

Annex 2

EHSS Register

Regulation	Regulation Summary	Permits/Actions
ENVIRONMENT		
GENERAL		
<p>Environment Law No. 2872, as amended in 2006 by Law No. 5491</p> <p>Official Gazette Date/Number: 11.08.1983/18132; Last Amended on 30.12.2020</p>	<p>The Environment Law is Turkey’s primary framework for environmental legislation and is supported by a series of regulations. Article 10 of the Environment Law sets the framework for the EIA Regulation.</p>	<p>Relevant permits as per the applicable regulations (e.g. EIA, Environmental Permit - if necessary)</p>
<p>Environmental Impact Assessment (EIA) Regulation</p> <p>Official Gazette Date/Number: 25.11.2014/29186; Last Amended on 28.11.2019</p>	<p>Pursuant to the regulation, depending on the type of the project, its capacity, or the location of the activity, an EIA or a Project Description File may be required. Based on classification of projects according to the potentially expected environmental impacts, the projects listed in Annex-1 of the regulation are directly subject to prepare a full EIA Report and they should first apply to Ministry of Environment, Urban Planning and Climate Change (MoEUCC) with an EIA Application File. The projects listed in Annex-2 should prepare a Project Description File and are subject to screening by MEUP to derive a decision whether or not a full EIA is needed.</p> <p><i>The Project is exempted from the Turkish EIA Regulation as explained below:</i></p> <p><i>Nakkas-Basaksehir Motorway Project is the last section of the Northern Marmara Motorway Project which was included in the public investment program in 1991 and evaluated by the MoEUCC with its official letter dated 31 July 2009 as out-of-scope of EIA Regulation as per the Temporary Article 3 of the EIA Regulation in force at the time (2008 EIA Regulation). Temporary Article 3 (“Out of Scope Projects”) of the 2008 Regulation states that for projects that were included in the investment program prior to the 1993 EIA Regulation; the provisions of this Regulation shall not apply. As such, the Project is exempted from the Turkish EIA Regulation. This exemption of the Project from Turkish EIA Regulation was recently confirmed by a decision of the Istanbul Provincial Directorate of the Environment, Urbanization and Climate Change as issued to 1st Regional Directorate of KGM with an official letter dated 2 December 2020. The Project’s EIA exemption includes also all material quarries, connecting roads, energy transmission lines, storage areas, ready mix concrete plants, asphalt plants and manufacturing facilities required for constructions.</i></p>	<p>EIA positive decision or EIA not required decision or EIA exemption certificate</p>

Regulation	Regulation Summary	Permits/Actions
Environmental Audit Regulation Official Gazette Date/Number: 12.06.2021/31509	This regulation defines procedures and principles for environmental inspections of businesses and activities, qualifications of inspection officers, identification of breaches and administrative sanctions.	Provide all necessary documentation to the inspector, undertake necessary measurements and analysis as per relevant legislation
Regulation on Environmental Management Services Official Gazette Date/Number: 30.07.2019/30847	The regulation defines the procedures and principles regarding the qualifications, responsibilities and certification of those who will be providing environmental management services.	Employ an environmental officer or establish Environmental Management Unit or acquire services from an authorized consulting company
Regulation on Environmental Permits and Licenses Official Gazette Date/Number: 10.09.2014/29115; Last Amended on 31.12.2020	<p>The purpose of this regulation is to define the permitting and licensing procedures and principles for the activities and facilities listed in the annexes of the regulation. Within the scope of this regulation, facilities are classified based on their environmental impacts as follows: (a) Facilities that have a high pollution impact on the environment (Annex-1 list); and (b) Facilities that have a pollution impact on the environment (Annex-2 list). The facilities that are included in these lists are required to obtain an environmental permit (Annex-1 facilities from MoEUCC, Annex-2 facilities from PDEU). An environmental permit covers at least one of the following: air emissions, environmental noise, wastewater discharge or deep-sea discharge. A temporary operation permit may be issued for a period of one year while the requirements for the Environmental Permit are completed.</p> <p><i>The following activities/facilities listed under the Annex-1 and Annex-2 of the regulation are relevant/potentially relevant for the Project.</i></p> <p><i>Construction phase:</i></p> <ul style="list-style-type: none"> • <i>Annex-2, Item 2.13 - Facilities that produce concrete, mortar or road materials using cement with a production capacity of 10 m³/hour or above, including the areas where these materials are mixed in their dry form.</i> • <i>Annex-2, Item 2.15 - Asphalt plant facilities preparing road materials, facilities that melt or produce mineral-based bitumen or tar mixtures (including tar melting and spraying facilities)</i> • <i>Annex-2, Item 2.16 - Mines where explosives are used.</i> 	Temporary Operation Permit and Environmental Permit

Regulation	Regulation Summary	Permits/Actions
	<ul style="list-style-type: none"> • <i>Annex-2, Item 2.17 - Mines extracting Group 1 a/b, Group II, Group IV, Group V mines as per Mining Law with a production capacity of 200 ton/day and above</i> • <i>Annex-2, Item 2.18 – Facilities with a production capacity of 200 ton/day and above that break, grind and screen ores in Group 1 a/b, Group II, Group IV, Group V mines of the Mining Law, slag and debris.</i> 	
<p>Regulation on Workplace Opening and Operating Licenses</p> <p>Official Gazette Date/Number: 10.08.2005/25902; Last Amended on 30.07.2021</p>	<p>The regulation governs the principles and procedures in issuing opening and operation licenses required for workplaces. The regulation covers authorization and auditing of sanitary and non-sanitary workplaces. The regulation designates the metropolitan municipalities, municipalities, municipal district or first level municipalities, provincial special administrations and organized industrial zone administrations as competent authorities for licensing. The type of opening and operation license an establishment has to possess depends on whether it is listed as a sanitary workplace (Annex-1) or non-sanitary workplace (Annex-2) under the regulation.</p>	<p>Workplace opening and operating license</p>
WATER		
<p>Water Pollution Control Regulation</p> <p>Official Gazette Date/Number: 31.12.2004/25687; Last Amended on 14.01.2020</p>	<p>The purpose of this regulation is to set the legal and technical principles to be followed in the control of water pollution, in order to protect the ground and surface waters and to prevent water pollution. The regulation provides quality criteria for surface, marine and groundwaters, rules and principles for water pollution control, industry specific discharge (effluent) standards, and the principles for discharging wastewater into the surroundings, the sea or the sewer system.</p>	<p>Wastewater discharge permit (within the scope of the "Environmental Permit" <i>(required if wastewaters are discharged into receiving environments)</i></p> <p>Wastewater connection permit (for connection to sewer system)</p>
<p>Surface Water Quality Regulation</p> <p>Official Gazette Date/Number: 30.11.2012/28483; Last Amended on 16.06.2021</p>	<p>This regulation aims to define the procedures and principles for identification of biological, chemical, physicochemical and hydro-morphological quality, classification and monitoring of quality and quantity of the surface waters and coastal & transitional waters, as well as sets forth their utilization purposes and the measures to be taken in order to achieve good water conditions.</p> <p><i>Table 2 of Annex 5 of the regulation provides quality criteria for different water quality classes (Class I-very good, Class II-good and Class III-medium) which were used in evaluation of the creeks along the motorway route where water samples were collected.</i></p>	

