



# ANNUAL PRODUCTION OF 280 MILLION SQUARE METERS OF DESIGNABLE NANOPOROUS MATERIALS PROJECT

## ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

CNR-GR-ESMP-001

FEBRUARY 2026

(Final)

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<b>Project Title</b>	<b>Annual Production Of 280 Million Square Meters of Designable Nanoporous Materials Project</b>
<b>Project Location</b>	<b>Evrensekiz/Kirklareli</b>
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## ABBREVIATIONS AND ACRONYMS

<b>ESMP</b>	Environmental and Social Management Plan
<b>ESMS</b>	Environmental and Social Management System
<b>FI</b>	Financial Intermediaries
<b>GRM</b>	Grievance Redress Mechanism
<b>GRS</b>	Grievance Redress Service
<b>OHS</b>	Occupational Health and Safety
<b>PR</b>	Public Relations
<b>RCA</b>	Root Cause Analysis
<b>SEP</b>	Stakeholder Engagement Plan
<b>WB</b>	World Bank
<b>WBG</b>	World Bank Group
<b>WHO</b>	World Health Organization
<b>YİMER</b>	Foreigners Communication Center

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## 1 INTRODUCTION

### 1.1 Objectives

The ESMP is designed to systematically identify, assess, and manage the potential E&S impacts and risks associated with the pre-construction, demolition and construction, and operation phases of the Project. This document outlines a comprehensive strategy for evaluating these risks and impacts and implements a suite of mitigative measures aimed at either preventing or minimizing any adverse effects.

The purpose of the ESMP is to provide a practical plan for mitigating, managing and monitoring environmental and social risks and impacts and providing the necessary management tools to ensure compliance with Project standards in achieving environmental and social objectives. Additionally, hazards, social and environmental repercussions anticipated to arise throughout the construction and operation phases are identified. The Project's potential effects are outlined, along with the steps that must be taken to minimize and/or reduce risks and/or consequences at their source. The responsible project stakeholders are identified, and monitoring and control actions are decided upon over the Project lifespan to prevent and mitigate the consequences detailed in this ESMP.

The main objectives of this ESMP are as follows:

- To cover;
  - Project description including location,
  - Compliance with relevant laws and regulations,
  - Initial assessment of surrounding environment and community,
  - Organizational structure for project implementation
  - Strategies to address and oversee environmental and social impacts
  - Engagement and addressing concerns of involved parties
  - Process for addressing stakeholder complaints
- To provide an overview of the environmental, health and safety (EHS) and socio-economic policies, standards and legal legislation that the Project is obliged to comply with,
- To ensure that pre-construction, construction and operation activities are properly checked to be in compliance with national standards, IFC PSs, AIIB ESSs and WBG General EHS Guidelines, WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing,
- To determine the roles and responsibilities of Project' parties to ensure compliance with the relevant requirements during the pre-construction, construction and operation phases of the project,
- To establish an E&S baseline for the project area and plans E&S mitigation measures,
- To ensure that reporting systems are effectively developed and streamlined to deliver compliance performance aligned with relevant requirements,
- To follow the progress in achieving the environmental and social objectives and targets and to make improvements.

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## 1.2 Scope

This ESMP has been developed to ensure the effective management of environmental, health, safety, and social risks and impacts that may arise from the Project activities throughout its lifecycle, encompassing the preconstruction, demolition, construction, and operation phases. It includes the chapters and contents outlined in Table .

**Table . Structure and Content of the ESMP**

<b>1. Introduction</b>
The objectives, scope, and project background and rationale have been given in this chapter.
<b>2. Project Description</b>
Specific objectives, location, components and technical characteristics, labor demands and timeline of the Project have been presented in this chapter.
<b>3. National and International Requirements</b>
The national legal framework, international policies and standards and Project standards have been defined and identified in this chapter.
<b>4. Environmental and Social Risks and Impacts</b>
The environmental and social area of influence has been defined and expected environmental and social risks and impacts in each of the Project phases have been identified in this chapter.
<b>5. Implementation of the Environmental &amp; Social Management Plan</b>
In this chapter, existing institutional structure and capacity have been defined, roles and responsibilities for the implementation of ESMP have been determined, capacity development and training requirements, environmental and social reporting and disclosure of the ESMP have been presented.
<b>6. Stakeholder Engagement and Grievance Mechanism</b>
Previous stakeholder engagement and consultation activities and grievance mechanisms (current mechanisms, national-, IFC- and Project-level grievance mechanisms) have been summarized in this chapter.
<b>7. Environmental and Social Mitigation Measures</b>
In this chapter, mitigation, minimization and/or compensation measures have been determined for each of the identified risks/impacts for all phases (pre-construction, demolition & construction and operation phases) of the Project.
<b>8. Environmental and Social Monitoring Plan</b>
In this chapter, monitoring requirements such as parameters, locations, methods, frequencies, etc. have been determined for each of the mitigation measures for all phases of the Project.

## 2 PROJECT DESCRIPTION

### 2.1 Project Location

The project is located at Parcel 398 and 460 of block 256 at Evrensekiz/Gündoğu Neighborhood, within the city of Lüleburgaz, Kırklareli Province, in the Republic of Türkiye. The selected location benefits from its strategic positioning in one of Türkiye's key industrial hubs, making it an ideal site for the establishment of the Nanoporous Materials facility. The Project Topographical Map is given Figure 2-1.

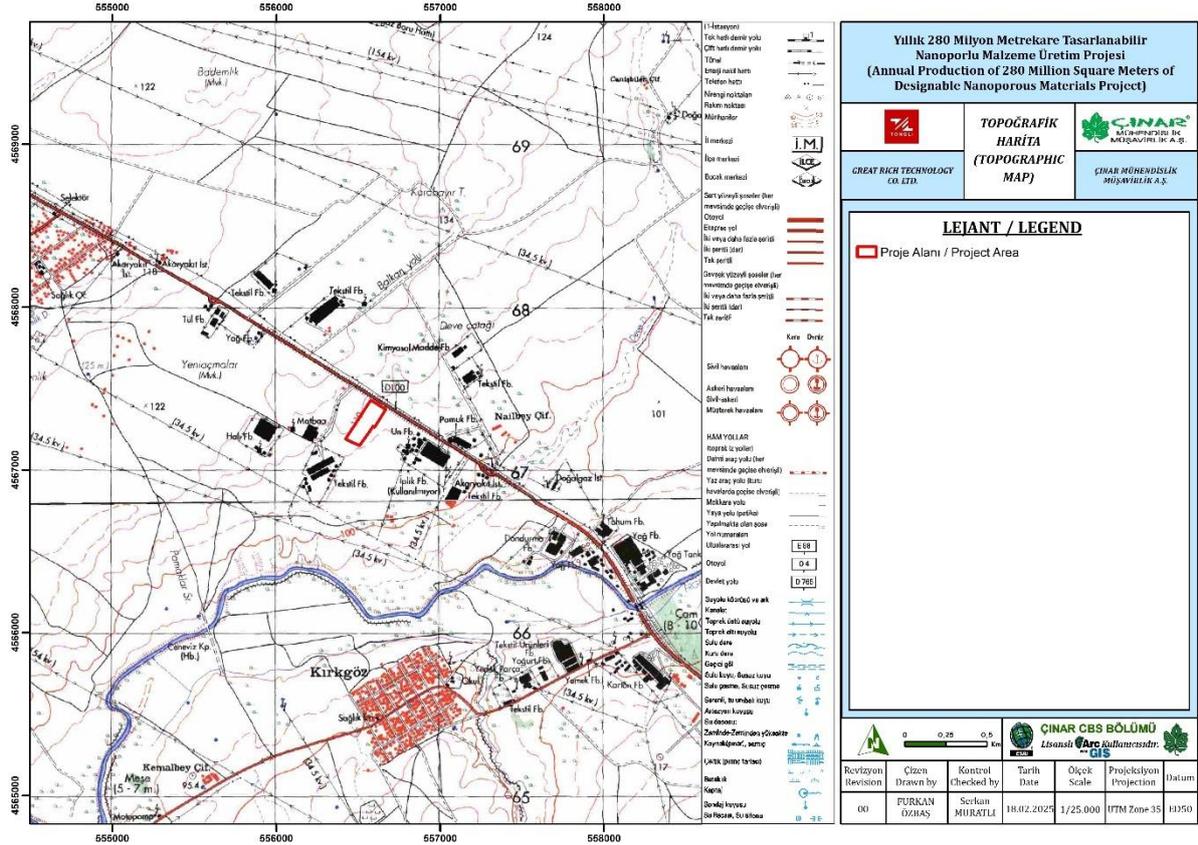


Figure 2-1. Topographical Map

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## 2.2 Project Phases and Timeline

The **Nanoporous Materials Project** is expected to be completed within a 2-year timeframe, with the following major phases:



### 3 NATIONAL AND INTERNATIONAL REQUIREMENTS

Turkish Environmental Law No. 2872, which was issued in the Official Gazette No. 18132 on August 11, 1983, describes the fundamental principles required to protect the environment in accordance with sustainable development and sustainable environmental goals. Environmental Law provides a legal framework for the development of environmental regulations in accordance with national and international standards.

In addition to Environmental Law and associated regulations, several laws in relation with environmental protection, pollution prevention and control, human rights and safety are listed in Table 3-1.

**Table 3-1. Highlighted Laws Covered by National Legislation**

Law	Law Number
Electricity Market Law	6446
Energy Efficiency Law	5627
Groundwater Law	167
Highway Traffic Law	2918
Labor Law	4857
Law on Measures to be taken and Aids to be provided for Disasters Effective in Public Life	7269
Law on Right to Information	4982
Law on Soil Conservation and Land Use	5403
Municipality Law	5393
Occupational Health and Safety Law	6331
Public Health Law	1593

Environmental, social and Occupational Health and Safety (OHS) related regulations that are valid for the project within the above-mentioned laws are listed in Table 3-2.

**Table 3-2. Prominent Regulations Covered by National Legislation**

Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
<b>Environmental Permits and Licenses (General)</b>			
Regulation on Environmental Impact Assessment	Evaluating the activities carried out within the scope of the project, including related and auxiliary facilities, according to the Annex-1 and Annex-2 lists of the Regulation, and obtaining decisions on “EIA Out of Scope” “EIA Not Required” or “EIA Positive”.	29.07.2022	31907
Regulation on Environmental Permits and Licenses	Evaluating the activities carried out within the scope of the project, including related and auxiliary facilities, according to the Annex-1 and Annex-2 lists of the Regulation, and obtaining necessary environmental permit(s) on air emissions, wastewater discharge and environmental noise.	10.09.2014	29115
Regulation on Environmental Audit	It covers the procedures and principles regarding environmental inspections and the application of administrative sanctions in accordance with Environmental Law No. 2872, as well as the related works and transactions to be carried out throughout the implementation period of the project.	12.06.2021	31509
Regulation Concerning Environmental Management Services	It explains the procedures and principles regarding the conditions, certification, and obligations of those who will provide environmental management services within the scope of the project.	01.11.2022	32000
Regulation on Pollutant Release and Transportation Record	It explains the procedures and principles for establishing the release and transportation records of pollutants to protect the environment and reduce environmental pollution from diffuse sources and industrial sources.	04.12.2021	31679
Circular on Restrictions in Discharge Standards under the Scope of the Marmara Sea Action Plan No. 2021-13	It specifies restrictions on discharge standards, particularly concerning the Chemical Oxygen Demand (COD) parameter, for domestic and industrial discharges within the Marmara Sea Hydrological Basin.	22.06.2021	41203884-010.06-02/1172378
<b>Climate Change</b>			
Regulation on Minimization of Ozone Depleting Substances	It determines the procedures and principles regarding the use and termination of substances controlled by the Montreal Protocol on Substances that Deplete the Ozone Layer, to be used within the scope of the project	07.04.2017	30031
Regulation on Monitoring of Greenhouse Gas Emissions	It covers monitoring, reporting, and verification of greenhouse gas emissions arising from activities included in the annexes of the regulation.	17.05.2014	29003

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Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
<b>Land Use and Soils</b>			
Regulation on Control of Soil Pollution and Point Source Contaminated Sites	It determines the principles for preventing soil contamination as a receiving environment due to project activities, identifying contaminated or potentially contaminated sites and sectors, and the cleanup and monitoring of contaminated soils and sites in alignment with sustainable development goals.	08.06.2010	27605
Regulation on Protection, Use and Planning of Agricultural Lands	It defines the procedures and principles for ensuring that project activities do not affect agricultural land, preventing misuse, and taking necessary measures in accordance with the principles of sustainable development.	09.12.2017	30265
<b>Water</b>			
Regulation on Surface Water Quality	It determines the procedures and principles for monitoring, determining, and classifying the quality and quantity of surface water resources and for the measures to be taken to achieve good water status. Baseline measurements and/or analyses to evaluate the impact of project activities on water resources are carried out within this framework.	30.11.2012	28483
Regulation on Water Pollution Control	In the case of wastewater discharge resulting from project activities (such as effluent from a wastewater treatment plant), it specifies the standards that the discharged water must meet.	31.12.2004	25687
Regulation Concerned Water Intended for Human Consumption	It sets the appropriate quality standards for hygiene and health for mains water or groundwater used as drinking water by employees within the scope of the project.	17.02.2005	25730
Regulation Concerning Protection of Groundwater against Pollution and Deterioration	It establishes the principles for protecting the current state of groundwater from project activities, preventing pollution and degradation, and improving the water quality.	07.04.2012	28257
Regulation on Monitoring of Surface Water and Groundwater	It covers issues related to the monitoring of surface water and groundwater resources affected directly or indirectly by the project activities.	11.02.2014	28910
Regulation on Control of Pollution Caused by Hazardous Substances in and around the Water Bodies	It includes measures to detect, prevent and gradually reduce pollution caused by hazardous substances in water and its surroundings resulting from project activities and associated/auxiliary facilities.	26.11.2005	26005
Regulation on Planned Areas Zoning	It includes procedures and principles regarding building and construction in accordance with the plan, science, health and sustainable environmental conditions, project design and supervision.	03.07.2017	30113

Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
	Article 7 of the Regulation states that “The mechanical installation projects of the buildings to be built on parcels larger than 2,000 m <sup>2</sup> must include a rainwater collection system to collect the rainwater to be collected from the roof surface, if necessary, filtered and collected in a tank and used in building toilet flushes.”		
Communique on Sampling of Surface Water, Groundwater and Sediment and Biological Sampling	It explains the requirements for taking samples, transporting, protecting, and storing samples in order to determine the impact of project activities on the aquatic environment (for baseline measurements, periodic monitoring, and measurements to be made in case of any grievances).	21.02.2015	29274
Communique on Administrative Procedures for the Regulation on Water Pollution Control	The purpose of this Communiqué is to regulate the administrative procedures and practices concerning the responsibilities and permit acquisition principles outlined in the Water Pollution Control Regulation, published in the Official Gazette on 31 December 2004, with the number 25687. This Communiqué addresses the principles for obtaining permission for the direct discharge of all types of urban, domestic, and/or industrial wastewater into the receiving environment.	10.10.2009	27372
<b>Waste Management</b>			
Regulation on Control of Packaging Wastes	It includes requirements for effective waste management and disposal in line with the waste management hierarchy, applicable to all phases of the project, based on the type of waste generated.	26.06.2021	31523
Regulation on Waste Management		02.04.2015	29314
Regulation on the Control of Excavation Soil, Construction and Demolition Wastes		18.03.2004	25406
Regulation on the Control of Medical Wastes		25.01.2017	29959
Regulation on the Management of Waste Oils		21.12.2019	30985
Regulation on the Control of Vegetable Waste Oils		06.06.2015	29378
Regulation on the Control of Waste Batteries and Accumulators		31.08.2004	25569
Regulation on the Control of End-of-Life Tires		25.11.2006	26357
Regulation on the Control of Waste Electrical and Electronic Equipment		26.12.2022	32055

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Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
Regulation on the Control of End-of-Life Vehicles		30.12.2009	27448
Regulation on Zero Waste	It contains the principles that must be adopted for the protection of the environment, human health, and all resources in waste management processes in line with the principles of sustainable development throughout the life of the project.	12.07.2019	30829
Regulation on the Landfill of Wastes	It explains the characteristics and requirements of the sanitary landfills to which the waste generated within the scope of the project and that cannot be recycled will be sent	26.03.2010	27533
<b>Air Quality and Greenhouse Gas Emissions</b>			
Regulation on the Control of Industrial Air Pollution	It covers the examination and determination of the prevention of air pollution resulting from project activities, the limit values that must be maintained in the receiving environments (sensitive receptors), and the flue gas emission limit values originating from the facility (as fixed emission sources).	03.07.2009	27277
Regulation on Assessment and Management of Air Quality	It covers the necessary measures to define air quality targets and ensure good air quality in order to prevent or reduce the harmful effects of air pollution resulting from the activities carried out within the scope of the project on the environment and human health.	06.06.2008	26898
Regulation on the Control of Exhaust Gas Emissions	It contains the procedures and principles regarding the protection of living beings and the environment from the effects of air pollution caused by exhaust gases from motor vehicles used in project activities and driving in traffic. It ensures the reduction of exhaust gas pollutants, their control through measurements, and implementation.	11.03.2017	30004
Regulation on Monitoring of Greenhouse Gas Emissions	It covers the procedures and principles for monitoring, reporting, and verifying both direct and indirect (due to the supply chain) greenhouse gas emissions arising from project activities, mainly from traffic/transportation and auxiliary/associated facilities.	17.05.2014	29003
Regulation on Increasing Efficiency in the Use of Energy Resources and Energy	It covers the procedures and principles for the effective use of energy during the construction and operation periods of the project, aiming to prevent energy waste, reduce energy costs, and increase efficiency in the use of energy resources to protect the environment.	27.10.2011	28097

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Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
<b>Management of Chemicals</b>			
Regulation on Classification, Labelling and Package of Materials and Mixtures	It regulates the administrative and technical procedures and principles for the classification, labeling, and packaging of chemicals and hazardous substances used in the project to ensure a high level of protection for human health and the environment and to facilitate their safe circulation.	11.12.2013	28848
Regulation on Safety Information Forms on Hazardous Substances and Mixtures	It regulates the administrative and technical procedures and principles for the preparation and distribution of safety data sheets to ensure effective control and supervision of the adverse effects that chemicals and hazardous substances used in the project may have on human health and the environment.	13.12.2014	29204
Regulation Regarding Prevention of Major Industrial Accidents and Mitigation of Their Effects ("BEKRA")	It determines the procedures and principles for measures to ensure a high level of effective and continuous protection against major industrial accidents in related and auxiliary facilities containing hazardous substances, and to minimize the potential damage to people and the environment.	02.03.2019	30702
Regulation Regarding Transport of Hazardous Materials on Highways	It defines the necessary procedures and principles for carrying out hazardous material transportation on public roads within the scope of the project in a safe, secure, and orderly manner, without harming human health, other living beings, or the environment.	18.06.2022	31870
<b>Community and Occupational Health and Safety and Labor and Working Conditions</b>			
Regulation on Occupational Health and Safety Risk Assessment	It regulates the procedures and principles for conducting risk assessments related to occupational health and safety in the project's activity areas, including related and auxiliary facilities.	29.12.2012	28512
Regulation on Occupational Health and Safety Services	It regulates the authorization of joint health and safety units for providing occupational health and safety services within the scope of the project, including the issuance and cancellation of authorization certificates, as well as their duties, powers, responsibilities, and working procedures.	29.12.2012	28512
Regulation on Duties, Authority, Responsibilities and Trainings of Occupational Health and Safety Specialists	It regulates the qualifications, training, and certification of occupational safety experts, as well as their duties, powers, responsibilities, and working procedures for the occupational health and safety services to be received within the project.	29.12.2012	28512

Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
Regulation on Procedures and Principles of Occupational Health and Safety Training of Employees	It regulates the procedures and principles for providing occupational health and safety training to employees within the scope of the project.	15.05.2013	28648
Regulation on the Occupational Health and Safety Committees	It determines the working procedures and principles for occupational health and safety committees in workplaces with fifty or more employees where continuous work lasts more than six months.	18.01.2013	28532
Regulation on the Health and Safety Measures to be taken in Workplace Buildings and Additions	It specifies the minimum health and safety conditions for workplace buildings and extensions used in the project.	17.07.2013	28710
Regulation on Protection of Buildings from Fire	It defines the procedures and principles for measures, organization, training, and inspection before and during a fire in areas where project activities are conducted.	19.12.2007	26735
Regulation on Emergency Cases in Workplaces	It regulates the procedures and principles for preparing emergency plans in workplaces used for the project, covering prevention, protection, evacuation, firefighting, first aid, and similar issues, as well as the safe management of these situations and the assignment of responsible employees.	18.06.2013	28681
First Aid Regulation	It regulates the procedures and principles for reducing the risk of death and injury due to accidents by ensuring the presence of first aiders based on the number of personnel in the project facilities; it also covers the establishment, operation, and inspection of centers for first aid instructor training, first aid training, and the certification of first aiders.	29.07.2015	29429
Communique on Hazard Classes List related to Occupational Health and Safety	It determines the hazard classes of workplaces used in the project for occupational health and safety purposes.	26.12.2012	28509
Regulation Concerning the Protection of Workers from Risks Associated with Noise	It defines the minimum requirements to protect employees from health and safety risks resulting from exposure to noise in the project's activity areas, particularly hearing-related risks.	28.07.2013	28721
Regulation Concerning the Protection of Workers from Risks Associated with Vibration	It establishes the minimum requirements for protecting employees from health and safety risks resulting from exposure to mechanical vibration within the scope of the project.	22.08.2013	28743
Regulation on Health and Safety Conditions in the Use of Work Equipment	It defines the minimum health and safety requirements for the use of work equipment in workplaces used for the project.	25.04.2013	28628
Regulation on Occupational Health and Safety in Construction Works	It defines the minimum occupational health and safety requirements for construction work within the scope of the project	05.10.2013	28786

Regulation Name	Relevance of the Legislation with the Project	Official Gazette Date	Issue
Regulation on Health and Safety Regarding Temporary and Time Limited Works	It ensures that employees on temporary or fixed-term contracts within the scope of the project are provided with the same level of health and safety protection as other employees in the workplaces.	23.08.2013	28744
Regulation on Health and Safety Precautions Regarding Working with Chemicals	It defines the minimum requirements for protecting employees' health and ensuring a safe working environment from existing or potential risks arising from chemicals present, used, or processed in workplaces within the scope of the project.	12.08.2013	28733
Regulation on Health and Safety Signs	It defines the minimum requirements for the implementation of health and safety signs to be used in workplaces.	11.09.2013	28762
Regulation on Dust Management	It defines the procedures and principles for dust control in workplaces used within the scope of the project to prevent risks arising from dust and ensure the protection of workers from its effects.	05.11.2013	28812
Regulation on Personal Protection Equipment	It defines the procedures and principles regarding the requirements for the PPEs purchased and used within the scope of the project.	01.05.2019	30761
Regulation on Usage of Personal Protective Equipment in Workplaces	It determines the procedures and principles regarding the features, supply, use, and other matters related to personal protective equipment to be used to prevent or adequately reduce risks in the workplaces within the scope of the project.	02.07.2013	28695
Regulation on Vocational Training of the Employees Working in Dangerous and Highly Dangerous Workplaces	It regulates the procedures and principles for the vocational training of employees in hazardous and very hazardous works within the scope of the project.	13.07.2013	28706
<b>Noise</b>			
Regulation on Environmental Noise Control	It covers the procedures and principles for controlling environmental noise and vibration originated from project activities to prevent their adverse effects on the environment and human health and includes the limit values that must be met in receiving environments.	30.11.2022	32029
Regulation on Environmental Noise Emission Caused by Equipment Used Outdoors	It establishes the procedures and principles for the application of noise emission standards for equipment used in open areas within the scope of the project, including the collection of technical documents and information, compliance assessment procedures, and labeling.	30.12.2006	26392
<b>Social</b>			

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<b>Regulation Name</b>	<b>Relevance of the Legislation with the Project</b>	<b>Official Gazette Date</b>	<b>Issue</b>
Regulation on the Implementation of Law Concerning Private Security Services	It establishes the procedures and principles for the requirements of private security services to be procured within the scope of the project.	07.10.2004	25606
<b>Others</b>			
Regulation on Traffic in Highway	It covers measures to ensure traffic order on highways within the scope of the project's activities and addresses all issues related to traffic safety for people and property.	18.07.1997	23053
Regulation on Opening a Business and Working Licenses	It regulates the principles and procedures for issuing business opening and working licenses for the workplaces used in the project activities.	10.08.2005	25902

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## 3.1 International Standards

### 3.1.1 IFC Sustainability Framework

The IFC Sustainability Framework (2012) serves as a comprehensive structure designed to help private sector companies manage environmental, social, and governance (ESG) risks in alignment with sustainable development goals. It reflects the International Finance Corporation's (IFC) commitment to ensuring that business activities not only contribute to economic growth but also uphold high standards of social and environmental responsibility.

