receiving water body depends on numerous factors including, but not limited to, the total volume of water, flow rate, flushing rate of the water body and the loading of pollutants from other effluent sources in the area or region. A seasonally representative baseline assessment of ambient water quality may be required for use with established scientific methods and mathematical models to estimate potential impact to the receiving water from an effluent source

quality. Additional considerations that should be included in the setting of project-specific performance levels for wastewater effluents include:

- Process wastewater treatment standards consistent with applicable Industry Sector EHS Guidelines. Projects for which there are no industry-specific guidelines should reference the effluent quality guidelines of an industry sector with suitably analogous processes and effluents
- Compliance with national or local standards for sanitary wastewater discharges or, in their absence, the indicative guideline values applicable to sanitary wastewater discharges shown in Table 2-11
- Temperature of wastewater prior to discharge does not result in an increase greater than 3°C of ambient temperature at the edge of a scientifically established mixing zone which takes into account ambient water quality, receiving water use and assimilative capacity among other considerations

**Table 2-11: Indicative Values for Treated Sanitary Sewage Discharges**

Indicative Values for Treated Sanitary Sewage Discharges <sup>a</sup>		
Pollutants	Units	Guideline Value
pH	pH	6 – 9
BOD	mg/l	30
COD	mg/l	125
Total nitrogen	mg/l	10
Total phosphorus	mg/l	2
Oil and grease	mg/l	10
Total suspended solids	mg/l	50
Total coliform bacteria	MPN <sup>b</sup> / 100 ml	400 <sup>a</sup>

Notes:

<sup>a</sup> Not applicable to centralized, municipal, wastewater treatment systems which are included in EHS Guidelines for Water and Sanitation.

<sup>b</sup> MPN = Most Probable Number

Discharges of industrial wastewater, sanitary wastewater, wastewater from utility operations or stormwater into public or private wastewater treatment systems should:

- Meet the pretreatment and monitoring requirements of the sewer treatment system into which it discharges
- Not interfere, directly or indirectly, with the operation and maintenance of the collection and treatment systems, or pose a risk to worker health and safety, or adversely impact characteristics of residuals from wastewater treatment operations
- Be discharged into municipal or centralised wastewater treatment systems that have adequate capacity to meet local regulatory requirements for treatment of wastewater generated from the project. Pretreatment of wastewater to meet regulatory requirements before discharge from the project site is required if the municipal or centralised wastewater treatment system receiving wastewater from the project does not have adequate capacity to maintain regulatory compliance

The quality of treated process wastewater, wastewater from utility operations or stormwater discharged on land, including wetlands, should be established based on local regulatory requirements. Where land is used as part of the treatment system and the ultimate receptor is surface water, water quality guidelines for surface water discharges specific to the industry sector process should apply<sup>13</sup>. Potential impact on soil, groundwater, and surface water, in the context of protection, conservation and long term sustainability of water and land resources should be assessed when land is used as part of any wastewater treatment system.

## 2.7.2 Air Quality Standards

### 2.7.2.1 JS 1140/2024 Air Quality Standards

The concentrations of the criteria ambient air pollutants may not exceed the maximum permissible limits specified in Table 2-12.

**Table 2-12: Maximum Permissible Limits for Criteria Ambient Air Pollutants**

Pollutant	Averaging Time	Maximum Permissible Limit	Allowed Number of Exceedances
<b>Sulphur Dioxide (SO<sub>2</sub>)</b>	1 hour	350 µg/m <sup>3</sup> (134 ppb)	-
	24 hours	125 µg/m <sup>3</sup> (48 ppb)	3 times during 12 months
<b>Carbon Monoxide (CO)</b>	1 hour	30 mg/m <sup>3</sup> (26 ppm)	-
	8 hours	10 mg/m <sup>3</sup> (9 ppm)	-
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	1 hour	200 µg/m <sup>3</sup> (107 ppb)	-
	24 hours	120 µg/m <sup>3</sup> (64 ppb)	3 times during 12 months
	Annual	40 µg/m <sup>3</sup> (21 ppb)	-
<b>Hydrogen Sulphide (H<sub>2</sub>S)</b>	1 hour	42 µg/m <sup>3</sup> (30 ppb)	-
	24 hours	14 µg/m <sup>3</sup> (10 ppb)	-
<b>Ozone (O<sub>3</sub>)</b>	1 hour	165 µg/m <sup>3</sup> (84 ppb)	-
	8 hours	120 µg/m <sup>3</sup> (61 ppb)	3 times during 12 months
<b>Ammonia (NH<sub>3</sub>)</b>	24 hours	270 µg/m <sup>3</sup> (390 ppb)	-
	1 hour	556 µg/m <sup>3</sup> (800 ppb)	-
<b>PM<sub>10</sub> (Particulate Matter 10)</b>	24 hours	120 µg/m <sup>3</sup>	3 times during 12 months
	Annual	70 µg/m <sup>3</sup>	-
<b>PM<sub>2.5</sub> (Particulate Matter 2.5)</b>	24 hours	50 µg/m <sup>3</sup>	3 times during 12 months
	Annual	15 µg/m <sup>3</sup>	-
<b>Lead (Pb)</b>	24 hours	1.0 µg/m <sup>3</sup>	
	Annual	0.5 µg/m <sup>3</sup>	

<sup>13</sup> Additional guidance on water quality considerations for land application is available in the WHO Guidelines for the Safe Use of Wastewater, Excreta and Greywater. Volume 2: Wastewater Use in Agriculture [http://www.who.int/water\\_sanitation\\_health/wastewater/gsuweg2/en/index.html](http://www.who.int/water_sanitation_health/wastewater/gsuweg2/en/index.html)

The concentrations of non-criteria ambient air pollutants may not exceed the maximum permissible limits specified in Table 2-13.

**Table 2-13: Maximum Permissible Limits for Non-Criteria Ambient Air Pollutants**

Pollutant	Averaging Time	Maximum Permissible Limit
<b>Cadmium (Cd)</b>	24 hours	0.025 µg/m <sup>3</sup>
	Annual	0.005 µg/m <sup>3</sup>
<b>Nickel (Ni)</b>	24 hours	0.1 µg/m <sup>3</sup>
	Annual	0.02 µg/m <sup>3</sup>
<b>Arsenic (As)</b>	24 hours	0.3 µg/m <sup>3</sup>
	Annual	0.006 µg/m <sup>3</sup>
<b>Mercury (Hg)</b>	24 hours	2 µg/m <sup>3</sup>
<b>Phosphate (as P<sub>2</sub>O<sub>5</sub>)</b>	24 hours	100 µg/m <sup>3</sup>
	Annual	0.5 µg/m <sup>3</sup>
<b>Benzene</b>	24 hours	30 µg/m <sup>3</sup> (9 ppb)
	Annual	3 µg/m <sup>3</sup> (0.9 ppb)
<b>Toluene</b>	1 hour	1880 µg/m <sup>3</sup> (499 ppb)
	24 hours	400 µg/m <sup>3</sup> (106 ppb)
<b>Ethylbenzene</b>	1 hour	2000 µg/m <sup>3</sup> (460 ppb)
	24 hours	1000 µg/m <sup>3</sup> (230 ppb)
<b>Xylenes</b>	1 hour	2300 µg/m <sup>3</sup> (530 ppb)
	24 hours	700 µg/m <sup>3</sup> (161 ppb)

### 2.7.2.2 IFC General Environmental, Health and Safety Guidelines

Projects with significant<sup>14,15</sup> sources of air emissions, and potential for significant impacts to ambient air quality, should prevent or minimize impacts by ensuring that emissions do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards<sup>16</sup> by applying

<sup>14</sup> Significant sources of point and fugitive emissions are considered to be general sources which, for example, can contribute a net emissions increase of one or more of the following pollutants within a given airshed: PM10: 50 tons per year (tpy); NOx: 500 tpy; SO2: 500 tpy; or as established through national legislation; and combustion sources with an equivalent heat input of 50 MWth or greater. The significance of emissions of inorganic and organic pollutants should be established on a project-specific basis taking into account toxic and other properties of the pollutant.