Regulation	Regulation Summary	Permits/Actions
<p>Law on Groundwater No. 167 Official Gazette Date/Number: 23.12.1960/10688; Last Amended on 09.07.2018</p>	<p>This law defines the legal framework for groundwater usage. Related permits should be received from the State Hydraulic Works (DSI) for groundwater exploration, and construction and operation of wells to be utilized for groundwater abstraction purposes.</p>	<p>Well exploration permit and well utilization permit - if necessary</p>
<p>State Hydraulic Works Regulation on Groundwater Measurement Systems Official Gazette Date/Number: 12.10.2013/28793</p>	<p>This regulation defines the procedures and principles; i) to control, by means of measuring systems, the amount of groundwater which is being abstracted and to be abstracted from groundwater well, gallery, tunnel and etc. according to the utilization permit, and ii) to identify the purpose of use, amount, catchment boundary and other related issues of groundwater that requires installation of a measuring system.</p>	<p>Installation of a measuring system - if groundwater is abstracted</p>
<p>Regulation on Protection of Groundwater against Pollution and Deterioration Official Gazette Date/Number: 07.04.2012/28257; Last Amended on 22.05.2015</p>	<p>The aim of this regulation is to identify relevant principles associated with the protection of the existing groundwater quality, prevention of groundwater deterioration and pollution and determination of the measures to remediate these waters.</p>	
<p>Regulation on the Protection of Drinking-Utilization Water Basins Official Gazette Date/Number: 28.10.2017/30224; Last Amended on 27.08.2020</p>	<p>The aim of this regulation is to regulate principles to protect and improve the quality and quantity of all surface and ground water resources that are used or planned to be used for drinking-utilization purposes.</p> <p>The regulation defines the types of activities that can be conducted within the protection zones of lakes, dam lakes and ponds. Considering the public benefit and if there is no other alternative, motorways can be allowed to pass through absolute protection zone and short distance protection zones on condition that necessary measures are taken to prevent pollution of the water resource. Resting area, service stations, gas stations and similar areas are not allowed within the absolute protection zone and short distance protection zone.</p>	<p>Permit for absolute protection zone and short distance protection zone - if motorway passes through these zones</p>
<p>Regulation Concerning Water Intended for Human Consumption</p>	<p>The aim of this regulation is to provide the technical and hygienic conditions and ensure the quality standards of the waters for human consumption and to organize the basics and procedures regarding the production, packaging, labelling, marketing and auditing of the spring and drinking waters.</p>	<p>Ensure quality standards mentioned in the regulation are met</p>

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 17.02.2005/25730;		
Regulation on Pollution Control Caused by Dangerous Substances in Aquatic Environment Official Gazette Date/Number: 26.11.2005/26005; Last Amended on 30.03.2010	The aim of the regulation is to identify, prevent and gradually decrease the pollution caused by dangerous substances in the aquatic environment.	Ensure compliance with the regulation in case of discharges of dangerous substances to sewerage network or receiving water bodies
AIR		
Industrial Air Pollution Control Regulation Official Gazette Date/Number: 03.07.2009/27277; Last Amended on 06.11.2020	This Regulation aims to control and reduce soot, dust, gas, steam and aerosol emissions due to industries and energy producing installations to protect human health and prevent air pollution. Annex-5 provides special emission limits for the facilities of high pollutant capacity. <i>Of specific to the Project; asphalt plants, concrete plants and quarries will be subject to the requirements of this regulation.</i>	Air emissions permit (<i>within the scope of the "Environmental Permit" - if necessary</i>) and Emissions Measurement Report - <i>if necessary</i>
Regulation on Assessment and Management of Air Quality Official Gazette Date/Number: 06.06.2008/26898; Last Amended on 05.05.2009	The purpose of this regulation is to identify air quality targets, to assess the air quality against defined criteria, to preserve the conditions where the air quality is good and to improve it where needed, and to gather air quality data and inform the public. <i>This regulation might be applicable related to emissions to air from concrete plants and asphalt plants.</i>	
Regulation on Control of Exhaust Gas Emissions Official Gazette Date/Number: 11.03.2017/30004; Last Amended on 23.04.2021	This regulation sets out the principles and procedures to ensure reduction of exhaust gas pollutants and their control by monitoring, in order to preserve the environment from pollution caused by motor vehicles in traffic.	Exhaust gas emission measurement <i>for motor vehicles to be used for the Project</i>

Regulation	Regulation Summary	Permits/Actions
SOIL		
<p>Regulation on Soil Pollution Control and Point-Source Contaminated Sites</p> <p>Official Gazette Date/Number: 08.06.2010/27605; Last Amended on 11.07.2013</p>	<p>This regulation defines the principles and procedures to prevent the contamination of soil, to determine the sites and sectors where pollution exists or is likely to exist, and to remediate and monitor contaminated soil and sites.</p> <p><i>The regulation requires all existing and prospective facilities which are included in Annex-2 of the regulation to declare an Activity Preliminary Information Form to the Provincial Directorate of Environment, Urbanization and Climate Change. Activities supporting mining and quarries (of specific to construction phase) and activities for equipment maintenance (of specific to operation phase) are included in Annex-2 of the regulation and consequently those sites may be subject to soil quality assessment under the aforementioned regulation.</i></p>	<p>Preliminary Activity Information Form</p>
WASTE		
<p>Regulation on Waste Management</p> <p>Official Gazette Date/Number: 02.04.2015/29314; Last Amended on 23.03.2017</p>	<p>This regulation lays down the principles and procedures concerning the management of wastes from their production to disposal by preserving the human health and the environment; and reducing the use of natural sources through waste reduction, reuse and recycling.</p>	<p>Waste management plan</p> <p>Temporary storage permit (if hazardous waste generation is 1000 kg/month or above)</p> <p>Hazardous materials and hazardous waste compulsory financial liability insurance</p> <p>Yearly notification to the MoEUCC (Waste declaration form)</p>
<p>Regulation on Control of Excavated Soil, Construction and Demolition Wastes</p> <p>Official Gazette Date/Number: 18.03.2004/25406; Last Amended on 26.03.2010</p>	<p>This regulation sets out the general procedures and principles, technical and administrative rules regarding the minimization at source, collection, storage, transportation, recycling, recovery and disposal of excavation and construction/demolition wastes.</p>	<p>Waste transportation and acceptance certificate (if the amount of waste exceeds 2 tons)</p>
<p>Communiqué on Recycling of Certain Non-hazardous Wastes</p> <p>Official Gazette Date/Number:</p>	<p>This Communiqué regulates minimization, temporary storage, establishment and management of recycling facilities of certain non-hazardous wastes. The Communiqué covers certain non-hazardous wastes listed in Waste Management Regulation.</p>	<p>Non-hazardous waste management plan</p> <p>Non-hazardous waste declaration form</p>

Regulation	Regulation Summary	Permits/Actions
17.06.2011/27967; Last Amended on 11.03.2015		
Packaging Waste Control Regulation Official Gazette Date/Number: 26.06.2021/31523	This regulation governs collection, recycling, and disposal of packaging waste.	Annual declaration to the MoEUCC Collection of packaging wastes separately
Waste Oil Management Regulation Official Gazette Date/Number: 21.12.2019/30985; Last Amended on 23.12.2020	The purpose of this regulation is to provide standards for storage, transportation, recovery and disposal of waste oils and to prevent their discharge into the receiving environment.	Annual waste oil declaration to the MoEUCC (Waste oil declaration form)
Regulation on Control of Waste Batteries and Accumulators Official Gazette Date/Number: 31.08.2004/25569; last amended on 23.12.2014	This regulation defines the principles for the management of waste batteries and accumulators from their production to their final disposal. The regulation sets principles to ensure production of batteries with certain environmental criteria, prevent their direct or indirect discharge to the receiving environments, control their labelling and marking, prevent the production, import, export or sale of batteries and accumulators containing harmful substances, and establish a collection system for recovery or disposal.	Annual declaration to the MoEUCC for waste batteries and accumulators (<i>within the waste declaration form</i>) Collection of waste batteries and accumulators separately, disposal with certified collectors and at certified disposal facilities
Regulation on Control of Waste Electrical and Electronic Equipment Official Gazette Date/Number: 22.05.2012/28300	This regulation designates the principles for the management of electrical and electronic equipment from their production to their final disposal, including restriction of use of certain harmful substances in their manufacturing and waste reduction procedures including collection, recycling and recovery.	Annual declaration to the MoEUCC for electrical and electronic equipment (<i>within the waste declaration form</i>) Collection of waste electrical and electronic equipment separately, disposal at certified disposal facilities
Regulation on Control of End-of-Life Tires Official Gazette Date/Number: 25.11.2006/26357; Last Amended on 11.03.2015	This regulation sets out the principles for separate collection, transport, temporary storage, recycling, disposal of the end-of-life tires.	Annual declaration to the MoEUCC for end-of-life tires (<i>within the waste declaration form</i>) Give the end-of-life tires to authorized haulers

