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No:15/1 Merkezefendi / Denizli

KARDEMİR STEEL INDUSTRY INC. INTEGRATED STEELWORKS

ENVIRONMENTAL AND SOCIAL DUE DILIGENCE



DOKAY-ÇED Çevre Mühendisliği Ltd. Şti.
Ata Mah. Kabil Cad. 140/A
06460 Çankaya/ANKARA
Tel: 0 (312) 475 7131
Faks: 0 (312) 475 7130

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KARDEMİR STEEL INDUSTRY INC.
INTEGRATED STEELWORKS

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Prepared by	Deniz Çağlar (Environmental Engineer and OHS Expert) Pelin Bekri (Sociologist) İlhan Altıntaş (Cartographer) İlknur Dinçer (Expert Biologist) Beraat Batuhan Kaplangı (Environmental Engineer)			
Reviewed by				
Director	Prof. Dr. Coşkun Yurteri			

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ABBREVIATIONS

AIIB	: Asian Infrastructure Investment Bank
EHS	: Environment Health and Safety
EIA	: Environmental Impact Assessment
ESMP	: Environmental and Social Management Plan
GHG	: Greenhouse Gas Emission
GNP	: Gross National Product
IFC	: International Finance Corporation
OHS	: Occupational Health and Safety
PPE	: Personnel Protective Equipment
PS	: Performance Standards
RAMAQ	: Regulation on Assessment and Management of Air Quality
RAMEN	: Regulation on the Assessment and Management of Environmental Noise
RCIAP	: Regulation on Control of Industrial Air Pollution
SEP	: Stakeholder Engagement Plan
OHSMP	: Occupational Health and Safety Management Plan
EAF	: Electric Arc Furnace

1 PURPOSE AND SCOPE

This Environmental and Social Due Diligence (“ESDD”) was prepared for the identification of the status of the Kardemir Steelworks Industry Inc. (“Project Owner”) Integrated Steelworks Facility in Aliağa/İzmir (“Project”) within the environmental and social framework. This report covers the environmental and social assessments of the Facility Location (“Project Area”) and the activities held during the Project's operation phase only. The construction phase of the Project is out of scope. During the preparation of this report, Environmental and Social Framework of Asian Infrastructure Investment Bank (“AIIB”) was followed.

In addition to the determination of the environmental and social status of the Project, the current environmental and social measures applied during the operation phase of the Project will be assessed, and gap analyses will be accomplished for the following environmental and social issues.

- Environmental and Social Assessment and Management System
- Labor and Working Conditions
- Pollution Prevention and Abatement
- Community Health, Safety and Security
- Land Acquisition and Involuntary Resettlement
- Biodiversity Conservation and Sustainable Natural Resource Management
- Indigenous People
- Cultural Heritage

As well as the issues mentioned above, the details regarding the Project specific issues will be covered in the Report.

This report will be the basis of the management plans defined in the Environmental and Social Action Plan (“ESAP”), which is created by TKYB. The environmental and social management techniques will be proposed, and monitoring program will be created within the scope of those management plans in parallel with the results of the gap analyses accomplished in this report.

The management plans are:

- Stakeholder Engagement Plan
- Occupational Health and Safety Management Plan
- Waste Management Plan
- Air Quality Management Plan
- Environmental and Social Management Plan

In addition to those management plans, an environmental and social monitoring will be conducted within six months during the operation phase in order to check the application of the prevention and mitigation measures identified in the management plans.

1.1 Asian Infrastructure Investment Bank (“AIIB”) Standards

AIIB requires the Project Management to adopt an integrated approach to the process of environmental and social assessment, given the complex interrelationships of environmental and social risks and impacts in both public and private sector Projects. However, the Bank recognizes that in some economies, legislation and procedures require separate environmental and social documents, making the preparation of an integrated environmental and social assessment difficult to achieve. In such cases, the Bank reviews the environmental and social documentation prepared by the Project Management to confirm that it provides for assessment of both environmental and social risks and impacts, as well as mitigation and monitoring.

AIIB requires the Project Management to undertake an environmental and social assessment that consists of the following elements in varying degrees, depending on the categorization, and reflecting the nature, scale and potential risks and impacts of the Project:

- Description of the Project, including, as applicable, a map of the Project area;
- Policy, legal and administrative framework, including the international and national legal framework applicable to the Project;
- Scoping, including stakeholder identification and consultation plan;
- Analysis of alternatives, including the “without Project” alternative;
- Baseline environmental and social data;
- Evaluation of environmental and social risks and impacts;
- Analysis of risks and impacts related to climate change;
- Public consultation and information disclosure; and
- Development of mitigation, monitoring and management measures and actions in the form of environmental and social. The assessment also identifies the GRM required for the Project.

2 PROJECT DESCRIPTION

2.1 Project Location

Integrated Steelworks Facility of the Kardemir Steelworks Industry Inc. is located in Bozköy Village of Aliğa/Izmir. Detailed information regarding the parcel and block numbers of the Area where the Facility is located on as well as the field sizes are given in Table 2-1. The property deeds of the mentioned areas are given in ESMP Report.

Table 2-1: Deed Information of the Project Location

Parcel Number	Block Number	Size (m ²)
1032	3	41,211.72
1032	4	16,405.45
1034	1	74,425.04
1034	3	139,170.33

The site location map of the Project Area is given in Figure 2-1. In order to understand the specifications of the location of the Project Area, Aliğa Region should be defined in terms of geographically and economically.

2.2 Geographic Information of the Region

Aliğa*, a district of Izmir, is located on the shore of the Aegean Sea. The district is surrounded by Dumanlı Mountain to the South-East and Yunt Mountain to the North-East and the Aegean Sea to the west.

The industrial district of Izmir is Aliğa; It is bordered by Manisa to the east, Pergamon to the North, Menemen to the South, Foça to the south-west. Izmir-Çanakkale highway passes through the city and Izmir is reached in 45 minutes from the district by this highway, which has a double round trip.

The district is dominated by a temperate Mediterranean climate. Winters are usually rainy, while summers are dry. In winter, the northern winds prevail. In summer, the Imbat blowing from the west brings coolness to the district. The average temperature in the dec is between 24-27 degrees. It is observed that this temperature exceeds 35 C⁰ during the day. The average temperature of the winter months is 7 C⁰. The coldest month in Aliaga is January.

Aliaga is under the influence of a typical Mediterranean climate. Forests have been almost destroyed due to overgrazing, fire and field opening for centuries. The forests have been replaced by maki-type plants such as juniper, fir, gum, akca cut, mule claw, rosary. There are 9500 acres of Kızılçam forest near Bozköy alone. The Kızı Decçam forest between the villages of Samurlu and Güzelhisar is in formation. Detailed information regarding the flora as well as the fauna in the Project Area will be given in "Biodiversity" part of the ESMP Report.

