

Kocaeli Hastane Yatırım ve Sağlık Hizmetleri A.Ş. (Kocaeli or SPV)

Kocaeli Integrated Health Campus Project (KİP)

DOCUMENT NUMBER: **KİP-ESMS-SPL-001**

DOCUMENT TITLE:

SPILL RESPONSE PLAN - FINAL

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SPILL RESPONSE PLAN

PURPOSE SCOPE

This Plan has been developed in accordance with SPV policies, with the commitments undertaken by SPV in the ESA, with Turkish regulatory framework, with IFC Performance Standards, IFC EHS General and Sector Specific Guidelines, EBRD Performance Requirements, OPIC Environmental and Social Policy Statement and EDC. The purpose of this Plan is to provide general guidance to manage hazardous material/chemical and accidental spills at the Site occurred during the Construction phase.

This Plan includes guidelines and minimum requirements for preventing spills and responding to small and large amount of spills for EPC Contractor for defining its own Procedure appropriate to the nature and scale of the Project Construction phase. This Plan should be implemented in conjunction with the Hazardous Materials Management and Monitoring Plan.

APPLICATION

This Plan applies to the Project Construction phase only. It applies to construction work activities under the control of SPV, of EPC and to all KİP employees.

DEFINITIONS

Kocaeli or SPV: Kocaeli Hastane Yatırım ve Sağlık Hizmetleri A.Ş.

Kocaeli Integrated Health Campus Kocaeli Integrated Health Campus Project, being executed by SPV or its Project (or "KİP" or simply "Project"): affiliates

EPC Contractor (or simply EPC): Gama – Türkerler Kocaeli Adi Ortaklığı & Gama Türkerler Dubai

All key managerial roles involved in the Construction Site management, Site Management:

mainly referring to the EPC Contractor's personnel

Environmental and Social The complete set of documents (including but not limited to: policies, Management System (ESMS)

manuals, plans, procedures, work instruction and records) developed to address, manage, monitor, audit and review the environmental, social, health and safety aspects of the KİP, aimed at mitigating potential ESHS risks and

impacts and improving ESHS performance

Guidelines to EPC Contractor Guidelines to EPC for the development of its own ESMS and associated EPC

> Contractor Procedures appropriate to the nature and scale of the Project are contained in SPV ESMS documentation. SPV ESMS documentation, identify also minimum requirements and specific responsibilities for EPC Contractor

in line with the EPC contract

Construction Site: The Construction Site includes all areas impacted in any manner by the

construction activities.

Environmental and Social Plans issued by SPV addressing significant Environmental and Social Management Plans (ESMPs)

aspects (as identified in the ESA) by defining specific management methods, mitigation measures, monitoring activities, reporting, auditing and review.

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EPC Contractor Procedure A procedure to be prepared by EPC, to be used by EPC to describe how the

mitigation and monitoring measures/actions outlined in SPV ESMPs are

actually implemented

ACRONYMS

KiP Kocaeli Integrated Health Campus Project

SPV Kocaeli Hastane Yatırım ve Sağlık Hizmetleri A.Ş.

Golder Associates Turkey Ltd. Şti.

BAT Best Available Technology

EBRD European Bank for Reconstruction and Development

EDC Export Development Canada
EHS Environmental, Health and Safety

EPC Engineering Procurement and Construction **EPRP** Emergency Preparedness and Response Plan

ES Environmental and Social

ESHS Environmental, Social Health and Safety **ESA** Environmental and Social Assessment

ESMP(s) Environmental and Social Management Plan(s)
ESMS Environmental and Social Management System

ESAP Environmental and Social Action Plan

EU European Union GHG Greenhouse Gas

GIIP Good International Industry Practice
HS (or OHS) (Occupational) Health and Safety
IFC International Finance Corporation

IFC, EBRD WA GN Workers' accommodation: processes and standards A guidance note by IFC & EBRD

ISO International Organization for Standardization

KPI Key Performance Indicators

OHSAS Occupational Health and Safety Assessment Scheme

OPIC Overseas Private Investment Corporation
PR Performance Requirement (issued by EBRD)
PS Performance Standard (issued by IFC)

QRA Quantitative Risk Analysis
SEP Stakeholder Engagement Plan
WHO World Health Organization

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1.0 PURPOSE AND SCOPE OF THE PLAN

This Plan has been developed in accordance with SPV policies, with the commitments undertaken by SPV in the ESA, with Turkish regulatory framework, with EBRD Performance Requirements (in particular PR2, PR3 and PR4), IFC Performance Standards (in particular PS2 and PS3), IFC General EHS Guidelines, Sector specific EHS Guidelines, OPIC Environmental and Social Policy Statement and EDC. Where no national regulation or international standard/guideline applies, it considers the adoption of Good International Industry Practices (GIIP).