Regulation	Regulation Summary	Permits/Actions
Regulation of Control of Waste Vegetable Oils Official Gazette Date/Number: 06.06.2015/29378	This regulation defines the requirements for the management of waste vegetable oils from their production to final disposal, including their interim storage and transfer to waste oil recycling/disposal facilities by licensed haulers.	Annual declaration to the MoEUCC for waste vegetable oils (<i>within the waste declaration form</i>) Annual agreements with licensed recycling facilities or waste vegetable oil interim storage facilities
Regulation on Medical Waste Control Official Gazette Date/Number: 25.01.2017/29959	The aim of the regulation is to define the requirements for the management of medical wastes from their generation to final disposal, including their separate collection, temporary storage, transfer to medical waste processing facility and disposal.	Collection of medical wastes separately Protocol with the municipality for collection, transportation and disposal of medical wastes
Zero Waste Regulation Official Gazette Date/Number: 12.07.2019/30829; Last Amended on 09.10.2021	The aim of the regulation is to define the principles and procedures for the establishment, development, monitoring, financing and registration of zero waste management system.	Zero Waste Certification <i>if required</i>
Circular on COVID-19 Measures for the Management of Wastes of Single Use Masks, Gloves and Other Personal Hygiene Materials Official Gazette Date/Number: 2020/12 Date:07.04.2020)	The circular aims to regulate the proper management of wastes of Single Use Masks, Gloves and Other Personal Hygiene Materials.	Ensure that collection, storage and disposal of Single Use Masks, Gloves and Other Personal Hygiene Materials are conducted as per the requirements of the circular
Regulation on the Control of End-of-Life Vehicles Official Gazette Date/Number: 30.12.2009/27448; Last Amended on 21.12.2010	The aim of the regulation is to prevent wastes caused by end-of-life Vehicles and to define the principles and procedures for the reuse, recycling and recovery of the parts of these vehicles, and to define the standards and responsibilities of temporary storage areas for end-of-life vehicles.	Give the end-of-life vehicles to authorized collection points

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Regulation on Mining Wastes Official Gazette Date/Number: 15.07.2015/29417; Last Amended on 16.07.2016	The regulation sets out the principles and procedures for the proper management of wastes generated during the exploration, extraction, preparation/enrichment and storage of mines.	Waste Management Plan Characterization of mining wastes Emergency Action Plan
Communiqué on Road Transportation of Wastes Official Gazette Date/Number: 20.03.2015/29301;	The communiqué sets out the principles for the road transport of wastes listed in Waste Management Regulation.	Transport of wastes with licensed haulers certified in line with the requirements of the communiqué
ENVIRONMENTAL NOISE		
Regulation on the Assessment and Management of Environmental Noise Official Gazette Date/Number: 04.06.2010/27601; Last Amended on 18.11.2015	The regulation establishes standards for acceptable levels of noise and vibration during the day and at night in different environments (residential, commercial, industrial, etc.), limits on increases in noise levels and standards for construction sites. The regulation also covers principles and criteria for buildings exposed to vibration. <i>This regulation would be particularly applicable for quarries, concrete plants and asphalt plants.</i>	Acoustic report Environmental noise level assessment report (<i>if requested by relevant authority</i>) Noise permit (<i>within the scope of the "Environmental Permit"- if necessary</i>)
Regulation on Environmental Noise Emission Created by Equipment Used Outdoors (2000/14/AT) Official Gazette Date/Number: 30.12.2006/26392; Last Amended on 06.06.2017	The aim of the regulation is to determine the principles and procedures for the implementation of noise emission standards related to the noise caused by the equipment used outdoors; collection of technical documents and information; determination of competency evaluation procedures; and signing.	Ensure compliance with the requirements and noise standards for the equipment used
CHEMICAL CONTROL		

Regulation	Regulation Summary	Permits/Actions
<p>Regulation on the Transport of Dangerous Goods by Road (by Ministry of Transport, Maritime and Communication) (Official Gazette Date/Number: 24.4.2019/30754; last amended on 07.10.2020)</p>	<p>The regulation defines the transportation conditions for hazardous materials (packaging and signing of hazardous materials, vehicle properties etc.) by road and responsibilities, rights, provisions and working conditions of the senders, receivers, loaders, unloaders, packaging parties, transporters and drivers. This regulation is prepared in accordance with the provisions of the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR).</p>	<p>Necessary documentation, certificates, records as per the regulation</p>
<p>Regulation on Registration, Evaluation, Permitting and Restriction of Chemicals (Official Gazette date/number: 23.06.2017/30105); last amended on 29.11.2019)</p>	<p>The regulation defines the methods and principles for the registration, assessment, permitting and limitation of the chemicals in order to protect human health and environment at high level and to encourage for the evaluation of alternative methods.</p>	<p>Necessary documentation and records as per the regulation Material Safety Data Sheets</p>
<p>Regulation on Safety Data Sheets for Dangerous Substances and Mixtures Official Gazette Date/Number: 13.12.2014/29204; will be expired on 31.12.2023</p>	<p>The purpose of this regulation is to regulate the administrative and technical procedures and principles regarding the preparation and distribution of safety data sheets in order to ensure effective control and surveillance against the negative effects of dangerous substances and mixtures placed on the market, on human health and the environment. The regulation has been abolished with the enactment of the Regulation on Registration, Assessment, Permitting and Limitation of Chemicals, and will be fully expired on 31.12.2023.</p>	<p>Material Safety Data Sheets</p>
<p>Regulation on Ozone Layer Depleting Substances Official Gazette Date/Number: 07.04.2017/30031; last amended on 06.10.2020)</p>	<p>This regulation provides guidelines on limiting the use of ozone layer depleting substances in line with the Montreal Protocol. It requires that the controlled substances contained in refrigeration, air-conditioning, heat pump equipment, equipment containing solvents or fire protection systems and fire extinguishers are recovered by the end user for recycling or reclamation, during the maintenance of equipment or before the dismantling or disposal of equipment.</p>	<p>Annually conduct and document inspections of fixed equipment containing more than 3 kg of controlled substances.</p>

Regulation	Regulation Summary	Permits/Actions
<p>Regulation on the Control of Polychlorinated Biphenyls and Polychlorinated Terphenyls</p> <p>Official Gazette Date/Number: 27.12.2007/26739; Last Amended on 30.03.2010</p>	<p>The purpose is to determine the principles for the disposal of materials and equipment containing polychlorinated biphenyls without giving harm to the environment and human health. PCB containing materials and equipment should be purified or disposed of until 2025.</p>	<p>Ensure that no PCB containing oil/equipment is used.</p>
NATURE CONSERVATION AND LAND USE		
<p>Forest Law (No. 6831)</p> <p>Official Gazette Date and Number: 08.09.1956/9402; Last amended on 28.07.2021)</p>	<p>The purpose of this law is the protection of forests. This law states that forest areas can be used by real persons and legal entities for installations which are for the public benefit after obtaining a permit from Ministry of Forestry and Water Works, and the period of the permit cannot exceed 49 years pursuant to article 17 of this law. The permit can be extended up to 99 years for permit owners who act in accordance with the permit conditions.</p>	<p>Forest Permit - <i>if necessary</i></p>
<p>Law on Soil Protection and Land Use (Law No:5403)</p> <p>Official Gazette Date and Number: 03.07.2005/25880; Last amended on 04.11.2020</p>	<p>The purpose of the law is to regulate the protection and development of soil, and to set principles for planned land use.</p> <p>In accordance with article 12 of the Law, in cases of soil losses and land degradation, soil protection project should be prepared by those using the land. Pursuant to article 13 of the Law; absolute agricultural land, land for special products, planted agricultural land and irrigated agricultural land are not allowed to be used for non-agricultural purposes. However, if there is no alternative area and the Soil Protection Board approves, a permit by Ministry of Agriculture and Forest (MoAF) can be given for the use of agriculture land for non-agricultural purposes for public benefit investments on condition that the soil protection projects are met. Article 14 states that agricultural lands in large plains can be used for non-agricultural purposes for activities obtaining a public-benefit decision after a permit is obtained by MoAF.</p>	<p>Soil Protection Project - <i>if necessary</i></p> <p>Permit to use agricultural land for non-agricultural purposes - <i>if necessary</i></p>
<p>Pasture Law (Law No:4342)</p> <p>Official Gazette Date and Number: 28.02.1998/23272; Last amended on 18.01.2019</p>	<p>The purpose of the regulation is to regulate the determination of pasture and similar lands, and to set principles for their appropriate use, improving and sustaining their efficiency, inspection, protection and changing their utilization purpose in required cases.</p> <p>In accordance with article 4 of the regulation pasture land cannot be used for a different purpose. Article 14 defines exceptions to this case. The utilization purpose of the areas that are required to be used for public investments can be changed by the governorship</p>	<p>Decision for changing utilization purpose - <i>if necessary</i></p>