<sup>15</sup> United States Environmental Protection Agency, Prevention of Significant Deterioration of Air Quality, 40 CFR Ch. 1 Part 52.21. Other references for establishing significant emissions include the European Commission. 2000. "Guidance Document for EPER implementation." <http://ec.europa.eu/environment/ippc/eper/index.htm>; and Australian Government. 2004. "National Pollutant Inventory Guide." <http://www.npi.gov.au/handbooks/pubs/npiguide.pdf>

<sup>16</sup> Ambient air quality standards are ambient air quality levels established and published through national legislative and regulatory processes, and ambient quality guidelines refer to ambient quality levels primarily developed through clinical, toxicological, and epidemiological evidence (such as those published by the World Health Organization)

national legislated standards, or in their absence, the current WHO Air Quality Guidelines (Table 2-14), or other internationally recognized sources<sup>17</sup>.

**Table 2-14: WHO Ambient Air Quality Guidelines**

Pollutant	WHO Ambient Air Quality Guidelines <sup>18,19</sup>	
	Averaging Period	Guidelines value in µg/m3
<b>Sulphur dioxide (SO<sub>2</sub>)</b>	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10-minute	500 (guideline)
<b>Nitrogen dioxide (NO<sub>2</sub>)</b>	1-year	40 (guideline)
	1-hour	200 (guideline)
<b>Particulate Matter PM<sub>10</sub></b>	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
<b>Particulate Matter PM<sub>2.5</sub></b>	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
<b>Ozone 8-hour daily</b>	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

<sup>17</sup> For example the United States National Ambient Air Quality Standards (NAAQS) (<http://www.epa.gov/air/criteria.html>) and the relevant European Council Directives (Council Directive 1999/30/EC of 22 April 1999 / Council Directive 2002/3/EC of February 12 2002).

<sup>18</sup> World Health Organization (WHO). Air Quality Guidelines Global Update, 2005. PM 24-hour value is the 99th percentile

<sup>19</sup> Interim targets are provided in recognition of the need for a staged approach to achieving the recommended guidelines

## 2.7.3 Atmospheric Emission Standards

### 2.7.3.1 JS 1189:2006 Maximum Permissible Limits of Air Pollutants from Stacks of Stationary Sources

The height of stacks shall be appropriate to ensure the proper dispersion of pollutants into the open air and to prevent exceeding the maximum permissible limits specified in Jordanian Standard JS 1140/2024.

The discharge of dark smoke resulting from combustion processes is not permitted if it is equal to or exceeds Grade 1 on the Ringelmann Scale (corresponding to 20% opacity).

The concentration of total particulate emissions shall not exceed the maximum permissible limits shown in Table 2-15 when emitted from stacks of stationary sources engaged in the following activities:

**Table 2-15: Maximum Permissible Limits for Total Particulates**

Type of Activity	Maximum Emission Limit (mg/Nm <sup>3</sup> )
Cement industry	50
Phosphate industry or industries producing phosphate fumes and fertilizers	50
Petroleum and oil refining industries	50
Smelting and extraction of lead, zinc, or copper	20
Other non-ferrous metal foundries	50
Iron and steel industries	50
Boilers used for steam and power generation for industrial purposes	50

The exceedance period shall not exceed 5% of the total daily operating time of the working units.

The concentration of gaseous pollutants and vapours shall not exceed the maximum allowable limits specified in Table 2-16.

**Table 2-16: Maximum Permissible Limits for Gases and Vapours**

Pollutant / Source	Maximum Emission Limit (mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> ) from burning petroleum derivatives	6500 <sup>(a)</sup>
Sulphur Dioxide (SO <sub>2</sub> ) from non-ferrous industries	3000
Sulphur Dioxide (SO <sub>2</sub> ) from sulfuric acid industries	1500
Sulphur Trioxide (SO <sub>3</sub> ) and Sulfuric Acid Mist	150
From combustion processes below 1200°C	200
From combustion processes above 1200°C	1500
From non-combustion industrial processes	300
Volatile Organic Compounds (VOCs)	20
Lead (Pb)	0.5

Pollutant / Source	Maximum Emission Limit (mg/Nm <sup>3</sup> )
Lead (Pb) compounds	20
Cadmium (Cd)	0.05
Cadmium (Cd) compounds	10
Chlorine (Cl <sub>2</sub> )	30
Hydrogen Chloride (HCl)	10
Hydrogen Fluoride (HF)	15
Copper (Cu)	1
Nickel (Ni)	2
Fluorine (F <sub>2</sub> )	5
Ammonia (NH <sub>3</sub> )	50
Dioxins	1x10 <sup>-6</sup>

<sup>(a)</sup> Until an alternative petroleum source with a lower sulphur content becomes available, or within five years—whichever comes first.

#### 2.7.3.2 IFC General Environmental, Health and Safety Guidelines

The emissions guidelines in Table 2-17 are applicable to small combustion process installations operating more than 500 hours per year, and those with an annual capacity utilization of more than 30 percent. Plants firing a mixture of fuels should compare emissions performance with these guidelines based on the sum of the relative contribution of each applied fuel<sup>20</sup>. Lower emission values may apply if the proposed facility is located in an ecologically sensitive airshed, or airshed with poor air quality, in order to address potential cumulative impacts from the installation of more than one small combustion plant as part of a distributed generation project.

<sup>20</sup> The contribution of a fuel is the percentage of heat input (LHV) provided by this fuel multiplied by its limit value

**Table 2-17: Small Combustion Facilities Emissions Guidelines (3MWth – 50MWth)**

Small Combustion Facilities Emissions Guidelines (3MWth – 50MWth) – (in mg/Nm <sup>3</sup> or as indicated)				
Combustion Technology / Fuel	Particulate Matter (PM)	Sulphur Dioxide (SO <sub>2</sub> )	Nitrogen Oxides (NOx)	Dry Gas, Excess O <sub>2</sub> Content (%)
<b>Engine</b>				
<b>Gas</b>	N/A	N/A	200 (Spark Ignition) 400 (Dual Fuel) 1,600 (Compression Ignition)	15
<b>Liquid</b>	50 or up to 100 if justified by project specific considerations (e.g. Economic feasibility of using lower ash content fuel, or adding secondary treatment to meet 50, and available environmental capacity of the site)	1.5 percent Sulphur or up to 3.0 percent Sulphur if justified by project specific considerations (e.g. Economic feasibility of using lower S content fuel, or adding secondary treatment to meet levels of using 1.5 percent Sulphur, and available environmental capacity of the site)	If bore size diameter [mm] < 400: 1460 (or up to 1,600 if justified to maintain high energy efficiency.) If bore size diameter [mm] > or = 400: 1,850	15
<b>Turbine</b>				
<b>Natural Gas =3MWth to &lt; 15MWth</b>	N/A	N/A	42 ppm (Electric generation) 100 ppm (Mechanical drive)	15
<b>Natural Gas =15MWth to &lt; 50MWth</b>	N/A	N/A	25 ppm	15
<b>Fuels other than Natural Gas =3MWth to &lt; 15MWth</b>	N/A	0.5 percent Sulphur or lower percent Sulphur (e.g. 0.2 percent Sulphur) if commercially available without significant excess fuel cost	96 ppm (Electric generation) 150 ppm (Mechanical drive)	15