* Geographic and economic details regarding the Aliğa Region are obtained from the official web site of the Aliğa Chamber of Commerce: <https://alto.org.tr/>.



Figure 2-1: Site Location Map

2.3 Economic Activities in the Region

According to the research held by Turkish Republic Prime Ministry State Planning Organization, Aliağa is the 3rd most developed town of Turkey other than the metropolitan towns after Körfez and Gebze. Thus, Aliağa is the most developed town of İzmir. It realizes 22% of Aegean Region's total exports and produces 1-1.3% of Turkey's GNP per capita.

The economy of Aliağa which was based on agriculture until early 60's, has gained an industrial character after 1970's as the town was declared as "heavy industrial zone" according to the planned development" principal of Turkish Constitution of 1961.

There are Facilities of Mechanical and Chemical Industry Corporation, TUPRAŞ Turkish Petroleum Refineries Co, PETKİM Petrochemical Holding A.Ş., Petrol Ofisi and other LPG warehouses and filling facilities, fuel oil warehouses and distribution facilities, steel and iron factories including Kardemir Steelworks Industry Inc., ship breaking facilities, pulp and paper factories, fertilizer factories and rolling mills in Aliağa Region.

The Aliağa-based steel and iron industry realizes 25% of Turkey's iron production. The plants and rolling mills make scrap-based production.

Many harbours in the vicinity, Biçerova Freight Station and the Motorway connecting İzmir to Çanakkale and İstanbul played a very important role in Aliağa's industrial development.

Finally, Aliağa became an industrial hub after the establishment of Aliağa Organized Industrial Zone in 1997. Integrated Steelworks Facility of Kardemir Steelworks Inc. is located near the Aliağa Organized Industrial Zone as can be seen in Figure 2-1.

2.4 Definition of the Operational Activities of the Facility

In accordance with the official "Capacity Report "obtained from the Union of Chambers and Commodity Exchanges of Türkiye, steel billet production from the scrap metal is accomplished in the Facility and the annual production capacity of the Facility is 1,030,020,000 kg of steel billet.

The Steelwork Facility is comprised of the steel mill and rolling mill which are operated integrally with each other in the same Project Area. The production units of the Facility are given below.

- Scrap Area,
- Electric Arc Furnace,
- Ladle Furnace,
- Material Feed System,
- Continuous Casting System,
- Gas and Dust Trap System, (2,500,000 m³/hour)
- Water Treatment and Distribution System,
- Oxygen Unit.

In addition to those units, there are wastewater treatment plant, hazardous and nonhazardous waste storage areas within the borders of the Facility.

The scrap metals are collected and stored at the scrap area and then those scrap metals are transferred to the Electric Arc Furnace Unit by scrap transfer trucks.

In the Electric Arc Furnace Unit, scrap materials are melted by graphite electrodes. During the melting process, oxygen is used as a supplemental substance to improve the efficiency of the operation. The necessary oxygen is provided in the Oxygen Unit.

After the melting operation in the Electric Arc Furnace is completed, the molten steel is transferred to the Ladle Furnace by using casting ladle. In the Ladle Furnace, molten steel is heated until reaching to the desired temperature. In order to ensure the desired quality, chemical composition of the molten steel is adjusted in this unit, as well.

The chemical composition arrangement is achieved by material feed system. Material feed system is used for the lime, aluminum and ferro alloy metal material feed in Electric arc Furnace and Ladle Furnace.

Chemically and physically adjusted molten steel is sent to the continuous casting system to be melted and cooled. Continuous cast steel billets are formed, at the end.

A Gas and Dust Trap System is installed to collect dust and gases from the electric arc furnace, ladle furnace, and material feeding system.

Since steel production is a hot process, the use of water is essential. The facility has an open-circuit and a closed-circuit water system. In order to cool down the electric arc furnace and the ladle furnace, the closed-circuit water system is used while the open-circuit system is used for cooling down the steel billets in a continuous casting system. In the gas and dust trap system, closed-circuit water-cooling system is applied since the gas in which the dust formation occurred is generated in high-temperature units.

The production was started on 15.05.2022. The operation phase of the Facility has been determined as 30 years. The life-time of the facility may be extended with renovation studies and technological support.

3 ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

In this section, the environmental and social status of the Project will be identified, commitments made within the scope of the operation phase of the Project will be defined and gap analyses will be carried out for the following environmental and social issues in particular by expressing the requirements in accordance with the international standards and national legislation.

- Labor and Working Conditions
- Pollution Prevention and Abatement
- Community Health, Safety and Security
- Land Acquisition and Involuntary Resettlement
- Biodiversity Conservation and Sustainable Natural Resource Management
- Indigenous People
- Cultural Heritage

On 09.09.2022, a site survey was held by DOKAY in order to monitor and assess the environmental and social management system of the Facility as well as to prepare environmental and social management plans. During the site survey, interviews were held with the Project Management Representatives and Facility Staff regarding environmental and social issues. In addition, all the units of the Facility that may pose environmental and OHS risks have been visited during the site survey and photographs have been recorded. Due diligence and gap analyses will be accomplished in accordance with those studies in the following sections of the Report.

3.1 Environmental and Social Assessment and Management System

In this section, information regarding the Environmental and Social Impact Regulation status of the Facility will be given and the existing environmental and social management system of the Facility will be defined in terms of the responsibilities and management applications such as monitoring, reporting, and training programs.

3.1.1 EIA Status and Initiation of the Operation Phase

“EIA Positive” decision had been made for the “Steel production and steel mill” part of the current facility by the Ministry of Environment and Urbanization in 31.07.2012. After that, “EIA is not necessary” decision had been made for the “Medium section rolling mill” part of the Facility. At the end, the Project Owner has decided to integrate both steel and rolling mill and increase the production capacity and, in this scope, “EIA Positive” was obtained for the “Capacity increase of the integrated steelwork facility” from the Ministry of Environment, Urbanization and Climate Change in 11.02.2022. The official EIA documents are shared in ESMP, respectively. After the completion of the construction and installation works, the facility became operational on 15.05.2022.

3.1.2 Roles and Responsibilities

The organization chart of the Integrated Steelworks Industry is given in Occupational Health and Safety Management Plan.

There branches defined under the organization chart of the Facility which are responsible for the environmental and social management. Those positions and responsible people are identified in Table 3-1. Branches responsible for the environmental and social management are directly connected to the Manager and Assistant Manager of the Facility.

Table 3-1: Environmental and Social Management Branches

Branch Name	Name and Surname of the Responsible
Environment	Aylin Tozduman
Occupational Health and Safety	Anıl Gözüaçık
Human Resources and Administration	Emir Özsevi

3.1.3 Environmental and Social Commitments

Kardemir Steelworks Inc. Integrated Steelworks Facility has a list of commitments prepared by the Environment Branch for establishing an environmental and social management system in accordance with the national legislation, especially with the Environmental Impact Assessment Regulation. Commitments to be followed during the operation phase of the Facility are listed in Table 3-2.