Regulation	Regulation Summary	Permits/Actions
	upon a request of the relevant directorate and approval by the pasture commission and the financial office. It is not allowed to use the pasture land for a different purpose without changing its utilization purpose.	
CULTURAL HERITAGE		
Law on Protection of Cultural and Natural Assets No. 2863 Official Gazette Date/Number: 23.07.1983/18113; Last Amended on 10.12.2018	The law defines the movable and immovable cultural and natural assets to be preserved, regulates associated implementation activities and identifies the organization and duties of the authority that will take implementation decisions in this respect.	Contact museum directorate in case of a chance find during construction
Regulation on Conducting Survey, Drilling and Excavation Works Related to Cultural and Natural Properties Official Gazette Date/Number: 10.08.1984 /18485; Last Amended on 05.06.2020	The purpose of this regulation is to determine principles for giving permission for survey, drilling and excavation in order to reveal the movable and immovable cultural and natural assets subject to the Law on Protection of Cultural and Natural Assets (Law No. 2863); for preservation conditions of the assets to be obtained; for research on the assets; and for the duties, authorities, rights and expenses of those concerned.	Undertake survey, drilling and excavation works in line with the regulation – if required
MINING ACTIVITIES		
Mining Law No. 3213 Official Gazette Date/Number: 15.06.1985/18785; Last Amended on 02.12.2020	This Law regulates the principles and procedures regarding the exploration, operation, ownership and abandonment of mines in accordance with national interests. All kinds of substances found naturally in the earth's crust and water resources, except oil, natural gas, geothermal and water resources, which have economic and commercial value, are mines according to this Law.	Exploration License - <i>certificate of authorization to carry out mineral exploration activities in a certain area.</i> Operation License - <i>certificate of authorization for the execution of business activities.</i> Operation Permit - <i>permission for a mine to be put into operation.</i>
Mining Activities Permission Regulation Official Gazette Date/Number: 21.06.2005/	The purpose of this regulation is to regulate the procedures and principles regarding the principles on which mining activities will be carried out in the areas specified in Article 7 of the Mining Law No. 3213 and the permits to be granted by ministries and other public institutions and organizations regarding these principles.	Necessary permits as per Mining Law

Regulation	Regulation Summary	Permits/Actions
25852; Last Amended on 19.08.2009		
Regulation on Rehabilitation of Areas Destroyed by Mining Activities Official Gazette Date/Number: 23.01.2010/27471; Last Amended on 28.09.2012	The purpose of this regulation is to determine the procedures and principles regarding the rehabilitation of land which is deteriorated by mining activities, excavations made in the field for the supply of materials and soil, and castings and wastes left to the nature.	Land Rehabilitation Plan
ENERGY EFFICIENCY		
Energy Efficiency Law No. 5627 Official Gazette Date/Number: 02.05.2007/26510; Last Amended on 31.12.2020	The purpose of this law is to increase efficiency in using energy sources and energy in order to use energy effectively, avoid waste of energy, ease the burden of energy costs on the economy and protect the environment. <i>According to the law, industrial facilities should assign an employee as energy manager. Industrial facilities that annually consume 50.000 TEP (Tons equivalent petroleum) of energy and above should establish an energy management unit.</i> <i>Commercial and service buildings which occupy a construction area of 20,000 m² and above or annually consume 500 TEP (Tons equivalent petroleum) of energy and above should assign an energy manager or obtain services from external energy managers or companies.</i> <i>Energy Identity Document should be prepared for buildings with an area above 1,000 m² of total construction area (if the building remains within the jurisdiction of municipality boundaries). The Energy Identity Document includes at a minimum information on the energy requirement of the building, energy consumption classification, insulation properties and efficiency of the heating and/or cooling systems.</i>	Energy Manager or Energy Management Unit - if required Energy Identity Document - if required
EXPROPRIATION		
Expropriation Law No. 2942 (amended in 2001 by Law No. 4650) Official Gazette Date/Number:	The purpose of the regulation is to determine the procedures for the expropriation of immovable properties of real persons and legal entities by the state and public entities; calculation of expropriation price; registration of the expropriated properties to the name of relevant authorities; and resolution of disputes related to the expropriation process.	Public Benefit Decision Decision for Immediate Expropriation Valuation records Payment records

Regulation	Regulation Summary	Permits/Actions
08.11.1983/18215; Last Amended on 19.06.2021		
STAKEHOLDER ENGAGEMENT		
Law on Right to Access to Information No. 4982 Official Gazette Date/Number: 24.10.2003/25269; Last Amended on 24.06.2018	The purpose of this Law is to regulate the principles and procedures regarding the exercise of the right to information of individuals in accordance with the principles of equality, impartiality and openness, which are a requirement of democratic and transparent administration.	Relevant records specific to the Project
Law on the Use of the Right to Petition No. 3071 Official Gazette Date/Number: 10.11.1984/18571; Last Amended on 18.12.2011	The purpose of this Law is to regulate the use of the right of Turkish citizens and foreigners residing in Turkey to apply in writing to the Turkish Grand National Assembly and the competent authorities regarding their wishes and complaints regarding themselves or the public.	Relevant records specific to the Project
OCCUPATIONAL AND COMMUNITY HEALTH AND SAFETY		
Occupational Health and Safety Law No. 6331 Official Gazette Date/Number: 30.06.2012/28339; Last Amended on 28.07.2020	This law aims to regulate the employer and the employees' duties, powers, responsibilities, rights and obligations to provide the occupational health and safety at work and improve the current health and safety conditions.	Onsite doctor Health and safety specialist Health and safety unit (if required) Risk assessment Emergency action plan
Occupational Health and Safety Risk Assessment Regulation Official Gazette Date/Number: 29.12.2012/28512	This regulation sets out the procedures and principles of the risk assessment in terms of occupational health and safety.	Perform risk assessment
Regulation on the Procedures and Principles of Occupational Health and	The regulation sets the principles for health and safety trainings to be given at workplaces to employees by the employers.	Employee training

Regulation	Regulation Summary	Permits/Actions
Safety Training of Employees Official Gazette Date/Number: 15.05.2013/28648; Last Amended on 24.05.2018		
Regulation on the Occupational Health and Safety Committees Official Gazette Date/Number: 18.01.2013/28532	The regulation determines workplaces in which health and safety committees are to be established, and the working methods and the tasks, authorities, working procedures and principles of these committees. The regulation covers the workplaces and activities within the scope of the Occupational Health and Safety Law, with minimum 50 permanent workers and with permanent jobs that last more than 6 months.	Occupational Health and Safety Committee
Regulation on Occupational Health and Safety Services Official Gazette Date/Number: 29.12.2012/28512; Last Amended on 06.07.2021	This regulation sets out the principles related to the establishment of “workplace health and safety units” and certification of “common health and safety units” and sets out the duties and responsibilities of these units.	Occupational health and safety specialist On-site doctor and other health personnel Workplace occupational health and safety unit - if required Hold an approved notebook (<i>Approved notebook is a unique notebook for each workplace which is used by on-site doctor and occupational health and safety specialist to note findings, recommendations and other required issues</i>)
Communiqué on Danger Class Lists Related to Occupational Health and Safety Official Gazette Date/Number: 26.12.2012/28509; Last Amended on 24.02.2021	This Communiqué classifies the works in three categories including less dangerous works, dangerous works and very dangerous works in Annex-1 of the Communiqué.	Identification of the danger class categorization of the activities Fulfil the necessary requirements of relevant occupational health and safety regulations with respect to each identified hazard class
Regulation on Vocational Training for Dangerous and Very Dangerous Works Official Gazette Date/Number:	The regulation sets out the principles for the trainings of workers who are employed at dangerous and very dangerous works.	Employee training - as necessary