The purpose of the Plan is to define the actions to be implemented for the spill response cases in compliance with the Turkish legislation and/or IFC and EBRD requirements. This Plan should be implemented in conjunction with the Hazardous Materials Management and Monitoring Plan.

2.0 BACKGROUND POLICIES AND STANDARDS

This section includes all those policies, standards and requirements of reference for this procedure that are applicable for, but not limited to, the Project during Construction phase.

A number of qualitative performance parameters have been identified in Section 4 below, derived from ESA commitments, Turkish legislation and/or IFC, EBRD and EHS Guidelines as well as from GIIP.

2.1 National standards and regulations

TITLE	Turkish Reg. Gaz. Date
Regulation on Decreasing the Ozone Depleting Materials	27052, 12/11/2008
Regulation on Water Pollution Control	25687, 31/12/2004
Regulation on Waste Management	29314, 02/04/2015
Regulation on Control of Soil Pollution and Point Source Polluted Fields	27605, 08/06/2010
Regulation on Control of Pollution Caused by Dangerous Substances in Water and its Environment	26005, 26/11/2005
Regulation on Radiation Safety	23999, 24/03/2000
Regulation on the Safely Transportation of Radioactive Materials	25869, 08/07/2005
Regulation on the Transportation of Hazardous Goods by Road	28801, 24/10/2013
Regulation on Classification, Package and Labeling of the Hazardous Materials and Aids	27092, 26/12/2008
Regulation on Classification, Labeling, and Packaging of Materials and Mixtures	28848, 11/12/2013
Regulation on Preparation and Distribution of Safety Data Sheets on Hazardous Materials and Aids	27092, 26/12/2008
Regulation on Inventory and Control of the Chemicals (hereinafter mentioned as "Chem").	27092, 26/12/2008
Regulation on the Restrictions relating to the Production, Supply to the Market and Use of certain Hazardous Materials, Products and Goods (including asbestos and PCB, hereinafter mentioned as "HazMat").	27092, 26/12/2008
Regulation on Control of Soil Pollution and Sites Contaminated by Point Sources	27605, 08/06/2010
Law No. 4857 Labor Law	25134, 10/6/2003
Law No. 6331 on Occupational Health and Safety	28339, 30/06/2012
Regulation on Emergencies in Workplaces	28681, 18/06/2013
Occupational Health and Safety Risk Assessment Regulation	28512, 29/12/2012
Regulation on Personnel Protective Equipment	26361, 29/11/2006

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TITLE	Turkish Reg. Gaz. Date
Regulation on Health and Safety Precautions Regarding Working with Asbestos	28539, 25/01/2013
Regulation on Protection of Workers from the Risk of Explosive Media	28633, 30/04/2013
Regulation on Health and Safety Precautions Regarding Workplace Buildings	28710, 17/07/2013
Regulation on Health and Safety at Construction Sites	28786, 05/10/2013
Regulation on First Aid	24762, 22/05/2002
Regulation on Procedures and Principles of Health and Safety Training for Employees	28648, 15/05/2013
Regulation on Use of Personnel Protective Equipment in Workplaces	28695, 02/07/2013
Regulation on Health and Safety Precautions Regarding Working with Carcinogenic and Mutagenic Substances	28730, 06/08/2013
Regulation on Health and Safety Precautions Regarding Working with Chemicals	28733, 12/08/2013
Regulation on Health and Safety Signs	28762, 11/09/2013

2.2 International standards

Source	Document Title				
The Equator Principles Association	The Equator Principles, June 2013				
IFC - International Finance Corp.	IFC Performance Standards (PS) and Guidance Notes (GN)				
IFC - International Finance Corp.	IFC PS2 and GN2: Labor and Working Conditions				
IFC - International Finance Corp.	IFC PS3 and GN3: Resource Efficiency and Pollution Prevention				
IFC - International Finance Corp.	IFC General EHS Guidelines: Environmental				
IFC - International Finance Corp.	IFC General EHS Guidelines: Occupational Health and Safety				
IFC - International Finance Corp.	IFC General EHS Guidelines: Construction and Decommissioning				
IFC - International Finance Corp	IFC General EHS Guidelines: Health Care Facilities				
EBRD – European Bank for Reconstruction and Development	EBRD PR 2: Labour and Working Conditions				
EBRD – European Bank for Reconstruction and Development	EBRD PR 3: Resource Efficiency and Pollution Prevention and Control				
EBRD – European Bank for Reconstruction and Development	EBRD PR4: Health and Safety				
EBRD – European Bank for Reconstruction and Development	EBRD Sub-sectoral Environmental and Social Guidelines: Health Services and Clinical Waste Disposal				
OPIC - Overseas Private Investment Corporation	OPIC - Environmental and Social Policy Statement				
International Organization for Standardization	ISO 14001:2004 - Environmental management systems Requirements with guidance for use				
OHSAS Project Group	OHSAS 18001 - Occupational health and safety management systems – Requirements				