The framework's main objective is to promote sustainability by guiding clients to manage risks responsibly and achieve positive environmental and social outcomes. Key benefits include:

- Risk Mitigation: Helps businesses identify and address potential environmental and social risks early.
- Enhanced Performance: Promotes sustainable practices that can improve overall project efficiency and effectiveness.
- Stakeholder Engagement: Facilitates better relationships with local communities and stakeholders.
- Compliance with Global Standards: Ensures alignment with international sustainability practices, enhancing reputation and trust.

#### Main Components of the IFC Sustainability Framework:

##### 1. IFC Policy on Environmental and Social Sustainability

- Outlines IFC's approach to working with clients to achieve sustainable development.
- Provides the basis for IFC's commitment to working with clients to mitigate environmental and social risks and enhance sustainability outcomes.

##### 2. Performance Standards on Environmental and Social Sustainability

- Serve as the cornerstone of IFC's sustainability framework, defining clients' responsibilities in managing environmental and social risks throughout the project lifecycle.
- These standards ensure that projects funded by IFC promote positive environmental and social outcomes.

#### Detailed Overview of the Eight Performance Standards (PS):

- **PS1: Assessment and Management of Environmental and Social Risks and Impacts**
  - Establishes a process for identifying, assessing, and managing potential risks and impacts.
  - Emphasizes continuous monitoring and adaptive management to mitigate issues.
- **PS2: Labor and Working Conditions**
  - Safeguards fair treatment of workers, including workplace safety, non-discrimination, and mechanisms for resolving grievances.
  - Covers aspects such as child labor, forced labor, and workers' rights.
- **PS3: Resource Efficiency and Pollution Prevention**
  - Promotes the sustainable use of resources, aiming to prevent pollution and reduce emissions.

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- Encourages the adoption of cleaner production methods and technologies.
- **PS4: Community Health, Safety, and Security**
  - Focuses on preventing and mitigating risks to local communities arising from project activities.
  - Includes considerations related to the security arrangements to protect both the company and community.
- **PS5: Land Acquisition and Involuntary Resettlement**
  - Ensures fair compensation and mitigation measures for those affected by land acquisition or involuntary resettlement.
  - Aims to prevent economic and social displacement and support affected communities.
- **PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources**
  - Aims to protect biodiversity and maintain the ecosystem services essential for human well-being.
  - Encourages responsible management of natural resources for sustainable use.
- **PS7: Indigenous Peoples**
  - Acknowledges the distinct needs of indigenous communities and seeks to protect their rights, land, and cultural practices.
  - Ensures their participation in project development through informed consultation and participation.
  - PS7 Indigenous Peoples is not applicable for the Projects in Türkiye, since there is no communities or groups of people which can be identified/defined as indigenous peoples in the country.
- **PS8: Cultural Heritage**
  - Protects cultural heritage from potential adverse project impacts and encourages its preservation.
  - Promotes cultural heritage as a means of fostering community identity and legacy.

### 3. Access to Information Policy

- Reflects IFC's dedication to transparency and public accountability.
- Ensures stakeholders have access to relevant project information and decision-making processes.

By implementing these standards, IFC not only supports its clients in managing their environmental and social impacts but also contributes to broader development goals focused on economic growth, social inclusion, and environmental sustainability.

Performance Standards that are expected to be relevant to the Project and considered within the scope of the ESIA are PS1, PS2, PS3 and PS4.

#### 3.1.2 AIIB Environmental and Social Standards (ESSs)

##### ESS 1 – Environmental and Social Assessment and Management

- Requires projects to **identify, assess, and manage environmental and social risks and impacts.**

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- Emphasizes:
  - Environmental protection (air, water, land, biodiversity, climate change).
  - Social aspects (land use, livelihoods, cultural heritage, community health and safety).
  - Use of a **mitigation hierarchy** (avoid → minimize → mitigate → compensate/offset).
  - Preparation of Environmental and Social Impact Assessments (ESIA), Management Plans (ESMP), or frameworks when needed.
  - Meaningful stakeholder engagement and disclosure.

### **ESS 2 – Land Acquisition and Involuntary Resettlement**

- Applies when projects cause **land acquisition, economic displacement, or physical resettlement**.
- Core requirements:
  - Avoid or minimize resettlement impacts.
  - Provide **compensation at replacement cost** and restore/improve livelihoods.
  - Special attention to vulnerable groups.
  - Prepare and implement **Resettlement Plans (RP)** or frameworks.
  - Ensure consultation and grievance mechanisms for affected people.

### **ESS 3 – Indigenous Peoples**

- Applies when projects affect **Indigenous Peoples (IPs) / Ethnic Minorities**.
- Main principles:
  - Respect rights, dignity, identity, culture, and natural resource-based livelihoods of IPs.
  - Ensure they receive **equitable benefits** and do not suffer adverse impacts.
  - Conduct culturally appropriate consultation.
  - Where significant impacts occur, require **Free, Prior and Informed Consent (FPIC)**.
  - Develop **Indigenous Peoples Plans (IPP)** or frameworks.

Environmental Standard that is expected to be relevant to the Project and considered within the scope of the ESMP is ESS1.

### **3.1.3 Other E&S Guidelines**

The following E&S Guidelines are also applicable to the project as reference technical documents for determining performance levels and measures to manage the hazards and risks related to environmental, social and OHS issues established for the project:

- World Bank Group (WBG) General Environmental, Health and Safety (EHS) Guidelines (2007),

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- WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing (2007),
- Good International Industry Practices (GIIP),
- World Health Organization (WHO) Documents regarding Drinking-Water Quality Guidelines and Air Quality Guidelines.
- International Environmental and Social Conventions Ratified by Türkiye.

## 4 ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The environmental and social impacts and risks of the project during the construction and operation phases are outlined in Table 4-1. Relevant mitigation measures and monitoring plans for each phase of the project are detailed in Chapter 7 and Chapter 8, respectively.

**Table 4-1. Environmental and Social Impacts and Risks of the Project**

Topic	Associated impacts and/or risks during the demolition and construction phase	Associated impacts and/or risks during the operation phase
Land Use, Soil and Geology	<ul style="list-style-type: none"> <li>▪ Soil disturbance and soil erosion risk, due to earthworks: excavation and filling operations, in the absence of proper erosion control measures and sedimentation,</li> <li>▪ Soil contamination risk originated from accidental spill/leakage and improper management of hazardous materials and waste,</li> <li>▪ Risks during the construction of pile foundations and building bases on alluvial soil with low groundwater levels.</li> <li>▪ Seismicity and geotechnic related risks.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Seismicity and geotechnic related risks,</li> <li>▪ Soil contamination risk originated from accidental spill/leakage and improper management of hazardous materials and waste,</li> <li>▪ Soil disturbance and erosion risk due to extreme weather conditions and improperly functioning erosion and sediment control structures.</li> </ul>
Noise and Vibration	<ul style="list-style-type: none"> <li>▪ Increase in noise levels and vibration due to demolition and construction activities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase in noise levels due to operation of the facility along with traffic load that will be generated</li> </ul>
Air Quality and Greenhouse Gas Emissions	<ul style="list-style-type: none"> <li>▪ Decrease in air quality due to dust formation originating from excavation, concrete works, material storage, unloading and transportation processes and due to air emissions originating from diesel-powered construction equipment/machinery</li> <li>▪ Greenhouse gas contribution resulting from operation of construction vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decrease in air quality caused by the facility's air emissions, along with exhaust emissions from traffic vehicles</li> <li>▪ Greenhouse gas emissions resulting from the facility's raw material and energy requirements, as well as from traffic movements</li> </ul>
Water Resources, Water Quality and Wastewater	<ul style="list-style-type: none"> <li>▪ Impacts on the groundwater resources due to water use for construction activities,</li> <li>▪ Degradation impacts on surface water quality due to improper management of the wastewater, waste and chemicals/hazardous substances along with surface runoff resulting in sediment accumulation on the waterbody,</li> <li>▪ Impacts on groundwater resources due to accidental spill/leakage and improper management of hazardous materials and waste (including wastewater),</li> <li>▪ Impacts on surface water flow and flood risk due to poor management of surface runoff,</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impacts on the groundwater resources due to water use for operation activities,</li> <li>▪ Degradation impacts on surface water quality due to improper management of the wastewater, waste and chemicals/hazardous substances along with surface runoff resulting in sediment accumulation on the waterbody,</li> <li>▪ Impacts on groundwater resources due to accidental spill/leakage and improper management of hazardous materials and waste (including wastewater),</li> <li>▪ Impacts on surface water flow and flood risk due to poor management of surface runoff.</li> </ul>

Topic	Associated impacts and/or risks during the demolition and construction phase	Associated impacts and/or risks during the operation phase
Resources and Waste Management	<ul style="list-style-type: none"> <li>▪ Raw material and energy usage due to construction activities,</li> <li>▪ Possible impacts from storage of excavation surplus materials in case excavated materials are not reused/recycled, resulting in additional land occupation,</li> <li>▪ Potential impacts of hazardous and non-hazardous solid wastes due to poor waste management, resulting in environmental pollution and occupational and community related health and safety risks.</li> <li>▪ Additional load on the waste management facilities around the sub-project area in the absence of best management practices and effective waste management.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Raw material and energy usage due to the facility activities,</li> <li>▪ Potential impacts of hazardous and non-hazardous solid wastes due to poor waste management, resulting in environmental pollution and occupational and community related health and safety risks.</li> <li>▪ Additional load on the waste management facilities around the sub-project area in the absence of best management practices and effective waste management.</li> </ul>
Biological Environment	<ul style="list-style-type: none"> <li>▪ Potential impacts on biodiversity due to noise and air pollution, improper waste management and pollution of water resources</li> <li>▪ Potential for small-scale biodiversity and habitat disturbances.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential impacts on biodiversity due to noise and air pollution, improper waste management and pollution of water resources</li> </ul>
Labor and Working Conditions	<ul style="list-style-type: none"> <li>▪ Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time.</li> <li>▪ Unequal opportunities for women and men in selection, remuneration, and promotion</li> <li>▪ Harassment (including sexual harassment), intimidation, and/or exploitation among project workers</li> <li>▪ Retaliation of workers as a result of any grievance they raised and/or difficulty in accessing worker grievance mechanism (WGM)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Foreign workers</li> <li>▪ Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time.</li> <li>▪ Unequal opportunities for women and men in selection, remuneration, and promotion</li> <li>▪ Harassment (including sexual harassment), intimidation, and/or exploitation among project workers</li> <li>▪ Retaliation of workers as a result of any grievance they raised and/or difficulty in accessing worker grievance mechanism (WGM)</li> </ul>
Community Health, Safety and Security	<ul style="list-style-type: none"> <li>▪ Traffic and road safety risks to road users</li> <li>▪ Communication issues with stakeholders due to poor management of stakeholder engagement,</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traffic and road safety risks to road users</li> <li>▪ Communication issues with stakeholders due to poor management of stakeholder engagement</li> </ul>
Occupational Health and Safety	<ul style="list-style-type: none"> <li>▪ Accidents and Injuries                             <ul style="list-style-type: none"> <li>○ Over-exertion (includes ergonomic injuries from repetitive movements and handling, as well as overexertion)</li> <li>○ Slips and Falls</li> <li>○ Falls from high places</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Electric Shock Hazards: The project involves a large number of electrical devices, some of which have high input voltages, posing significant risk of electric shock.</li> <li>▪ Lifting Hazards: Project factories and warehouses use forklifts, and during lifting operations, there is a possibility of accidents such as disconnection</li> </ul>

Topic	Associated impacts and/or risks during the demolition and construction phase	Associated impacts and/or risks during the operation phase
	<ul style="list-style-type: none"> <li>○ Accidents caused by tools used during construction</li> <li>○ Accidents caused by vehicles on the construction site</li> <li>○ Traffic accidents that occur during work on the road</li> <li>○ Accidents within Construction Camps and Material/Equipment storage areas</li> <li>▪ Exposure to dust</li> <li>▪ Exposure to noise</li> <li>▪ Accidents caused by confined spaces and excavations (where entry or exit is difficult, such as silos, boats, hoppers, utility boxes, tanks, drains, pipes and access shafts)</li> <li>▪ Other hazards (injuries from exposure to chemicals, hazardous or flammable substances, and liquid, solid or gaseous wastes)</li> <li>▪ Emergency situations (fire, chemical spill, etc.).</li> </ul>	<p>causing injuries, steel wire ropes breaking and striking individuals, moving suspended objects colliding with people, steel wire ropes scraping individuals, and pulleys hitting people, which can result in casualties.</p> <ul style="list-style-type: none"> <li>▪ <b>Mechanical Injuries:</b> The project utilizes production equipment such as mixers and coating machines, as well as a large number of conveyor devices. Direct contact between moving (stationary) parts of the equipment, tools, processed parts, and the human body may lead to injuries in the form of pinching, collision, cutting, entrapment, twisting, crushing, slicing, and stabbing. Exposed transmission parts of various rotating machinery (such as gears, shafts, tracks, etc.) and reciprocating motion parts can potentially cause mechanical injuries to the human body.</li> <li>▪ <b>Noise and Vibration:</b> The operation of equipment inevitably generates low-frequency noise and vibration, but there may also be certain high-frequency components, with sound pressure levels ranging from 95 to 115 decibels. Workers exposed to forging vibrations may experience qualitative and functional disorders, which can reduce work capacity and affect safety.</li> <li>▪ <b>Protection Against Toxicity and Dust:</b> The synthesis process generates a small amount of organic solvent waste gas; the combustion waste gas produced by the regenerative thermal oxidizer is collected by fans and exhaust pipes, and after high-temperature incineration in the RTO waste incinerator, it is discharged into the atmosphere.</li> <li>▪ <b>Fire/Explosion Hazards:</b> Most of the main materials in the production process have flammable and explosive characteristics, such as natural gas and resin materials. When these materials leak into the air and encounter an ignition source, there is a risk of combustion/explosion.</li> <li>▪ <b>Other Hazards:</b> High-temperature equipment is used in production, thus there is a risk of high-temperature burns.</li> </ul>

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## 5 IMPLEMENTATION OF THE ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

### 5.1 Organizational Structure

Great Rich Technologies Limited is responsible for the overall environmental and social performance of the project, including the technical performance of its contractors and subcontractors. The company will establish an effective organizational structure to ensure the smooth implementation of the project and adherence to the environmental and social management requirements outlined in the Environmental and Social Impact Assessment (ESIA). Organizational structure Great Rich Technologies Limited is presented in

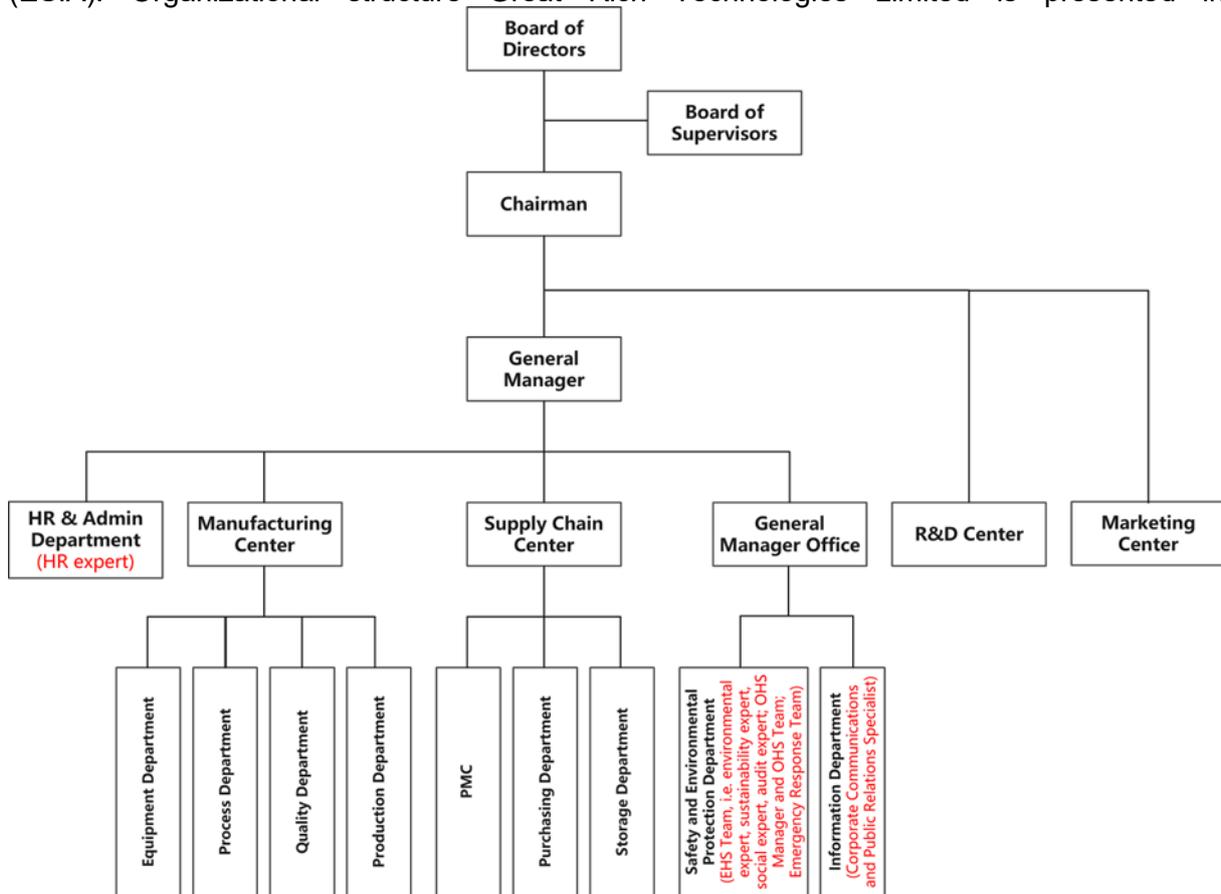
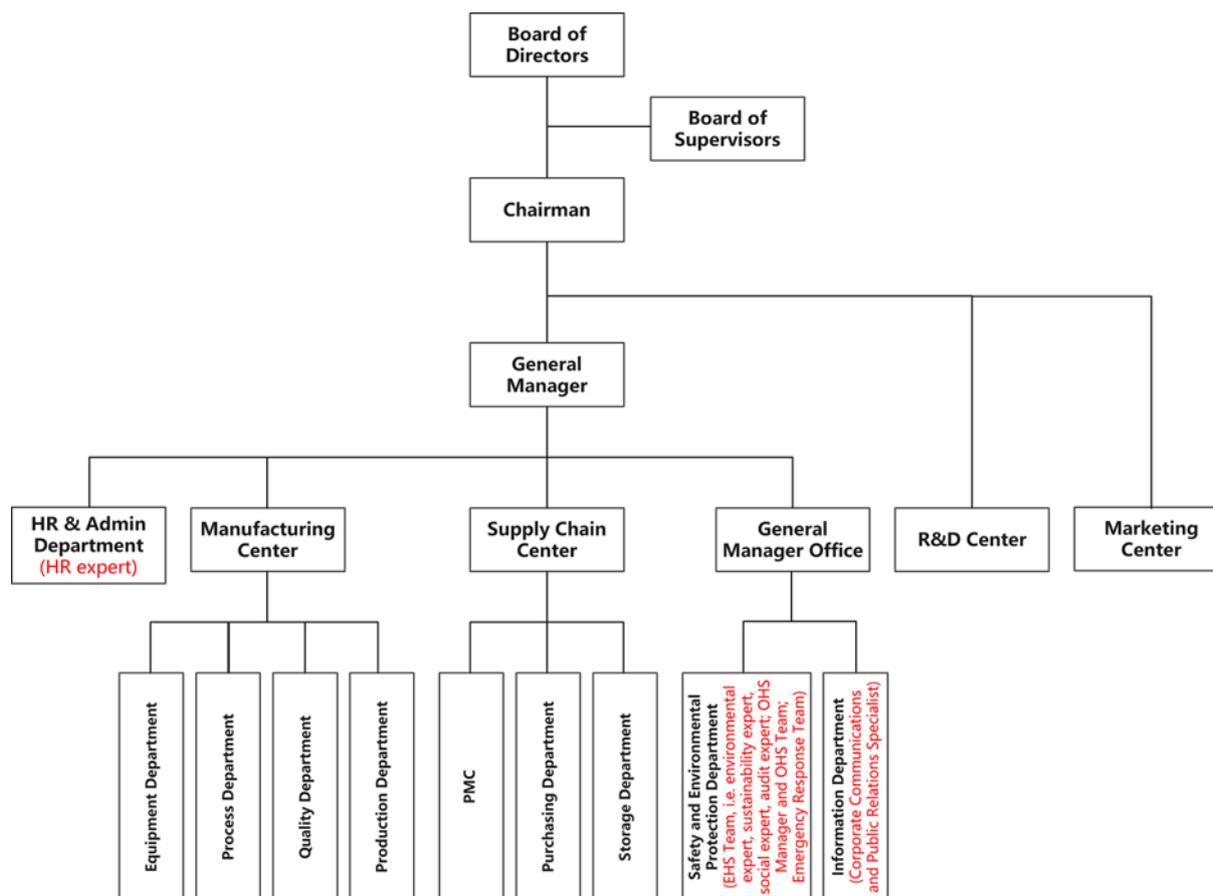


Figure 5-1.