Regulation	Regulation Summary	Permits/Actions
13.07.2013/28706; Last Amended on 11.05.2017		
Regulation on Duties, Authority, Responsibilities and Trainings of Occupational Safety Specialists Official Gazette Date/Number: 29.12.2012/28512; Last Amended on 06.07.2021	This regulation lays down the principles related to the qualifications, trainings, certification, duties, authority and responsibilities of the occupational safety specialists. <i>For a workplace of a very dangerous class and having 250 and more workers, one full time occupational specialist per 250 workers is required. For a workplace of a dangerous class and having 500 and more workers, one full time occupational specialist per 500 workers is required. Additional work hours are at least 40 minutes per employee per month for very dangerous class and at least 20 minutes per employee per month for dangerous class workplaces.</i>	Appoint an Occupational Health and Safety Specialist (<i>working duration is determined considering the numbers of workers and danger class</i>) or Obtain service from Common Occupational Health and Safety Units
Regulation on the Tasks, Authority, Responsibility and Education of On-Site Doctor and Other Health Personnel Official Gazette Date/Number: 20.07.2013/28713; Last Amended on 06.07.2021	The purpose of this regulation is to set out the principles related to the qualifications, education, certification, duties, authority and responsibilities of the workplace doctors. Working duration required for workplace doctors: <ul style="list-style-type: none"> • Low dangerous class: At least 5 minutes per worker in a month • Dangerous class: At least 10 minutes per worker in a month • Very dangerous class: At least 15 minutes per worker in a month • Low dangerous class and having 2000 and more workers: One full time on-site doctor per 2000 workers. If the numbers of the workers are greater than the multiple of 2000, additional numbers of on-site doctors are appointed considering the remaining number of workers. • Dangerous class and having 1000 and more workers: One full time on-site doctor per 1000 workers. If the numbers of the workers are greater than the multiple of 1000, additional numbers of on-site doctor are appointed considering the remaining number of workers. • Very dangerous class and having 750 and more workers: One full time on-site doctor per 750 workers. If the numbers of the workers are greater than the multiple of 750, additional numbers of on-site doctor are appointed considering the remaining number of workers. 	On-site doctor
Regulation on the Health and Safety Measures to be taken in Workplace Buildings and Additions	This regulation identifies minimum health and safety conditions in the workplace buildings and additions under the scope of the Occupational Health and Safety Law.	Employers are obliged to apply minimum conditions stated in Annex-1 of the regulation.

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 17.07.2013/28710		
Regulation on Health and Safety in Construction Works Official Gazette Date/Number: 05.10.2013/28786; Last Amended on 31.12.2018	The purpose of this regulation is to determine the minimum health and safety requirements to be taken in construction works.	Health and Safety Coordinator - if required Health and Safety Plan
Regulation on Health and Safety Requirements in the Use of Work Equipment Official Gazette Date/Number: 25.04.2013/28628; Last Amended on 24.04.2017	The regulation lays down the minimum requirements to be met in terms of health and safety in the use of work equipment.	Regular maintenance of the equipment Informing/training of workers on how to use the equipment
Regulation on Manual Handling Operations Official Gazette Date/Number: 24.07.2013/28717	This regulation identifies principles to determine the necessary measures at works where manual handling is performed, to protect the workers from the risks particularly from back injuries.	Ensure necessary measures are taken in line with this regulation
Regulation on Emergencies in Workplaces Official Gazette Date/Number: 18.06.2013/28681	This regulation sets out the procedures and principles regarding preparation of emergency response plans, tasks for prevention, protection, evacuation, firefighting, first aid and similar issues, and assignment of employees to these tasks.	Emergency Preparedness and Response Plan Emergency Response Teams
Regulation on the Use of Personal Protective Equipment in Workplaces Official Gazette Date/Number: 02.07.2013/28695	The purpose of this regulation is to set forth the principles and procedures regarding the characteristics, supply and use of personal protective equipment, where risks cannot be prevented or sufficiently reduced through collective protection by technical measures or by means of work organization and working methods.	Provide necessary personal protective equipment to workers

Regulation	Regulation Summary	Permits/Actions
Personal Protective Equipment Regulation Official Gazette Date/Number: 01.05.2019/30761	The purpose of the regulation is to determine the procedures and principles for the protection of the health and safety of users in the design and production of personal protective equipment available on the market; and for the free movement of personal protective equipment.	Ensure that personal protect equipment provided to workers meet the standards defined in the regulation
Regulation on Health and Safety Signs Official Gazette Date/Number: 11.09.2013/28762	The regulation sets out the rules and minimum requirements for use of health and safety signs in workplaces.	Place necessary signs in the workplace
First Aid Regulation Official Gazette Date/Number: 29.07.2015/29429; Last Amended on 27.08.2020	The regulation sets forth the principles related to first-aid. One first-aider (holding a basic first aid certificate) per 10 employees is required at facilities that are considered as performing very dangerous works, one first-aider per 15 employees is required at facilities that are considered as performing dangerous works and one first-aider per 20 employees is required at facilities that are considered as performing less dangerous works.	Appointment of first-aiders in the workplace
Regulation on the Protection of the Workers against Risks Relevant to Noise Official Gazette Date/Number: 28.07.2013/28721	This regulation aims to determine the necessary measures to protect the workers from health and safety risks associated with exposure to noise.	Provide necessary personal protective equipment and perform medical surveillance of workers as necessary
Regulation on the Protection of the Workers against Vibration Risks Official Gazette Date/Number: 22.08.2013/28743	This regulation aims to determine the necessary measures to protect the workers from health and safety risks due to exposure to mechanical vibration.	Provide necessary personal protective equipment and perform medical surveillance of workers as necessary
Regulation on Management of Dust	The aim of this regulation is to manage dust in terms of occupational health and safety and specify the principles and procedures for the necessary measures to be taken in order to prevent the risks that may arise from dust formation in the workplace.	Dust measurements - <i>if necessary, based on risk assessment</i>

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 05.11.2013/28812		Perform medical surveillance of workers as necessary Provide necessary protective equipment
Regulation on Occupational Health and Safety in Temporary or Fixed-Term Employment Official Gazette Date/Number: 23.08.2013/28744	The aim of this regulation is to ensure that workers with an employment relationship governed by a fixed-duration contract or on a temporary employment are afforded the same level of protection as that of other workers.	Ensure compliance with this regulation regarding fixed and/or temporary employment
Regulation on Suspension of Work in Workplaces Official Gazette Date/Number: 30.03.2013/28603; Last amended on 11.02.2016	This regulation specifies the conditions that may lead to the suspension of works in workplaces and procedures and principles on permission to resumption. This regulation is applicable to those workplaces that are within the scope of Occupational Health and Safety Law.	Suspend the work totally or partially in case of life-threatening situations, until situation is avoided
Regulation on Health and Safety Measures in Works with Chemical Substances Official Gazette Date/Number: 12.08.2013/28733	The aim of the regulation is to lay down the minimum requirements to protect the health of workers from existing or potential risks due to presence, use or processing of chemical substances at workplaces and to provide a safe working environment. Annex-1 of the regulation defines vocational exposure limit values for certain substances.	Undertake risk assessment Ensure to inform and train employee on chemical substances, health and safety risks of these substances, occupational diseases, occupational exposure limit values, measures to be taken and the material safety data sheets
Regulation on Protection of Workers from Dangers of Explosive Environments Official Gazette Date/Number: 30.04.2013/28633	The regulation lays down the measures for the protection of health and safety of employees from the dangers of explosive environment that can be arise at workplaces.	Categorize the areas that have explosion risks and implement the minimum requirements
Regulation on Equipment and Protective Systems Used in Potentially Explosive Environment	The purpose of the regulation is to determine the fundamental health and safety rules for the safe placing on the market of equipment and protective systems used in potentially explosive atmospheres; and for the determination of conformity assessment procedures, market surveillance and inspection procedures.	Ensure that the relevant equipment and protective systems meet the fundamental health and safety rule given in Annex-1 of the regulation