Small Combustion Facilities Emissions Guidelines (3MWth – 50MWth) – (in mg/Nm <sup>3</sup> or as indicated)				
<b>Fuels other than Natural Gas =15MWth to &lt; 50MWth</b>	N/A	0.5% S or lower % S (0.2%S) if commercially available without significant excess fuel cost	74 ppm	15
<b>Boiler</b>				
<b>Gas</b>	N/A	N/A	320	3
<b>Liquid</b>	50 or up to 150 if justified by environmental assessment	2000	460	3
<b>Solid</b>	50 or up to 150 if justified by environmental assessment	2000	650	6
Notes: -N/A/ - no emissions guideline; Higher performance levels than these in the Table should be applicable to facilities located in urban / industrial areas with degraded airsheds or close to ecologically sensitive areas where more stringent emissions controls may be needed.; MWth is heat input on HHV basis; Solid fuels include biomass; Nm3 is at one atmosphere pressure, 0°C; MWth category is to apply to the entire facility consisting of multiple units that are reasonably considered to be emitted from a common stack except for NOx and PM limits for turbines and boilers. Guidelines values apply to facilities operating more than 500 hours per year with an annual capacity utilization factor of more than 30 percent.				

## 2.7.4 Environmental Noise Standards

### 2.7.4.1 Requirements of the Instructions for the Limitation and Prevention of Noise, 2003

Under no circumstances shall the maximum equivalent sound level (dBA) exceed the limits for the specified areas as indicated in Table 2-18.

**Table 2-18: Maximum Permissible Equivalent Sound Level**

Area	Maximum Permissible Equivalent Sound Level (dB A)	
	Daytime	Nighttime
Residential areas in cities	60	50
Residential areas in the suburbs	55	45
Residential areas in villages	50	40
Residential areas with small workshops or light trades, commercial and administrative areas, and city centres	65	55
Industrial areas (heavy industries)	75	65
Places of education, worship, treatment, and hospitals	45	35

### 2.7.4.2 IFC General Environmental, Health and Safety Guidelines

Noise impacts should not exceed the levels presented in Table 2-19, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.

**Table 2-19: Noise Level Guidelines<sup>21</sup>**

Noise Level Guidelines <sup>24</sup>		
Receptor	One Hour LAeq (dBA)	
	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00
Residential; institutional; educational <sup>22</sup>	55	45
Industrial; commercial	70	70

<sup>21</sup> Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, World Health Organization (WHO), 1999

<sup>22</sup> For acceptable indoor noise levels for residential, institutional, and educational settings refer to WHO (1999)

## 2.7.5 Drinking Water Standards

### 2.7.5.1 JS 286/2015 Drinking Water Standards

Drinking water must comply with the following standard requirements.

The values of the physical characteristics of drinking water may not exceed the maximum permissible limits specified in Table 2-20.

**Table 2-20: Physical Characteristics of Drinking Water**

Characteristic	Maximum Permissible Limit
Colour (TCU)	15 True Colour Units
Taste <sup>(a)</sup>	Acceptable
Odor	Acceptable
Turbidity (NTU)	5 Nephelometric Turbidity Units

<sup>(a)</sup> Tested only when required

The values of the substances and characteristics affecting the palatability of drinking water may not exceed the maximum permissible limits specified in Table 2-21.

**Table 2-21: Substances and Characteristics Affecting the Palatability of Drinking Water**

Characteristic	Symbol	Maximum Permissible Limit
pH (Hydrogen ion concentration)	pH	6.5 – 8.5
Total Dissolved Solids <sup>(a)</sup>	TDS	1,000 mg/L
Total Hardness <sup>(b)</sup>	TH	500 mg/L
Methylene Blue Active Substance <sup>(c)</sup>	MBAS	0.2 mg/L
Ammonium <sup>(d)</sup>	NH <sub>4</sub>	0.2 mg/L
Aluminium <sup>(e)</sup>	Al	0.1 mg/L
Iron	Fe	1.0 mg/L
Zinc	Zn	4.0 mg/L
Copper	Cu	2.0 mg/L
Manganese	Mn	0.4 mg/L
Sodium <sup>(f)</sup>	Na	200 mg/L
Chloride	Cl	500 mg/L
Sulfate	SO <sub>4</sub>	500 mg/L

<sup>(a)</sup> A maximum of 1,300 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health

<sup>(b)</sup> A maximum of 600 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.

<sup>(c)</sup> Indicator of the concentration of synthetic detergents.

Characteristic	Symbol	Maximum Permissible Limit
(d) Considered an indicator of contamination and shall be addressed accordingly.		
(e) A maximum of 0.2 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.		
(f) A maximum of 300 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.		

The values of inorganic chemical elements and compounds in drinking water may not exceed the maximum permissible limits specified in Table 2-22.

**Table 2-22: Inorganic Chemical Elements and Compounds**

Inorganic Chemical Element / Compound	Symbol	Maximum Permissible Limit (mg/L)
<b>Arsenic</b>	As	0.01
<b>Lead</b>	Pb	0.01
<b>Cyanide</b>	CN	0.07
<b>Cadmium</b>	Cd	0.003
<b>Total Chromium</b>	Cr	0.05
<b>Barium</b>	Ba	1.0
<b>Selenium</b>	Se	0.04
<b>Boron</b>	B	2.4
<b>Mercury</b>	Hg	0.006
<b>Silver</b>	Ag	0.1
<b>Nickel</b>	Ni	0.07
<b>Antimony</b>	Sb	0.02
<b>Fluoride <sup>(a)</sup></b>	F	1.5
<b>Molybdenum <sup>(b)</sup></b>	Mo	0.09
<b>Nitrite</b>	NO <sub>2</sub>	3.0
<b>Nitrate <sup>(c)</sup></b>	NO <sub>3</sub>	50

(a) A maximum of 2.0 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.

(b) A maximum of 0.27 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.

(c) A maximum of 70 mg/L may be permitted where no better quality source is available and subject to the approval of the Ministry of Health.

The concentrations of organic pesticides in drinking water may not exceed the values specified in Table 2-23.

**Table 2-23: Organic Pesticides in Drinking Water<sup>(a)</sup>**

Chemical Substance <sup>(b)</sup>	Maximum Permissible Limit (µg/L)
<b>Endrin<sup>(c)</sup></b>	0.6
<b>Lindane<sup>(c)</sup></b>	2.0
<b>Aldrin and Dieldrin<sup>(c)</sup></b>	0.03
<b>DDT<sup>(c)</sup></b>	1.0
<b>2,4-D<sup>(d)</sup></b>	30
<b>2,4,5-T<sup>(d)</sup></b>	9.0

(a) These pesticides (and any other pesticides that may be present in the water distribution system) shall be evaluated to determine their likelihood of occurrence and the required frequency of testing  
 (b) In the event of contamination by any other pesticide, reference shall be made to the list of substances included in the WHO for Drinking Water Quality, together with their associated maximum limits and criteria  
 (c) Insecticides  
 (d) Herbicides

The concentrations of organic contaminants in drinking water may not exceed the values specified in Table 2-24.

**Table 2-24: Organic Contaminants in Drinking Water<sup>(a)</sup>**

Chemical Substance <sup>(b)</sup>	Symbol	Maximum Permissible Limit (µg/L)
<b>Benzene</b>	C <sub>6</sub> H <sub>6</sub>	10
<b>Tetrachloroethylene</b>	C <sub>2</sub> HCl <sub>4</sub>	40
<b>Trichloroethylene</b>	C <sub>2</sub> HCl <sub>3</sub>	20
<b>Ethylbenzene</b>	C <sub>6</sub> H <sub>5</sub> (CH <sub>2</sub> CH <sub>3</sub> )	300
<b>Total Xylenes</b>	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	500
<b>Toluene</b>	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	700

(a) These organic contaminants (and any other organic contaminants that may be present in the water distribution system) shall be assessed to determine their likelihood of occurrence and the required frequency of testing.  
 (b) In situations requiring investigation of contamination by any other organic contaminant, reference shall be made to the list of substances included in the WHO Guidelines for Drinking Water Quality, together with their associated maximum limits and criteria.