**Figure 5-1. Organizational Structure of Great Rich Technologies Limited**

**Table 5-1. Roles and Responsibilities**

<b>Roles</b>	<b>Responsibilities</b>
General Manager	<ul style="list-style-type: none"> <li>Appoints the Project Manager and ensures he/she is aware of his/her responsibilities,</li> <li>Ensures environmental and social requirements will be implemented during the lifetime of the Project,</li> <li>Evaluates the reports provided by Project Manager and ensures necessary actions were taken.</li> </ul>
Project Manager (General Manager Office)	<ul style="list-style-type: none"> <li>Has overall responsibility for the implementation of ESMP and sub-management plans by fulfilling project requirements,</li> <li>Coordinates with parties for proper implementation of ESMP and sub-management plans,</li> <li>Ensures the provision of competent personnel of the emergency response team,</li> <li>Provides necessary resources for proper implementation,</li> <li>Conduct periodic inspections of the performance of project activities during the lifetime of the project,</li> <li>Makes the final decision concerning internal/external grievances (if needed) in the light of the assessment of Environmental &amp; Utilities Unit Manager, Occupational Health and Safety Manager and Construction Authorized Specialist.</li> </ul>
Safety and Environmental Protection Department (which is an individual department consisting of specialists such as environmental expert(s), OHS expert(s),	<ul style="list-style-type: none"> <li>Responsible for the implementation, coordination, and, when necessary, revision of the plan during the operation phase,</li> <li>Ensures the application of appropriate control procedures, maintaining records, conducting necessary audits, identifying non-conformities, and implementing corrective actions,</li> </ul>

<b>Roles</b>	<b>Responsibilities</b>
sustainability expert(s), and audit expert(s) from various departments)	<ul style="list-style-type: none"> <li>▪ Preparation, implementation, and, when necessary, updating of documentation required under national legislation and international standards,</li> <li>▪ Overseeing the compliance of all service providers and contractors working or to be employed on the site with the requirements of this plan,</li> <li>▪ Reporting identified non-conformities and related corrective actions to the Project Manager,</li> <li>▪ Ensuring that all personnel working on the project receive necessary training and that relevant procedures and essential requirements are applied.</li> </ul>
Information Department	<ul style="list-style-type: none"> <li>▪ Responsible for ensuring the effective implementation of the Project Grievance Mechanism, conveying recorded feedback, suggestions, and complaints to the relevant individuals, and ensuring that necessary corrective and preventive actions are taken</li> <li>▪ Provides regular reporting back to the community on the management related to community grievances.</li> </ul>
HR & Admin Department	<ul style="list-style-type: none"> <li>▪ Ensure that all employees have access to adequate welfare facilities, such as clean drinking water, sanitation, medical care, and safe accommodation.</li> <li>▪ Address grievances related to workplace conditions, health, and safety.</li> <li>▪ Enforce adherence to labor policies outlined in the ESMP, including equal opportunity, non-discrimination, and anti-harassment policies.</li> <li>▪ Ensure fair and transparent recruitment processes</li> <li>▪ Monitor employee compliance with ESMP requirements and maintain records of training, grievances, and corrective actions.</li> <li>▪ Work with other departments to promote collaboration between employees, contractors, and local communities in achieving ESMP goals.</li> </ul>
Occupational Health and Safety Manager (under the Safety and Environmental Engineering Department)	<ul style="list-style-type: none"> <li>▪ Developing, implementing, and maintaining safety programs and procedures to ensure compliance with national, and international safety regulations.</li> <li>▪ Conducting regular safety audits, inspections, and assessments to identify potential hazards and ensure the safe operation of the workplace.</li> <li>▪ Providing training to employees on safety protocols, emergency procedures, and safe work practices.</li> </ul>

<b>Roles</b>	<b>Responsibilities</b>
	<ul style="list-style-type: none"> <li>▪ Ensuring that all safety equipment is maintained, tested, and used correctly by employees.</li> <li>▪ Investigating accidents and incidents to determine root causes, ensuring that corrective and preventive actions are taken to mitigate future risks.</li> <li>▪ Monitoring and evaluating workplace safety performance, reporting findings to senior management, and recommending improvements.</li> <li>▪ Promoting a safety culture within the organization by encouraging safe behavior and engaging employees in safety initiatives.</li> <li>▪ Managing emergency response procedures and ensuring that employees are well-prepared for potential hazards or emergencies.</li> </ul>
Emergency Response Team	<ul style="list-style-type: none"> <li>▪ Implementing the relevant emergency response plans.</li> <li>▪ Initial response to emergencies.</li> <li>▪ Coordinating with local emergency services.</li> <li>▪ Implementing evacuation procedures.</li> <li>▪ Ensuring the safety of all personnel during the incident.</li> </ul>
Project Staff	<ul style="list-style-type: none"> <li>▪ Complying with and implementing the requirements of this plan.</li> <li>▪ Attending the relevant training sessions assigned to them under this plan.</li> <li>▪ Reporting non-conformities to their administrative managers</li> </ul>
Supply Chain Center	<ul style="list-style-type: none"> <li>▪ Ensures that procurement, purchasing, and storage activities are carried out in compliance with the ESMP and relevant environmental, social, and OHS requirements.</li> <li>▪ Coordinates with suppliers and contractors to ensure that materials and services meet project standards.</li> <li>▪ Supports the implementation of responsible supply chain practices, including proper storage, handling, and transportation of materials.</li> </ul>
R&D Center	<ul style="list-style-type: none"> <li>▪ Supports the development and application of innovative technologies and processes that contribute to improved environmental performance and operational efficiency.</li> <li>▪ Collaborates with relevant departments to identify opportunities for reducing environmental and occupational health and safety risks.</li> <li>▪ Provides technical input, when necessary, to support continuous improvement of environmental and sustainability practices.</li> </ul>
Manufacturing Center	<ul style="list-style-type: none"> <li>▪ Ensures that manufacturing and production activities are carried out in compliance with the ESMP and applicable environmental, social, and OHS requirements.</li> <li>▪ Implements measures to control emissions, waste generation, resource consumption, and occupational risks arising from production processes.</li> <li>▪ Coordinates with the E&amp;S and OHS Team to monitor performance, address non-conformities, and support continuous improvement in environmental and safety practices.</li> </ul>

The roles and responsibilities of the contractor during the demolition and construction phase are summarized below:

- Ensure the full implementation of all requirements of the management plans and project standards.
- Ensure the implementation of additional commitments set by the General Manager and Project Manager.

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- Ensure compliance with project standards (national regulations and international standards) and ensure that necessary permits are obtained and maintained on time.
- Regularly monitor construction activities (including subcontractor activities) and ensure that appropriate preventive and corrective measures are taken in line with project standards.
- Ensure the employment of sufficient and competent EHS personnel and minimize the project's environmental and social impacts.
- Ensure that all project personnel, including subcontractor staff, receive necessary training on environmental, social, and occupational health and safety matters, and monitor the effectiveness of this training.
- Ensure regular monitoring and analysis of environmental and occupational health and safety incidents, identify the causes of accidents, and implement preventive measures.
- Ensure that records of accidents and incidents are meticulously maintained throughout the construction phase and immediately reported to the Project Manager.
- Ensure that complaints, feedback, and suggestions from employees and external stakeholders are recorded, inform the Project Manager, and implement necessary corrective and preventive actions.

Additionally, the responsibilities of the third-party E&S Consultant are outlined below:

- Monitoring the implementation of E&S management plans and mitigation measures to ensure compliance with both project standards and national/international regulations.
- Providing detailed E&S performance reports to the Bank semi-annually, including assessments of the project's compliance with E&S requirements, identifying any non-compliance or areas requiring improvement.
- Evaluating the effectiveness of corrective actions taken for identified non-compliances and providing recommendations for further improvements.
- Assessing the project's compliance with relevant E&S standards, regulations, and contractual commitments, and ensuring that all findings are clearly communicated to the Bank.
- Supporting the project team in responding to E&S-related inquiries from the Bank, including clarifications, additional information, and follow-up on mitigation measures.
- Reviewing and analyzing any community feedback, grievances, or complaints related to environmental and social performance, and reporting on how these are addressed.
- Facilitating communication between the project team and the Bank regarding E&S performance, ensuring that all reporting is timely, accurate, and comprehensive.
- Ensuring that all environmental and social risks are identified, evaluated, and adequately managed, and that relevant measures are in place to mitigate impacts throughout the project lifecycle.

## 5.2 Environmental and Social Monitoring and Reporting

The project will implement a robust reporting system to track progress on environmental and social performance and ensure transparency. Key elements of the reporting system will include:

- **Monthly Progress Reports:** Providing updates on the implementation of the ESMP, including compliance with mitigation measures, monitoring results, and any corrective actions taken.
- **Environmental and Social Audits:** Conducting regular audits to assess compliance with national laws, international standards, and the ESMP. Audit results will be shared with relevant stakeholders.

- **Incident and Non-Conformity Reporting:** Documenting and reporting any incidents or non-conformities, including accidents, pollution events, or deviations from the ESMP. These reports will outline corrective actions taken to prevent recurrence.
- **Stakeholder Reporting:** Preparing periodic reports for stakeholders, including local communities and regulatory authorities, detailing the project’s environmental and social performance, community engagement activities, and any grievances received.

Reporting will be structured to ensure that all relevant parties, including the project owner, contractors, regulators, and the local community, are informed of the project’s environmental and social performance.

### 5.3 Training

The Project Owner is set to implement an ESMP training and awareness program that will focus on the identified social and environmental risks, along with the measures in place to prevent, minimize, and mitigate any adverse impacts.

The training program/modules for the sub-project will encompass a comprehensive range of topics to ensure that all project participants are well-informed and equipped to handle their roles effectively and responsibly. The curriculum will include, but is not limited to, the following subjects:

- **Environmental Awareness:** Educating all project staff on environmental issues and the importance of complying with the ESMP. Topics may include waste management, pollution prevention, and resource conservation.
- **Social Responsibility:** Providing training on community engagement, human rights, and managing social risks such as labour conditions and local community relations.
- **Occupational Health and Safety Training:** Offering specialized training for workers to ensure they understand safety protocols, use appropriate PPE, and follow safe work practices to prevent accidents and occupational health issues.
- **Emergency Response Training:** Conducting regular drills and training sessions for both workers and local communities to ensure a prompt and effective response in case of an emergency, such as a fire or natural disaster.

This training program is designed to cover a wide array of critical topics, ensuring that all project participants are well-prepared to contribute to the project’s success while adhering to the highest standards of safety, ethics, and environmental stewardship.

Details of the trainings prepared for the Great Rich Ltd staff along with the Contractor within the scope of requirements of the ESMP are also presented in Table 5-2.

**Table 5-2. Consolidated Training Program**

Training Items	Specific Training Topics	Responsible Party	Target Group	Period
Induction Training	<ul style="list-style-type: none"> <li>▪ Introduction to the organization</li> <li>▪ Workplace Culture and Environment</li> <li>▪ Role specific training</li> <li>▪ Compliance and legal requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contractor</li> <li>▪ Great Rich Ltd</li> </ul>	<ul style="list-style-type: none"> <li>▪ Newly recruited Personnel</li> <li>▪ Personnel of newly contracted subcontractor-service provider</li> </ul>	Whenever needed

Training Items	Specific Training Topics	Responsible Party	Target Group	Period
	<ul style="list-style-type: none"> <li>Introduction to teams and departments</li> </ul>			
Environmental Awareness	<ul style="list-style-type: none"> <li>Pollution Prevention and Resource Efficiency</li> <li>Waste Management</li> <li>Requirements of the National Legislation and Project Standards along with the ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Contractor</li> <li>Great Rich Ltd</li> </ul>	All project personnel	Once before the commencement of construction activities and quarterly throughout the lifecycle of the sub-project
Social Responsibility (OHS Management)	<ul style="list-style-type: none"> <li>Introduction to Occupational Health and Safety</li> <li>Workplace Hazards and Risk Assessment</li> <li>Emergency Procedures</li> <li>Personal Protective Equipment (PPE)</li> <li>Construction and Site-Specific Safety</li> <li>Incident Reporting, Root Cause Analysis and Investigation</li> </ul>	<ul style="list-style-type: none"> <li>Contractor</li> <li>Great Rich Technologies Limited</li> </ul>	All project personnel	Once before the commencement of construction activities and whenever needed
Social Responsibility (Labor Management)	<ul style="list-style-type: none"> <li>Code of Conduct</li> <li>Human Rights</li> <li>Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH)</li> <li>Worker's GM</li> </ul>	<ul style="list-style-type: none"> <li>Contractor</li> <li>Great Rich Technologies Limited</li> </ul>	All project personnel	Once before the commencement of construction activities and quarterly throughout the lifecycle of the project
Social Responsibility (Community Health, Safety Management)	<ul style="list-style-type: none"> <li>Traffic and Road Safety Principles</li> <li>Environmental and Social Sensitivities</li> <li>Community Communication</li> </ul>	<ul style="list-style-type: none"> <li>Contractor</li> <li>Great Rich Technologies Limited</li> </ul>	All project personnel	Once before the commencement of construction activities and quarterly throughout the lifecycle of the project
Emergency Response	<ul style="list-style-type: none"> <li>Emergency Response Procedures</li> <li>Fire, Flood Earthquake Drills</li> </ul>	<ul style="list-style-type: none"> <li>Contractor</li> <li>Great Rich Technologies Limited</li> </ul>	All project personnel	Once before the commencement of construction activities and quarterly throughout the lifecycle of the project

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## 6 STAKEHOLDER ENGAGEMENT AND GRIEVANCE MECHANISM

### 6.1 Previous Stakeholder Engagement and Consultation Activities

During the project preparations, interviews were held between March 10-11, 2025, to obtain general information about the region where the project will be carried out and to identify stakeholders and disadvantaged/vulnerable individuals and groups. The individuals and institutions interviewed are listed as:

- Akın Tekstil (the closest factory to the project area)
- Koray Chemical Industry and Trade Limited Company (landowner of the Project area)
- Mukhtarship of the Yıldırım neighbourhood (settlement around the Project area)
- Mukhtarship of the Gündoğdu neighbourhood (settlement around the Project area)
- Mukhtarship of the Yenibedir village (settlement around the Project area)
- Female citizen living in the Evrensekiz municipality
- Evrensekiz Municipality
- Lüleburgaz Chamber of Agriculture

The project area is primarily characterized by agriculture, with wheat, sunflower, and canola being the most commonly cultivated crops. The local economy is sustained by agriculture, industry, and livestock farming, with agriculture playing the leading role. However, agricultural land in the project area is quite scarce. The designated Organized Industrial Zone mainly consists of factory-owned properties, where cultivation does not occur.

Migration is not considered a significant issue in the area. While some Syrian, Palestinian, and Afghan workers reside here, their numbers remain small. Due to a lack of official documentation, they are not formally employed in the industrial sector. Instead, they find employment in traditional and temporary jobs such as agricultural labor and shepherding. Since the migrant population is not concentrated in large groups, their presence does not cause major disruptions within the local community.

The residents of the region are highly familiar with industrial activities. It is claimed that over 7,000 industrial production factories operate throughout the province. This situation is generally viewed positively, as the local workforce finds employment opportunities within these factories. The people express a desire for industrial activities to coexist harmoniously with agriculture, emphasizing the need to address environmental and air pollution concerns.

One of the primary environmental concerns revolves around the Ergene River, a natural water source that has reportedly been contaminated by industrial activities, leading to an unpleasant odor. Residents highlight that they are unable to use the water in any capacity due to its pollution.

There are no reports of systematic or continuous violence and harassment against women and children. Factory-provided shuttle services are regarded as beneficial, particularly for female workers. Due to the small size of the region, residents believe that any negative incidents would quickly become widely known.

Worker mobility in the region is not perceived negatively. External migration is not prevalent, as most factory workers are local residents. Since commuting takes place on a daily basis, it does not disrupt the social fabric of the region. In the case of Evrensekiz Municipality, worker mobility has had a particularly positive impact. As the closest settlement to the industrial zone,

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Evrensekiz benefits economically, as factory workers fulfill their daily needs—such as food, barber services, and shopping—within the municipality.

Beekeeping is another prominent activity in Evrensekiz. Although the settled population accounts for only 20% of beekeepers, "Mobile Beekeepers" make up 80% during the summer months. However, concerns have been raised about the decline in beekeeping activities, with industrial expansion and a lack of education being identified as key factors negatively affecting productivity.

Büyükkarıştıran Municipality is a region that predominantly receives internal migration. The influx of migrants from eastern provinces is substantial but remains controlled in a way that does not threaten social order. Additionally, it is reported that approximately 135 to 140 factories are located in the vicinity, further contributing to the region's economic dynamics

## 6.2 Grievance Mechanism

Recording and monitoring of E&S grievances will be the main responsibility of the Client. Client will appoint personnel for the grievance management process in the field. As described in the SEP, the Project Manager and social expert will be primarily responsible for grievance management and the Contractor's CLO. Client will arrange contractual agreements with the Contractor to ensure that they have a CLO on site that will be responsible for recording and monitoring grievances with the Contractor. These appointed persons will follow the GM established to record and resolve all grievances from stakeholders and to continue on the reparative measures established. Channels to submit grievances will be disclosed through stakeholder consultation meetings, brochures and the website to raise awareness and provide transparency on how stakeholders can raise their grievances. Some ways for stakeholders to formally voice their grievances are as follows:

- Telephone or Hotline: [to be determined later]
- E-mail: [to be determined later]
- Face-to-face: Stakeholders can convey their complaints to the relevant field personnel of Client or the Contractor.
- Grievance Registration Form: Stakeholders can fill in the grievance registration forms that will be available at the construction site.

The following steps will be followed during grievance management which are also detailed in the Stakeholder Engagement Plan prepared for the Project:

- Receiving and Registering the Grievance (on the same day)
- Evaluation of the Grievance (within 10 business days)
- Solution of the Grievance (within 30 business days)
- Closing of the Grievance

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## 7 ENVIRONMENTAL AND SOCIAL MITIGATION MEASURES

This section describes the relevant environmental and social risks identified during the ESIA process of the Project. Since ESMP needs to serve as an active tool, additional risks identified during project implementation will be included as defined (see Table 7-1, Table 7-2 and Table 7-3 for E&S mitigation plans related to the pre-construction, demolition & construction, and operation phases, respectively).