Table 3-2: Commitments to be Followed in Accordance with the EIA

No.	SUBJECT	COMMITMENTS TO BE FOLLOWED DURING THE OPERATION PHASE
1	Any changes regarding the Project	In case of changes such as the owner of the Project, Project area coordinates or Project-site plan; approval must be obtained from Provincial Directorate of Environment, Urbanization and Climate Change
2	Any changes regarding the Project	In the operation and post-operation period of the Project; survey, analysis, and measurement studies specified in the current legislation will be carried out. In addition, changes made within the scope of the project, permits, approvals, licenses, etc. information will be reported to the relevant administration.
3	Emission	The dust accumulated on the surface of the bag is piled up in the collection section under the filter. The collected dust will be transferred to the dust silo by chain pallet conveyors. The bag filters in the Dust Trap unit will be replaced upon the end of their life. The replaced bag filters will be sent to the disposal companies licensed by the Ministry and their disposal will be provided. Operation will be stopped in case of possible failure of the gas and dust trap system.
4	Emission	Pelletizing the chimney and filter dust and transferring those dust to the temporary waste storage area will also be carried out in an enclosed environment. The waste transfer to the recycling or disposal facilities will be accomplished by licensed vehicles. No flue dust will be kept in the open during the operation. Emissions from the slag extinguishing area will be filtered.
5	Emission	During the transportation of the scrap metals to the Facility, which is the primary raw material of the production, necessary measures (SKHKKY Annex-1) will be taken to prevent dust emission originating from transportation by ensuring that the truck beds are fully covered
6	Emission	Within the scope of the project, the best techniques in the European Commission-Integrated Pollution Prevention and Control (IPPC) as a reference document on Best Available Techniques in Iron Rolling Processes (December 2001) will be followed in the selection of combustion and emission control system.
7	Emission	Action will be taken in line with the provisions of the Regulation on the Control of Odor-Creating Emissions.
8	Emission	A greenhouse gas monitoring plan will be prepared and submitted to the Ministry within the framework of the "Regulation on the Monitoring of Greenhouse Gas Emissions". During the operation period, the greenhouse gas emission report will be approved by the institutions authorized by the Ministry and reported to the Ministry between 1 January and 31 December of the previous year until 30 April each year.

9	Emission	<p><i>In accordance with the Industrial Air Pollution Control Regulation, the following principles should be obeyed in "Converters, Electric Arc Furnaces, Induction Melting, and Vacuum Melting Facilities";</i></p> <p>1) In all units (filling, discharging, mixing, desulphurization, etc.) waste gases must be collected and sent to a dust separation facility. 2) Dust emission of waste gases should not exceed the 50 mg/Nm³ limit value. This limit value will be applied as 25 mg/Nm³ as of 01.01.2012. Dust emission originating from steel-producing units that use ore as raw material located in integrated iron-steel facilities should not exceed the limit value of 75 mg/Nm³ according to subparagraph (g) of Annex-1. 3) Carbon monoxide emission should be treated, burned or, if it cannot be burned with a combustion efficiency of 90% or more, it should be emitted to the atmosphere according to ANNEX-4. 4) The relevant principles given in Annex-1 for the iron steel and/or non-ferrous scrap material, ore, waste foundry sand, etc. must be followed. In the facilities where those materials are stored, necessary precautions should be taken against dusting. 5) Relevant Turkish Standards and best available techniques published in studies on technology regarding dust emission reduction in steel-producing plants should be complied with.</p>
10	Emission	<p><i>In accordance with the Industrial Air Pollution Control Regulation, the following principles should be obeyed in "The Facilities where Heat Treatment of Steel and Non-Ferrous Metals are held (Anneal Furnaces)"</i></p> <p>1) Emissions in the form of dust in waste gases should not exceed 50 mg/Nm³. 2) The relevant principles given in Annex-1 of the Regulation must be followed. 3) By making 3% volumetric oxygen correction; - In facilities using liquid fuel, a sulfur dioxide emission value of 1,700 mg/Nm³ should not be exceeded. - In facilities using gaseous fuel, a sulfur dioxide emission value of 100 mg/Nm³ should not be exceeded, - In facilities using coke gas as fuel, a sulfur dioxide emission value of 800 mg/Nm³ should not be exceeded, - In plants using dual fuel (liquid+gas) sulfur dioxide emission value of 1,700 mg/Nm³ should be achieved by making 3% volumetric oxygen correction and equipped with a flue gas analyzer with a continuous monitoring. 4) In facilities using liquid fuel, sootiness should not exceed 3 according to Bacharach scale.</p>
11	Water and Wastewater Management	Provisions of "Water Pollution Control Regulation" and "İzmir Water Administration (İZSU) Wastewater Discharge into Sewerage Network" provisions will be followed at all stages of the project.
12	Water and Wastewater Management	Potable water will be supplied from the market with carboys authorized/licensed by the Ministry of Health within the scope of the Regulation on Water Intended for Human Consumption, and the carboys to be used will be stored under appropriate conditions. In the case of storing potable water to be used in administrative buildings and social facilities, the water tanks will be constructed in a way that any contamination will not occur. Those tanks will be made of materials of stainless, chrome-nickel, etc. and a water tank chlorination dosing system will be installed.
13	Water Wastewater Management	The washing water of the tires of the vehicles that bring scrap metal to the area will be connected to the septic tank via a closed channel.
14	Water and Wastewater Management	All kinds of sludge, slag, flue dust, and similar waste/wastewater that may arise from the operational activities will be prevented from discharging the stream beds, and those wastes will be disposed of in accordance with the legislation. Sealing (impermeability) measures will be taken in septic tanks, settling pools, sludge, flue dust, waste/wastewater storage, and similar units; pollution of surface and groundwater resources will be prevented, and necessary permits will be obtained within the scope of "Environmental Permit and License Regulation".
15	Water and Wastewater Management	The free flow of water will not be interfered with in sections having natural stream beds.

16	Waste Management	Waste electrical and electronic equipment generated during the construction and operation phases will be reused by IT Directorate. Electrical and electronic materials that cannot be reused will be sent to licensed facilities in accordance with the Waste Electrical and Electronic Equipment Control Regulation.
17	Waste Management	During the operation phase of the project, an "Industrial Waste Management Plan" will be prepared within the scope of the "Waste Management Regulation" and submitted to the Provincial Directorate.
18	Waste Management	With the commissioning of the facility, a Zero Waste Management System will be established in accordance with the Provincial Zero Waste Management System Plan and the principles determined in the relevant legislation. Except for process wastes, which are not similar in content and structure to domestic wastes, the wastes will be collected in separate containers suitable for their qualifications and sent to licensed recycling facilities. In all those processes, Zero Waste Regulation and other administrative and technical issues will be complied with.
19	Hazardous Material Management	During the operation phase of the project, the list of the hazardous substances which are included in Annex 1 of the "Regulation on the Prevention of Major Industrial Accidents and Reduction of Their Effects" will be prepared and declared.