When chlorine is used for disinfection, the water within the distribution network shall contain a free residual chlorine concentration of not less than 0.2 mg/L at the farthest point in the network and not more than 1.5 mg/L after a contact period of not less than 15 minutes from the time of chlorine addition. In all cases, a minimum of 15 minutes must elapse before the disinfected water reaches the first consumer.

The concentrations of disinfection by-products (total trihalomethanes and chlorite) shall not exceed the values specified in Table 2-25.

**Table 2-25: Disinfection By-Products in Drinking Water**

Substance	Maximum Permissible Limit (mg/L)
<b>Total Trihalomethanes (TTHMs) <sup>(a)</sup></b>	0.15
<b>Chlorite <sup>(b)</sup></b>	0.7
<sup>(a)</sup> Total trihalomethanes shall be evaluated annually and quarterly (once every three months). If the maximum permissible limit is exceeded, the operating authority or water supplier must take corrective action to prevent recurrence	
<sup>(b)</sup> Chlorite shall be tested for in water sources that use chlorine dioxide in the treatment process	

The reference limits for the radiological characteristics of drinking water are specified in Table 2-26.

**Table 2-26: Radioactive Substances in Drinking Water**

Radioactive Substance	Reference Radiological Limit <sup>(a)</sup>
<b>Alpha emitters (excluding Radon-222)</b>	0.5 Bq/L
<b>Beta emitters (excluding Tritium, Carbon-14, and Potassium-40)</b>	1.0 Bq/L
<sup>(a)</sup> If these limits are exceeded, further investigation shall be carried out within three (3) months to identify all radionuclides contributing to the total activity. The radioactive activity of each radionuclide must be measured, and the effective dose resulting from each radionuclide calculated, along with the total effective dose, which must not exceed 0.5 millisievert per year.	

The examined water sample (100 millilitres) must be free from the following:

- Total coliform bacteria when using the membrane filtration method or any internationally approved method; or the total coliform count shall be less than 1.1 when using the Most Probable Number (MPN) method
- Thermotolerant coliform bacteria or Escherichia coli when using the membrane filtration method or any internationally approved method; or the count shall be less than 1.1 when using the Most Probable Number (MPN) method

Drinking water must be free from all stages of parasitic organisms, all stages of pathogenic helminths, and pathogenic bacteria.

The number of free-living organisms (nematodes) must not exceed one (1) organism per litre.

#### **2.7.5.2 IFC General Environmental, Health and Safety Guidelines**

Drinking water sources, whether public or private, should at all times be protected so that they meet or exceed applicable national acceptability standards or in their absence the current edition of WHO Guidelines for Drinking-Water Quality.

#### **2.7.5.3 Project Delivered Water Quality Requirements**

The Desalination Plant shall also be designed to comply with select modified Desalinated Water quality requirements (Table 2-27) set by MWI specific for this project, which will supersede the limits specified for the corresponding parameters in JS/286/2015.

**Table 2-27: Additional Desalinated Water Quality Requirements**

Parameter	Additional Desalinated Water Requirements
Turbidity	100% of time: $\leq 2$ NTU 90% of time: $\leq 1$ NTU
pH	7.8–8.5 S.U.
TDS	$\leq 500$ mg/L
Total Hardness	$\leq 300$ mg/L
Chloride	$\leq 300$ mg/L
Residual Chlorine Level at the Delivery Points	1–1.5 mg/L as Cl <sub>2</sub>
Bromide	$\leq 1.5$ <sup>3</sup> 23mg/L
Calcium	$\geq 40$ mg/L as CaCO <sub>3</sub>
Total Alkalinity	60–80 mg/L as CaCO <sub>3</sub>
LSI	Between 0 and 0.5

## 2.8 Good International Practice

### 2.8.1 IFC / EBRD Guidance Note on Worker Accommodation: Processes and Standard

The IFC / EBRD Guidance Note on Worker Accommodation: Processes and Standard (2009) mandates proper management and maintenance of accommodation, including access to healthcare, nutritious food, and recreational facilities, alongside mechanisms for addressing worker grievances. It also highlights the importance of respecting workers' rights, preventing discrimination, and fostering positive relations with local communities by minimising social impacts and avoiding overcrowding. This guidance emphasises providing adequate living space, sanitation, potable water, ventilation, and privacy to promote workers' well-being.

### 2.8.2 IFC General EHS and Sector Specific Guidelines

The IFC guidelines serve as a global reference point for environmental protection, worker safety, and community well-being in development projects. They set minimum standards of practice expected in projects financed by IFC and other development lenders. Table 2-28 presents an overview of relevant general and sector-specific guidelines.

**Table 2-28: IFC Guidelines Relevant to the Project**

Title	Overview of Guidelines
General Environment, Health and Safety	Provide internationally recognised technical reference documents for best practices across all sectors:

<sup>23</sup> Subject to MWI's approval during the LNTP Works Phase. The Tri-Halomethanes concentration of the Delivered Water at the Delivery Points shall strictly comply with the latest Jordanian Drinking Water Standards

Title	Overview of Guidelines
<b>(EHS) Guidelines (2007)</b>	<ul style="list-style-type: none"> <li>• Serve as a baseline for evaluating project performance and compliance for activities supported by the World Bank Group, IFC, and other International Funding Institutions (IFIs).</li> <li>• Cover air emissions and ambient air quality, energy and water conservation, wastewater and solid waste management, hazardous materials handling and noise control.</li> <li>• Set out measures to manage OHS risk (such as workplace hazards, personal protective equipment and emergency preparedness).</li> <li>• Promote community health and safety (traffic safety, infrastructure design and disease prevention).</li> <li>• Emphasise pollution prevention, resource efficiency, and continuous performance monitoring in line with the principle of good international industry practice (GIIP).</li> </ul>
<b>EHS Guidelines for Electric Power Transmission and Distribution (2007)</b>	<p>Provide sector-specific EHS recommendations for planning, construction, operation, and maintenance of transmission and distribution systems:</p> <ul style="list-style-type: none"> <li>• Supplement the General EHS Guidelines and address the unique risks associated with high-voltage infrastructure (electromagnetic fields, avian collisions, and land use conflicts)</li> <li>• Key considerations include the right-of-way siting and clearance, vegetation management, electromagnetic field exposure, and interactions with wildlife, particularly bird species</li> <li>• Recommend careful routing to avoid sensitive areas, adherence to the right-of-way maintenance protocols and use of bird diverters or line markers, where necessary.</li> <li>• Emphasise pollution prevention measures, such as managing SF<sub>6</sub> (sulphur hexafluoride) emissions from equipment and avoiding oil spills from transformers.</li> <li>• Cover electrical hazards, work at heights, live-line maintenance and public safety, as well as training, protective equipment and clear safety procedures</li> <li>• Advise on stakeholder engagement, grievance mechanisms and compliance monitoring.</li> </ul>
<b>EHS Guidelines for Water and Sanitation (2007)</b>	<p>Provide technical guidance on EHS aspects of development, operation, and maintenance of water supply and sanitation systems:</p> <ul style="list-style-type: none"> <li>• Cover a wide range of infrastructure types (water abstraction, treatment and distribution systems, as well as wastewater collection, treatment and disposal)</li> <li>• Key considerations include source water protection, efficient use of water resources, management of treatment by-products (e.g. sludge and chemicals) and prevention of surface and groundwater contamination</li> <li>• Emphasise pollution prevention through proper facility design and operational controls (leak detection, chemical handling protocols, and energy efficiency measures in pumping and treatment processes)</li> <li>• Address worker exposure to biological and chemical hazards, confined space entry, manual handling, and maintenance of safe access to elevated structures.</li> <li>• Highlight the importance of public health protections (water quality monitoring and safeguarding against disease transmission)</li> <li>• Recommend effective community engagement and the establishment of grievance mechanisms.</li> </ul>