The coding of the reference numbers of the overall environmental and social aspects of the impacts and risks are given as follows:

<b>AQ:</b>	Air Quality
<b>BIO:</b>	Biological Environment
<b>CHS:</b>	Community Health and Safety
<b>DCP:</b>	Demolition and Construction Phase
<b>ES:</b>	Environmental and Social Management System
<b>EU:</b>	Energy Use
<b>GW:</b>	Groundwater
<b>LSG:</b>	Land Use, Soil and Geology
<b>LWC:</b>	Labor and Working Conditions
<b>NOI:</b>	Noise Generation
<b>OHS:</b>	Occupational Health and Safety
<b>OP:</b>	Operation Phase
<b>PCP:</b>	Pre-construction Phase
<b>SEE:</b>	Socio-Economic Environment
<b>SW:</b>	Surface Water
<b>WM:</b>	Waste Management

## 7.1 Mitigation Plan for Pre-construction Phase

Table 7-1. Mitigation Plan for Pre-construction Phase

Mitigation Plan for Pre-construction Phase						
Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
PCP-ES-01	Risks arising from the inadequate management of the project's environmental and social impacts	Major	<ul style="list-style-type: none"> <li>▪ Construction activities will commence following the final approval of the Bursa Provincial Directorate of Environment, Urbanization, and Climate Change, in accordance with the Environmental Impact Assessment (EIA) Regulation.</li> <li>▪ Demolition and construction permits, as well as work permits, will be obtained.</li> <li>▪ The necessary permits for infrastructure-related processes and connections will be obtained from the relevant authorities.</li> <li>▪ All engineering structures and superstructures to be established within the scope of the project will be designed and constructed taking into account the earthquake resistant design parameters and criteria.</li> <li>▪ The Environmental and Social Management System (ESMS) will be finalized for the project in accordance with national legislation and the IFC Sustainability Framework. Designated personnel will be appointed to effectively manage environmental, social, and occupational health and safety (OHS) matters. All employees will receive the necessary training, ensuring adequate capacity and competence.</li> <li>▪ Contractor and subcontractor activities will be required to comply with national legislation and the Great Rich Ltd's Environmental and Social Management System, as specified in the contractual terms.</li> <li>▪ The Stakeholder Engagement Plan and Grievance Mechanism developed for the project will be implemented. Stakeholders affected by or anticipated to be affected by the project will be informed. <ul style="list-style-type: none"> <li>○ A project-specific website and communication channels will be created.</li> <li>○ All communication channels will be announced.</li> <li>○ All communication channels will be managed effectively and transparently.</li> <li>○ Stakeholders, with particular focus on vulnerable groups, will be identified.</li> <li>○ Communication and engagement methods tailored to stakeholders and vulnerable groups will be developed.</li> <li>○ An appropriate environment for regular information-sharing and consultation processes will be established.</li> <li>○ A schedule and budget for meetings and related processes will be created.</li> <li>○ Informative documents and materials about the project will be prepared.</li> <li>○ The Grievance Mechanism will be established before the start of construction and communicated to all stakeholders.</li> <li>○ The employee grievance mechanism will be activated.</li> </ul> </li> </ul>	Minor	Included in construction cost	The Project Owner, with the support of the contractor
PCP-LWC-01	Impacts and risks related to labor and working conditions	Major	<ul style="list-style-type: none"> <li>▪ Equal and fair working conditions will be ensured for all employees.</li> <li>▪ Participation of all employees in information-sharing processes will be ensured.</li> <li>▪ The Code of Conduct will be signed by all employees.</li> <li>▪ Employees will be informed about gender-based violence, harassment, abuse, and discrimination.</li> <li>▪ Participation in mandatory EHS training will be ensured.</li> </ul>	Minor	Included in construction cost	The Project Owner, with the support of the contractor
PCP-OHS-01	Failure to Prepare the Health and Safety Plan	Major	<ul style="list-style-type: none"> <li>▪ It will be ensured that the Health and Safety Plan is prepared and approved at the project initiation stage.</li> <li>▪ Health and safety risk assessment meetings will be organized with relevant stakeholders.</li> </ul>	Minor	Included in construction cost	The Project Owner, with the support of the contractor

## 7.2 Mitigation Plan for Demolition & Construction Phase

Table 7-2. Mitigation Plan for Demolition and Construction Phase

Mitigation Plan for Demolition & Construction Phase						
Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
<b>Land Use, Soil and Geology</b>						
PCP-LSG-01	Risks during the construction of pile foundations and building bases on alluvial soil with low groundwater levels	<b>Major</b>	<ul style="list-style-type: none"> <li>In areas with low groundwater levels and alluvial soils, building and equipment foundation piles will be constructed using reinforced or non-reinforced concrete with the aid of casing pipes to prevent soil and water intrusion.</li> <li>For deep excavations, stability and isolation will be ensured through shoring methods, such as diaphragm walls and other support structures. When necessary, well-point systems may be employed to control and safely remove groundwater.</li> <li>Piles should be designed to reach load-bearing layers.</li> <li>Continuous and consistent concrete pouring is essential, as groundwater can affect the durability of concrete.</li> <li>Waterproofing must be applied around the foundation.</li> <li>Vibrational impacts from construction equipment should be minimized during construction.</li> <li>Emergency Preparedness and Response Plan must be implemented in case of sudden water level rises or drops.</li> </ul>	<b>Negligible</b>	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-LSG-02	Soil Disturbance and Erosion	<b>Minor</b>	<ul style="list-style-type: none"> <li>Land preparation, demolition and construction works will be conducted at designated sites that will be visibly and appropriately marked. Accordingly, training will be provided to the construction personnel to ensure they maintain the pre-established construction boundaries.</li> <li>As the project area is an already developed and highly modified industrial zone, the availability of topsoil will be limited. In areas where vegetative soil is present, it should be stored separately from the subsoil under appropriate conditions to preserve its vegetative properties. Upon the completion of construction activities, the subsoil should be used for backfilling, while the topsoil should be utilized for landscaping purposes.</li> <li>Before the onset of demolition and construction works, erosion control measures like drainage channels, settling structures, etc. will be implemented.</li> <li>To eliminate the risk of erosion in periods of excessive rainfall, the waters from the project surroundings and slopes will be separated from surface run-off by directing through temporary channels and soil embankments.</li> <li>Erosion control measures will be implemented following the completion of excavation works, also at the culvert outlets, and slopes will be improved.</li> <li>Around the excavated material stored at designated storage sites, dikes will be established to prevent loss of soil.</li> <li>All disturbed sites will be restored to the greatest extent possible in a timely manner, following the completion of stripping and excavation works, as well as after excessive rainfall, during the Project's lifecycle.</li> </ul>	<b>Negligible</b>	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-LSG-03	Soil Contamination	<b>Moderate</b>	<ul style="list-style-type: none"> <li>Discharge of materials into soil that would cause soil and groundwater contamination will be prohibited.</li> <li>After the construction site is decommissioned, all debris and waste shall be cleared.</li> <li>Employees will be trained regarding spills and leaks.</li> <li>Accidental spills and leakages will be managed through implementation of the Emergency Preparedness and Response Plan.</li> <li>Maintenance and repairs will be carried out on the impermeable grounds with secondary containment structure/drip trays.</li> <li>Solid wastes, hazardous wastes and wastewater to be generated as a result of project activities and hazardous and chemical materials to be used during the lifecycle of the project will be further managed through WBG EHS Guidelines and GIIP along with ESMP and relevant sub-management plans.</li> <li>In case of a location suspected of contamination, a sampling and analysis study will be carried out.</li> <li>The Grievance Mechanism will be implemented to ensure that any complaints or comments regarding the Project are received and responded to in a timely manner, with solutions provided and corrective measures taken as appropriate.</li> </ul>	<b>Negligible</b>	Included in construction costs  Additional cost for soil sampling in cases of soil contamination  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-LSG-04	General Geotechnical Risks Seismicity Related Risks	<b>Moderate</b>	<ul style="list-style-type: none"> <li>All engineering structures to be established within the scope of the project will be designed and constructed taking into account the earthquake resistant design parameters and criteria.</li> <li>In the structures to be constructed within the scope of the project, provisions of "Regulations for the Structures to be Built in Disaster Areas" published in the Official Gazette No. 26582 dated 14.07.2007 and "Türkiye Building Earthquake Code" of Disaster and Emergency Management Administration published in the Official Gazette No.30364 and dated 18.03.2018 that came into force in 01.01.2019 will be strictly followed.</li> <li>The Emergency Preparedness and Response Plan prepared for the project will be implemented in the event of an earthquake.</li> </ul>	<b>Negligible</b>	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
<b>Noise and Vibration</b>						

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
PCP-NOI-01	Increase in noise and/or vibration levels	Minor	<ul style="list-style-type: none"> <li>All construction activities will be carried out in compliance with the noise limit values specified in the Environmental Noise Control Regulation (ENCR) and WBG EHS Guidelines.</li> <li>Construction activities that are inherently likely to generate noise (excluding disassembly works) will be carried out between 10.00-22.00 in line with the requirements specified in Regulation on Environmental Noise Control (see Annex-2, Table 2 of the regulation). Working during early mornings and evenings should be avoided whenever possible.</li> <li>All project personnel, including sub-contractor(s), will receive the necessary training on noise management.</li> <li>Project Grievance Mechanism will be implemented. If any complaint related with noise or vibration is received through the Grievance Mechanism, the complaint will be evaluated, and the necessary corrective preventive actions will be implemented.</li> <li>Portable barriers and acoustic enclosures will be established around equipment where necessary with consideration for noise-sensitive receptors.</li> <li>Machinery, equipment and vehicles with lower sound power levels and sound reduced models will be preferred, using newer and electrically driven models.</li> <li>Maintenance of construction vehicles will be conducted regularly by means of a regular vehicle maintenance and repair program which is also recommended by the manufacturer.</li> <li>Speed limitations for construction vehicles will be defined and obeyed. Relevant trainings will be conducted and instructions on the driving speed limits will be provided to drivers/operators of construction vehicles.</li> <li>Driving of construction vehicles through settlements will be avoided where possible.</li> <li>When the equipment is not working, they will be turned off or reduced to the minimum level.</li> <li>Keeping the vehicles running will be prohibited while waiting on the construction site.</li> <li>In the event of a grievance, noise and/or vibration monitoring will be carried out by means of noise measurements in accordance with both national legislation and the WBG EHS Guidelines.</li> <li>When necessary, to protect the employees from the noise and vibration caused by machinery and equipment; work will be carried out in accordance with the provisions of the "Occupational Health and Safety Law No. 6331" and necessary measures (such as providing ear protection PPE) will be taken to protect workers from risks that may arise from health and safety, especially hearing risks, as a result of exposure to noise/vibration.</li> <li>Engagement with local communities will be performed to understand their concerns and gather feedback on noise and vibration related issues.</li> <li>Collaboration will be made with regulatory authorities to address noise and vibration related concerns and seek approval for noise and vibration mitigation measures, if necessary.</li> </ul>	Negligible	<p>Included in construction costs</p> <p>Additional costs for noise measurements (upon grievance) and in cases requiring corrective and preventive actions</p> <p>Additional costs for EHS training</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
<b>Air Quality and Greenhouse Gas Emissions</b>						
PCP-AQ-01	Decrease in Air Quality	Minor	<ul style="list-style-type: none"> <li>ESMP and relevant sub-management plans will be implemented by the Contractor by covering relevant E&amp;S issues and all personnel will receive the necessary training on air quality management.</li> <li>In accordance with the "Exhaust Gas Emission Control and Gasoline and Diesel Quality Regulation" published in the Official Gazette No. 28837 dated 30.11.2013; vehicles undergoing traffic inspections will have exhaust gas emission measurements conducted. Vehicles requiring maintenance will be serviced after routine checks, while others will remain in use until maintenance is completed.</li> <li>Procedures to limit the drop height of falling materials will be adopted.</li> <li>Dust suppression methods will be applied such as watering with water trucks; applying non-toxic anti-dust chemicals etc. at construction site and roads.</li> <li>Incineration of construction waste at worksite will be prohibited.</li> <li>Water suppression, pressurized distribution or spraying systems will be applied to minimize dust where and when necessary, on paved or unpaved road surfaces.</li> <li>Loading and unloading materials are carried out without throwing and scattering.</li> <li>Excavated materials will be covered with nylon canvas or with materials with grain size larger than 10 mm during transportation.</li> <li>Dust generation from open areas will be minimized through control measures such as installing covers over materials, using particles of appropriate grain size as cover, increasing moisture content, and maintaining a humidity level of around 10% in the upper layers of materials along with using wind shields or barriers around material storage sites.</li> <li>Driving of construction vehicles through settlements will be avoided where possible.</li> <li>Employees will be ensured to work in accordance with the Traffic Law, and special attention will be paid to make loading according to loading standards.</li> <li>The Project Grievance Mechanism will be implemented. If any comment related with dust and air quality is received through the Grievance Mechanism, the complaints will be evaluated, and necessary corrective preventive actions will be taken.</li> <li>In the event of grievance, air quality monitoring will be carried out in accordance with both national legislation and the WBG EHS Guidelines.</li> </ul>	Negligible	<p>Included in construction costs</p> <p>Additional costs for ambient air quality measurements (upon grievance) and in cases requiring corrective and preventive actions</p> <p>Additional costs for EHS training</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
PCP-AQ-02	Greenhouse gas emissions due to construction machines	Moderate	<ul style="list-style-type: none"> <li>Demolition and construction activities will be carried out in line with GIIP.</li> <li>Periodic trainings will be provided to operators and drivers, covering practices to reduce unnecessary equipment idling time, raising awareness on energy efficiency and best practices and avoid behaviors that increase fuel consumption, such as shifting hydraulic levers unnecessarily and using excess horsepower.</li> <li>Fuel efficiency of construction vehicles will be optimized by means of applications such as speed restrictions and avoidance of uphill movements as much as possible.</li> <li>Proper maintenance of machinery/equipment including systematic equipment inspection, detection of potential failure and prompt correction to ensure fuel savings will be ensured.</li> <li>Energy/fuel consumption of construction machinery, equipment and vehicles will be monitored.</li> </ul>	Minor	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
<b>Water Resources, Water Quality and Wastewater Management</b>						
PCP-SW-01	Degradation Impacts on Surface Water Quality	Moderate	<ul style="list-style-type: none"> <li>All personnel will receive the necessary training on water resources, water quality and wastewater management.</li> <li>The domestic wastewater generated during land preparation and construction activities will be treated and disposed of at the existing wastewater treatment plants (WWTPs) of either Great Rich Ltd or Borusan. The treated wastewater will be discharged into the nearby receiving environment in compliance with the project standards (Table 1.3.1. of the WBG General EHS Guidelines along with Table 21.1 of the Water Pollution Control Regulation (WPCR)) and environmental permits for wastewater discharge obtained from the relevant authorities, along with the identity documentation of the WWTP. Effluent discharge will be monitored periodically as specified in the Communiqué on Administrative Procedures for the Water Pollution Control Regulation (monthly for internal monitoring and annually for monitoring by the competent authority). Moreover, if the contractor installs mobile toilets or a septic system, the activities must comply with the Regulation on Pits to be Built in Areas Where Sewer Pipeline Construction is not Possible.</li> <li>Discharge of any kinds of untreated wastewater and waste to receiving bodies (soil and surface waters), drain fields, dry wells or separate storm drainage and interception channels will be prevented.</li> <li>All chemical storage tanks, including those for diesel fuel and dangerous liquid waste, will be stored in secondary containment structures with a capacity of up to 110% of the volume of material stored, in compliance with construction site requirements. Additionally, spill kits or absorbent pads should be readily available near storage areas.</li> <li>To collect and reduce the flow of surface runoff originated from construction and accommodation sites and other areas of impermeable surfaces; drainage systems and related strategies will be planned and implemented.</li> <li>In case of any grievances, water samples should be collected and assessment of the water quality of the samples will be performed at the locations where baseline measurements were conducted in the ESIA process.</li> </ul>	Minor	Included in construction costs  Additional costs for surface water quality measurements (upon grievance) and in cases requiring corrective and preventive actions  Additional cost for treated domestic wastewater analysis on parameters specified in WBG General EHS Guidelines  Additional costs for EHS training	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-SW-02	Impacts on Surface Water Flow and Flood Risk	Moderate	<ul style="list-style-type: none"> <li>Surface runoff or wastewater generation due to dust suppression activities will be prevented.</li> <li>Works during high flow events and during heavy rainfall will be avoided to reduce the risk of fine sediment release into watercourses, watercourse erosion and increased flood risk.</li> <li>To collect and reduce the flow of surface runoff originated from the project area having impermeable surfaces; drainage systems, interception channels and related strategies should be planned and implemented.</li> </ul>	Minor	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-GW-01	Impact on Groundwater Resources	Moderate	<ul style="list-style-type: none"> <li>Sustainable use of water resources through water use minimization and recycling should be promoted along with the implementation of water saving technologies and practices.</li> <li>When determining the locations of temporary fuel or oil storage areas, groundwater levels will be taken into account. Accidental spill of hazardous materials such as fuel, oil, cement etc. will be taken under control immediately.</li> <li>Construction activities may pose the potential for accidental release/leakages of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. All chemical storage containers, including diesel fuel, and hazardous liquid waste drums/containers should be placed in secondary containments/drip trays so as to minimize the risk of soil, surface water and groundwater contamination during construction and land preparation phase.</li> <li>Spill kits should be kept on site to be deployed in the event of a spillage, and site staff trained in their use.</li> <li>The units of the Project that are in touch with water, wastewater and chemicals will be constructed with concrete with appropriate cement ratio and durability in order to provide basement impermeability. Thus, no leakages to soil and groundwater will occur during the construction phase of the Project.</li> <li>Containers containing hazardous materials will be placed in sealed vessels to prevent spills and leaks. Hazardous wastes will be transported by licensed waste transportation companies and will be disposed of at licensed facilities.</li> <li>Groundwater will be used in accordance with the purposes and quantities specified in the groundwater permits.</li> </ul>	Minor	Included in construction costs  Additional costs for groundwater quality measurements (upon grievance) and in cases requiring corrective and preventive actions	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
			<ul style="list-style-type: none"> <li>Quarterly analysis of utility water, to be used after chlorination and supplied from the Great Rich Ltd-1 well, will be performed to ensure compliance with quality standards for human consumption/use. If utility water is sourced from a different supply and stored, Ministry of Health Circular No. 2007-67 must be followed, and cleaning and disinfection should be carried out at least every 6 months along with the periodic measurements.</li> <li>In the event of a leakage or spill, the contractor will conduct the necessary sampling and analysis of the groundwater resources.</li> </ul>			
<b>Resource and Waste Management</b>						
PCP-EU-01	Material and Energy Use	Moderate	<ul style="list-style-type: none"> <li>Energy efficient tools and equipment will be preferred and idling of vehicles will be prohibited.</li> <li>In a planned manner, unnecessary energy/fuel consumption will be avoided.</li> <li>In line with the waste mitigation hierarchy and resource efficiency strategy, reuse/recycle/recovery steps will be followed to prevent excess use of materials.</li> <li>To understand fluctuations in usage, monthly usage statistics will be obtained, and the cause of the fluctuations will be analyzed and recorded in the Resource Usage Monitoring Chart.</li> </ul>	Minor	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-WM-01	Possible Impacts from Storage of Excavation Surplus Materials	Moderate	<ul style="list-style-type: none"> <li>Excavation material will be used as much as possible in filling works.</li> <li>Excavated material that cannot be used for filling operations will be stored in designated temporary storage areas where necessary permissions have been obtained and having sufficient capacity.</li> <li>The fill program will be proceeded to minimize excavation wastes during excavation operations.</li> </ul>	Minor	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-WM-02	Potential Impacts of Demolition (Dismantling) Activities	Moderate	<ul style="list-style-type: none"> <li>Materials obtained during dismantling, such as polyurethane roof coverings, sheet metal cladding, and steel structural elements, will be meticulously sorted on-site.</li> <li>Usable materials will be stored in designated stock areas for reuse in new construction projects.</li> <li>Recyclable materials will be separated and transported to appropriate recycling facilities. Non-recyclable waste will be disposed of following legal regulations.</li> <li>Polyurethane roof coverings will be removed, with usable portions stored for reuse and the remainder sent for recycling.</li> <li>Sheet metal cladding from the roof and facades will be dismantled, properly stored, and recycled.</li> <li>Steel structural elements will be carefully dismantled and stored for reuse in new building projects, avoiding unnecessary waste.</li> <li>Recyclable materials will be transported to designated facilities using predefined plans and suitable vehicles to ensure safety and efficiency.</li> </ul>	Minor	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-WM-03	Potential Impacts of Hazardous and Non-Hazardous Solid Wastes	Moderate	<ul style="list-style-type: none"> <li>The ESMP and relevant sub-management plans will be implemented by the Contractor by covering relevant E&amp;S issues and all personnel will receive the necessary training on waste management.</li> <li>The requirements of the applicable regulations related to waste management will be followed for the management of all waste generated as a result of the project activities,</li> <li>Separation of wastes (hazardous / non-hazardous, recyclable / non-recyclable) and temporary storage in designated storage areas will be ensured.</li> <li>Packaging wastes made of plastic, metal, glass, paper and board, composite and similar materials will be collected separately from other wastes and given to Packaging Waste Collection, Segregation and Recovery Facilities licensed by the Ministry of Environment, Urbanization and Climate Change (MoEUCC).</li> <li>After segregating the municipal solid waste by collecting recyclable materials separately, the organic portion of the municipal solid waste will be collected by the municipalities in accordance with the waste collection agreements.</li> <li>Vegetable waste oils will be stored separately and collected by environmentally licensed recovery facilities and vegetable waste oil interim storage facilities.</li> <li>Ensuring that waste storage areas meet the standards set by the national legislation and international standards:                             <ul style="list-style-type: none"> <li>Determining sufficient and appropriate storage areas and ensuring that conditions such as container types, labels and classifications are appropriate in these areas,</li> <li>Ensuring impermeability on the grounds of storage areas against possible contamination of soil and groundwater,</li> <li>Sufficient ventilation of the area under conditions where volatile wastes need to be stored,</li> <li>Establishing a suitable drainage system against leaks,</li> <li>Restriction of physical access to waste storage areas (through gates, fences, etc.); ensuring that only authorized persons can enter the storage areas,</li> <li>Placing warning signs and panels with the name and contact number of authorized personnel in storage areas,</li> </ul> </li> </ul>	Negligible	Included in construction costs  Additional cost in case of soil contamination  Additional costs for corrective and preventive actions taken when necessary  Additional costs for EHS training	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
			<ul style="list-style-type: none"> <li>○ In order to be prepared for emergencies such as spillage, fire, absorbent materials, fire extinguishing equipment, etc. near the area. be ready,</li> <li>○ Quick identification of any possible spillages / leaks by periodically performing visual checks in hazardous waste areas.</li> <li>▪ Compulsory liability insurance for hazardous materials and hazardous waste will be obtained and renewed on an annual basis.</li> <li>▪ Wastes are not spilled out of areas other than those reserved for this purpose will be ensured and all necessary waste management training and periodic repetition of these trainings will be provided to all personnel.</li> <li>▪ Waste oils will only be transported by licensed transportation companies and will only be delivered to licensed recycling or disposal facilities.</li> <li>▪ Stripped topsoil will be separated from general trash and organic, liquid, and chemical wastes on site, and stored in designated areas.</li> <li>▪ Construction wastes will be regularly collected by licensed collectors at the permitted excavation waste storage site of the Municipality.</li> <li>▪ All necessary precautions will be taken to prevent contamination of land.</li> <li>▪ Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies.</li> <li>▪ In cases when tires of the vehicles to be changed during construction activities; end-of-life tires will be delivered to the companies that distributes and sells tires via the authorized transportation companies in accordance with the Regulation on Control of End-of-Life Tires.</li> <li>▪ Medical wastes will be collected in special containers in the infirmary and given to the licensed Medical Waste Disposal Facilities. The provisions of the "Medical Waste Control Regulation" will be complied with.</li> <li>▪ No waste should be disposed of any receiving environment or burned at the construction site.</li> <li>▪ Waste records will be recorded by means of online platform of MoEUCC on Integrated Environment Information System/Waste Management Application (Waste Declaration System).</li> <li>▪ Hazardous wastes will be separated from other waste streams at the source to prevent cross-contamination. After temporarily storing hazardous wastes in designated areas with appropriate containment measures to prevent leaks or spills, they will be disposed of at licensed facilities. Hazardous waste deliveries will be made via Mobile Waste Tracking System (MoTAT) by ensuring selection of licensed recycling/recovery/disposal facilities.</li> <li>▪ A similar approach to the one used at the existing facility will be followed for the management of scale breaker waste generated during the operation phase of the Project.</li> <li>▪ Treatment sludge from Industrial and Domestic/Urban WWTP will be delivered to licensed companies with the relevant waste code.</li> <li>▪ All personnel will receive periodic training on effective waste management, zero waste principles, and resource efficiency.</li> </ul>			
PCP-WM-04	Additional load on the waste management facilities around the Project area	Minor	<ul style="list-style-type: none"> <li>▪ In line with the waste management hierarchy and good practices, reuse and recycling practices will be preferred.</li> <li>▪ Excavated material storage sites with sufficient number and capacity will be used in case the designated material storage areas are insufficient.</li> <li>▪ Waste disposal agreements will be made with the municipality and licensed recycling / disposal firms.</li> </ul>	Negligible	Included in construction costs	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
<b>Biological Environment</b>						
PCP-BIO-01	Noise and Air Pollution		(see "Noise and Vibration" and "Air Quality and Greenhouse Gas Emissions" part)			
PCP-BIO-02	Waste Generation		(see "Resource and Waste Management" part)			
PCP-BIO-03	Impact on Water Resources		(see "Water Resources, Water Quality and Wastewater Management" part)			
PCP-BIO-04	Biodiversity, Habitat Disturbance and spread of Alien Invasive Species	Moderate	<ul style="list-style-type: none"> <li>▪ Any animals discovered during vegetation clearance will be removed and relocated to an appropriate habitat.</li> <li>▪ The project site's lighting will be kept to a minimum, and sensory lighting systems, rather than nightlong active lighting, will be considered. The lights will be aimed downwards.</li> <li>▪ Workers will be prohibited from killing or trapping wild animals for food or trade. Throughout the project areas, signage will be installed to reinforce the hunting ban.</li> <li>▪ The site must be protected from the introduction of invasive alien plant species. Imported materials, such building sand or filthy earthmoving machinery, require special consideration. Stockpiles should be routinely inspected, and any weeds that grow out of them should be pulled.</li> </ul>	Minor	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
<b>Labor and Working Conditions</b>						
PCP-LWC-01	Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time.	Moderate	<p>Discriminatory working conditions</p> <ul style="list-style-type: none"> <li>Regular consultations with worker representatives, union representatives, and employee representatives are mandatory</li> <li>WGM records are a critical tool for identifying and addressing these deficiencies</li> <li>Subcontractor employees and those working for service providers should also be integrated into a unified WGM system</li> <li>Training on the WGM should be provided at the start of employment, and all tools should be made accessible to all employees</li> </ul> <p>Over time</p> <ul style="list-style-type: none"> <li>Over Time Action Plan should be implemented</li> <li>The projected employment capacity for the Project should be analyzed in conjunction with overtime requirements.</li> <li>Providing training to women in areas where they are excluded from employment, in order to include them in programs.</li> <li>Utilizing local and regional collaborations.</li> <li>Establishing collaboration with local and regional worker organizations and associations.</li> </ul>	Negligible	Included in construction costs	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-LWC-02	Unequal opportunities for women and men in selection, remuneration, and promotion	Moderate	<ul style="list-style-type: none"> <li>Implement a Gender-Equal Recruitment Process – Ensure hiring practices are merit-based, free from gender bias, and actively encourage women's participation in traditionally male-dominated roles. Use gender-neutral job descriptions and structured interviews.</li> <li>Enforce Equal Pay for Equal Work – Conduct regular wage audits to identify and eliminate gender pay gaps, ensuring that men and women receive equal pay for equivalent roles and responsibilities.</li> <li>Establish Clear and Transparent Promotion Criteria – Develop a standardized promotion framework based on skills, experience, and performance rather than gender, ensuring equal opportunities for career progression.</li> <li>Conduct Gender Equality Training and Awareness Programs – Educate management, HR personnel, and employees on gender bias, workplace discrimination, and inclusive leadership to foster a more equitable work environment</li> </ul>	Minor	Included in construction costs	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-LWC-03	Harassment (including sexual harassment), intimidation, and/or exploitation among project workers	Major	<ul style="list-style-type: none"> <li>All workers, contractors, and security personnel will be required to sign and adhere to a Code of Conduct that explicitly prohibits GBVH and SEA/SH.</li> <li>Fair recruitment practices will be established to prevent exploitation or coercion.</li> <li>A GBVH and SEA/SH focal point will be assigned within the project management team to oversee and monitor the implementation of measures.</li> <li>Mandatory training will be provided to all project personnel, contractors, and security staff on GBVH and SEA/SH awareness, acceptable workplace behavior, and response mechanisms.</li> <li>Background checks will be conducted for all personnel to minimize risks, particularly for roles involving public interaction.</li> <li>Local communities will be engaged to raise awareness of GBVH and SEA/SH risks and to foster collaboration on mitigation strategies.</li> <li>Grievance mechanisms will be implemented for GBVH and SEA/SH complaints, ensuring they are easily accessible to both workers and the community.</li> </ul>	Minor	Included in construction costs	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-LWC-04	Retaliation of workers as a result of any grievance they raised and/or difficulty in accessing worker grievance mechanism (WGM)	Major	<p>Establishing a Safe and Accessible Worker Grievance Mechanism (WGM)</p> <ul style="list-style-type: none"> <li>Provide multiple channels for submitting grievances, including in-person, phone, email, and anonymous suggestion boxes.</li> <li>Conduct regular awareness campaigns and training sessions to educate workers on how to access the WGM.</li> <li>Ensure the mechanism is available in local languages and through verbal reporting for illiterate workers.</li> </ul> <p>Ensuring Anonymity and Confidentiality of Complaints</p> <ul style="list-style-type: none"> <li>Develop a system that allows workers to file anonymous grievances securely.</li> <li>Establish an independent committee to handle grievances, ensuring impartiality.</li> <li>Maintain transparency in tracking and addressing grievances while protecting worker identities.</li> </ul> <p>Implementing a Zero-Tolerance Policy Against Retaliation</p> <ul style="list-style-type: none"> <li>Develop a formal policy stating that retaliation against workers using the WGM is strictly prohibited.</li> <li>Regularly communicate this policy to all employees and contractors.</li> <li>Provide legal or organizational support for workers who experience retaliation.</li> </ul> <p>Ensuring Equal Access for Contracted Workers</p> <ul style="list-style-type: none"> <li>Guarantee that contracted workers have the same access to the WGM as direct employees.</li> </ul>	Negligible	Included in construction costs	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>