3.1.4 Documentation, Monitoring and Training

Documentation

The Environment and OHS Branches of the Facility prepared a master list that covers all the plans, procedures and monitoring programs to implement an environmental and social management system to the Project. The master documentation list is given in Table 3-3.

Table 3-3: The Master Documentation regarding the Environmental and Social Management

No.	Subject	Name of the Document
1	Emission	Emission Control Procedure
2	Emission	Greenhouse Gas Emission Calculation Procedure
3	Emission	Greenhouse Gas Monitoring and Emission Report Preparation and Control Procedure
4	Emission	Greenhouse Gas Calibration Procedure
5	Emission	Greenhouse Gas Risk Assessment Procedure
6	Emission	Greenhouse Gas Corrective and Preventive Action Procedure
7	Emission	Greenhouse Gas Internal Audit Procedure
8	Emission	Stack Dust Management Instruction
9	Emission	Natural Gas Sampling Instruction
10	Emission	Greenhouse Gas Risk Assessment Table
11	Emission	Greenhouse Gas Internal Audit Question List

12	Environmental Management	Natural Resources Management Procedure
13	Environmental Management	Environmental Impact-Scale Assessment Procedure
14	Environmental Management	Environmental Risk Assessment Procedure
15	Environmental Management	Sampling Plan and Application Procedure
16	Environmental Management	Data Flow-Sharing Procedure
17	Environmental Management	Measurement Uncertainty Identification Procedure
18	Environmental Management	Stock Management Procedure
19	Environmental Management	Job Definition of the Management Representative
20	Environmental Management	Job Definition of the Environmental Responsible
21	Environmental Management	Information System Sustainability Procedure
22	Environmental Management	Service Procurement Procedure
23	Environmental Management	Missing Data Correction Procedure
24	Environmental Management	Environmental Accident Management Instruction
25	Environmental Management	Steel Billet Sampling Instruction
26	Environmental Management	Monitoring and Measuring Plan
27	Environmental Management	Waste Plan
28	Environmental Management	Environmental Risk Assessment Table
29	Environmental Management	Environmental Impact-Scale Table
30	Environmental Management	Environmental Legal Requirements Table
31	Environmental Management	Environmental Field Audit Forms
32	Environmental Management	Environmental Accident Forms
33	Environmental Management	Legislation Alteration Forms
34	Hazardous Material Management	Scrap Metals having Radioactive Substances Management Procedure
35	Hazardous Material Management	Hazardous Substance Management Procedure
36	OHS Management	Radiation Alert Instruction

37	OHS Management	Security Information Forms
38	OHS Management	Near Miss Declaration Form
39	OHS Management	OHS Risk Analyses Table
40	OHS Management	PPE Debit Form
41	OHS Management	Corrective Action Form
42	Waste Management	Waste Management Procedure
43	Waste Management	Hazardous Waste Management Procedure
44	Waste Management	Packaging Waste Management Procedure
45	Waste Management	Medical Waste Management Procedure
46	Waste Management	Waste Batteries and Accumulators Management Procedure
47	Waste Management	Waste Oil Management Procedure
48	Waste Management	Waste Temporary Storage Instruction
49	Waste Management	Slag Management Instruction
50	Waste Management	Oxide Layer (Scale) Management Instruction
51	Waste Management	Waste Tagging Instruction
52	Waste Management	Waste Transfer Forms
53	Waste Management	Stack Dust Monthly Transfer Forms
54	Waste Management	Slag Monthly Transfer Forms
55	Waste Management	Oxide Layer (Scale) Monthly Transfer Forms
56	Waste Management	Hazardous Waste Monthly Transfer Forms
57	Waste Management	Packaging Waste Monthly Transfer Forms
58	Waste Management	Hazardous Substance Transfer Forms
59	Water and Wastewater Management	Wastewater Control Procedure
60	Water and Wastewater Management	Monitoring and Measuring Procedure

In addition to the documentation list mentioned above, the following management plans are prepared.

- Stakeholder Engagement Plan
- Occupational Health and Safety Management Plan
- Waste Management Plan
- Air Quality Management Plan
- Environmental and Social Management Plan

Monitoring

There are monitoring plans and procedures among the existing master documents for the environmental and social issues including emissions, waste and wastewater management, hazardous material management and OHS management. Delivering the commitments and the implementation of the environmental and social plans will be monitored bi-annually during the operation phase of the Project. The results of the monitoring studies will be included in the “Environmental and Social Monitoring Reports”.

Training

OHS and Environment Branches of the Project has created a training program for the first year of the operation phase. This program covers the environmental and OHS issues and the training will be provided by the environmental and OHS experts of the Facility to the staff. The contents of the training programs are given in Table 3-4.

Table 3-4: Training Program for the First Operation Year

No.	Category	Participants	Subject of the Training
1	OHS	All Staff	Information on labor legislation Legal rights and responsibilities of employees Workplace cleanliness and order Legal consequences arising from work accidents and occupational diseases
2	OHS (Provided by the Occupational Physician)	All Staff	Causes of occupational diseases Principles of disease prevention and application of mitigation techniques Biological and psychosocial risk factors First aid Harms of tobacco products and passive exposure
3	OHS	All Staff	Fire, flash, explosion, and fire protection Evacuation and rescue
4	OHS	All Staff	Electric Hazards, Risks and Measures

5	OHS	All Staff	General OHS Rules and Security Culture
6	OHS	All Staff	Chemical, physical and ergonomic risk factors
7	OHS	All Staff	Manual lifting and carrying
8	OHS	All Staff	Personal Protective Equipment Usage
9	OHS	All Staff	Security and Health Signs
10	OHS	All Staff	Safe use of working equipment and hand tools, Working with display tools, Creating safe zones and systems
11	OHS	All Staff	Safe working at height
12	OHS	All Staff	Safety working in enclosed and restricted areas
13	OHS	All Staff	Occupational safety measures for the construction equipment (crane, excavator - loader, etc.)
14	OHS	All Staff	Pressurized vessels, their safety precautions and procedures
15	OHS	Lifting and Loading Teams	OHS Procedures during the Scrap Material Loading and Unloading
16	OHS	All Staff	Safety measures in hot environments and hot works; Safety measures for the cutting operations of the large pieces
17	OHS	Scrap Material Handling Team	The effects of smoke and gas compounds (lead, manganese, etc.) on health, which are formed as a result of cutting metals
18	OHS	All Staff	Usage and Placing the MSDS Forms
19	OHS	Maintenance Team	Occupational Safety during Maintenance Works
20	Environment	All Staff	General Environmental Training- Environmental Accident Response
21	Environment	All Staff	Waste Management – Zero Waste
22	Environment	Environment-Cleaning Team	Waste Management- Zero Waste-Sorting the Waste according to their Types
23	Environment	Scrap Material Handling Team	Radiated Scrap Material Management

In addition to the training sessions mentioned above, there are sessions regarding the prevention of the radiation and first-aid techniques that has been completed during the operation phase. Those training sessions has been provided by the consultants and contractors.