Title	Overview of Guidelines
<b>EHS Guidelines for Ports, Harbours and Terminals (2017)</b>	<p>Applicable to marine and freshwater ports, harbours, and terminals for cargo and passengers:</p> <ul style="list-style-type: none"><li>• Environmental issues in port and terminal construction and operation (terrestrial and aquatic habitat alteration and biodiversity, climate change resilience, water quality, air emissions, waste management, hazardous materials and oil management and noise and vibration (including underwater))</li><li>• Specific occupational health and safety issues relevant to port operations (physical hazards, chemical hazards, confined spaces, exposure to organic and inorganic dust and exposure to noise).</li></ul>

### 2.8.3 IFC Handbook for Addressing Project-Induced In-Migration

The IFC Projects and People: Handbook for Addressing Project-Induced In-Migration (2009) was developed to address an identified gap in assessing the risk of project-induced in-migration and promoting its effective management:

- Part 1 defines the business case for addressing project-induced in-migration
- Part 2 considers the dynamics of project-induced in-migration, discusses its potential environmental and social impacts and considers the unique aspects of in-migration in relation to artisanal and small-scale mining, resettlement, indigenous peoples, areas of high biodiversity value and cultural heritage
- Part 3 focuses on the assessment of the probability of project-induced in-migration and the risks that such in-migration poses to a project, and identifies the requirements for a situation analysis as a basis for developing a project-specific Influx Management Strategy and Plan.
- Part 4 outlines potential management approaches and interventions, including approaches to reducing in-migration, managing its footprint, enhancing its positive impacts, and preventing and mitigating its negative impacts
- Part 5 supports the development of influx management strategies and their integration into the project

### 2.8.4 UNESCO Guidance for Impact Assessments

The UNESCO 2022 Guidance and Toolkit for Impact Assessments in a World Heritage Context has been designed specifically for heritage management institutions, governments, and project developers, with the aim of helping to find the best possible solutions to meet both conservation priorities and development needs. The document:

- Helps identify and define the outstanding universal values (OUV) and attributes of the site concerned, whether it is a cultural, natural or mixed cultural-natural World Heritage Site
- Provides a methodology and a set of tools for elaborating impact assessments of proposed actions in relation to the protection of the OUV
- Explains the process for evaluating potential impacts and finding appropriate mitigation measures, alternative options, and suggesting recommendations to inform site management frameworks and processes

## 2.8.5 Intangible Cultural Heritage Guidelines

### 2.8.5.1 UNESCO

The principal international instrument governing ICH is the Convention for the Safeguarding of the Intangible Cultural Heritage. The Convention entered into force on 20 April 2006, following ratification by thirty States Parties, and has since become the primary international instrument for safeguarding living heritage (Article 34). Adopted by the General Conference of UNESCO at its 32<sup>nd</sup> session, the Convention establishes a global framework for the identification, documentation, safeguarding, and transmission of ICH. It recognizes ICH as a central component of cultural diversity and sustainable development and sets out the obligations of States Parties to identify, inventory, and protect living cultural expressions within their territories.

Under Article 2, the Convention defines ICH as “the practices, representations, expressions, knowledge, and skills that communities, groups, and, in some cases, individuals recognize as part of their cultural heritage,” including associated instruments, objects, artefacts, and cultural spaces. The safeguarding of ICH is defined broadly to include measures for identification, documentation, research, preservation, promotion, enhancement, transmission, and revitalization (Article 2.3).

The Convention classifies ICH into five broad domains, reflecting the diversity of living heritage worldwide:

- Oral Traditions and Expressions: This domain encompasses spoken forms of heritage such as myths, epics, legends, poetry, proverbs, and storytelling traditions, as well as the languages through which these are transmitted. In the Middle East, this includes rich oral poetry and narrative traditions such as *al-sīrah al-hilāliyya* and Bedouin storytelling, which serve as key vehicles of cultural memory and identity
- Performing Arts: Performing arts include traditional music, dance, theatre, and other performance-based expressions that convey creativity, history, and identity. In Jordan and the wider region, examples include *dabka* (folk dance), traditional musical forms, and poetic performances that sustain intergenerational transmission of artistic practices
- Social Practices, Rituals, and Festive Events: This domain covers community-based activities that express shared values and social cohesion, including rituals, ceremonies, festivals, and life-cycle events. In Jordan, these include religious festivals, wedding customs, and communal gatherings that reinforce continuity, belonging, and mutual respect among community members
- Knowledge and Practices Concerning Nature and the Universe: This domain encompasses traditional ecological knowledge, healing practices, agriculture, animal husbandry, and cosmological beliefs related to the natural environment. In the Middle Eastern context, examples include desert navigation by stars, water harvesting systems, and herbal medicine. Each reflects a deep understanding of arid ecosystems and human–nature relations
- Traditional Craftsmanship: This domain refers to the skills, knowledge, and techniques involved in creating handmade objects and artefacts. In Jordan, traditional crafts such as mosaic-making, embroidery, ceramics, and metalwork demonstrate enduring artistic traditions and the transmission of technical mastery through apprenticeship

The Convention’s objectives (Article 1) are to:

- Safeguard ICH

- Ensure respect for ICH and its bearers
- Raise awareness of its importance at local, national, and international levels
- Provide for international cooperation and assistance

States Parties are required to take legislative, administrative, and policy measures to integrate safeguarding into national development planning (Article 13). This includes the creation and regular updating of national inventories (Articles 11–12), the promotion of education and awareness (Article 14), and ensuring the widest possible participation of communities, groups, and individuals in safeguarding processes (Article 15). Periodic reporting to the Intergovernmental Committee on implementation measures is required under Article 29.

At the international level, the Convention establishes mechanisms to enhance visibility and cooperation, including the Representative List of the Intangible Cultural Heritage of Humanity (Article 16), the List of Intangible Cultural Heritage in Need of Urgent Safeguarding (Article 17), and the Register of Good Safeguarding Practices (Article 18). Financial and technical support are administered through the Fund for the Safeguarding of the Intangible Cultural Heritage (Articles 25–28).

The Convention emphasizes that all safeguarding activities must be consistent with international human rights instruments, mutual respect among communities, and sustainable development principles (Article 2.1). It complements the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, ensuring a holistic approach to both tangible and intangible heritage.

#### **2.8.5.2 ICOMOS**

Within the ICOMOS, the International Scientific Committee on Intangible Cultural Heritage (ICICH) operates as the principal body guiding the integration of intangible cultural values into heritage conservation. The ICICH functions under the ICOMOS Statutes and By-Laws and promotes a holistic approach that recognizes the interdependence of tangible and intangible heritage.

The ICICH By-Laws emphasize community participation, transparency, and inclusivity, particularly through the involvement of emerging professionals. The Committee's objectives include advancing interdisciplinary research, promoting ethical practice, and strengthening international cooperation in the safeguarding of living traditions associated with heritage places. The Bureau of the ICICH oversees work programs and provides technical guidance to the ICOMOS Scientific Council.

The By-Laws and associated Charter establish that heritage significance encompasses both material and immaterial dimensions, affirming that intangible values (e.g., beliefs, rituals, languages, crafts, and practices) must be systematically identified and protected within conservation processes.