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2.3 Source documents

This section presents source documents, i.e. documents where SPV commitments are sourced from and that are the trigger for the development and implementation of the ESMPs and in general of the ESMS documentation. They are in turn based on Turkish regulatory framework, EBRD Performance Requirements and IFC Performance Standard and Guidelines.

Document ID	Document Title
ESA Report	Environmental Social Assessment (January, 2016)

Date: 15 August 2016

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3.0 ROLES AND RESPONSIBILITIES

Principal roles and responsibilities for the implementation of this procedure are outlined below.

3.1 EPC Contractor & Subcontractors

EPC Contractor has to ensure sufficient and qualified resources are allocated on an ongoing basis to achieve effective implementation of this Plan.

EPC Contractor have to ensure the effective implementation of this Plan by issuing its own Procedures addressing, detailing and customizing specific actions, measures under EPC Contractor's responsibility. The EPC Contractor Procedure has to include a description of allocated resources, responsibilities and communication procedures to relevant personnel.

If any Subcontractor is involved, it is responsible for duly implementing requirements included in EPC Contractor Procedure under the EPC supervision.

3.2 SPV

SPV Management has to ensure sufficient and qualified resources are allocated on an ongoing basis to achieve effective implementation of actions, measures and monitoring activities under SPV's responsibility. SPV Management is responsible for:

- This Plan's and EPC Contractor Procedures' final approval
- taking appropriate actions to address major Non-Conformities based on audit reports, performance monitoring reports and on SPV HSE Manager proposed approach and actions.

SPV HSE Manager is responsible for:

- ensuring that this Plan is up to date and appropriate to the nature and scale of the KİP and ensuring that this Plan is implemented effectively by EPC Contractor;
- ensuring that action/measures and monitoring activities directly under SPV responsibilities are carried out timely and adequately according to this Plan requirements;
- proposing to SPV Management, if necessary, amendments and/or updates to this Plan and issuing Plan revisions;
- programming inspections and audit activities to ensure the correct implementation of this Plan and of EPC Contractor Procedure;
- addressing Non-Conformities through the definition of Preventive/Corrective actions;
- bringing major Non-Conformities immediately to the attention of SPV Management;
- collecting, organizing and reviewing monitoring data and performance monitoring reports from EPC Contractor and providing summary results of such reports to SPV Management, to stakeholders and to the Lenders.

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4.0 MANAGEMENT METHODS AND MITIGATION MEASURES

4.1 General Management Criteria

The overall objective of hazardous materials/chemicals management is to avoid or, when avoidance is not feasible, minimize uncontrolled releases of hazardous materials or accidents (including explosion and fire) during their production, handling, storage and use¹.

Where there is risk of a spill of uncontrolled hazardous materials, a spill control, prevention and countermeasure plan will be developed and fully implemented in the Project.

General management criteria for spill prevention and response will be as follow:

- Planning;
- Risk assessments for handling of hazardous materials/chemicals;
- Ensuring safe storage and handling of hazardous materials/chemicals are in line with regulatory requirements;
- · Equipment inspection;
- Provision of training;
- Ensuring waste storage and disposal are in line with regulatory requirements (Refer to Waste Management Plan);
- Spill response measures.

Safety Data Sheets ("SDSs") and labelling of hazardous materials are important elements for the correct management of the hazardous materials. Information included in SDSs; maintenance of the SDSs requirements on the Construction site; abbreviations, hazards and symbols for hazardous materials labeling are explained in Hazardous Materials Management and Monitoring Plan.

4.2 Spill Prevention Methods and Mitigation Methods

All hazardous materials/chemicals will be managed in a way that prevents any accidental release. To avoid uncontrolled releases of hazardous materials or, when avoidance is not feasible, to help minimizing the risk of chemical/hazardous spills and ensure safe chemical/hazardous handling, storage and use.

For the spill prevention on construction site; hazardous materials handling, storage and usage conditions; transportation of hazardous materials by road; training; vehicle maintenance and refilling requirements for workers are explained in Hazardous Materials Management and Monitoring Plan.