At the end of the sessions, the success of the trainings are checked by written examinations. Addition to those examinations, drills are held and monitored.

In this section of the report, existing environmental and social management of the Facility has been identified by listing the commitments and management tools such as documentation, plans and procedures. In the following sections, gap analyses for the environmental and social issues will be achieved by expressing the current situation and desired conditions in accordance with the legal requirements and international standards.

3.2 Due Diligence and Gap Analysis Tables

In this section, the following environmental and social subjects will be assessed by identifying the current situations, sharing remarks for the gaps in the current management applications and proposing corrective actions regarding those gaps. The assessments will be held in the tables.

- Labor and Working Conditions (Table 3-5)
- Pollution Prevention and Abatement (Table 3-6)
- Community Health, Safety and Security (Table 3-7)
- Land Acquisition and Involuntary Resettlement (Table 3-8)
- Indigenous People and Cultural Heritage (Table 3-8)
- Biodiversity Conservation (Table 3-9)

The photographs that are taken during the site survey are shared in Annex-1 of the Report.

Table 3-5: Labor and Working Conditions

Labor and Working Conditions				
Topic	Current Situation			Remarks / Corrective Actions
Labor Statistics	STAFF			<p>It is reported in the official Environmental Impact Assessment of the Project the total number of employees is expected to be 750 in the following years.</p> <p>All the statistics should be kept regularly to comprehensively understand the personnel needs. In addition, women should be encouraged to work in the facility while applying the recruitment policy.</p>
	Man	155	289	
	Woman	9	1	
	Total	164	290	
	Age Range	22-60	21-55	
Internal Stakeholder Engagement	<p>In accordance with the interviews held with various white-collar and blue-collar personnel such as Scrap Metal Preparation Supervisor, Operations Engineer, Dust Collector, Refractory and Ladle Preparation Chief, Company Nurse, Consultation Personnel, OHS Expert, Cleaning Personnel and Cook, it can be concluded that most of the employees have been working at Kardemir for many years.</p> <p>The fact that the employees have been working for the same company for many years increases the sense of belonging to the company, and this fact also indicates that the company managers have taken actions to strengthen this sense of belonging among the employees.</p> <p>All white-collar and blue-collar employees eat together in the same cafeteria and benefit from the identical dressing cabins and shower facilities. At the same time, strong verbal communication between managers and employees within the company plays an important role in solving employee problems. Those are examples of actions that strengthen the sense of belonging to the company.</p>			<p>Measures and management techniques identified in the Stakeholder Engagement Plan should be followed.</p> <p>Participation of employees in project management increases the motivation of the employees to work. One of the most important tools for ensuring the participation of employees in the management is to receive and evaluate their opinions and suggestions about the project. In this context, employees should be motivated to share their opinions and suggestions in written forms.</p> <p>This motivation can be achieved by scoring the opinions and suggestions of the employees according to their content and presenting awards according to their scores.</p>
Internal Grievance Mechanism	<p>There are suggestion boxes and near miss boxes placed several points in the Facility (Photo-1). However, strong verbal communication causes relatively less use of those anonymous forms.</p> <p>Project management and employees are informed about the</p>			<p>Grievance forms should be encouraged, and recordings of the grievances should be kept and monitored regularly in terms of the number and content of the grievances. The grievances forms prepared in the Stakeholder Engagement Plan should be used.</p>

Labor and Working Conditions																													
Topic	Current Situation			Remarks / Corrective Actions																									
	suggestion, request, and grievance form during the internal stakeholder interviews within the scope of Stakeholder Engagement Plan.			Measures and management techniques identified in the Stakeholder Engagement Plan should be followed.																									
Accident/ Incident/ Near-Miss Statistics	<table border="1"> <thead> <tr> <th>Month</th> <th>Number of the Accidents that Caused Lost-Day</th> <th>Number of the Accidents that Caused First aid Operations</th> <th>Number of the Near Miss</th> </tr> </thead> <tbody> <tr> <td>May</td> <td>5</td> <td>9</td> <td>-</td> </tr> <tr> <td>June</td> <td>7</td> <td>8</td> <td>-</td> </tr> <tr> <td>July</td> <td>7</td> <td>7</td> <td>-</td> </tr> <tr> <td>August</td> <td>7</td> <td>6</td> <td>-</td> </tr> <tr> <td>September</td> <td>9</td> <td>5</td> <td>-</td> </tr> </tbody> </table>	Month	Number of the Accidents that Caused Lost-Day	Number of the Accidents that Caused First aid Operations	Number of the Near Miss	May	5	9	-	June	7	8	-	July	7	7	-	August	7	6	-	September	9	5	-	<p>It was reported by the Project representatives that there have not been any major occupational accidents occurred at the facility until the day of the site survey. Near-miss and minor work accidents are reported and recorded in accordance with national legislation.</p> <p>There are near miss boxes at the several points of the Facility. The aim of those boxes is reporting the near misses immediately when a near miss happens. In addition, corrective actions format was prepared as well.</p>			<p>In accordance with the No. 6331 Occupational Health and Safety Law, all kinds of near misses should be recorded and reported. Planning training for such incidents has vital importance for the prevention of occupational accidents. Because near-miss events and their reports are warning and pioneering for most unseen accidents. By noticing and reporting near-miss events, employees increase occupational safety and provide a participatory approach in taking early precautions.</p> <p>Employees should be encouraged to report near misses for the events. Staff should be trained in this regard. After all near misses, corrective action document should be fulfilled.</p> <p>The facility unit where the accident occurred should be recorded in the statistics and the data should be compared with each other. In this way, it will be seen how many accidents occurred in which unit and unit-specific measures and precautions will be increased.</p> <p>Measures and management techniques identified in the Occupational Health and Safety Management Plan should be followed.</p>
	Month	Number of the Accidents that Caused Lost-Day	Number of the Accidents that Caused First aid Operations	Number of the Near Miss																									
	May	5	9	-																									
	June	7	8	-																									
	July	7	7	-																									
	August	7	6	-																									
September	9	5	-																										
Infirmary	There is an infirmary in the Facility (Photo-2). There is an officially assigned occupational physician, as well.			The maintenance of the infirmary should be achieved regularly and the equipment and materials for the first aid should always be available in the infirmary.																									
Responsible People	There is an OHS Expert responsible for the OHS Management in the Facility. Details regarding the responsible people for the environmental and social management are given in SEP and OHSMP Reports.			In order to follow the accidents and incidents and take immediate actions regarding OHS issues, the number of the responsible people should be increased. OHS Technicians may be recruited to increase the OHS inspection performances.																									