#### **2.8.5.3 Charter and Guidance on Sites with Intangible Cultural Heritage**

The ICOMOS International Charter and Guidance on Sites with Intangible Cultural Heritage provides a professional framework for the assessment, documentation, and management of ICH at heritage sites. The Charter defines ICH as “practices, representations, expressions, knowledge systems, skills and associated objects, archives and documents” that are transmitted across generations and continually adapted by communities.

The Charter outlines six key principles guiding professional practice:

1. Community Custodianship: Communities are primary custodians and must provide Free, Prior, and Informed Consent (FPIC) for any documentation or public presentation of ICH.

2. Site Context and Interpretation: Interpretation should respect cultural meanings and avoid distortion or commodification.
3. Transmission and Adaptation: Safeguarding supports intergenerational transmission while allowing natural evolution of practices.
4. Documentation and Knowledge Sharing: Recording ICH must respect cultural confidentiality and utilize accessible formats.
5. Managing Threats and Change: Risk assessment should address pressures from development, globalization, and environmental change.
6. Professional Roles and Training: Heritage professionals act as facilitators, supporting but not displacing community authority.

Together, the ICOMOS ICICH Charter and By-Laws provide the doctrinal and ethical framework for integrating ICH into site management and assessment processes. They form the professional foundation for conducting ICHIA in alignment with international heritage standards and conventions.

## 2.8.6 MWI Guideline on EIA for Sea and Brackish Water Desalination Plants

The 2022 Guideline on EIA for Sea and Brackish Water Desalination Plants was issued jointly by the MWI, Water Authority Jordan (WAJ) and the MoEnv, with support from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The Guideline establishes a unified framework for conducting Environmental and Social Impact Assessments (ESIAs) for sea and brackish water desalination projects in Jordan. It ensures that desalination development proceeds sustainably, minimising harm to ecosystems and communities while complying with Jordan's Environmental Protection Law No. 6 (2017) and Instruction No. 69 (2020).

Key components of the Guideline include legal and constitutional framework, environmental and social issues to be addressed within the ESIA and ESMP and a standardised outline for an ESIA.

The Guideline aligns Jordan's environmental assessment process with international best practices while addressing local environmental sensitivities such as limited water resources and seismic risks. It promotes environmentally responsible desalination, balancing water security with ecosystem protection and social well-being.

## 2.9 Corporate Requirements

The consortium of Meridiam and Suez, with their Contractors (the BOT Contractor or the Developer), was appointed the Preferred Bidder by the MWI of the Government of Jordan in relation to the Project in September 2024.

The BOT Contractor established a Special Purpose Vehicle (SPV) for the local Project Company, named the National Carrier Project Company (NCPC). The Commercial agreement was signed between the Government of Jordan, represented by the MWI, and the NCPC in January 2025.

As a long-term investor in public infrastructures, Meridiam seeks to develop, invest and manage projects that offer a stable return rate in addition to beneficial outcomes for local communities. The following corporate policies of Meridiam will apply to the Project:

- Sustainable Development Charter
- 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.

## 2.10 Regulatory ESIA and Permitting Process

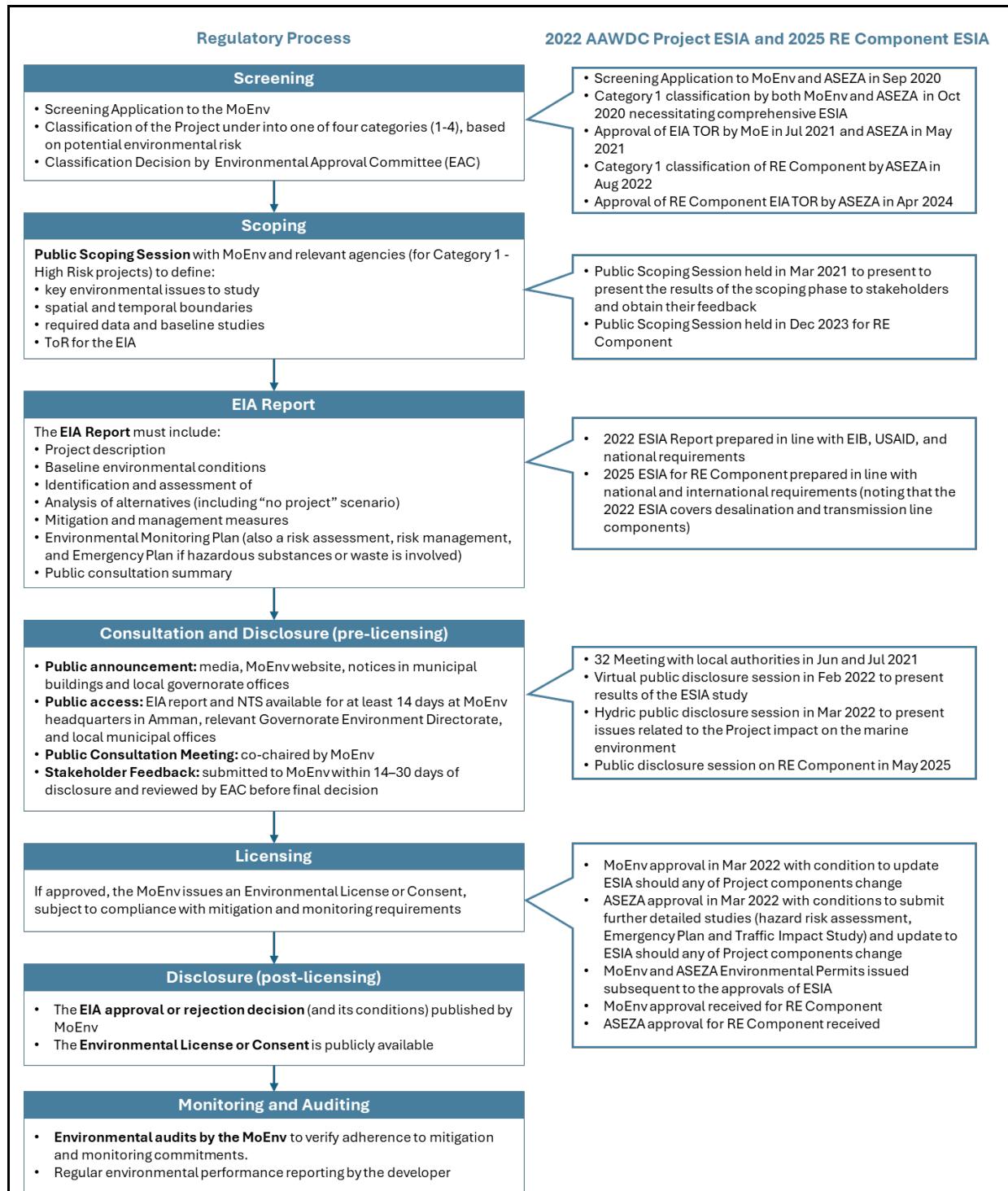
Figure 2-2 summarises the regulatory ESIA and environmental permitting process followed for the previous Project approvals, including:

- 2022 AAWDC Project ESIA (updated in January 2025 to incorporate the change in the location of the PS ADC, policy updates and inclusion of marine baseline surveys results)
- 2025 Renewable Energy Component ESIA addendum covering the Renewable Energy Facility and Overhead Transmission Line (OHTL)

The signing of the Project Agreement for the AAWDC Project between MWI and NCPC in January 2025 was followed by meetings with each MoEnv and ASEZA to agree on the approach for the 2025 AWWDC Project ESIA. It was agreed that given that:

- A scoping phase and submission of a new Terms of Reference (TOR) will not be required given this is an update to previously approved ESIA
- The 2025 AWWDC Project ESIA will be carried out in line with national legislation and Lender requirements and submitted to MoEnv and ASEZA for review and approval
- The ESIA Team will keep the regulatory entities updated on progress and approach and will inform them of the consultation plan and schedule
- On submission of the 2025 AWWDC Project ESIA in Arabic, MoEnv and ASEZA will review it and facilitate disclosure sessions in Amman and Aqaba
- The outcomes of the disclosure sessions will be incorporated into the final 2025 AWWDC Project ESIA

**Figure 2-2: Regulatory ESIA Process and Previous Approvals**



## 2.11 Integration of Lender Requirements

Due to the convergence between key Lender standards, the integration of Lender requirements into the 2025 AWWDC Project ESIA process, as presented in this Section, is anchored to the EBRD ESRs.