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Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
			<ul style="list-style-type: none"> <li>Ensure grievance mechanisms are applicable to both primary and subcontractor employees.</li> <li>Include clauses in contracts with subcontractors that enforce worker protection measures.</li> </ul> Monitoring and Feedback Mechanism <ul style="list-style-type: none"> <li>Regularly assess the effectiveness of the WGM and address any gaps.</li> <li>Conduct independent audits to ensure compliance with IFC standards.</li> <li>Provide workers with feedback on the status and resolution of their grievances.</li> </ul>			
<b>Community Health, Safety and Security</b>						
PCP-CHS-01	Traffic and road safety risks to road users	Moderate	<ul style="list-style-type: none"> <li>The requirements outlined in the Road and Traffic Safety Management Plan prepared for the project will be implemented.</li> <li>The construction site will be enclosed with clear boundaries to prevent unauthorized access.</li> <li>Informational signs regarding potential threats to community health will be posted, and emergency contact details will be made available at the project site.</li> <li>The effectiveness of the training plan will be evaluated, and necessary improvements will be implemented as needed.</li> <li>Overloading of trucks will not be permitted.</li> <li>Signalers or spotters will be employed, particularly at road junctions and crossings, to avoid hazards caused by the movement and limited visibility of construction vehicles.</li> <li>The Project Grievance Mechanism will be implemented effectively. All public grievances will be recorded and managed.</li> </ul> Driver trainings: <ul style="list-style-type: none"> <li>Implement regular training programs to educate drivers on appropriate social behavior, respect for residents, and safe driving practices in proximity to residential areas.</li> <li>Establish a strict code of conduct for all drivers, outlining acceptable behavior both on and off the job, and ensure that all drivers are aware of and adhere to these guidelines.</li> <li>Set up monitoring systems, such as cameras or on-site supervisors, to oversee the behavior of drivers and ensure compliance with social and safety norms.</li> <li>Making the grievance mechanism more visible.</li> <li>Encouraging the local community to use the grievance mechanism.</li> </ul>	Minor	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-CHS-02	Communication issues with stakeholders	Moderate	<ul style="list-style-type: none"> <li>The requirements of the Stakeholder Engagement Plan prepared as part of the project will be implemented and updated as necessary.</li> <li>Security personnel will receive appropriate training on topics such as codes of conduct, community relations, use of force, and social and cultural sensitivity. If armed security personnel are employed, psychotechnical training will be completed without exception. Any complaints from local communities regarding inappropriate behavior by security personnel will be promptly investigated.</li> <li>The Grievance Mechanism will be actively utilized. External stakeholders will be informed about the functioning of the grievance mechanism.</li> </ul>	Negligible	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
<b>Occupational Health and Safety</b>						
PCP-OHS-01	Possible impact of document, training, or inspection deficiencies	Moderate	<ul style="list-style-type: none"> <li>The management and monitoring of OHS risks and issues during night shifts should be improved, and the Contractor should ensure the recruitment of hire additional OHS specialists specifically for night shifts.</li> <li>OHS risk assessments should be updated annually and include contractor companies.</li> <li>Daily toolbox talks and weekly meetings should be used to provide OHS training to all employees, including contract workers. Records of these training should be maintained.</li> <li>The company has established an Accident Logbook to record incidents/accidents. Root cause analyses are conducted, and corrective actions are determined by the company. This practice should continue with proper record-keeping.</li> </ul>	Minor	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary  Additional costs for additional OHS specialist(s)  Additional costs for OHS training	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
PCP-OHS-02	Potential Impact of Noise and Vibration on Workers	Moderate	<ul style="list-style-type: none"> <li>The contractor shall ensure that periodic maintenance of machinery used in demolition, foundation works, and construction activities is carried out regularly. Additionally, machinery shall not be kept running on idle mode when not in use.</li> <li>Earplugs shall be provided to workers assigned to high-noise areas.</li> <li>The source of vibration is the work equipment. Whole-body vibration levels of the equipment in use shall be measured. If the measured value exceeds the exposure action value of 0.5 m/s<sup>2</sup>, preventive measures shall be taken. To prevent workers from being harmed by vibration, regular maintenance of work equipment shall be performed. Furthermore, working hours for employees shall be adjusted.</li> </ul>	Minor	<p>Included in construction costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-OHS-03	Potential Impacts of Machinery Overturning	Major	<ul style="list-style-type: none"> <li>Workers should use machinery, equipment, vehicles, tools, hazardous substances, transport vehicles, and other production tools in accordance with regulations. They should properly utilize safety features and should avoid arbitrarily removing or altering these features.</li> <li>Workers should immediately inform the employer or a representative if they encounter a serious and immediate health or safety hazard involving machinery, equipment, vehicles, tools, facilities, or buildings, or if they detect any deficiencies in protective measures.</li> <li>No one should be allowed to operate or use work machinery unless they are sufficiently competent and reliable, informed of the risks associated with the operation, and subject to regular medical examinations.</li> <li>Workers assigned to operate work equipment should possess a Class G driver's license, a psychotechnical report, a defensive driving certificate, and a professional competency training certificate (SRC Driver Certificate).</li> <li>The contractor should ensure that no one operates or uses construction machinery unless they are sufficiently competent, reliable, informed about operational risks, and have undergone periodic medical examinations.</li> <li>Workers should not stand behind large facility machinery or under suspended loads. They should avoid working near moving objects and should remain particularly vigilant if those objects lack lights or signaling devices.</li> <li>A flagger should always be present to guide facility vehicles.</li> </ul>	Negligible	<p>Included in construction costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-OHS-04	Potential Impacts of Dust from Demolition and Foundation Activities	Moderate	<ul style="list-style-type: none"> <li>Dust and emissions from demolition activities should be identified and monitored to evaluate their potential impact on workers' respiratory health.</li> <li>Dust suppression techniques, such as water spraying or using dust control barriers, should be implemented at demolition sites.</li> <li>The frequency and duration of workers' exposure to dust and emissions should be minimized through work rotation schedules.</li> <li>Workers should be trained on the hazards of dust and emissions and on the correct usage of personal protective equipment (PPE).</li> </ul>	Negligible	<p>Included in construction costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-OHS-05	Potential Risks Due to Improper Management of Hazardous and Chemical Substances	Moderate	<ul style="list-style-type: none"> <li>Safe handling procedures should be implemented for the storage, transportation, and use of hazardous and chemical substances.</li> <li>Designated storage areas equipped with appropriate containment measures should be provided to prevent leaks or spills. Safety Data Sheets (SDS) should be readily available.</li> <li>Proper labeling and packaging of hazardous and chemical materials should be ensured to facilitate safe handling and identification.</li> <li>Adequate personal protective equipment (PPE), such as gloves, goggles, and respiratory masks, should be provided to workers to minimize exposure to hazardous substances.</li> <li>Workers should receive comprehensive training on the safe use and management of hazardous and chemical substances, including emergency response procedures.</li> <li>An emergency preparedness and response plan should be in place to address spills, leaks, or other incidents involving hazardous substances, ensuring prompt containment and cleanup.</li> <li>Proper waste management procedures should be established for the disposal of hazardous and chemical substances, including recycling and disposal at licensed facilities.</li> <li>If hazardous substances listed in Annex-1, Chapter 1 and Chapter 2 of the Regulation on the Prevention and Mitigation of Major Industrial Accidents are stored, notification should be made to the BEKRA Notification System.</li> </ul>	Minor	<p>Included in construction costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-OHS-06	Potential Impacts of Working at Heights on Workers	Major	<ul style="list-style-type: none"> <li>Whenever possible, the need for working at heights should be avoided.</li> <li>In cases where working at heights cannot be avoided, collective protective measures should be implemented to prevent falls. For example, the use of equipment such as scaffolding with double guardrails or edge protection should be considered. Additionally, safety nets should be provided to minimize the consequences of falls.</li> <li>The employee must have a qualification to work at heights.</li> <li>Special precautions should be taken for working at heights. Personnel working in areas without a full-body harness or lifeline should not be granted work permits or allowed to proceed with the work.</li> <li>Work permits should be obtained before commencing tasks that involve working at heights.</li> </ul>	Negligible	<p>Included in construction costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Implementation: Contractor</p> <p>Supervision: Construction Authorized Specialist of Great Rich Ltd</p>
PCP-OHS-06	Potential Impacts of Contacting Overhead	Major	<ul style="list-style-type: none"> <li>Work permits should be obtained before commencing tasks involving electrical work.</li> <li>Work instructions should be strictly followed.</li> </ul>	Negligible	<p>Included in construction costs</p>	<p>Implementation: Contractor</p>

Mitigation Plan for Demolition & Construction Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
	Power Lines While Operating Machinery				Additional costs for corrective and preventive actions taken when necessary	Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-OHS-07	Potential risk of electric shock	Major	<ul style="list-style-type: none"> <li>All electrical systems and equipment should be regularly inspected and maintained by qualified personnel to prevent malfunctions.</li> <li>Employees should be provided with personal protective equipment (PPE), such as insulated gloves and boots, when working with or near electrical systems.</li> <li>Routine safety training should be conducted on electrical hazard awareness and proper handling procedures for electrical equipment.</li> <li>Areas with high-voltage equipment should be clearly marked and isolated to restrict access to authorized personnel only.</li> <li>Residual current devices and other safety mechanisms should be installed to immediately shut down systems in case of electrical faults.</li> </ul>	Negligible	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd
PCP-OHS-08	Potential Risks Related to Ergonomics, Repetitive Movements, and Manual Handling	Moderate	<ul style="list-style-type: none"> <li>Mechanical aids should be used to eliminate or reduce the effort required for lifting materials, holding tools, and handling work objects. Multi-person lifts should be implemented when weight thresholds are exceeded.</li> <li>Tools and equipment should be selected and designed to improve postures, reduce force requirements, and minimize holding times.</li> <li>Rest and stretching breaks should be incorporated into work processes, and job rotation should be implemented.</li> <li>Quality control and maintenance programs should be applied to reduce unnecessary force and effort.</li> <li>Additional special conditions, such as those relevant to left-handed individuals, should be taken into account.</li> </ul>	Negligible	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Implementation: Contractor  Supervision: Construction Authorized Specialist of Great Rich Ltd

7.3 Mitigation Plan for Operation Phase

Table 7-3. Mitigation Plan for Operation Phase

Mitigation Plan for Operation Phase						
Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
<b>Land Use, Soil and Geology</b>						
OP-LSG-01	Soil Disturbance and Erosion	Moderate	<ul style="list-style-type: none"> <li>To eliminate the risk of erosion in periods of excessive rainfall, the waters from the project surroundings and slopes will be separated from surface run-off by directing through temporary channels and soil embankments.</li> <li>All disturbed sites will be restored to the greatest extent possible in a timely manner after excessive rainfall during the Project's lifecycle.</li> </ul>	Minor	Included in operation costs  Additional costs for corrective and preventive actions taken when necessary	Great Rich Ltd's EHS Team
OP-LSG-02	Soil Contamination	Minor	<ul style="list-style-type: none"> <li>Discharge of materials into soil that would cause soil and groundwater contamination will be prohibited.</li> <li>Employees will be trained regarding spills and leaks.</li> <li>Accidental spills and leakages will be managed through implementation of the Emergency Preparedness and Response Plan.</li> <li>Maintenance and repairs will be carried out on the impermeable grounds with secondary containment structure/drip trays.</li> <li>Solid wastes, hazardous wastes and wastewater to be generated as a result of project activities and hazardous and chemical materials to be used during the lifecycle of the project will be further managed through WBG EHS Guidelines and GIIP along with ESMP and relevant sub-management plans.</li> <li>In case of a location suspected of contamination, a sampling and analysis study will be carried out.</li> <li>The ESMP and relevant sub-management plans must be implemented effectively.</li> <li>The Grievance Mechanism will be implemented to ensure that any complaints or comments regarding the Project are received and responded to in a timely manner, with solutions provided and corrective measures taken as appropriate.</li> </ul>	Negligible	Included in operation costs  Additional cost for soil sampling in cases of soil contamination  Additional costs for corrective and preventive actions taken when necessary	Great Rich Ltd's EHS Team
OP-LSG-03	General Geotechnical Risks Seismicity Related Risks	Major	<ul style="list-style-type: none"> <li>Periodic checks and maintenance will be conducted. If necessary, additional stability and structural measures (e.g., in response to potential settlement, cracks, or structural irregularities observed after an earthquake) will be developed and implemented.</li> <li>The Emergency Preparedness and Response Plan will be implemented.</li> </ul>	Minor	Included in operation costs	Great Rich Ltd's Project Manager
<b>Noise and Vibration</b>						
OP-NOI-01	Increase in noise and/or vibration levels	Minor	<ul style="list-style-type: none"> <li>All activities will be carried out in compliance with the noise limit values specified in the ENCR and WBG EHS Guidelines.</li> <li>All project personnel will receive the necessary training on noise management.</li> <li>Periodic maintenance and repair work will be carried out to minimize the noise generated by the equipment and machinery used.</li> <li>An application for the environmental permit related to noise will be submitted to the Ministry of Environment, Urbanization, and Climate Change. If subject to an environmental permit on noise, environmental noise measurements will be conducted during the specified time periods, and an acoustic report will be prepared. It will be ensured that the measurement results comply with both national legislation and the WBG General EHS Guidelines. If there is any change in the noise source or noise reduction conditions, environmental measurements will be renewed.</li> <li>The Project Grievance Mechanism will be implemented. If any comment related with noise or vibration is received through the Grievance Mechanism, the complaint will be evaluated and where necessary corrective preventive actions will be implemented.</li> <li>In the event of grievance, noise monitoring will be carried out by means of noise measurements in accordance with both national legislation and the WBG EHS Guidelines.</li> <li>Engagement with local communities will be performed to understand their concerns and gather feedback on noise/vibration-related issues.</li> <li>Collaboration will be made with regulatory authorities to address noise and vibration related concerns and seek approval for noise and vibration mitigation measures, if necessary.</li> </ul>	Negligible	Included in operation costs  Additional costs for noise measurements (upon grievance) and in cases requiring corrective and preventive actions  Additional costs for EHS training	Great Rich Ltd's EHS Team
<b>Air Quality and Greenhouse Gas Emissions</b>						

Mitigation Plan for Operation Phase

Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
OP-AQ-01	Decrease in air quality caused by pollutant emissions from the facility, along with exhaust gases from traffic movements	Major	<ul style="list-style-type: none"> <li>An application for the environmental permit related to air emissions will be submitted to the Ministry of Environment, Urbanization, and Climate Change. Within the scope of environmental permit on air emissions, measurements will be conducted during the specified time periods (i.e. every two years). Furthermore, as one of the requirements of ESAP, Great Rich Ltd will update the air emissions stack and process emissions monitoring procedures to be aligned with WBG EHS Guidelines (General Guidelines and EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing) including the frequency of monitoring (i.e. bi-annual monitoring) and the monitoring parameters. It will be ensured that the measurement results comply with both national legislation, Regulation on the Control of Industrial Air Pollution (RCIAP), WBG General EHS Guidelines (Table 1.1.2) and WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing (Table 5).</li> <li>The dust generated in the scale breaker unit will be filtered, and the remaining exhaust air will be released into the atmosphere through a stack. Acid regeneration is carried out in a fluidized bed reactor. The mixture of evaporated water and hydrochloric acid in the reactor will be washed in a scrubbing tower, and the remaining vapor will be discharged into the atmosphere through the stack.</li> <li>During the cold rolling process, the emulsion containing rolling oil evaporates. The collected water and rolling oil vapor mixture will be retained in filters, and the remaining vapor will be released into the atmosphere via the stack. Emissions generated in the unit where the coil surface is cleaned with detergent water and brushed will be trapped in filters and then released into the atmosphere through the stack.</li> <li>For the annealing process, natural gas is used as an energy source in the furnace. The gases generated by the combustion of natural gas will be released into the atmosphere through a newly installed stack.</li> <li>In the wet tempering stand, the gas-vapor mixture formed due to the evaporation of the tempering solution emulsion will be retained in filters, and the remaining vapor will be released into the atmosphere through the stack.</li> <li>In the chromating unit, the solution prepared is applied to the coil surface by spraying, and the excess solution is drained in the unit. It is then dried in the drying unit using a natural gas burner. The resulting waste gas will be collected in the stack and released into the atmosphere.</li> <li>The combustion gases, volatile organic compounds, and dust emissions in the facility will be collected by the stack systems. An adequate ventilation system will be installed in the facility to prevent adverse effects on workers and the environment.</li> <li>Periodic maintenance and repair work will be carried out to minimize the air emissions generated by the equipment and machinery used.</li> <li>The Project Grievance Mechanism will be implemented. If any comment related with air quality is received through the Grievance Mechanism, the complaint will be evaluated and where necessary corrective preventive actions will be implemented.</li> <li>Engagement with local communities will be performed to understand their concerns and gather feedback on air quality-related issues.</li> <li>Collaboration will be made with regulatory authorities to address air quality-related concerns and seek approval for the mitigation measures.</li> <li>In the event of grievance, ambient air quality monitoring will be carried out in accordance with both national legislation (RCLIP) and the WBG General EHS Guidelines (Table 1.1.1).</li> </ul>	Minor	<p>Included in operation costs</p> <p>Additional costs for ambient air quality measurements (upon grievance) and in cases requiring corrective and preventive actions</p> <p>Additional costs for flue gas emissions measurements on parameters specified in the WBG EHS Guidelines</p> <p>Additional costs for EHS training</p>	Great Rich Ltd's EHS Team
OP-EQ-02	Greenhouse gas emissions due to the facility activities and energy and raw material requirements	Major	<ul style="list-style-type: none"> <li>Alternatives will be considered, and technically and financially feasible, cost-effective options will be implemented to reduce project-related GHG emissions during the design and operation phases of the project. These options may include, but are not limited to, adopting renewable or low-carbon energy sources, reducing fugitive emissions, and minimizing gas flaring.</li> <li>If the facility is expected to produce more than 25,000 tonnes of CO<sub>2</sub>-equivalent annually, Great Rich Ltd will quantify direct emissions from facilities owned or controlled within the physical project boundary, as well as indirect emissions associated with the off-site production of energy used by the project. Great Rich Ltd will conduct the quantification of GHG emissions annually in accordance with internationally recognized methodologies and best practices.</li> </ul>	Moderate	<p>Included in operation costs</p> <p>Additional cost for preparation of Annual Greenhouse Gas Emission Reports</p>	Great Rich Ltd's EHS Team
<b>Water Resources, Water Quality and Wastewater Management</b>						
OP-SW-01	Degradation Impacts on Surface Water Quality	Major	<ul style="list-style-type: none"> <li>Discharge of any kinds of wastewater and waste to receiving bodies (soil and surface waters), drain fields, dry wells or separate storm drainage and interception channels will be prevented.</li> <li>Treated domestic and industrial wastewater must meet the limit values specified in national legislation and the WBG EHS Guidelines. Specifically, the allowable limit values for domestic wastewater are outlined in Table 21 of the Water Pollution Control Regulation and Table 1.3.1 of the WBG General EHS Guidelines. For industrial wastewater, the permissible limit values are defined in Tables 15.2, 20.1, and 20.7 of the Water Pollution Control Regulation, as well as in Table 6 of the WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing.</li> <li>Since the existing environmental permit for domestic WWTP discharge remains valid, only the environmental permit for the existing industrial WWTP should be updated following the capacity increase. After project approval, a new WWTP identity certificate must be obtained. Additionally, sampling and measurements should be conducted at the</li> </ul>	Minor	<p>Included in operation costs</p> <p>Additional costs for surface water quality measurements (upon grievance) and in cases requiring</p>	Great Rich Ltd's EHS Team