Labor and Working Conditions		
Topic	Current Situation	Remarks / Corrective Actions
	In addition, responsible people are defined for the emergencies.	
OHS Trainings	Training program is shared in Table 3-4 and in Occupational Health and Safety Management Plan.	Training should cover the unit-specific sessions, as well.
OHS Measurements	<p>During the operation phase, OHS measurements were held at the several points of the Facility. Those measurements cover:</p> <ul style="list-style-type: none"> • Illumination, • Noise, • Dust Exposure, • Body Vibration, • Thermal Comfort <p>Details regarding the results are given in OHSMP Report.</p>	OHS Measurement should be held biannually especially for the points where the results are above the limits. In those points and units of the facility, PPEs should be provided to all workers and the usage of the PPE should be inspected more strictly.
OHS Applications	<p>The master documents are given in Table 3-3. In addition to those documents, emergency action plan was prepared for the operation phase of the facility. Details regarding that plan is given in OHSMP Report.</p> <p>During the site survey studies, OHS Boards and Signs are placed within the facility (see Photo-3 and Photo-4). The signs and boards that are given in Photo-3 and Photo-4 are placed every unit of the Facility. Those photos are taken in EAF Unit.</p> <p>During the site survey, all the PPE are provided by the Project Management to DOKAY Team. It was observed that all the workers were wearing their PPE during the site survey. In addition, a PPE Debit Form of a worker was checked.</p> <p>Emergency assembly points are defined by signs (Photo-5) (Please check OHSMP Report for the details)</p>	<p>In order to prevent accidents, incidents and near misses; maintaining the order of the working places is an essential topic. During the site survey studies, some minor faults were encountered.</p> <p>Unproperly stored materials in the facility may cause near misses and accidents (Photo-6 and Photo-7). In Photo-2, unproper storage of the construction wastes are observed near the entrance of the infirmary. In addition, unproper construction waste storage at the borders of the Facility is observed (Photo-8).</p> <p>In Photo-8, dust accumulations on the roads laid in the Facility is observed. In order to prevent dust emissions, the roads should be paved and watered. (Water trucks are given in Photo-9)</p> <p>Measures and management techniques identified in the Occupational Health and Safety Management Plan should be followed.</p>

Table 3-6: Pollution Prevention and Abatement

Pollution Prevention and Abatement		
Topic	Current Situation	Remarks / Corrective Actions
Waste Management	<p>Current situation was assessed in the Waste Management Plan Report. The hazardous and non-hazardous wastes collected temporarily in the facility and then transferred to the treatment facilities by licensed firms. In addition to Waste Management Plan, the Facility has its own plan and procedures defined below.</p> <ul style="list-style-type: none"> • Waste Management Procedure • Hazardous Waste Management Procedure • Packaging Waste Management Procedure • Medical Waste Management Procedure • Waste Batteries and Accumulators Management Procedure • Waste Oil Management Procedure • Waste Temporary Storage Instruction • Slag Management Instruction • Oxide Layer (Scale) Management Instruction • Waste Tagging Instruction • Waste Transfer Forms • Stack Dust Monthly Transfer Forms • Slag Monthly Transfer Forms • Oxide Layer (Scale) Monthly Transfer Forms • Hazardous Waste Monthly Transfer Forms • Packaging Waste Monthly Transfer Forms • Hazardous Substance Transfer Forms 	<p>In Photo-10, some types of waste including chemicals, tires, maintenance equipment, construction wastes, etc. are stored in an open area and they are not stored separately.</p> <p>In Photo-11, the drainage well of the waste storage is observed. In Photo-12, chemical liquid accumulation on the waste storage area ground can be observed.</p> <p>All types of wastes should be stored temporarily in areas, whose borders have enclosed edges, in order to eliminate the risk of the spreading of the small particles of the wastes to the environment due to the wind.</p> <p>All the same types of waste should be stored separately on an impermeable floor. The ventilation inside the storage areas should be proper in order to prevent the accumulation of gases due to the waste. A drainage system should be established for the waste storage area to collect the possible leakages from the waste.</p> <p>The slag is a hot material that is generated due to production activities. This material should be cooled in a pool. A pool should be designed and constructed for this purpose. Scale and slag should be transferred to the licensed facility on a daily basis.</p> <p>In Photo-13, it can be observed that there is not a pool constructed and slag is cooled down in water on the ground. On the other hand, the Project Management reported that the pool will be constructed as soon as possible.</p>

Pollution Prevention and Abatement		
Topic	Current Situation	Remarks / Corrective Actions
	The hazardous and non-hazardous waste storage area in the facility (Except for the process wastes) are given in Photo-10, Photo-11, Photo-12 and Photo-13.	
Hazardous Material Management	<p>The following plans and procedures are created by the Project Management.</p> <ul style="list-style-type: none"> • Scrap Metals having Radioactive Substances Management Procedure • Hazardous Substance Management Procedure • Hazardous Substance Transfer Forms • Hazardous Waste Monthly Transfer Forms • Hazardous Waste Management Procedure <p>In addition to those plans and procedures, "Hazardous Substance Operation Document" which is valid until 17.08.2027 is obtained from the Ministry of Transport and Infrastructure. The document is shared in Annex-2.</p> <p>In accordance with the Regulation on Reducing Major Industrial Accident Risks, the amount of all the chemicals that are stored and used in the facility are identified. Those chemicals and their amounts are shared in Annex-3.</p>	<p>The walls and floor of the chemical storage areas must be covered with non-combustible, impermeable, and non-sparking material.</p> <p>While cleaning the hazardous liquid chemicals from the storage area floor, water should not be used. Absorbent materials such as sand and sawdust should be used.</p> <p>No one other than the person in charge of the chemical storage area should be allowed to enter the storage area, and the door should be kept locked by hanging the necessary warning signs.</p> <p>Warning signs regarding the hazards that may arise during the loading, unloading, and use of the stored materials and the measures against these hazards should be posted in the storage areas.</p> <p>MSDS forms of all hazardous materials in the storage areas should be provided, and the use of undefined chemicals should not be allowed.</p> <p>Necessary safety measures should be taken during maintenance and repair works.</p> <p>In the storage areas, hazardous material storage conditions and stacking rules must be obeyed, and extra risks that can be aroused from hazardous materials must be prevented.</p> <p>There should be a closed temporary storage area for</p>