The 2025 AWWDC Project ESIA has been prepared in alignment with EBRD ESR 1 through a systematic process of identifying, assessing and mitigating environmental and social risks and impacts across the Project lifecycle.

### 2.11.1 Scope of the 2025 AWWDC Project ESIA

The impact assessment was based on a scoping exercise conducted to identify potential interactions between the Project activities and potential receptors for each Project component. The scoping exercise was informed by the previous project ESIA, input from NCPC and EPC contractors on the Project design and execution, input from stakeholders (as detailed in Chapter 8), additional environmental and social baseline surveys and feedback from the Project Lenders.

The overall 2025 AWWDC Project ESIA Study Area encompassed the footprints of the Project's permanent and temporary facilities, as well as the associated facilities. The ESIA Study Area, defined for marine ecology and cultural heritage, encompassed a broader area within which Project-related impacts on biodiversity and cultural heritage may occur, given the increased receptor importance and sensitivity identified in the baseline studies.

The temporal boundaries of the ESIA encompass construction, commissioning, start-up, and operations.

### 2.11.2 Assessment of Alternatives

The 2025 AWWDC Project ESIA includes an assessment of technically and financially feasible alternatives to the Project's location, technology, size, design, and/or mitigation options in terms of their environmental and social impacts and risks, including a 'No Development' option (as detailed in Chapter 4).

### 2.11.3 Assessment Methodology

The 2025 AWWDC Project ESIA assessed direct, indirect, induced, intra-project, cumulative, and transboundary effects, as well as the Project benefits. It also included relevant thematic impact areas covered by other ESRs (e.g. biodiversity, labour, etc.)

The 2025 AWWDC Project ESIA adopted a combination of assessment approaches, such as:

- Quantitative impact assessment of emissions, noise, discharges and wastes based on estimates, risk assessments and modelling studies
- Qualitative impact assessment applying risk-based expert/judgement, benchmarking, studies and secondary data sources

Whenever potential impacts were identified, appropriate mitigation strategies were developed in line with the mitigation hierarchy, which included avoidance, management, and monitoring actions. When negative impacts are anticipated, the priority has been to make recommendations to eliminate or reduce them, wherever possible, through design.

Differentiated mitigation measures have been considered for individuals or groups identified as vulnerable, marginalised and/or experiencing discrimination, to ensure these groups do not experience

risks and impacts disproportionately. In addition, specific mitigation measures for important biodiversity values will be developed.

## 2.11.4 Baseline Studies

Limitations associated with the baseline surveys completed to support the 2025 AWWDC Project ESIA are outlined in Chapter 6 (Environmental Description) and Chapter 7 (Socio-Economic Description).

To complement existing data and facilitate effective characterisation of the environmental baseline with ESR6, the following field surveys and studies have been completed:

- Terrestrial Ecological baseline survey designed to:
  - Gain an overview of the habitats and species present within the ESIA Study Area
  - Identify areas of biodiversity interest
  - Engage with local stakeholders to gain an understanding of local perspectives on important species, habitats and ecosystems
- Bird survey along the route of the OHTL for the presence of bird species possibly qualifying as critical habitat values, as well as globally, regionally or nationally threatened species, globally significant populations of migratory species and migratory soaring birds. Desk based reviews of existing literature
- Marine habitat baseline study of benthic habitats using a remotely operated vehicle (ROV) to identify and classify major seabed types and to generate habitat distribution maps of the coral reef, seagrass and soft sediment communities. Seabed sediment sampling for chemistry, macrobenthos, and sediment particle size analysis. Seawater sampling for physical properties and plankton
- Terrestrial and Marine Critical Habitat Assessments (CHA) to:
  - Identify biodiversity values which qualify as Critical Habitat (CH) or Priority Biodiversity Features (PBFs)
  - Inform the approach for protecting and conserving biodiversity values using a precautionary approach and applying Biodiversity Mitigation Hierarchy.

Project stakeholders have been identified through a combination of secondary data review and primary data collection, including interviews, focus group discussions, and field observations gathered during the ESIA phase. Primary data collection was conducted across all five governorates traversed by the project, involving a range of meetings with official, administrative, and community stakeholders. Additionally, an infrastructure sensitivity assessment was completed along the entire Conveyance pipeline route and the above-ground installations (AGIs) to support the preparation of the social assessment and the Resettlement Policy Framework (RPF).

To inform the Heritage Impact Assessment (HIA), a comprehensive field baseline study was conducted to identify heritage assets within the Wadi Rum area. The baseline incorporated GIS mapping, photographic records, and geo-referenced datasets, forming a reliable spatial record to inform assessments and mitigation planning.

## **2.11.5 Environmental and Social Management System**

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. The ESMS will be proportional to the Project's risk and impacts, designed to remain adaptive throughout the Project lifecycle and will include:

- Policies with a commitment to environmental and social sustainability, labour standards, and stakeholder engagement
- Plans and procedures for ongoing identification, assessment, monitoring, and management of E&S risks and impacts
- Definition of organisational capacity with clear responsibilities, training, and resources for E&S management
- Compliance monitoring and reporting framework to ensure continuous improvement and transparent reporting of environmental and social performance

During the operational phase, NCPC will manage the Project 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.

## **2.11.6 Monitoring and Reporting**

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 detailed monitoring program will be designed as part of the ESMMMP to address any significant impacts identified during the 2025 AWWDC Project ESIA and during Project execution and include key performance indicators and targets.

The Project will be subject to regular external monitoring by relevant authorities and Project Lenders.

## **2.11.7 Management of Change**

A Management of Change process will be established to govern the identification and assessment of changes that are likely to materially change its environmental and/or social risks and impacts.

## **2.11.8 Labour and Working Conditions**

The Project will develop and implement procedures and processes that reflect the requirements of ESR 2. The Project will ensure compliance with national labour, employment laws and social security laws applicable to the Project throughout its lifecycle.

Worker accommodation will be provided in accordance with the requirements of the IFC / EBRD Guidance Note on Worker Accommodation: Processes and Standard (2009).

## **2.11.9 Pollution Prevention and Control**

The Project is designed to comply with the standards on emissions, discharges and wastes outlined in this Chapter, including legislative standards, EU substantive environmental standards and general environmental and sector-specific GIP guidance. The mitigation measures in accordance with the

mitigation hierarchy and GIP favour the prevention or avoidance of risks and impacts over minimisation and reduction and are based on requirements of the national legislation and best available technologies (BAT). The pollution prevention and control techniques will be incorporated into the Project ESMS for implementation by NCPC and its contractors and will be subject to compliance monitoring and reporting throughout the Project lifecycle.

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.

### **2.11.10 Health, Safety and Security**

The Project is committed to protecting and promoting the health, safety, and security of its workers, as well as managing risks to affected communities from both routine and non-routine activities throughout the Project lifecycle.

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.

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.