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			frequency specified in the Communiqué on Administrative Procedures for the Water Pollution Control Regulation (monthly internal inspections for both WWTPs, annual monitoring for the domestic WWTP, and quarterly monitoring for the industrial WWTP as part of inspections by the competent authority). <ul style="list-style-type: none"> <li>Records related to generated, discharged, and reclaimed wastewater (along with intended use) must be entered into the Integrated Environmental Information System (Wastewater Information System), the online platform of the Ministry of Environment, Urbanization, and Climate Change.</li> <li>Best practices should be implemented to minimize wastewater generation, including process optimization and the adoption of water reuse technologies.</li> <li>Implementing erosion control measures, such as the use of vegetation, geotextiles, or retaining walls, can be implemented whenever necessary to prevent soil erosion and sedimentation, which can degrade surface water quality.</li> <li>In case of any grievances, water samples should be collected and assessment of the water quality of the samples will be performed at the locations where baseline measurements were conducted in the ESIA process.</li> </ul>		corrective and preventive actions  Additional costs for the analysis of treated domestic wastewater on parameters specified in the WBG General EHS Guidelines  Additional costs for EHS training	
OP-SW-02	Impacts on Surface Water Flow and Flood Risk	Moderate	<ul style="list-style-type: none"> <li>Surface runoff or wastewater generation due to dust suppression and garden irrigation activities will be prevented.</li> <li>Stormwater management should be implemented, including the installation of permeable surfaces and retention basins to reduce runoff and promote infiltration. To collect and reduce the flow of surface runoff originated from the project area having impermeable surfaces; drainage systems, interception channels and related strategies should be planned and implemented.</li> <li>Water absorption/infiltration should be enhanced, and surface water runoff should be reduced by incorporating green infrastructure, such as permeable pavements, green roofs and vegetated swales.</li> </ul>	Minor	Included in operation costs	Great Rich Ltd's EHS Team
OP-GW-01	Impact on Groundwater Resources	Major	<ul style="list-style-type: none"> <li>Sustainable use of water resources through water use minimization and recycling should be promoted along with the implementation of water saving technologies and practices.</li> <li>Water demand management practices should be implemented, groundwater extraction minimized, and strategies regularly adjusted based on monitoring data to ensure sustainable water use.</li> <li>Water recycling systems should be maintained for reuse in non-potable applications such as landscaping, cooling, and irrigation, with usage monitored to ensure efficiency.</li> <li>By regarding a river basin-based approach, sustainable approaches such as rainwater harvesting and reuse of treated wastewater will be performed for water supply, taking into account the water potential/budget in Engürü Groundwater Basin and the pressures on the reservoir utilized by other users.</li> <li>A leak detection and repair program will be implemented to minimize water losses. Repairs must be promptly made for broken pipes and other damages.</li> <li>Adequate maintenance will be carried out for pumps and pumping stations.</li> <li>All storage tanks and drums are positioned on concrete surfaces with appropriate secondary containment measures will be ensured. Additionally, spill kits, absorbent pads, or materials, as well as adsorbent sands, will be readily available near chemical storage areas as needed.</li> <li>Groundwater resources will not be utilized without the permission for the use of groundwater granted by the State Hydraulic Works (DSİ).</li> <li>Quarterly analysis of utility water, to be used after chlorination and supplied from the Great Rich Ltd-1 well, will be performed to ensure compliance with quality standards for human consumption/use.</li> </ul>	Minor	Included in operation costs  Additional costs for groundwater quality measurements (upon grievance) and in cases requiring corrective and preventive actions	Great Rich Ltd's EHS Team
<b>Resource and Waste Management</b>						
OP-EU-01	Material and Energy Use	Major	<ul style="list-style-type: none"> <li>Energy efficient tools and equipment will be preferred and idling of vehicles will be prohibited.</li> <li>In a planned manner, unnecessary energy/fuel consumption will be avoided.</li> <li>In line with the waste mitigation hierarchy and resource efficiency strategy, reuse/recycle/recovery steps will be followed to prevent excess use of materials.</li> <li>To understand fluctuations in usage, monthly usage statistics will be obtained, and the cause of the fluctuations will be analyzed and recorded in the Resource Usage Monitoring Chart.</li> <li>Where possible, a shift towards renewable energy sources will be adopted.</li> </ul>	Minor	Included in operation costs	Great Rich Ltd's EHS Team
OP-WM-01	Potential Impacts of Hazardous and Non-Hazardous Solid Wastes	Moderate	<ul style="list-style-type: none"> <li>The ESMP and relevant sub-management plans will be implemented by covering relevant E&amp;S issues and all personnel will receive the necessary training on waste management.</li> <li>The requirements of the applicable regulations related to waste management will be followed for the management of all waste generated as a result of the project activities,</li> <li>Separation of wastes (hazardous / non-hazardous, recyclable / non-recyclable) and temporary storage in designated storage areas will be ensured.</li> <li>Packaging wastes made of plastic, metal, glass, paper and board, composite and similar materials will be collected separately from other wastes and given to Packaging Waste Collection, Segregation and Recovery Facilities licensed by the MoEUCC.</li> </ul>	Negligible	Included in operation costs  Additional cost in case of soil contamination  Additional costs for corrective and	Great Rich Ltd's EHS Team

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			<ul style="list-style-type: none"> <li>After segregating the municipal solid waste by collecting recyclable materials separately, the organic portion of the municipal solid waste will be collected by the municipalities in accordance with the waste collection agreements.</li> <li>Vegetable waste oils will be stored separately and collected by environmental licensed recovery facilities and vegetable waste oil interim storage facilities.</li> <li>Ensuring that waste storage areas meet the standards set by the national legislation and international standards:                             <ul style="list-style-type: none"> <li>Determining sufficient and appropriate storage areas and ensuring that conditions such as container types, labels and classifications are appropriate in these areas,</li> <li>Ensuring impermeability on the grounds of storage areas against possible contamination of soil and groundwater,</li> <li>Sufficient ventilation of the area under conditions where volatile wastes need to be stored,</li> <li>Establishing a suitable drainage system against leaks,</li> <li>Restriction of physical access to waste storage areas (through gates, fences, etc.); ensuring that only authorized persons can enter the storage areas,</li> <li>Placing warning signs and panels with the name and contact number of authorized personnel in storage areas,</li> <li>In order to be prepared for emergencies such as spillage, fire, absorbent materials, fire extinguishing equipment, etc. near the area. be ready,</li> <li>Quick identification of any possible spillages / leaks by periodically performing visual checks in hazardous waste areas,</li> </ul> </li> <li>Compulsory liability insurance for hazardous materials and hazardous waste will be obtained and renewed on an annual basis.</li> <li>A Zero Waste Certification will be obtained during the operational phase.</li> <li>An Industrial Waste Management Plan will be prepared in accordance with national regulations and updated every three years.</li> <li>Wastes are not spilled out of areas other than those reserved for this purpose will be ensured and all necessary waste management training and periodic repetition of these trainings will be provided to all personnel.</li> <li>Waste oils will only be transported by licensed transportation companies and will only be delivered to licensed recycling or disposal facilities.</li> <li>All necessary precautions will be taken to prevent contamination of land.</li> <li>Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies.</li> <li>Medical wastes will be collected in special containers in the infirmary and given to the licensed Medical Waste Disposal Facilities. The provisions of the "Medical Waste Control Regulation" will be complied with.</li> <li>No waste should be disposed of any receiving environment or burned at the construction site.</li> <li>Waste records will be recorded by means of online platform of MoEUCC on Integrated Environment Information System/Waste Management Application (Waste Declaration System).</li> <li>Hazardous wastes will be separated from other waste streams at the source to prevent cross-contamination. After temporarily storing hazardous wastes in designated areas with appropriate containment measures to prevent leaks or spills, they will be disposed of at licensed facilities. Hazardous waste deliveries will be made via Mobile Waste Tracking System (MoTAT) by ensuring selection of licensed recycling/recovery/disposal facilities.</li> <li>All personnel will receive periodic training on effective waste management, zero waste principles, and resource efficiency.</li> </ul>		<p>preventive actions taken when necessary</p> <p>Additional costs for EHS training</p>	
OP-WM-02	Additional load on the waste management facilities around the Project area	Minor	<ul style="list-style-type: none"> <li>It will be ensured that waste disposal agreements are established with municipalities and licensed recovery/disposal firms.</li> </ul>	Negligible	Included in operation costs	Great Rich Ltd's EHS Team
<b>Biological Environment</b>						
OP-BIO-01	Noise and Air Pollution		(see "Noise and Vibration" and "Air Quality and Greenhouse Gas Emissions" part)			
OP-BIO-02	Waste Management		(see "Resource and Waste Management" part)			
OP-BIO-03	Wastewater Management		(see "Water Resources, Water Quality and Wastewater Management" part)			
<b>Labor and Working Conditions</b>						
OP-LWC-01	Foreign workers	Minor	<ul style="list-style-type: none"> <li>Offer regular cultural sensitivity training for both foreign workers and local employees to promote understanding, respect, and cooperation between different cultures.</li> <li>Provide language support, such as language courses or translation services, to help foreign workers communicate effectively and integrate better into the work environment.</li> <li>Implement clear and enforceable policies to ensure that all workers, regardless of nationality, have equal access to job opportunities, promotions, and benefits.</li> </ul>	Negligible	Included in operation costs	Great Rich Ltd's EHS Team Corporate Communications and

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			<ul style="list-style-type: none"> <li>Ensure that foreign workers receive fair compensation and benefits in line with local labor standards and their qualifications, just as local workers do.</li> <li>Establish open and transparent communication channels where foreign workers can express their concerns, provide feedback, and ask questions without fear of discrimination.</li> <li>Providing bilingual documents.</li> </ul>			Public Relations Specialist
OP-LWC-02	Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time	Moderate	<p>Discriminatory working conditions</p> <ul style="list-style-type: none"> <li>Regular consultations with worker representatives, union representatives, and employee representatives are mandatory</li> <li>WGM records are a critical tool for identifying and addressing these deficiencies</li> <li>Subcontractor employees and those working for service providers should also be integrated into a unified WGM system</li> <li>Training on the WGM should be provided at the start of employment, and all tools should be made accessible to all employees</li> </ul> <p>Over time</p> <ul style="list-style-type: none"> <li>Over Time Action Plan should be implemented</li> <li>The projected employment capacity for the Project should be analyzed in conjunction with overtime requirements.</li> <li>Providing training to women in areas where they are excluded from employment, in order to include them in programs.</li> <li>Utilizing local and regional collaborations.</li> </ul> <p>Establishing collaboration with local and regional worker organizations and associations.</p>	Negligible	Included in operation costs	Great Rich Ltd's EHS Team Human Resources
OP-LWC-03	Unequal opportunities for women and men in selection, remuneration, and promotion	Moderate	<ul style="list-style-type: none"> <li>Gender-Inclusive Recruitment and Hiring Policies – Ensure that job advertisements, interview questions, and selection criteria are gender-neutral, and actively encourage applications from both men and women, particularly for technical and leadership roles.</li> <li>Equal Pay and Compensation Transparency – Conduct regular salary audits and implement a transparent salary structure to ensure equal pay for men and women performing the same roles with equivalent skills and experience.</li> <li>Fair and Inclusive Career Advancement Opportunities – Establish clear promotion criteria based on skills, performance, and experience rather than gender, and create mentorship or leadership training programs to support women's career progression in technical and managerial positions.</li> <li>Workplace Policies Supporting Gender Equality – Implement policies such as parental leave, flexible work arrangements, and gender-sensitive occupational health and safety measures (e.g., PPE designed for both men and women) to create an inclusive work environment.</li> <li>Anti-Discrimination Training and Accountability Measures – Conduct regular training sessions on gender bias, diversity, and inclusion for management and staff, and establish a confidential grievance mechanism to report and address gender discrimination in hiring, pay, and promotions.</li> </ul>	Minor		
OP-LWC-04	Harassment (including sexual harassment), intimidation, and/or exploitation among project workers	Major	<ul style="list-style-type: none"> <li>All workers, contractors, and security personnel will be required to sign and adhere to a Code of Conduct that explicitly prohibits GBVH and SEA/SH.</li> <li>Fair recruitment practices will be established to prevent exploitation or coercion.</li> <li>A GBVH and SEA/SH focal point will be assigned within the project management team to oversee and monitor the implementation of measures.</li> <li>Mandatory training will be provided to all project personnel, contractors, and security staff on GBVH and SEA/SH awareness, acceptable workplace behavior, and response mechanisms.</li> <li>Background checks will be conducted for all personnel to minimize risks, particularly for roles involving public interaction.</li> <li>Local communities will be engaged to raise awareness of GBVH and SEA/SH risks and to foster collaboration on mitigation strategies.</li> <li>Grievance mechanisms will be implemented for GBVH and SEA/SH complaints, ensuring they are easily accessible to both workers and the community.</li> </ul>	Minor	Included in operation costs	Great Rich Ltd's EHS Team Human Resources
OP-LWC-05	Retaliation of workers as a result of any grievance they raised and/or difficulty in accessing worker grievance mechanism (WGM)	Major	<p>Establishing a Safe and Accessible Worker Grievance Mechanism (WGM)</p> <ul style="list-style-type: none"> <li>Provide multiple channels for submitting grievances, including in-person, phone, email, and anonymous suggestion boxes.</li> <li>Conduct regular awareness campaigns and training sessions to educate workers on how to access the WGM.</li> <li>Ensure the mechanism is available in local languages and through verbal reporting for illiterate workers.</li> </ul> <p>Ensuring Anonymity and Confidentiality of Complaints</p> <ul style="list-style-type: none"> <li>Develop a system that allows workers to file anonymous grievances securely.</li> <li>Establish an independent committee to handle grievances, ensuring impartiality.</li> <li>Maintain transparency in tracking and addressing grievances while protecting worker identities.</li> </ul>	Negligible	Included in operation costs	Great Rich Ltd's EHS Team Human Resources

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			Implementing a Zero-Tolerance Policy Against Retaliation <ul style="list-style-type: none"> <li>Develop a formal policy stating that retaliation against workers using the WGM is strictly prohibited.</li> <li>Regularly communicate this policy to all employees and contractors.</li> <li>Provide legal or organizational support for workers who experience retaliation.</li> </ul> Ensuring Equal Access for Contracted Workers <ul style="list-style-type: none"> <li>Guarantee that contracted workers have the same access to the WGM as direct employees.</li> <li>Ensure grievance mechanisms are applicable to both primary and subcontractor employees.</li> <li>Include clauses in contracts with subcontractors that enforce worker protection measures.</li> </ul> Monitoring and Feedback Mechanism <ul style="list-style-type: none"> <li>Regularly assess the effectiveness of the WGM and address any gaps.</li> <li>Conduct independent audits to ensure compliance with IFC standards.</li> <li>Provide workers with feedback on the status and resolution of their grievances.</li> </ul>			
<b>Community Health, Safety and Security</b>						
OP-CHS-01	Increase of the traffic accident risks due to increased traffic flow	Moderate	<ul style="list-style-type: none"> <li>The Road and Traffic Safety Management Plan will be implemented effectively.</li> <li>The visibility and proper placement of safety and traffic signs will be ensured.</li> <li>All drivers will be required to complete road safety training and comply with traffic regulations.                             <ul style="list-style-type: none"> <li>Implement regular training programs to educate drivers on appropriate social behavior, respect for residents, and safe driving practices in proximity to residential areas.</li> <li>Establish a strict code of conduct for all drivers, outlining acceptable behavior both on and off the job, and ensure that all drivers are aware of and adhere to these guidelines.</li> <li>Set up monitoring systems, such as cameras or on-site supervisors, to oversee the behavior of drivers and ensure compliance with social and safety norms.</li> <li>Making the grievance mechanism more visible.</li> <li>Encouraging the local community to use the grievance mechanism.</li> </ul> </li> </ul>	Negligible	Included in operation costs  Additional costs for corrective and preventive actions taken when necessary	Great Rich Ltd's EHS Team  Occupational Health and Safety Manager  Employee Services  Human Resources
OP-CHS-06	Communication issues with stakeholders	Moderate	<ul style="list-style-type: none"> <li>The requirements of the Stakeholder Engagement Plan prepared as part of the project will be implemented and updated as necessary.</li> <li>Security personnel will receive appropriate training on topics such as codes of conduct, community relations, use of force, and social and cultural sensitivity. If armed security personnel are employed, psychotechnical training will be completed without exception. Any complaints from local communities regarding inappropriate behavior by security personnel will be promptly investigated.</li> <li>The Grievance Mechanism will be actively utilized. External stakeholders will be informed about the functioning of the grievance mechanism.</li> </ul>	Negligible	Included in construction costs  Additional costs for corrective and preventive actions taken when necessary	Great Rich Ltd's EHS Team  Occupational Health and Safety Manager  Employee Services  Human Resources
<b>Occupational Health and Safety</b>						
OP-OHS-01	Electric Shock Hazards	Moderate	<ul style="list-style-type: none"> <li>All employees should follow and complete basic and advanced OHS training, including environmental, social, and technical OHS training.</li> <li>OHS Risk Assessments and Emergency Response Plans specific to the operational phase should be prepared and effectively implemented.</li> <li>Regular daily, weekly, and monthly OHS inspections should be conducted for operational processes, the results should be reported, and necessary corrective measures should be promptly taken.</li> <li>An OHS organizational structure compliant with national regulations and international standards should be established, and an adequate number of OHS specialists (OHS specialists and Occupational Physicians) should be present on-site during operating hours, along with additional OHS specialist(s) assigned specifically for night shifts.</li> <li>OHS personnel should inspect the site daily, and if new or additional risks are identified, relevant plans should be updated, and necessary training sessions should be renewed.</li> <li>Records of workplace accidents and near-miss incidents should be systematically maintained. Root cause analysis should be conducted for each incident, and measures to prevent recurrence should be implemented based on the analysis.</li> <li>In the event of a workplace accident, an incident report should be prepared at the accident site and submitted to the relevant authorities specified in national regulations within three (3) days along with a notification of the IFC Team.</li> <li>Work continuation after an accident should only be permitted once the issues identified by the root cause analysis have been fully resolved.</li> </ul>	Negligible	Included in operation costs  Additional costs for corrective and preventive actions taken when necessary  Additional costs for additional OHS specialist(s)  Additional costs for OHS training	Occupational Health and Safety Manager  Great Rich Ltd's EHS Team