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 30.06.2016/29758; Last Amended on 27.06.2020		
Regulation on Fire Protection of Buildings Official Gazette Date/Number: 19.12.2007/26735; Last Amended on 04.11.2020	This regulation sets out the procedures and principles to protect any building, workplace, facility etc. against fire. Pursuant to “Regulation on Opening and Operation Licenses of Workplaces”, any company employing more than 30 employees is required to obtain a report which proves that the precautions taken against fire in the workplace are sufficient.	Fire Safety Report Obtain service from a Fire Consultant during the design stage to ensure that all requirements are integrated into the design
Regulation on Occupational Health and Safety in Mine Workplaces Official Gazette Date/Number: 19.09.2013/28770; Last Amended on 18.11.2017	The aim of this regulation is to identify the minimum conditions to protect health and safety of the workers in workplaces where mines are extracted through drilling or in workplaces where aboveground and underground mining activities take place.	Employers are obliged to apply minimum conditions stated in Annex-1 and Annex 2 of the regulation for aboveground mining workplaces
Regulation on the Works in which Workers shall Work Maximum Seven and Half Hours or Less in a Day in Terms of Health Rules Official Gazette Date/Number: 16.07.2013/28709	The aim of this regulation is to regulate the maximum working time at workplaces specified in this regulation considering health principles. Article 4 of the regulation defines the works in which workers shall work maximum seven hours.	Define the works that require working for maximum seven hours and take necessary measures
Regulation on the Prevention of Risks of Exposure to Biological Factors Official Gazette Date/Number: 15.06.2013/28678	The purpose of this regulation is to regulate minimum provisions for the protection of the workers in workplaces against the biological factors to prevent health and safety risks.	Determination of risk group Biological risk assessment Notification (if required) Periodical health control of workers

Regulation	Regulation Summary	Permits/Actions
Regulation on Health and Safety Measures in Working with Carcinogenic or Mutagen Substances Official Gazette Date/Number: 06.08.2013/28730	The regulation is to be applied to workplaces where the workers may be at risk to be exposed to carcinogenic and mutagenic substances.	Take mitigation measures – if required based on the risk assessment conducted that takes into account the form, amount and duration of exposure to carcinogenic or mutagenic substances
LABOR CONDITIONS		
Labor Law No. 4857 Official Gazette Date/Number: 10.6.2003/25134; Last Amended on 28.07.2020	This Law aims to regulate the working conditions and work-related rights and obligations of employers and employees working under an employment contract.	Workplace notification
Regulation on Work Durations related to the Labor Law Official Gazette Date/Number: 06.04.2004/25425; Last Amended on 25.08.2017	The regulation governs the principles for the implementation of working duration. Accordingly, the employer should document the working durations of workers by appropriate means.	Ensure compliance with this regulation for working duration
Regulation on Excess and Overtime Work related to the Labor Law Official Gazette Date/Number: 06.04.2004/25425; Last Amended on 25.08.2017	The purpose of this regulation is to set out the principles for works that are above the weekly working period set out in Labor Law. Excess work is defined as those works that exceed 45 hours per week. The total time for excess work for a worker should not exceed 275 hours per year.	Ensure compliance with this regulation for excess and overtime work
Regulation on Certain Procedures and Principles for Works Conducted in Shifts	This regulation sets out the principles on work durations, night work, week holidays and breaks in works with shifts.	Submit the list of night-shift workers as well as a copy of their health reports to the regional directorate of labor

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 07.04.2004/25426; Last Amended on 19.08.2017		
Regulation on Minimum Wage Official Gazette Date/Number: 01.08.2004/25540; Last Amended on 19.04.2014	This regulation lays down the principles and procedures regarding the determination of gross minimum wage for employees. The minimum wage amount is determined every two years at a minimum.	Ensure that minimum wage requirements are met
Regulation on Procedures and Principles for Employment of Child and Young Workers Official Gazette Date/Number: 06.04.2004/25425 Last Amended on 12.05.2017	The purpose of this Regulation is to determine the principles of the way children and young workers work without endangering their health and safety, physical, mental, moral and social development or education and to prevent their economic exploitation. The regulation provides the list of activities that child and young workers can work.	Ensure that child and young workers are not employed during construction works and ensure compliance with the regulation during operation phase
Regulation on Annual Paid Vacation Official Gazette Date/Number: 03.03.2004/25391 Last Amended on 18.08.2017	The purpose of this regulation is to specify the procedures and principles of annual paid leave to be given to workers by employers in accordance with the Labor Law.	Ensure compliance with the regulation related to duration of vacations
Regulation on Subcontractors Official Gazette Date/Number: 27.09.2008/27010; Last Amended on 06.07.2021	The purpose of this regulation is to define the terms of establishment of an employer - subcontractor relationship, notification and registration of subcontractor's workplace and the provisions to be included in the subcontractor agreement.	Agreement with subcontractor
Regulation On Working Conditions of Female Employees in Night Shifts	The purpose of this regulation is to regulate the procedures and principles regarding the employment of female employees over the age of eighteen in night shifts.	Ensure compliance with the regulation

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 24.07.2013/28717 Last Amended on 19.08.2017		
Regulation on the Employment Terms of Pregnant or Nursing Women and Breastfeeding Rooms and Child Care Dormitories Official Gazette Date/Number: 16.08.2013/28737; Last Amended on 07.09.2019	The purpose of this regulation is to take precautions to ensure the health and safety of the pregnant, newly given birth or breastfeeding employee in the workplaces and to determine the type of work these employees are prohibited to work, the conditions and procedures that will be followed in the work they can be employed, how to set up nursing rooms or childcare dormitories and their conditions.	Set up breastfeeding rooms or childcare dormitories - if required
GENDER BASED VIOLENCE AND HARRASMENT (GBVH)		
Law to Protect Family and Prevent Violence against Woman - No: 6284 Official Gazette Date/Number: 20.03.2012/28239 Last Amended on 19.08.2017	The purpose of this law is to protect the women, the children, the family members and the victims of stalking, who have been subject to the violence or at the risk of violence, and to regulate procedures and principles with regard to the measures of preventing the violence against those people.	Consider this law in the development of the HR Policy and specifically the GBVH policy
Turkish Criminal Code - No: 5237 Official Gazette Date/Number: 12.10.2004/25611 Last Amended on 14.07.2021	The purpose of the Criminal Code is to protect the individual rights and freedom, public order and security, state of justice, public health and environment, and communal peace, as well as to discourage commitment of offences. This Law defines the basic principles for criminal responsibility and types of crimes, punishments and security precautions to be taken in this respect. The sixth section of the Criminal Code is on offenses against sexual immunity including article 102 on sexual abuse and article 105 on sexual harassment.	Consider this law in the development of the HR Policy and specifically the GBVH policy
EQUAL OPPORTUNITY		
Law on Equal Opportunities Commission for Woman and Man - No: 5840	The purpose of the Law is to follow the developments on national and international scale related to the protection and improvement of women rights and provision of equal	Consider the studies/reports of Equal Opportunities Commission for Woman and Man in the development of policy/procedure on equal opportunity

Regulation	Regulation Summary	Permits/Actions
Official Gazette Date/Number: 24.03.2009/27179 Last Amended on 02.07.2018	opportunities for women and men, and to set provisions for the establishment, duties and working principles of the Equal Opportunities Commission for Woman and Man.	
SOCIAL SUPPORT		
Law on Social Assistance and Encouragement of Solidarity - No: 3294 Official Gazette Date/Number: 14.06.1986/19134 Last Amended on 02.07.2018	The purpose of this Law is to help citizens who are poor and in need and to those people who have been accepted to or come to Turkey for whatever reason; to ensure fair income distribution by taking measures to reinforce social justice, and to encourage social assistance and solidarity.	Consider this law in the development of social support projects as part of the Project
Law on Social Services - No: 2828 Official Gazette Date/Number: 27.05.1983/18059 Last Amended on 16.04.2020	The purpose of this law is to regulate the principles and procedures regarding the establishment, duties, authorities and responsibilities, activities and incomes of the organization established to carry out social services for families, children, disabled, elderly and other persons who are in need of protection, care or assistance.	Consider this law in the development of social support projects as part of the Project
Law on Regular Cash Support for Turkish Citizens Who are 65 Years of Age or Older and Poor and Alone - No: 2022 Official Gazette Date/Number: 10.07.1976/15642 Last Amended on 11.05.2018	Turkish citizens over the age of 65, who are determined to be in need by Social Assistance and Solidarity Foundations, are granted a pension in the amount to be found by multiplying the indicator number (4.387) with the civil servant salary coefficient, as long as the state of need continues. Those citizens who receive an income from any of the social security institutions, who work in a job that requires having a compulsory insurance, who receive or is eligible to receive an alimony, and who receive allowance as per Social Services Law are excluded from getting a pension.	Consider this law in the development of social support projects as part of the Project