### **2.11.11 Land Acquisition and Involuntary Resettlement**

The Project has developed a Resettlement Policy Framework (RPF) that describes the strategy and principles for identifying, avoiding, and managing livelihood and resettlement impacts in accordance with Jordanian legislation, as well as applicable IFC, EBRD, and EIB standards published by the IFC and EBRD, along with associated guidance. At a later stage of Project development, when a final footprint is available, the Framework will be complemented 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.

The RAP will be prepared in accordance with the following steps:

- Initial engagement:
  - Establishment of a Steering Committee (preferably via a Decision of the Cabinet of Ministers)

- Kick-Off Workshops in the regions with relevant stakeholders, including government authorities in all governorates and districts/municipalities affected by the Project
- Establishment of a grievance mechanism
- Community meetings in all affected communities to explain the RAP preparation process, including the surveys, and inform Project Affected Persons (PAP) about the grievance mechanism, supported by a leaflet in Arabic
- In Bedouin tribal areas, advice from a recognised Jordanian Bedouin expert will be sought to organise consultations and engagement in a culturally and politically appropriate manner.
- Field surveys to identify all the Project impacts on land, businesses and livelihoods, based on the final Project footprint. Field surveys will include:
  - An inventory of assets affected by full physical displacement (structures and businesses that need to be relocated, on either a permanent or temporary basis), with the identification of landowners, users and occupants and their regime of occupation (formal, informal, structure permitted or not)
  - An inventory of assets and businesses affected by restrictions to access or parking space, with, similarly as above, the identification of landowners, users and occupants, as well as a business survey of all affected businesses to understand the type of activity, all individuals affected and the income generated for each category of affected individuals
  - An inventory of affected farmland, including the identification of crops or trees, landowners and land users, as well as of any structures on the land
  - A socio-economic survey of all affected people to understand livelihoods and compensation preferences, and to pre-identify potentially vulnerable households. Seasonal users of pasture or other natural resources, as well as migrant and refugee workers living in the vicinity of the Project, and other potentially vulnerable affected people, will also be identified
- Valuation will be carried out by a certified valuation expert for all identified losses. The process will involve market surveys (land, structures, crops), determination of rates and consultation with the Steering Committee and the Negotiation and Compensation Commission
- The Draft RAP will be prepared and submitted to consultation along the route around proposed entitlements, based on a simple and practical “Guide to Land Acquisition and Compensation”. The finalised RAP will be submitted to the Steering Committee for approval

Implementation of the approved RAP will involve negotiating individual compensation and livelihood restoration packages prior to their delivery. It is suggested that the RAP should be implemented by sections to allow for phased construction commencement.

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.

## 2.11.12 Cultural Heritage

The full HIA for the WRPA section of the Project was completed in accordance with the UNESCO Guidance and Toolkit for Impact Assessments in a World Heritage Context (2022) and in alignment with ESR 8. The 2025 AAWDC Project ESIA process was designed to integrate ESR8 requirements at every stage, ensuring

that cultural heritage considerations were addressed alongside environmental and social factors, in accordance with ESR 1.

Through systematic assessment, which follows a sequence of interrelated tasks that mirror the structure of heritage impact assessment within an ESIA context. These include scoping, baseline data collection, stakeholder engagement, impact assessment, mitigation, and reporting, stakeholder engagement, and mitigation planning, the Project ensured protection, conservation, and enhancement of both tangible and intangible cultural heritage. A comprehensive baseline study was conducted to identify heritage assets within the ESIA Study Area. Consistent with ESR8, a programme of meaningful consultation was implemented throughout the ESIA cycle. Key stakeholders included the Department of Antiquities of Jordan, local municipalities, community elders, and academic experts in archaeology and anthropology. Consultations were inclusive of women, youth, and vulnerable groups, ensuring that diverse perspectives on cultural heritage values were captured.

Impacts were assessed using EBRD's mitigation hierarchy, recommending avoidance of sensitive heritage areas through:

- Design modifications and buffer zones
- Minimisation of impacts through controlled construction methods, vibration monitoring, and visual screening
- Mitigation and documentation of unavoidable effects through archaeological recording, preservation by record, and community-led documentation of intangible practices and potential for enhancement by establishing public education initiatives, digital archiving, and interpretive signage for heritage sites

As mandated under ESR 8, opportunities have been identified for heritage-based community tourism, local craft revitalisation, and education programmes to ensure equitable sharing of benefits from any use of cultural heritage, ensuring fair compensation and recognition for community knowledge.

A Cultural Heritage Management Plan will be developed as a project-specific instrument to operationalise ESR 8 requirements, defining responsibilities, training needs, monitoring procedures, and resource allocation. A project-specific Chance Finds Procedure, adapted from Annex 2 of ESR8 Guidance, will be incorporated into all contractor ESMPs. The Chance Find Procedure will ensure that any unexpected discoveries made during construction are reported, assessed, recorded, and preserved in full compliance with Jordanian Antiquities Law No. 21 of 1988 and relevant EBRD protocols. Continuous coordination will be maintained with the Ministry of Tourism and Antiquities, local heritage councils, and UNESCO-affiliated institutions where applicable. Contractors and supervision teams will receive training on heritage awareness, chance find reporting, and site protection. A heritage monitoring programme will be embedded into the ESMS, including periodic inspections and monitoring of works by qualified archaeologists.

### 2.11.13 Stakeholder Engagement and Information Disclosure

To guide stakeholder consultations and ensure that meaningful, transparent, and culturally appropriate consultation with project stakeholders is implemented during the ESIA process, the Project has developed and implemented a 2025 AAWDC Project ESIA Stakeholder Engagement Plan (ESIA SEP). An early stakeholder engagement was carried out in September and October 2025 to ensure that:

- Stakeholders are informed about the purpose, nature, and scale of the Project as it currently stands, its status and expected timeline

- Stakeholders are informed about the ESIA, its objectives, what it entails, and the associated timelines
- Stakeholders are informed about a grievance mechanism that provides a transparent and accountable process for raising and responding to stakeholder grievances
- Stakeholders can inform the ESIA team and the wider AAWDC Project team about the Project's environmental and social context, including potential sensitivities
- The perceptions, expectations, and concerns of all stakeholders are understood, noted, and their feedback is incorporated into the impact assessment analysis, the development of mitigation/management measures, and informs the Project design

The stakeholder engagement process was designed to be inclusive, with specific attention to groups that might be considered vulnerable and at risk of being overlooked or disproportionately affected by the Project, such as women, youth, informal agricultural workers, and herders. Overall, 38 meetings, 35 focus groups and 95 interviews were conducted during the engagement, spanning the governorates, districts, sub-districts, and municipalities that are likely to be affected by the Project, targeting approximately 675 individual stakeholders, including 186 women.

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 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

Feedback received through stakeholder engagement during the development of the 2025 AAWDC ESIA has been incorporated into all the documents of the disclosure package.

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.

During these meetings, NCPC and the ESIA consultants will present the main findings and mitigation measures of the assessment, using a "What We Heard" feedback table to summarise the key issues raised during previous consultations and to explain how these have been addressed through Project design and management measures. Stakeholders will also be informed about where and how they can access the

draft ESIA, including its publication on the Project and Lender websites, as well as the availability of printed copies at designated Governorate and municipal offices.

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. During this period, stakeholders will be able to provide feedback through multiple channels, including written submissions via email or online feedback forms, as well as verbal comments recorded during disclosure meetings. All feedback will be logged in a Disclosure and Comments Register, documenting the date, source, and substance of each comment together with the Project's response or follow-up action.

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 Plan (ESMP). This report will also be made publicly available through the same disclosure channels.

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, which was developed to replace the ESIA SEP and is included in the disclosure package.

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