Pollution Prevention and Abatement		
Topic	Current Situation	Remarks / Corrective Actions
		hazardous wastes with a concrete floor and a locked door, separated into separate sections for each waste code. The liability insurance of this area should be renewed annually
Water and Wastewater Management	<p>Water is supplied from the groundwater wells within the borders of the Facility. (4 well, 288,000 tons/year capacity of each)</p> <p>Water consumption amount due to the Process Activities: 3400 m³ Water consumption amount due to the Labor: 100 m³ (454 person x 221 L/day) (the date of daily water consumption amount per person is taken from TÜİK)</p> <p>Domestic Wastewater Treatment Plant Capacity: 195 m³ /day</p> <p>Details regarding the water and wastewater management of the Facility can be found in Environmental and Social Management Plan. In addition to that plan, Facility management has prepared the following plans and procedures regarding the water and wastewater management.</p> <ul style="list-style-type: none"> • Wastewater Control Procedure • Monitoring and Measuring Procedure 	<p>There will be not any wastewater discharge due the process in the operation phase.</p> <p>Monthly monitoring of the wastewater of the Facility generated due to the labor should be achieved in order to verify the compliance of the wastewater parameters with the discharge limits. Continuous measurement is not obligatory due to the reason that the capacity of the WWTP is under 10,000 m³/day.</p> <p>In addition, water quality should be monitored regularly. Regarding the monitoring, detailed information is given in Environmental and Social Management Plan.</p>
Air Quality and Greenhouse Gas Emissions	<p>Detailed information regarding the emission points, emission monitoring and mitigation and prevention measures for the emissions are given in Air Quality Management and Greenhouse Emission Report. In addition to that report, the Project Management has been prepared for the plans and procedures given below.</p> <ul style="list-style-type: none"> • Emission Control Procedure • Greenhouse Gas Emission Calculation Procedure • Greenhouse Gas Monitoring and Emission Report Preparation 	<p>Measures and management techniques identified in the Air Quality Management and Greenhouse Emission Report should be followed.</p> <p>The commitments that are defined in Table 3-2 should be obeyed strictly.</p> <p>An excel sheet should be created for all the emission points defined in the Air Quality Management and Greenhouse Emission Report (Table 5-1). All the results of the air quality measurements should be recorded in that sheet. During the environmental and social monitoring</p>

Pollution Prevention and Abatement		
Topic	Current Situation	Remarks / Corrective Actions
	<p>and Control Procedure</p> <ul style="list-style-type: none"> • Greenhouse Gas Calibration Procedure • Greenhouse Gas Risk Assessment Procedure • Greenhouse Gas Corrective and Preventive Action Procedure • Greenhouse Gas Internal Audit Procedure • Stack Dust Management Instruction • Natural Gas Sampling Instruction • Greenhouse Gas Risk Assessment Table • Greenhouse Gas Internal Audit Question List 	<p>studies in the operation phase, those recordings will be checked.</p> <p>During the calculation of the greenhouse gas emission, Regulation on the Monitoring of Greenhouse Gas Emissions was followed. In accordance with that Regulation, the Facility is in Category B. The Project Management should regularly check the potential for improvement of the monitoring method employed. For the facilities that is in Category B, calculation method should be improved in every two years, on 30 July.</p> <p>The national legislation limits regarding the emissions are decreasing year by year. However, the national legislation currently has air pollution standards that allow for significantly higher pollution concentrations than WHO Standards. It can be concluded that the limit values of the air quality parameters will be decreased, and air quality management should be updated and improved in accordance with those changes in the standards.</p>

Table 3-7: Community Health, Safety and Security

Community Health, Safety and Security		
Topic	Current Situation	Remarks / Corrective Actions
Community Health, Safety and Security	<p>An emergency plan was created on 20.04.2022 by the OHS Expert under the OHS Unit. The mentioned report was updated on 20.04.2024. Within the scope of this emergency plan, all emergencies were defined, and assembly points were determined. In addition to these, (i) an inventory of materials and equipment to be used in emergencies was created, (ii) rescue, extinguishing, and first aid teams were determined, and (iii) evacuation points were defined.</p> <p>For emergency response, the following emergency teams are established by the Project management:</p> <ul style="list-style-type: none"> • Extinguishing Team • Search and Rescue Team • Security Team • First Aid Team • Energy Resources Response Team • Communication Team <p>There is a security at the entrance of the Facility and facility boundaries are surrounded with the walls in order to prevent unauthorized entries to the Facility. (Photo-14)</p>	<p>Security guards should complete the psychotechnical training and should be trained regularly.</p> <p>During the emergencies, stakeholders that are defined in the Stakeholder Engagement Plan should be communicated immediately.</p> <p>The Facility sign at the entrance should be observable and should include the OHS Signs.</p> <p>All the walls should have OHS Sign on it. (Hazardous area, Entrance is not allowed etc.)</p> <p>Traffic management plan should be established due to the high traffic jam in the region. The region is an industrial region and there is a highly concentrated traffic in the region especially in the duty period. Therefore, a traffic management plan should be established. In the scope of the traffic management, signs that shows the location of the facility should be placed on the access roads.</p>
Stakeholder Engagement Plan	<p>Stakeholder Engagement Plan is established for the operation phase of the Project. This SEP covers both internal and external stakeholders. Detailed information can be found in the report.</p>	<p>Stakeholders should be interviewed, and their grievances should be recorded regularly. Any grievances regarding the issues that threatens the community health, safety and security should be answered in accordance with the policy defined in grievance redress mechanism.</p>

Table 3-8: Land Acquisition and Involuntary Resettlement & Indigenous People and Cultural Heritage

Land Acquisition and Involuntary Resettlement & Indigenous People and Cultural Heritage																	
Topic	Current Situation	Remarks / Corrective Actions															
Land Acquisition and Involuntary Resettlement	<p>Integrated Steelworks Facility of the Kardemir Steelworks Industry Inc. is located in Bozköy Village of Aliğa/İzmir. Detailed information regarding the parcel and block numbers of the Area where the Facility is located on as well as the field sizes are given in Table 2-1. The property deeds of the mentioned areas are given in ESMP Report.</p> <p>Table 2-1: Deed Information of the Project Location</p> <table border="1"> <thead> <tr> <th>Parcel Number</th> <th>Block Number</th> <th>Size (m²)</th> </tr> </thead> <tbody> <tr> <td>1032</td> <td>3</td> <td>41,211.72</td> </tr> <tr> <td>1032</td> <td>4</td> <td>16,405.45</td> </tr> <tr> <td>1034</td> <td>1</td> <td>74,425.04</td> </tr> <tr> <td>1034</td> <td>3</td> <td>139,170.33</td> </tr> </tbody> </table>	Parcel Number	Block Number	Size (m ²)	1032	3	41,211.72	1032	4	16,405.45	1034	1	74,425.04	1034	3	139,170.33	<p>No law suits related to the Involuntary Resettlement were reported by the Project Management. The area in question is an industrial area.</p>
	Parcel Number	Block Number	Size (m ²)														
1032	3	41,211.72															
1032	4	16,405.45															
1034	1	74,425.04															
1034	3	139,170.33															
	<p>Mukhtar offices of Bozköy and Horozgediği Villages were visited in order to hold external stakeholder interviews located in the industrial environment of the region. In addition to the Mukhtars, a few of the local people were interviewed, as well. According to those interviews, it can be concluded that there are not any negative opinions against Kardemir Steel Industry. On the contrary, in accordance with the external stakeholders, Aliğa Industrial Zone and other industrial activities positively contribute to the socio-economic development of the surrounding villages.</p> <p>The lands belonging to the village people gained economic value due to the fact that they remained in the industrial zone. At the same time, the fact that there is a</p>	<p>The region is in an industrial zone for a long time (See the details in Section-2). There are not any activities that effects the cultural heritage of the Region.</p>															