TABLE 1: COMPARISON OF TURKISH AND INTERNATIONAL ENVIRONMENTAL STANDARDS FOR AMBIENT AIR QUALITY

Parameter	Averaging Period	TURKISH	IFC
		Air Quality Assessment and Management Regulation: Annex-I B Industrial Air Pollution Control Regulation : Table 2.2 of Annex 2 (Air Quality Limit Values in Facility's Sphere of Influence) Maximum Limit ($\mu\text{g}/\text{m}^3$) [Settled dust ($\text{mg}/\text{m}^2 \text{ day}$)] [Ar, Cd, Ni and Benzo (a) pyren (ng/m^3)] [Pb, Cd, TI and their compounds in settled dust ($\mu\text{g}/\text{m}^2 \text{ day}$)]	General EHS Guideline value ($\mu\text{g}/\text{m}^3$)
SO ₂ -Sulphur Dioxide	10 minutes	-	500
	1 hour	Air Quality Assessment and Management Regulation: 350 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 350	-
	24 hours	Air Quality Assessment and Management Regulation: 125 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 125	20
	1 year	-	-
	Long-term limit value (annual mean)	Industrial Air Pollution Control Regulation: 60	-
	1 year and winter season (Oct 1-March 31)	20 (<i>Ecosystem protection</i>) (<i>limits are same in both regulations</i>)	-
NO ₂ -Nitrogen Dioxide	1 hour	Air Quality Assessment and Management Regulation: 230-200 (2021-2024) (to be decreased by 10 $\mu\text{g}/\text{m}^3$ each year until 2024) (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 230-200 (2021-2024 and later) (to be decreased by 10 $\mu\text{g}/\text{m}^3$ each year until 2024, The limit remains same after the year 2024)	200
	1 year	Air Quality Assessment and Management Regulation: 40 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 40	40
NO _x	1 year	Air Quality Assessment and Management Regulation: 30 (<i>protection of vegetation</i>)	-
Thoracic particles <10 μm (PM10)	24 hours	Air Quality Assessment and Management Regulation: 50 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 50	50
	1 year	Air Quality Assessment and Management Regulation: 40 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 40	20
Fine particles <2.5 μm (PM2.5)	24 hours	-	25
	1 year	-	10
CO	8 hours	Air Quality Assessment and Management Regulation: 10,000 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 10,000	-
Benzene	1 year	Air Quality Assessment and Management Regulation: 5 (<i>protection of human health</i>)	-
HCl	24 hours	Industrial Air Pollution Control Regulation: 150	-
	1 year	Industrial Air Pollution Control Regulation: 60	-
HF	1 hour	Industrial Air Pollution Control Regulation: 30	-
	24 hours	Industrial Air Pollution Control Regulation: 5	-
H ₂ S	1 hour	Industrial Air Pollution Control Regulation: 100	-
	24 hours	Industrial Air Pollution Control Regulation: 20	-
Total Organic Compounds	1 hour	Industrial Air Pollution Control Regulation: 280	-

Parameter	Averaging Period	TURKISH	IFC
		Air Quality Assessment and Management Regulation: Annex-I B Industrial Air Pollution Control Regulation : Table 2.2 of Annex 2 (Air Quality Limit Values in Facility's Sphere of Influence) Maximum Limit ($\mu\text{g}/\text{m}^3$) [Settled dust (mg/m^2 day)] [Ar, Cd, Ni and Benzo (a) pyren (ng/m^3)] [Pb, Cd, Tl and their compounds in settled dust ($\mu\text{g}/\text{m}^2$ day)]	General EHS Guideline value ($\mu\text{g}/\text{m}^3$)
Settled dust	24 hours	Industrial Air Pollution Control Regulation: 70	-
	24 hours	Industrial Air Pollution Control Regulation: 390	-
	1 year	Industrial Air Pollution Control Regulation: 210	-
Pb (Lead) and its compounds in settled dust	1 year	Industrial Air Pollution Control Regulation: 250	-
Cd (Cadmium) and its compounds in settled dust	1 year	Industrial Air Pollution Control Regulation: 3.75	-
Tl (Thallium) and its compounds in settled dust	1 year	Industrial Air Pollution Control Regulation: 5	-
Pb-Lead	1 year	Air Quality Assessment and Management Regulation: 0.5 (<i>protection of human health</i>) Industrial Air Pollution Control Regulation: 0.5	-
As-Arsenic	1 year	Air Quality Assessment and Management Regulation: 6	-
Cd-Cadmium	1 year	Air Quality Assessment and Management Regulation: 5 Industrial Air Pollution Control Regulation: 0.02	-
Ni-Nickel	1 year	Air Quality Assessment and Management Regulation: 20	-
Benzo (a) Pyrene	1 year	Air Quality Assessment and Management Regulation: 1	-
Ozone	8 hour daily max. (average of last three years)	Air Quality Assessment and Management Regulation: 120 (Target value for the year 2022) (<i>protection of human health</i>)	100

TABLE 2: COMPARISON OF TURKISH AND INTERNATIONAL ENVIRONMENTAL STANDARDS FOR STACK GAS EMISSIONS

Parameter	TURKISH	IFC	
	Industrial Sourced Air Pollution Control Regulation: Annex-5, A) 1 st Group Facilities, article no: 2.5, Table 5.2 of Annex 5	General EHS Guideline value	
	Stack gas emission limits for facilities using natural gas with a thermal power less than 50MW (mg/Nm ³)	Small Combustion Facility (3MWth – 50MWth) Emission Guideline: Gas Engine**	Small Combustion Facility (3MWth – 50MWth) Emission Guideline: Gas Boiler
O ₂ content	3% <i>volume of oxygen will be taken into consideration at stack gas</i>	15% (<i>Dry gas excess O₂ Content</i>)	3% (<i>Dry gas excess O₂ Content</i>)
SO ₂	100	-	-
CO	100	-	-
NO ₂	800	-	-
NO _x	-	200 mg/Nm ³ (Spark Ignition) 400 mg/Nm ³ (Dual Fuel) 1,600 mg/Nm ³ (Compression Ignition)	320 mg/Nm ³
Dust	10	-	-
Particulate Matter	-	-	-
		Guideline values apply to facilities operating more than 500 hours per year with an annual capacity utilization factor of more than 30 percent.	