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			<ul style="list-style-type: none"> <li>In addition to internal audits, Borusan Holding and Arcelor Mittal (shareholders) conduct annual OHS/risk assessment audits based on a yearly plan, focusing on specific OHS issues. This practice should also be maintained.</li> </ul>			
OP-OHS-02	Noise and Vibration	Moderate	<ul style="list-style-type: none"> <li>Conduct noise mapping and implement noise reduction measures, such as soundproofing or acoustic enclosures for high-noise equipment.</li> <li>Provide hearing protection devices (earplugs or earmuffs) to employees working in noisy environments.</li> <li>Rotate employees between tasks to minimize prolonged exposure to noise and vibration.</li> <li>Perform regular maintenance of equipment to reduce noise and vibration levels.</li> </ul>	Minor	Included in operation costs Additional costs for corrective and preventive actions taken when necessary	Occupational Health and Safety Manager Great Rich Ltd's EHS Team
OP-OHS-03	Mechanical Injuries	Major	<ul style="list-style-type: none"> <li>Workers should use machinery, equipment, vehicles, tools, hazardous substances, transport vehicles, and other production tools in accordance with regulations. They should properly utilize safety features and should avoid arbitrarily removing or altering these features.</li> <li>Workers should immediately inform the employer or a representative if they encounter a serious and immediate health or safety hazard involving machinery, equipment, vehicles, tools, facilities, or buildings, or if they detect any deficiencies in protective measures.</li> <li>No one should be allowed to operate or use work machinery unless they are sufficiently competent and reliable, informed of the risks associated with the operation, and subject to regular medical examinations.</li> <li>Workers assigned to operate work equipment should possess a Class G driver's license, a psychotechnical report, a defensive driving certificate, and a professional competency training certificate (SRC Driver Certificate).</li> <li>The contractor should ensure that no one operates or uses construction machinery unless they are sufficiently competent, reliable, informed about operational risks, and have undergone periodic medical examinations.</li> <li>Workers should not stand behind large facility machinery or under suspended loads. They should avoid working near moving objects and should remain particularly vigilant if those objects lack lights or signaling devices.</li> <li>A flagger should always be present to guide facility vehicles.</li> </ul>	Negligible	Included in operation costs Additional costs for corrective and preventive actions taken when necessary	Occupational Health and Safety Manager Great Rich Ltd's EHS Team
OP-OHS-04	Potential Risks Due to Improper Management of Hazardous and Chemical Substances	Moderate	<ul style="list-style-type: none"> <li>Safe handling procedures should be implemented for the storage, transportation, and use of hazardous and chemical substances.</li> <li>Designated storage areas equipped with appropriate containment measures should be provided to prevent leaks or spills. Safety Data Sheets (SDS) should be readily available.</li> <li>Proper labeling and packaging of hazardous and chemical materials should be ensured to facilitate safe handling and identification.</li> <li>Adequate personal protective equipment (PPE), such as gloves, goggles, and respiratory masks, should be provided to workers to minimize exposure to hazardous substances.</li> <li>Workers should receive comprehensive training on the safe use and management of hazardous and chemical substances, including emergency response procedures.</li> <li>An emergency preparedness and response plan should be in place to address spills, leaks, or other incidents involving hazardous substances, ensuring prompt containment and cleanup.</li> <li>Proper waste management procedures should be established for the disposal of hazardous and chemical substances, including recycling and disposal at licensed facilities.</li> <li>If hazardous substances listed in Annex-1, Chapter 1 and Chapter 2 of the Regulation on the Prevention and Mitigation of Major Industrial Accidents are stored, notification should be made to the BEKRA Notification System.</li> </ul>	Minor	Included in operation costs Additional costs for corrective and preventive actions taken when necessary	Occupational Health and Safety Manager Great Rich Ltd's EHS Team
OP-OHS-06	Potential risk of electric shock	Major	<ul style="list-style-type: none"> <li>All electrical systems and equipment should be regularly inspected and maintained by qualified personnel to prevent malfunctions.</li> <li>Employees should be provided with personal protective equipment (PPE), such as insulated gloves and boots, when working with or near electrical systems.</li> <li>Routine safety training should be conducted on electrical hazard awareness and proper handling procedures for electrical equipment.</li> <li>Areas with high-voltage equipment should be clearly marked and isolated to restrict access to authorized personnel only.</li> <li>Residual current devices and other safety mechanisms should be installed to immediately shut down systems in case of electrical faults.</li> </ul>	Negligible	Included in operation costs Additional costs for corrective and preventive actions taken when necessary	Occupational Health and Safety Manager Great Rich Ltd's EHS Team
OP-OHS-07	Potential Risks Related to Ergonomics, Repetitive Movements, and Manual Handling	Moderate	<ul style="list-style-type: none"> <li>Mechanical aids should be used to eliminate or reduce the effort required for lifting materials, holding tools, and handling work objects. Multi-person lifts should be implemented when weight thresholds are exceeded.</li> <li>Tools and equipment should be selected and designed to improve postures, reduce force requirements, and minimize holding times.</li> <li>Rest and stretching breaks should be incorporated into work processes, and job rotation should be implemented.</li> <li>Quality control and maintenance programs should be applied to reduce unnecessary force and effort.</li> <li>Additional special conditions, such as those relevant to left-handed individuals, should be taken into account.</li> </ul>	Negligible	Included in operation costs Additional costs for corrective and preventive actions taken when necessary	Occupational Health and Safety Manager Great Rich Ltd's EHS Team

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Ref. No.*	Potential Risks & Impacts	Impact Sig. Before*	Mitigation Measures	Impact Sig. After*	Cost	Responsible Parties
OP-OHS-09	Fire risks from flammable materials	Major	<ul style="list-style-type: none"> <li>▪ Fire suppression systems should be installed, and their functionality should be ensured through regular testing and maintenance.</li> <li>▪ Employees should be trained in fire safety procedures, and regular fire drills should be conducted.</li> <li>▪ Safe storage practices for flammable materials and chemicals should be implemented.</li> <li>▪ Work areas should be equipped with readily accessible fire extinguishers and emergency exits.</li> </ul>	Negligible	<p>Included in operation costs</p> <p>Additional costs for corrective and preventive actions taken when necessary</p>	<p>Occupational Health and Safety Manager</p> <p>Great Rich Ltd's EHS Team</p>

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## 8 ENVIRONMENTAL AND SOCIAL MONITORING PLAN

The overall objective of environmental and social monitoring is to qualitatively and quantitatively measure effectiveness of mitigation measures, and develop appropriate responses to non-compliances with Project standards, and emerging environmental and social issues.

Monitoring is to verify that ESMP is properly implemented and to monitor whether it has the intended effect of mitigating impacts. The main objectives of developing a monitoring program and defining parameters are to:

- Control that all mitigation measures are in place,
- Measure effectiveness of the mitigation measures,
- Provide mechanisms for taking timely action when unexpected environmental and social incidents are encountered, and
- Identify training requirements at all levels of the organizational structure.

The Third (3<sup>rd</sup>) Party Environmental and Social Monitoring Consultant and experts, who will take part in monitoring the compliance and performance of the project activities in line with the ESMP requirements, will be responsible for conducting relevant assessments, developing corrective actions and presenting them to Great Rich Ltd and IFC Team.

Monitoring plans, which cover parameters to be monitored, target/threshold values, key performance indicators, monitoring locations, methods, monitoring frequency, and responsible parties, are provided for the pre-construction, demolition & construction, and operation phases in Table 8-1, Table 8-2 and Table 8-3, respectively.

## 8.1 Monitoring Plan for Pre-construction Phase

Table 8-1. Monitoring Plan for Pre-construction Phase

Monitoring Plan for Pre-construction Phase							
Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
PCP-ES-01	Environmental and Social Management System	Presence of ESMP and sub-management plans and procedures Assignment letters of the ESHS responsible Training of the workers on ESMS, ESMP	%100 of documents (The ESMP and other relevant sub-management plans) prepared and approved  Presence of assignment letters of the relevant ESHS responsible personnels in Project Owner and Contractor.  Providing trainings to all staff (100%) on the ESMS, ESMP and other sub-management plans.	Project Owner's administrative building and Contractor's office	Documentation Control (ESMP and sub-management plans, assignment letters, trainings records)	Before demolition and construction starts	The Project Owner, with the support of the contractor
PCP-ES-02	Permits for the Project Implementation	Permits/approvals/official letters	All permits/approvals/official letters are available and valid before construction	Project Owner's administrative building and Contractor's office	Documentation Control	Before demolition and construction starts	The Project Owner, with the support of the contractor
PCP-TR-01	Trainings	Trainings on grievance mechanism, gender-based violence, sexual exploitation and abuse, sexual harassment and OHS	Providing trainings to all staff (100%) on Code of Conduct, grievance mechanism, gender-based violence (GBV), sexual exploitation and abuse, sexual harassment (SEA/SH) and OHS.	Project Owner's administrative building and Contractor's office	Review of training documents and records	Before demolition and construction starts	The Project Owner, with the support of the contractor
PCP-CHS-01	Precautions for Community Health and Safety	Fences Warning Signs	Enclosed project area  Availability of warning signs where necessary (OHS, traffic management and similar issues)	Project site	On-site visual observations/inspections	Before demolition and construction starts	The Project Owner, with the support of the contractor
PCP-OHS-01	Occupational Health and Safety	Health and Safety Plan	A Health and Safety Plan shall be prepared by the employer responsible for the entire construction site or the project manager. The plan will evaluate potential risks and define the health and safety measures to be implemented, the organizational structure, working methods, and specify when and by whom related tasks will be performed throughout the construction process. Additionally, the plan will ensure coordination of health and safety matters among different employers, subcontractors, self-employed individuals, and various work teams operating on the same construction site.  %100 compliance with the Health and Safety Plan.	Project site	Documentation, and Record Control	Before demolition and construction starts	The Project Owner, with the support of the contractor

## 8.2 Monitoring Plan for Demolition & Construction Phase

**Table 8-2. Monitoring Plan for Demolition and Construction Phase**

Monitoring Plan for Construction Phase							
Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
<b>Land Use, Soil and Geology</b>							
DCP-LSG-01	Risks during the construction of pile foundations and building bases on alluvial soil with low groundwater levels	Soil stability Groundwater levels Surface runoff The status of implementation of mitigation measures	Number of incidents of soil instability or erosion Full compliance with the mitigation measures Prevention of surface runoff formation	Project site	On-site visual observations/inspections Incident records	Daily	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-LSG-02	Soil Disturbance and Erosion	Existence of sediment control structures Effectiveness of erosion control measures	Interception and drainage channels constructed and maintained Area of successful vegetative growth achieved at revegetated sites and ratio to total area designated for revegetation	Project site	On-site visual observations/inspections Incident records	Daily	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-LSG-03	Soil Contamination	Existence of soil contamination Extent of contamination and source identification Parameters as specified in the Annex-2 (Table 1: List of Pollution Indicator Parameters) of Regulation on Control of Soil Pollution and Lands Polluted by Point Sources	Number of leakages/spill incidents Number of non-compliances with the applicable standards (Target: Zero non-compliance) Amount of contaminated soil Number and percentage of the personnel trained regarding emergency response to spills and leaks	Project site	On-site visual observations/inspections Documentation: Training records, incident reports Soil sampling and analysis (by an accredited laboratory) in case of leakage/spill incident	Daily	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-LSG-04	General Geotechnical Risks Seismicity Related Risks	Design of the structures	Number of related OHS accidents/incidents recorded during and after natural disaster Effective implementation of the Emergency Preparedness and Response Plan Damage situation after the earthquake	Project site	On-site visual observations/inspections Visual check of all project components following large seismic events occurred Documentation: Building permits and certificates	Weekly	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
<b>Noise and Vibration</b>							
DCP-NOI-01	Increase in noise and/or vibration levels	Grievance records on noise and vibration Preventive and corrective measures taken Noise and/or vibration measurements (according to WBG EHS Guidelines and the Annex-2 of Environmental Noise Control Regulation) (in case of a grievance) Correspondence with the relevant stakeholders Maintenance activities	No exceedance of noise/vibration limit values observed in the noise/vibration measurements (As per Table 1.7.1 of the WBG General EHS Guidelines, a maximum allowable increase of 3 dB in background noise levels at the nearest off-site receptor, and Table 1 of Annex-2 of the Environmental Noise Control Regulation) Number of noise/vibration-related grievances Number and percentage of the personnel trained on noise management	Project site and area of influence	On-site visual observations/inspections Noise monitoring at the settlements around the project site in case of grievances using noise measuring devices (at least 48 hours of uninterrupted noise measurements) (by an accredited laboratory) Documentation: Vehicle and equipment maintenance records, training records, grievance records, measurement reports, correspondence with stakeholders	Daily (on-site visual observations) In case of noise/vibration related grievance Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
<b>Air Quality and Greenhouse Gas Emissions</b>							
DCP-AQ-01	Decrease in Air Quality	Grievance records on air quality Preventive and corrective measures taken Air quality measurements according to the subject of the grievance parameters such as PM <sub>10</sub> , PM <sub>2.5</sub> , settled dust, SO <sub>x</sub> and NO <sub>x</sub> (in accordance with WBG EHS Guidelines and the Regulation on the Control of Industrial Air Pollution) Vehicle emissions Correspondence with the relevant stakeholders	No exceedance of air quality limit values observed in air quality measurements (As per Table 1.1.1 of WBG General EHS Guidelines and Annex-2, Table 2.2: Air Quality Limit Values in the Facility Impact Area, as specified in the Regulation on the Control of Industrial Air Pollution) Number of air quality related grievances Number and percentage of the personnel trained on air quality management	Project site and area of influence	On-site visual observations/inspections Air quality measurements to be performed at the nearby settlements in case of grievance (by an accredited laboratory) Documentation: Vehicle and equipment maintenance records, training records, grievance records, measurement reports, correspondence with stakeholders	Daily (on-site visual observations) In case of air quality related grievance Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-AQ-02	Increase in dust and exhaust gas emissions	Availability of the dust suppression methods and records Grievances regarding dust and exhaust emissions Availability of the related inspection records of the machinery and equipment	Dust and exhaust emissions comply with the national and international limit values Zero grievance regarding the dust and exhaust emission Dust suppression methods are available and effective Ratio of periodically maintained equipment to total equipment	Project site and area of influence	Visual observation at the site for the physical precautions Review of the documentation (inspection records, dust suppression records, measurement reports, etc.)	Daily inspections for availability of the physical precautions Monthly for other parameters In case of grievance for measurements	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-AQ-03	Energy Usage	Training activities Energy consumption rates Resource and Energy Usage Monitoring Chart Maintenance activities	Energy consumption rate per vehicle Ratio of periodically maintained equipment to total equipment	Project site and area of influence	On-site visual observations/inspections Documentation: Training records, Resource and energy usage monitoring chart	Daily (on-site visual observations) Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
<b>Water Resources, Water Quality and Wastewater Management</b>							
DCP-SW-01	Degradation Impacts on Surface Water Quality	Wastewater disposal records Training activities Grievance records Environmental permit and WWTP identity certificate for the domestic WWTP, along with periodic measurements of discharged wastewater, in accordance with the WBG EHS Guidelines and the Water Pollution Control Regulation	Compliance with the surface water quality standards Existence of wastewater collection system Number of water quality related grievances Amount of domestic wastewater generated and sent to the WWTP of Great Rich Ltd No exceedance of discharge limit values observed in treated wastewater measurements, in accordance with Table 1.3.1 of the WBG General EHS Guidelines and Annex (Table 21.1: Domestic Wastewater (Equivalent	Project site, WWTP utilized and area of influence	On-site visual observations/inspections Domestic WWTP effluent sampling and analysis results (by an accredited laboratory) Documentation: Wastewater generation and disposal records, grievance records, training minutes, wastewater analysis reports	Daily (on-site visual observations) Monthly (document review) Wastewater analysis as specified in the respective environmental permit of the WWTP	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant

## Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
			Population < 2000)) of the Water Pollution Control Regulation				
DCP-SW-02	Impacts on Surface Water Flow and Flood Risk	Existence of drainage systems and hydraulic structures Flood incidents	Number of flood incidents	Project site and area of influence	On-site visual observations /inspections	Weekly	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-GW-01	Impact on Groundwater Resources	Wastewater disposal records Groundwater utilization permit for each well Groundwater usage records Groundwater quality measurements for human consumption and in the event of a spill (with parameters to be determined based on the type of leak/spill)	Number of spill incidents Amount of groundwater use No exceedance of limit values for human consumption (in line with Regulation on Water Intended for Human Consumption and WHO Guidelines for Drinking Water Quality)	Project site and area of influence	On-site visual observations/ inspections Documentation: Groundwater utilization permit for each well, incident records, water usage statistics Groundwater quality sampling and analysis results (by an accredited laboratory) (if groundwater is used for drinking water purposes) Groundwater quality sampling and analysis results (by an accredited laboratory) (in case of leakage/spill)	Weekly Quarterly (groundwater quality sampling and analysis) (In case groundwater is used for drinking water purposes) In case of leakage/spill	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
<b>Resource and Waste Management</b>							
DCP-EU-01	Material and Energy Use	Training activities Energy consumption rates Resource and Energy Usage Monitoring Chart Maintenance activities	Energy consumption rate per vehicle Ratio of periodically maintained equipment to total equipment	Project site	On-site visual observations/inspections Documentation: Training records, Resource and energy usage monitoring chart	Daily (on-site visual observations) Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-WM-01	Potential Impact of Hazardous and Non-hazardous Wastes	Waste records (amount of waste generated, waste types, disposal situations, etc.) Recycled/recovered waste amounts Protocols/agreements made with the licensed companies Hazardous Waste Tracking System (MoTAT) records	Increase in amount/percent of recycled wastes Minimization of total waste generated Availability of protocols/agreements made with the licensed companies Delivery of all hazardous wastes generated through the Mobile Hazardous Waste Tracking System (MoTAT) Separate storage of hazardous waste and non-hazardous waste	Project site	On-site visual observations/inspections Documentation: Waste records, protocol/agreements	Daily (on-site visual observations) Weekly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-WM-02	Excavation Wastes	Waste Records (Amount of excavation material generated, amount of excess excavation material sent to licensed landfill)	Amount/percent of excavation waste used as backfilling and sent to landfill At least 50% of the excavated waste is used as backfilling material. Delivery of excess excavation waste to licensed excavation material storage area	Project site	On-site visual observations/inspections Review of documentation (amount of excavation material generated and amount of excess excavation material sent to licensed area)	Transfer Period: When excess excavation material is generated (will not be stored in the project area) Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-WM-03	Potential Impacts of Demolition (Dismantling) Activities	Amount/percent of dismantling wastes to be reused Waste records	Maximum reuse of dismantling wastes Delivery of non-reusable decommissioning waste to licensed waste management companies.	Project site	On-site visual observations/inspections Review of documentation (Reuse amount/percent of dismantling generated and amount of	Monthly Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
					dismantling wastes sent to licensed area)		
DCP-WM-04	Effective waste management applications	Presence and implementation of Waste Management Plan (WMP) Training of the personnel in waste management Compliance of the waste storage containers and area Waste records Hazardous/non-hazardous temporary waste storage area	Implementation of WMP (full compliance) Full compliance of waste storage containers and areas with national and international standards. Keeping separate records according to waste type Presence and compatibility of a hazardous/non-hazardous temporary waste storage area	Project site Waste storage areas	On-site visual observations/inspections Review of documentation (waste records, delivery records)	Daily (on-site visual observations) Monthly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
<b>Biological Environment</b>							
DCP-BIO-01	Biodiversity, Habitat Disturbance and spread of Alien Invasive Species	Biodiversity – habitats and species Alien invasive species Pollution and Contamination Control	Area of habitat impacted or disturbed Percentage of disturbed areas rehabilitated within a specified timeframe Introduction of Alien Invasive Species prevented	Project site	Field Surveys and Observations Impact Assessment Audits	Once during site clearing and quarterly afterwards	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
<b>Labor and Working Conditions</b>							
DCP-LWC-01	Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time	Discriminatory working conditions <ul style="list-style-type: none"> <li>• Consultations</li> <li>• Training</li> <li>• WGM</li> </ul> Over time <ul style="list-style-type: none"> <li>• Evaluation of workforce capacity</li> <li>• Demand on over time</li> <li>• WGM</li> <li>• Over Time Action Plan</li> </ul>	Discriminatory working conditions <ul style="list-style-type: none"> <li>• Number of consultations</li> <li>• Number of trainings</li> <li>• WGM records</li> </ul> Over time <ul style="list-style-type: none"> <li>• Number of workers</li> <li>• Number of days with over-time</li> <li>• WGM records</li> </ul>	Project site	WGM records	Quarterly (document review)	Implementation: Contractor Monitoring/Supervision: Third-party E&S Consultant
DCP-LWC-02	Raising GBVH and SEA/SH	Training records Grievance records	Number and percentage of the personnel trained on GBVH and SEA/SH along with adherence to the code of conduct Number of grievance records Effectiveness of corrective and preventive actions	Project site and area of influence	Assessment of the Grievance Mechanism records and training performance	Quarterly	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Community Health, Safety and Security</b>							
DCP-CHS-01	Increase of the traffic accident risks due to increased traffic flow	Existence and number of warning signs properly installed at designed location Training activities Grievance records	Grievance mechanism records Compliance with local road safety regulations (e.g., weight limits, speed limits, vehicle emissions) Effectiveness of corrective and preventive actions	Project site and area of influence	On-site visual observations Internal Audit Documentation: Grievance records, training minutes, incident/accident reports, traffic tickets, minutes of stakeholder meetings	Weekly	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Incident/accident records and traffic tickets Information gathered through Public Consultation	Number of the community health, safety and security/ traffic safety training and toolboxes Number of training and toolbox participants Warning signs to be installed Road safety, traffic measures and Project health and safety information provided to the local Project Affected People (PAP) and vulnerable groups				
DCP-CHS-02	Communication issues with stakeholders	Frequency of stakeholder engagement Timeliness of responses to stakeholder inquiries Stakeholder grievance handling Accessibility and inclusivity of communication Awareness levels among stakeholders Documentation of stakeholder feedback	Number of stakeholder meetings or consultations Percentage of stakeholders reached during engagement activities Average time taken to acknowledge and resolve grievances Percentage of grievances resolved within the stipulated timeframe Stakeholder satisfaction score (e.g., through surveys) Availability of project information in accessible formats	Project site and area of influence	Internal audits Documentation: Stakeholder surveys and interviews, grievance mechanism records, meeting records, audit reports, list of corrective preventive actions taken	Weekly	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Occupational Health and Safety</b>							
DCP-OHS-01	Risk Analysis Report	Frequency of risk analysis updates (e.g., annually, during operational changes, etc.). Number and types of identified risks (physical, chemical, biological, ergonomic, etc.). Implementation status of control measures listed in the risk analysis. Accuracy of risk assessment methods and scoring used. Reduction rate of high-priority risks. Number of employees and managers involved in the risk analysis process.	100% timely updates of the risk analysis (e.g., annually or during operational changes). 90% or higher reduction in high and critical risks. 95% or higher implementation rate of control measures stated in the risk analysis. Employee participation in the analysis process. 100% compliance of risk assessment methodologies with national/international standards.	Project site	Review of documentation and inspection reports On-site visual observations/inspections	At least every two years. After each occupational accident, or as needed.	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
DCP-OHS-02	Use of PPE	Proper use of PPE specific to job types. Availability of sufficient and appropriate PPE in the workplace. Correct use of PPE (e.g., proper wearing and handling techniques).	100% compliance with the use of PPE appropriate to the job type. Zero shortages of PPE in the workplace. Zero incidents of incorrect or incomplete use of PPE by employees. 100% adherence to planned PPE maintenance and replacement schedules.	Project site	Review and control of PPE records On-site visual observations/inspections	Daily	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Regular maintenance and replacement of PPE. Employee awareness and training on PPE usage.	90% or higher participation in employee training on PPE usage.				
DCP-OHS-03	Training	Preparation and implementation of the annual training plan. Training participation rate (number of employees attending/total targeted employees). Relevance of training topics to the workplace. Success rate of employees in post-training assessment tests. Timeliness of recurring training (e.g., mandatory OHS trainings).	100% preparation and implementation of the annual training plan. Training participation rate of 90% or higher. Success rate in post-training tests of 80% or higher. 100% completion of recurring training within the planned timeframe. 90% or higher positive feedback from employees after training sessions.	Project site	Review and control of training documents and records On-site visual observations/inspections	Continuous	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
DCP-OHS-04	Occupational accidents and near-miss incident records	Recording rate of occupational accidents and near-miss incidents. Completeness and accuracy of records. Number of incidents investigated and reported. Completion of root cause analyses for incidents. Implementation status of preventive and corrective actions following incidents. Records in Workers' GM related to OHS ISG awareness should be increased by encouraging more near-miss reporting.	100% recording of all occupational accidents and near-miss incidents. 100% investigation and reporting of incidents. 100% completion of root cause analyses. 95% or higher implementation rate of preventive and corrective actions. Maintain accident frequency rate (AFR) or accident severity rate (ASR) below the annual target.	Project site	Review and control of accident and near-miss incident records Review and control of workers' GM records related to OHS On-site visual observations/inspections	Monthly After the incident	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
DCP-OHS-05	Work Permits	Proper identification of jobs requiring work permits (e.g., hot work, confined spaces, electrical work). Accurate completion and approval of work permits. Number of jobs started without obtaining a permit. Implementation of controls and safety measures listed in the permit form. Validity and renewal status of permits.	100% proper identification and permit approval for all jobs requiring work permits. Zero jobs started without a valid work permit. 100% implementation of safety measures listed in the permits. 100% renewal of permits before expiration. Zero accidents or violations in jobs require work permits.	Project site	Review and control of work permits On-site visual observations/inspections	Daily	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