Land Acquisition and Involuntary Resettlement & Indigenous People and Cultural Heritage		
Topic	Current Situation	Remarks / Corrective Actions
	great need for labor in the industry has provided employment for the villages. In addition, transportation cooperatives were formed in those villages, and they started to provide transportation services to the Industrial Zone including Kardemir Integrated Steelworks Facility.	

Table 3-9: Biodiversity Conservation

Biodiversity Conservation		
Topic	Current Situation	Remarks / Corrective Actions
Biodiversity Conservation	Detailed information regarding the biodiversity in the region can be found in ESMP Report. The information regarding the flora, fauna and protected areas in the region have been shared in ESMP Report in detail.	Biodiversity elements including critical flora and fauna species will be reviewed by rapid site surveys and updated literature studies to be carried out for the nearby protected areas during the monitoring studies. The information gathered will be shared in the corresponding Environmental and Social Monitoring reports in order to follow the impacts of the Project on the biodiversity of the region.

4 CONCLUDING REMARKS

Environmental and social management of the project consists of the following main plan and procedures.

- Environmental and Social Management Plan (“ESMP”)
- Waste Management Plan (“WMP”),
- Occupational Health and Safety Management Plan (“OHSMP”)
- Air Quality Management Plan and Greenhouse Gas Emission Report,
- Stakeholder Engagement Plan (“SEP”)
- Environmental and Social Due Diligence Report (“ESDD”)

These plans and procedures will be implemented during the lifespan of the Project. These plans are integrated with each other and are complementary each other. Plans and procedures that are prepared in the scope of the ESAP of the Project are living documents that should be updated in accordance with the alterations and new data regarding the Project activities. The management plans were prepared for the activities related with the operation phase of the Project.

The management plans define the necessary environmental and social risk prevention and mitigation measures in accordance with national legislation and international standards. In addition, the effects of the Project are assessed in terms of the location of the Project aiming to understand the cumulative environmental and social impacts.

During the project, Environmental and Social Monitoring Studies will be held two times a year. During the monitoring studies, mitigation measures will be checked, and complementary comments and actions will be offered by discussing with the Project Authorities, in the environmental and social monitoring reports.

ANNEXES

ANNEX-1: Photographs taken during the Site Survey



Photo-1: Suggestion Box (Red Circle) and Near Miss Box (Yellow Circle)



Photo-2: Infirmary and Unproper Material Storage



Photo-3: OHS Signs-1



Photo-4: OHS Signs-2



Photo-5: One of the Emergency Assembly Point Sign



Photo-6: Unproper Material Storage



Photo-7: Unproper Material Storage



Photo-8: Construction Waste and Dust Accumulation on the Ground



Photo-9: Water Trucks for Dust Prevention



Photo-10: Waste and Material Storage Area



Photo-11: Drainage Well in the Waste Storage Area



Photo-12: Chemical Accumulation on the Waste Storage and Maintenance Area



Photo-13: Slag Cooling Area Area



Photo-14: Border Walls of the Facility

ANNEX-2: Hazardous Substance Operation Document




T.C.
ULAŞTIRMA VE ALTYAPI BAKANLIĞI
ULAŞTIRMA HİZMETLERİ DÜZENLEME GENEL MÜDÜRLÜĞÜ



TEHLİKELİ MADDE FAALİYET BELGESİNİN			
VERİLİŞ TARİHİ	GEÇERLİLİK TARİHİ	NUMARASI	U-NET NO
17/08/2022	17/08/2027	İZM.U-NET.TMFB.20.54524	146327
FAALİYET KONUSU	ALICI-BOŞALTAN-GÖNDEREN-PAKETLEYEN-YÜKLEYEN		
TEHLİKELİ MADDE FAALİYET BELGESİ SAHİBİ			
TİCARİ ÜNVANI	KARDEMİR ÇELİK SANAYİ ANONİM ŞİRKETİ ÇELİKHANE ŞUBESİ		
ADRES	BOZKÖY MAH. 2 CAD. NO:24 ALIĞA/İZMİR		
TİCARET SİCİL NO	8351		
VERGİ DAİRESİ / NO	PAMUKKALE VERGİ DAİRESİ MÜD. / 5230949312		

Bu belge; Tehlikeli Maddelerin Karayoluyla Taşınması Hakkında Yönetmeliğin 5 inci maddesinin altıncı fıkrası kapsamında düzenlenmiştir.

Bu belgenin doğruluğu <https://www.turkiye.gov.tr/belge-dogrulama> adresinde veya mobil cihazlarınıza yükleyebileceğiniz e-Devlet Kapısı'na ait Barkodlu Belge Doğrulama uygulaması vasıtası ile yandaki karekod okutularak kontrol edilebilir.



ANNEX-3: The List of Hazardous Chemicals

<u>Substances and Amounts</u>		
<u>NO</u>	<u>Chemical List</u>	<u>Amount</u>
1	Hard Coal	3500 ton
2	Gas Nitrogen	100 m ³
3	Gas Oxygen	300 m ³
4	Gas Argon	30 m ³
5	Liquid Nitrogen	100 m ³
6	Liquid Oxygen	200 m ³
7	Liquid Argon	100 m ³
8	Grease	6 ton
9	Hydraulic oil	10 ton
10	HCl	5 ton
11	Caustic	1,5 ton
12	Biocide etc. water treatment chemicals	10 ton
13	Sodium Hypochlorite	0,5 ton
14	Refrigerant A/C Gases	0,5 ton
15	Paint	0,7 ton
16	Rust-lime removers	0,5 ton
17	Group Nitrogen Tube	1 ton
18	Group Oxygen Cylinder	1 ton
19	Arco Mixed Gas (For Welding)	1 ton