TABLE 3: COMPARISON OF TURKISH AND INTERNATIONAL ENVIRONMENTAL STANDARDS FOR WASTEWATER DISCHARGES

Parameter	WASTEWATER DISCHARGE to INFRASTRUCTURE FACILITIES		WASTEWATER DISCHARGE to RECEIVING ENVIRONMENT from INFRASTRUCTURE FACILITIES	WASTEWATER DISCHARGE to SURFACE WATER from TREATMENT FACILITIES	
	TURKISH		IFC	TURKISH	
	Water Pollution Control Regulation: Table 25-Wastewater Quality Criteria for Connection to Wastewater Infrastructure Facilities (mg/L)		General EHS Guideline value ¹	Urban Wastewater Treatment Regulation (mg/L)	General EHS Guideline value Discharge to surface water ² (mg/L)
	Wastewater infrastructure facilities where sewer systems are subject to complete treatment	Wastewater infrastructure facilities where sewer systems end with deep sea discharge			
Temperature (°C)	40	40	-	-	
pH	6.5-10	6-10	-	6-9	
Total Suspended solids	500	350	-	35 (<i>more than 10000 population equivalent</i>) 60 (<i>2000-10000 population equivalent</i>)	
Oil and grease	250	50	-	-	
Tar and petroleum-based oils	50	10	-	-	
Chemical Oxygen Demand (COD)	4,000	600	-	125	
Biological Oxygen Demand (BOD)	-	400	-	25	
Sulfate (SO ₄ ²⁻)	1,700	1,700	-	-	
Total sulphur (S)	2	2	-	-	
Phenol	20	10	-	-	
Free chlorine	5	5	-	-	
Total Nitrogen (N)	- (a)	40	-	10	
Total Phosphorus (P)	- (a)	10	-	2	
Arsenic (As)	3	10	-	-	
Total Cyanide (CN ⁻)	10	10	-	-	
Total Lead (Pb)	3	3	-	-	
Total Cadmium (Cd)	2	2	-	-	
Total Chromium (Cr)	5	5	-	-	
Total Mercury (Hg)	0.2	0.2	-	-	

Parameter	WASTEWATER DISCHARGE to INFRASTRUCTURE FACILITIES		WASTEWATER DISCHARGE to RECEIVING ENVIRONMENT from INFRASTRUCTURE FACILITIES	WASTEWATER DISCHARGE to SURFACE WATER from TREATMENT FACILITIES	
	TURKISH		IFC	TURKISH	
	Water Pollution Control Regulation: Table 25-Wastewater Quality Criteria for Connection to Wastewater Infrastructure Facilities (mg/L)		General EHS Guideline value ¹	Urban Wastewater Treatment Regulation (mg/L)	General EHS Guideline value Discharge to surface water ² (mg/L)
	Wastewater infrastructure facilities where sewer systems are subject to complete treatment	Wastewater infrastructure facilities where sewer systems end with deep sea discharge			
Total Copper (Cu)	2	2	-	-	
Total Nickel (Ni)	5	5	-	-	
Total Zinc (Zn)	10	10	-	-	
Total Tin (Sn)	5	5	-	-	
Total Silver (Ag)	5	5	-	-	
Chloride (Cl ⁻)	10,000	-	-	-	
Surface active agents reacting with methylene blue (MBAS)	In principle, dumping of substances whose biological degradation is not in line with Turkish Standards Institute's standards is prohibited.		-	-	
Total Coliform Bacteria (MPN/100) ³	-	-	-	400	

a) These parameters will not be measured in the evaluation of wastewaters.

b) For strong organic wastewaters that contain inert COD that is more than %2 and that have a total COD of above 5000 mg/L, BOD5 value is considered instead of the COD value.

¹Discharges of industrial wastewater, sanitary wastewater, wastewater from utility operations or storm water into public or private wastewater treatment systems should (i) Meet the pretreatment and monitoring requirements of the sewer treatment system into which it discharges (ii)Not interfere, directly or indirectly, with the operation and maintenance of the collection and treatment systems, or pose a risk to worker health and safety, or adversely impact characteristics of residuals from wastewater treatment operations (iii)Be discharged into municipal or centralized wastewater treatment systems that have adequate capacity to meet local regulatory requirements for treatment of wastewater generated from the project. Pretreatment of wastewater to meet regulatory requirements before discharge from the project site is required if the municipal or centralized wastewater treatment system receiving wastewater from the project does not have adequate capacity to maintain regulatory compliance (General EHS Guidelines (April 30, 2007)).

²The indicative guideline values applicable to treated sanitary wastewater discharges to surface water in the absence of national or local standards for sanitary wastewater discharges.

³MPN=Most Probable Number

TABLE 4: TURKISH QUALITY CRITERIA FOR SURFACE WATERS

Surface Water Quality Regulation: Annex 5, Table 2: Quality Criteria of Inland Surface Water Resources in Terms of General Chemical and Physicochemical Parameters by Class			
Water Quality Parameter	Water Quality Classes ^(a)		
	I (very good)	II (good)	III (medium)
Color (m-1)	RES 436 nm: ≤ 1,5 RES 525 nm: ≤ 1,2 RES 620 nm: ≤ 0,8	RES 436 nm: 3 RES 525 nm: 2,4 RES 620 nm: 1,7	RES 436 nm: > 4,3 RES 525 nm: > 3,7 RES 620 nm: 2,5
pH	6-9	6-9	6-9
Conductivity (µS/cm)	< 400	1000	> 1000
Oil and Grease (mg/L)	< 0,2	0,3	> 0,3
Dissolved oxygen (mg/L)	> 8	6	< 6
Chemical oxygen demand (COD) (mg/L)	< 25	50	> 50
Biochemical oxygen demand (BOD5) (mg/L)	< 4	8	>8
Ammonium nitrogen (mg NH4+-N/L)	< 0,2	1	>1
Nitrate nitrogen (mg NO3 ⁻ -N/L)	< 3	10	> 10
Total kjeldahl-nitrogen (mg N/L) (b)	< 0,5	1,5	> 1,5
Total nitrogen (mg N/L) (c)	< 3,5	11,5	> 11,5
Ortho phosphate phosphorus (mg o-PO4-P/L)	< 0,05	0,16	> 0,16
Total phosphorus (mg P/L)	< 0,08	0,2	> 0,2
Fluoride (µg/L)	≤ 1000	1500	> 1500
Manganese (µg/L)	≤ 100	500	> 500
Selenium (µg/L)	≤ 10	15	> 15
Sulfur (µg/L)	≤ 2	5	> 5

(a) Purposes of water use according to quality classes:

Class I - High quality water (Class I water quality means “Very Good” water status.)

- 1) Surface waters with high potential to be drinking water
- 2) Water usable for recreational purposes, including those requiring body contact, such as swimming
- 3) Water that can be used for trout production
- 4) Water that can be used for animal production and farm needs

Class II - Less polluted water (Class II water quality means “Good” water status.)

- 1) Surface waters that have the potential to be drinking water
- 2) Water that can be used for recreational purposes
- 3) Water that can be used for fish production other than trout
- 4) Irrigation water, provided that it meets the irrigation water quality criteria determined by the legislation

Class III- Contaminated water (Class III water quality refers to “Medium” water status.)

Water and industrial water that can be used for aquaculture after appropriate treatment, excluding facilities that require qualified water such as food and textiles

(b) TKN: NH3-N + Organic Nitrogen, (c) TN: TKN + NO3-N + NO2-N

TABLE 5: COMPARISON OF TURKISH AND INTERNATIONAL ENVIRONMENTAL STANDARDS FOR ENVIRONMENTAL NOISE, VIBRATION AND INTERNAL NOISE

Receptor (Environmental Noise)	TURKISH	IFC
	Regulation on the Assessment and Management of Environmental Noise: Table 4 of Annex-7 Noise criteria for Industry Facilities	General EHS Guideline value
Areas where sensitive receptors are located including education, culture, health, summer houses and camping areas	Ldaytime: 60 dBA, Levening: 55 dBA and Lnight: 50 dBA	-
Commercial and residential areas where residential buildings dominate	Ldaytime: 65 dBA, Levening: 60 dBA and Lnight: 55 dBA	-
Commercial and residential areas where workplaces dominate	Ldaytime: 68 dBA, Levening: 63 dBA and Lnight: 58 dBA	-
Industrial areas	Ldaytime: 70 dBA, Levening: 65 dBA and Lnight: 60 dBA	-
-	Regulation on the Assessment and Management of Environmental Noise: Annex 7 Table-5 Environmental Noise Limit Values for Construction Sites	-
-	Ldaytime: 70 dBA (construction, demolition and repair of buildings)	-
Residential; institutional; educational	-	Ldaytime: 55 dBA and Lnighttime: 45 dBA (or a maximum increase in background levels of 3 dBA at the nearest receptor location off-site)
Industrial; commercial	-	Ldaytime: 70 dBA and Lnighttime: 70 dBA (or a maximum increase in background levels of 3 dBA at the nearest receptor location off-site)
Receptor (Vibration)	Regulation on the Assessment and Management of Environmental Noise: Annex 7 Table-7 Maximum allowable ground vibration limits for pile driving and construction machinery (peak value-mm/s)	General EHS Guideline value
Residential areas	Continuous :5 Discontinuous: 10	-
Commercial and Industrial areas	Continuous :15 Discontinuous: 30	-