## Monitoring Plan for Construction Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
DCP-OHS-06	OHS Committee Meetings	Regularity of meetings. Attendance rate. Agenda items discussed. Implementation status and follow-up of decisions made during the meetings.	100% timely completion of meetings. Attendance rate of 90% or higher. Action plans prepared and implemented for every critical issue discussed. 100% inclusion of workplace incidents and OHS violations in the meeting discussions.	Project site	Review of documentation and inspection reports	Monthly	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
DCP-OHS-07	Inspections and Audits	Implementation of site inspections on a daily, weekly, and monthly basis.	Completion of comprehensive site inspections on a daily, weekly, and monthly basis.	Project site	Review of documentation and inspection reports	Monthly	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
DCP-OHS-08	Emergency Situations	Preparation and updates of emergency action plans. Quantity and functionality of emergency equipment (e.g., fire extinguishers, first aid kits). Frequency of emergency evacuation drills. Evacuation time and compliance of employees with the evacuation plan. Employees' awareness of emergency procedures (e.g., exit routes, assembly points). Reporting and evaluation of incidents post-emergency.	Preparation and regular updates of emergency action plans. Zero faulty or expired emergency equipment during inspections. Conducting emergency evacuation drills at least twice a year. Compliance with evacuation procedures during drills. Reporting and reviewing emergency situations or drills.	Project site	Review of documentation and inspection reports	Biannual	Implementation: Contractor under the supervision of Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

### 8.3 Monitoring Plan for Operation Phase

Table 8-3. Monitoring Plan for Operation Phase

Monitoring Plan for Operation Phase							
Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
<b>Land Use, Soil and Geology</b>							
OP-LSG-01	Soil Disturbance and Erosion	Extent of soil disturbance Visible signs of soil erosion, such as gullies or sediment deposition Vegetation Cover Existence of sediment runoff Effectiveness of erosion control measures (e.g., silt fences, drainage channels)	Number of erosion-related incidents reported Percentage of disturbed areas successfully revegetated or stabilized Percentage of erosion control structures maintained and functioning effectively	Facility area	On-site visual observations/inspections Incident records	Monthly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-LSG-02	Soil Contamination	Extent of contamination and source identification Baseline conditions Parameters as specified in the Annex-2 (Table 2: List of Potential Soil Polluting Activities and Activity-Specific Pollution Indicator Parameters) of Regulation on Control of Soil Pollution and Lands Polluted by Point Sources	Number of leakages/spill incidents Number of non-compliances with the applicable standards (Target: Zero non-compliance) Amount of contaminated soil Number and percentage of the personnel trained regarding emergency response to spills and leaks	Facility area	On-site visual observations/inspections Documentation: Training records, incident reports Soil sampling and analysis (by an accredited laboratory) in case of leakage/spill incident	Weekly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-LSG-03	General Geotechnical Risks Seismicity Related Risks	Maintenance records Incident records	Number of related incidents/accidents recorded Number of maintenance and repairs performed per year No significant damage observed after an earthquake	Facility structures and components	On-site visual observations/inspections Documentation: Maintenance records, incident records	Quarterly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Noise and Vibration</b>							
OP-NOI-01	Increase in noise and/or vibration levels	Correspondence with competent authorities regarding environmental permits Grievance records on noise and/or vibration Preventive and corrective measures taken Noise and/or vibration measurements (according to WBG EHS Guidelines and the Annex-2 of Environmental Noise Control Regulation) Correspondence with the relevant stakeholders	No exceedance of noise/vibration limit values observed in the noise/vibration measurements (As per Table 1.7.1 of the WBG General EHS Guidelines, a maximum allowable increase of 3 dB in background noise levels at the nearest off-site receptor, and Table 1 of Annex-2 of the Environmental Noise Control Regulation) Number of noise/vibration-related grievances Number and percentage of the personnel trained on noise management	Facility area and area of influence	On-site visual observations/inspections Noise monitoring at the settlements around the project site in case of grievances using noise measuring devices (at least 48 hours of uninterrupted noise measurements) (by an accredited laboratory) Documentation: Environmental permit opinion on environmental noise, vehicle and equipment maintenance records, training records, grievance records, measurement reports, correspondence with	Monthly In case of noise/vibration related grievance	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Maintenance activities			stakeholders, monthly activity reports		
<b>Air Quality and Greenhouse Gas Emissions</b>							
OP-AQ-01	Decrease in air quality caused by pollutant emissions from the facility, along with exhaust gases from traffic movements	<p>Correspondence with competent authorities regarding environmental permits</p> <p>Grievance records on air quality</p> <p>Preventive and corrective measures taken</p> <p>Air quality measurements according to the subject of the grievance parameters such as PM<sub>10</sub>, PM<sub>2.5</sub>, settled dust, SO<sub>x</sub> and NO<sub>x</sub> (in accordance with WBG EHS Guidelines and the Regulation on the Control of Industrial Air Pollution)</p> <p>Biannual flue gas emission measurements conducted in accordance with both national legislation and international standards</p> <p>Vehicle emissions</p> <p>Correspondence with the relevant stakeholders</p>	<p>No exceedance of air quality limit values observed in air quality measurements (As per Table 1.1.1 of WBG General EHS Guidelines and Annex-2, Table 2.2: Air Quality Limit Values in the Facility Impact Area, as specified in the Regulation on the Control of Industrial Air Pollution)</p> <p>No exceedance of flue gas emission limits as specified in Annex-5 Table 5.2, Annex-1 Tables 1.1, 1.2.1, 1.2.2, and 1.3.1 of the Regulation on the Control of Industrial Air Pollution, Table 5 of the WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing, and Table 1.1.2 of the WBG General EHS Guidelines</p> <p>Number of air quality related grievances</p> <p>Number and percentage of the personnel trained on air quality management</p>	Facility area and area of influence	<p>On-site visual observations/inspections</p> <p>Air quality measurements to be performed at the nearby settlements in case of grievance (by an accredited laboratory)</p> <p>Flue gas emission reports performed biannually/In the periods to be determined by IFC (by an accredited laboratory)</p> <p>Documentation: Environmental permit on air emissions, vehicle and equipment maintenance records, training records, grievance records, measurement reports, correspondence with stakeholders, monthly activity reports</p>	<p>Monthly</p> <p>In case of air quality related grievance</p>	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>
OP-AQ-02	Greenhouse gas emissions due to the facility activities and energy and raw material requirements	<p>Training activities</p> <p>Energy consumption rates</p> <p>Resource and Energy Usage Monitoring Chart</p> <p>Maintenance activities</p> <p>Greenhouse Gas Emission Report (applicable if the expected annual production of CO<sub>2</sub>-equivalent exceeds 25,000 tonnes)</p>	<p>Energy consumption rate of the facility activities</p> <p>Number and impact of implemented carbon reduction initiatives (e.g., process optimization, renewable energy integration)</p> <p>Ratio of periodically maintained equipment to total equipment</p> <p>Number and percentage of the personnel trained on energy efficiency</p>	Facility area	<p>Documentation: Annual greenhouse gas emission reports, training records, Vehicle maintenance records, Resource and energy usage monitoring chart</p>	<p>Monthly</p>	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>
<b>Water Resources, Water Quality and Wastewater Management</b>							
OP-SW-01	Degradation Impacts on Surface Water Quality	<p>Wastewater generation and disposal records</p> <p>Training activities</p> <p>Grievance records</p> <p>Environmental permit and WWTP identity certificate for the domestic and industrial WWTPs, along with periodic measurements of discharged wastewater, in accordance with the WBG EHS</p>	<p>Compliance with the surface water quality standards</p> <p>Existence of wastewater collection system</p> <p>Number of water quality related grievances</p> <p>Amount of domestic and industrial wastewater generated and sent to the relevant WWTPs of Great Rich Ltd</p>	Facility area, WWTPs utilized and area of influence	<p>On-site visual observations/inspections</p> <p>Domestic and industrial WWTPs effluent sampling and analysis results (by an accredited laboratory)</p> <p>Documentation: Wastewater generation and disposal records (Wastewater Information System records), grievance records, training minutes, wastewater</p>	<p>Monthly</p> <p>Wastewater analysis as specified in the respective environmental permit of the WWTP</p>	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>

Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Guidelines and the Water Pollution Control Regulation Wastewater treatment efficiencies	No exceedance of discharge limit values observed in treated wastewater measurements (for domestic wastewater: in accordance with Table 1.3.1 of the WBG General EHS Guidelines and Annex (Table 21.1: Domestic Wastewater (Equivalent Population < 2000)) of the Water Pollution Control Regulation; for industrial wastewater: in accordance with Table 6 of the WBG EHS Guidelines for Metal, Plastic and Rubber Products Manufacturing and Annex (Tables 15.2, 20.1, and 20.7) of the Water Pollution Control Regulation		analysis reports, monthly activity reports, environmental permit		
OP-SW-02	Impacts on Surface Water Flow and Flood Risk	Flood incidents Erosion potential Sediment accumulation in drainage systems	Number of flood events that impact facility operations or surrounding areas Percentage of flood risk mitigation measures implemented and functioning as planned	Facility area and area of influence	On-site visual observations /inspections	Monthly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-SW-03	Impact on Groundwater Resources	Total water withdrawal Groundwater levels and assessment of the aquifer stress Water usage by source and operational activities Wastewater disposal records Groundwater utilization permit for each well Groundwater usage records Groundwater quality measurements for human consumption and in the event of a spill (with parameters to be determined based on the type of leak/spill)	Number of spill incidents Amount of groundwater use Percentage of groundwater extracted compared to the facility's permit limits Percentage of water used that is recycled or sourced from non-groundwater sources (e.g., surface water, rainwater) Volume and percentage of water recycled or reused No exceedance of limit values for human consumption (in line with Regulation on Water Intended for Human Consumption and WHO Guidelines for Drinking Water Quality)	Facility area and area of influence	On-site visual observations/ inspections Documentation: Groundwater utilization permit for each well, incident records, water usage and recovery statistics Groundwater quality sampling and analysis results (by an accredited laboratory) (if groundwater is used for drinking water purposes) Groundwater quality sampling and analysis results (by an accredited laboratory) (in case of leakage/spill)	Monthly In case of leakage/spill	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Resource and Waste Management</b>							
OP-EU-01	Material and Energy Use	Training activities Energy consumption rates Resource and Energy Usage Monitoring Chart Maintenance activities	Energy and resource consumption rate per vehicle	Facility area	On-site visual observations/inspections Documentation: Training records, Resource and energy usage monitoring chart	Daily (on-site visual observations) Monthly (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-WM-01	Potential Impact of Hazardous and Non-hazardous Wastes	Waste records (amount of waste generated, waste types, disposal situations, etc.) Recycled/recovered waste amounts Protocols/agreements made with the licensed companies	Increase in amount/percent of recycled wastes Minimization of total waste generated Availability of protocols/agreements made with the licensed companies Delivery of all hazardous wastes generated through the Mobile Hazardous Waste Tracking System (MoTAT)	Facility area	On-site visual observations/inspections Documentation: Waste records, protocol/agreements	Daily (on-site visual observations) Weekly (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Hazardous Waste Tracking System (MoTAT) records	Separate storage of hazardous waste and non-hazardous waste				
OP-WM-02	Effective waste management applications	Presence and implementation of Waste Management Plan (WMP) Training of the personnel in waste management Compliance of the waste storage containers and area Waste records Hazardous/non-hazardous temporary waste storage area	Implementation of WMP (full compliance) Full compliance of waste storage containers and areas with national and international standards. Keeping separate records according to waste type Presence and compatibility of a hazardous/non-hazardous temporary waste storage area	Facility area Waste storage areas	On-site visual observations/inspections Review of documentation (waste records, delivery records)	Daily (on-site visual observations) Monthly (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-WM-03	Requirements and permits related with national legislation (Regulation on Waste Management)	Industrial Waste Management Plan Annual Waste Declaration Waste Delivery Zero Waste Certificate Compulsory liability insurance Temporary storage permit for hazardous waste	If a new waste storage area will be built for the new facility, an Industrial Waste Management Plan should be prepared and submitted to the Provincial Directorate for approval. If there will be common area use for both facilities, the existing plan should be revised. Annual waste declaration must be made through the Integrated Environmental Information System (EÇBS) Waste Management Application. Waste deliveries must be carried out in accordance with the periods in the national legislation. Compulsory liability insurance must be provided and renewed every year. If the facility has more than one thousand kilograms of hazardous waste per month, a hazardous waste temporary storage permit must be obtained.	Facility rea Waste storage area	Review of documentation	Monthly (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Labor and Working Conditions</b>							
OP-LWC-01	Foreign workers	Trainings Bilingual documents WGM	Number of trainings Number of bilingual documents WGM records	Project site	WGM records	Semi-annual (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-LWC-02	Poor working conditions which do not meet the national labor legislation, i.e. discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, over time	Discriminatory working conditions <ul style="list-style-type: none"> <li>• Consultations</li> <li>• Training</li> <li>• WGM</li> </ul> Over time <ul style="list-style-type: none"> <li>• Evaluation of workforce capacity</li> <li>• Demand on over time</li> <li>• WGM</li> <li>• Over Time Action Plan</li> </ul>	Discriminatory working conditions <ul style="list-style-type: none"> <li>• Number of consultations</li> <li>• Number of trainings</li> <li>• WGM records</li> </ul> Over time <ul style="list-style-type: none"> <li>• Number of workers</li> <li>• Number of days with over-time</li> <li>• WGM records</li> </ul>	Project site	WGM records	Semi-annual (document review)	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
OP-LWC-03	Raising GBVH and SEA/SH	Training records Grievance records	Number and percentage of the personnel trained on GBVH and SEA/SH along with adherence to the code of conduct Number of grievance records Effectiveness of corrective and preventive actions	Project site and area of influence	Assessment of the Grievance Mechanism records and training performance	Quarterly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Community Health, Safety and Security</b>							
OP-CHS-01	Increase of the traffic accident risks due to increased traffic flow	Existence and number of warning signs properly installed at designed location Training activities Grievance records Incident/accident records and traffic tickets Information gathered through Public Consultation	Grievance mechanism records Compliance with local road safety regulations (e.g., weight limits, speed limits, vehicle emissions) Effectiveness of corrective and preventive actions Number of the community health, safety and security/ traffic safety training and toolboxes Number of training and toolbox participants Warning signs to be installed Road safety, traffic measures and Project health and safety information provided to the local PAPs and vulnerable groups	Facility area and area of influence	On-site visual observations Internal Audit Documentation: Grievance records, training minutes, incident/accident reports, traffic tickets, minutes of stakeholder meetings	Monthly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-CHS-02	Communication issues with stakeholders	Frequency of stakeholder engagement Timeliness of responses to stakeholder inquiries Stakeholder grievance handling Accessibility and inclusivity of communication Awareness levels among stakeholders Documentation of stakeholder feedback	Number of stakeholder meetings or consultations Percentage of stakeholders reached during engagement activities Average time taken to acknowledge and resolve grievances Percentage of grievances resolved within the stipulated timeframe Stakeholder satisfaction score (e.g., through surveys) Availability of project information in accessible formats	Facility area and area of influence	Internal audits Documentation: Stakeholder surveys and interviews, grievance mechanism records, meeting records, audit reports, list of corrective preventive actions taken	Quarterly	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
<b>Occupational Health and Safety</b>							
OP-OHS-01	Risk Analysis Report	Frequency of risk analysis updates (e.g., annually, during operational changes, etc.). Number and types of identified risks (physical, chemical, biological, ergonomic, etc.). Implementation status of control measures listed in the risk analysis.	100% timely updates of the risk analysis (e.g., annually or during operational changes). 90% or higher reduction in high and critical risks. 95% or higher implementation rate of control measures stated in the risk analysis. Employee participation in the analysis process.	Project site	Review of documentation and inspection reports On-site visual observations/inspections	At least every two years. After each occupational accident, or as needed.	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

## Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		Accuracy of risk assessment methods and scoring used. Reduction rate of high-priority risks. Number of employees and managers involved in the risk analysis process.	100% compliance of risk assessment methodologies with national/international standards.				
OP-OHS-02	Use of PPE	Proper use of PPE specific to job types. Availability of sufficient and appropriate PPE in the workplace. Correct use of PPE (e.g., proper wearing and handling techniques). Regular maintenance and replacement of PPE. Employee awareness and training on PPE usage.	100% compliance with the use of PPE appropriate to the job type. Zero shortages of PPE in the workplace. Zero incidents of incorrect or incomplete use of PPE by employees. 100% adherence to planned PPE maintenance and replacement schedules. 90% or higher participation in employee training on PPE usage.	Project site	Review and control of PPE records On-site visual observations/inspections	Daily	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-OHS-03	Training	Preparation and implementation of the annual training plan. Training participation rate (number of employees attending/total targeted employees). Relevance of training topics to the workplace. Success rate of employees in post-training assessment tests. Timeliness of recurring training (e.g., mandatory OHS training).	100% preparation and implementation of the annual training plan. Training participation rate of 90% or higher. Success rate in post-training tests of 80% or higher. 100% completion of recurring training within the planned timeframe. 90% or higher positive feedback from employees after training sessions.	Project site	Review and control of training documents and records On-site visual observations/inspections	Continuous	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant
OP-OHS-04	Occupational accidents and near-miss incident records	Recording rate of occupational accidents and near-miss incidents. Completeness and accuracy of records. Number of incidents investigated and reported. Completion of root cause analyses for incidents. Implementation status of preventive and corrective actions following incidents. Records in Workers' GM related to OHS	100% recording of all occupational accidents and near-miss incidents. 100% investigation and reporting of incidents. 100% completion of root cause analyses. 95% or higher implementation rate of preventive and corrective actions. Maintain accident frequency rate (AFR) or accident severity rate (ASR) below the annual target.	Project site	Review and control of accident and near-miss incident records Review and control of workers' GM records related to OHS On-site visual observations/inspections	Biannual After the incident	Implementation: Great Rich Ltd Monitoring/Supervision: Third-party E&S Consultant

## Monitoring Plan for Operation Phase

Ref. No.	Issue	Parameters to be monitored	Target/Threshold Value/Key Performance Indicator	Monitoring Location	Monitoring Method	Timing/Frequency of Monitoring	Responsible Parties
		ISG awareness should be increased by encouraging more near-miss reporting.					
OP-OHS-05	Work Permits	<p>Proper identification of jobs requiring work permits (e.g., hot work, confined spaces, electrical work).</p> <p>Accurate completion and approval of work permits.</p> <p>The number of jobs started without obtaining a permit.</p> <p>Implementation of controls and safety measures listed in the permit form.</p> <p>Validity and renewal status of permits.</p>	<p>100% proper identification and permit approval for all jobs requiring work permits.</p> <p>Zero jobs started without a valid work permit.</p> <p>100% implementation of safety measures listed in the permits.</p> <p>100% renewal of permits before expiration.</p> <p>Zero accidents or violations in jobs require work permits.</p>	Project site	<p>Review and control of work permits</p> <p>On-site visual observations/inspections</p>	Daily	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>
OP-OHS-06	OHS Committee Meetings	<p>Regularity of meetings.</p> <p>Attendance rate.</p> <p>Agenda items discussed.</p> <p>Implementation status and follow-up of decisions made during the meetings.</p>	<p>100% timely completion of meetings.</p> <p>Attendance rate of 90% or higher.</p> <p>Action plans prepared and implemented for every critical issue discussed.</p> <p>100% inclusion of workplace incidents and OHS violations in the meeting discussions.</p>	Project site	Review of documentation and inspection reports	Every two months	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>
OP-OHS-07	Inspections and Audits	Implementation of site inspections on a daily, weekly, and monthly basis.	Completion of comprehensive site inspections on a daily, weekly, and monthly basis.	Project site	Review of documentation and inspection reports	Quarterly	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>
OP-OHS-08	Emergency Situations	<p>Preparation and updates of emergency action plans.</p> <p>Quantity and functionality of emergency equipment (e.g., fire extinguishers, first aid kits).</p> <p>Frequency of emergency evacuation drills.</p> <p>Evacuation time and compliance of employees with the evacuation plan.</p> <p>Employees' awareness of emergency procedures (e.g., exit routes, assembly points).</p> <p>Reporting and evaluation of incidents post-emergency.</p>	<p>Preparation and regular updates of emergency action plans.</p> <p>Zero faulty or expired emergency equipment during inspections.</p> <p>Conducting emergency evacuation drills at least once a year.</p> <p>Compliance with evacuation procedures during drills.</p> <p>Reporting and reviewing emergency situations or drills.</p>	Project site	Review of documentation and inspection reports	At least once a year	<p>Implementation: Great Rich Ltd</p> <p>Monitoring/Supervision: Third-party E&amp;S Consultant</p>

\*See "Noise and Vibration" and "Air Quality and Greenhouse Gas Emissions", Resource and Waste Management" and Water Resources, Water Quality and Wastewater Management" parts for the assessment related to Biological Environment.