¹ Reference: IFC Environmental, Health, and Safety (EHS) Guidelines, Section 1.5 Hazardous Materials Management

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If proper control measures are not taken, transferring chemicals is another potential reason of spill incidents on construction sites. Transferring chemicals from one container to another will be avoided. If a transfer is necessary,

- The transfer will be performed in secondary containment;
- The containers which chemicals transferred to will be marked with the chemical name and hazard;
- If possible, transfer of hazardous materials from vehicle tanks to storage containers will be carried out in areas with surfaces sufficiently impervious to avoid loss to the environment;
- Transfer equipment will be selected as it is compatible and suitable for the characteristics of the materials transferred and designed to ensure safe transfer;
- All transfer equipment (portable pumps, hoses, pipes, connection points etc.) will be inspected for tightness prior to use;
- Regular inspection, maintenance and repair will be carried out for transfer equipment (pipes and hoses, connection points, valves etc.).

4.3 Spill Response Methods

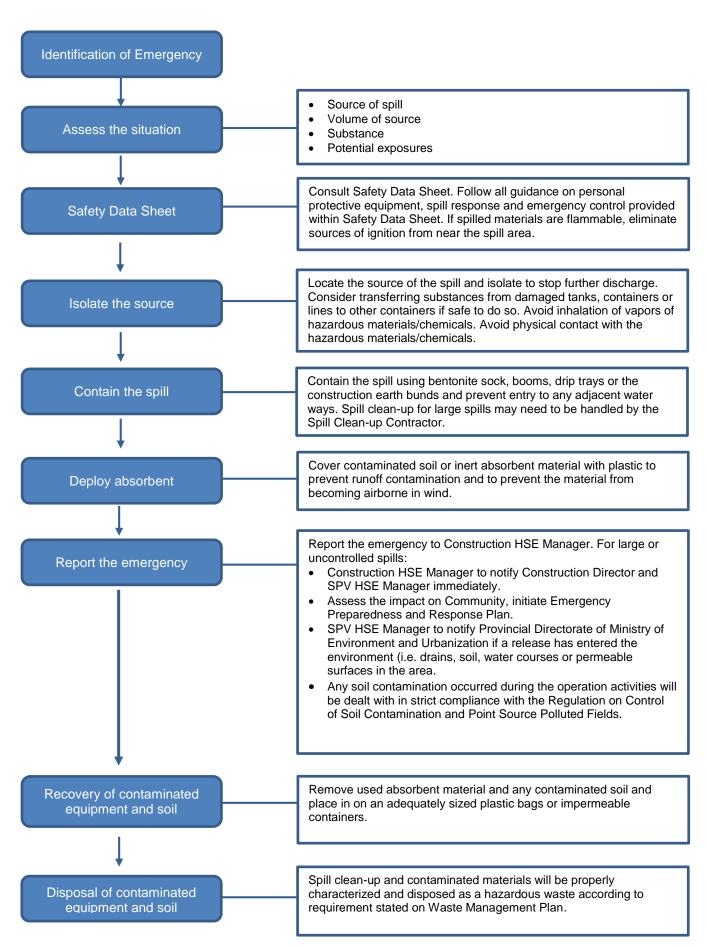
General Actions:

- Prior to on-site activities, EPC Contractor will review SDS's of hazardous materials/chemicals
 to determine storage and handling requirements and the type and quantity of spill response
 materials;
- EPC Contractor will ensure that a sufficient quantity and type of appropriate spill response material and/or equipment is onsite and readily available prior to receipt of any hazardous material;
- Spill response equipment must be maintained and located in areas where spills are likely to occur;
- Spill response equipment should provide adequate response capabilities to manage any accidental spill or release;
- Spill response equipment will be inspected periodically to ensure that they are ready to use;
- Prior to operation activities, EPC Contractor will ensure the relevant training mentioned in Hazardous Management and Monitoring Plan is provided to workers.

In the event of a spill following procedure will be implemented.

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5.0 MONITORING

The following table details the monitoring (measurement) activities identified for spill response in the Construction phase.

For each monitoring activity and measure/action identified, the table shows:

- The identification code (ID);
- the reference (or source) documents (i.e. ESA, Turkish standard, permits, IFC Performance Standards and EHS Guidelines, EBRD Performance Requirements, OPIC or other GIIP);
- frequency/timing of the measurement;
- Key Performance Indicator (KPI), and related quantitative target, if the target consist of a regulatory limit this will be indicated;
- the related responsibility for implementing the monitoring activity.

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ID.	Source doc.	Monitoring Action/Measure description	Frequency / Timing	KPI	Target/ Acceptance criteria	Responsibilities
SPL-01	Turkish Reg. Gaz. No. 28648, 15/05/13 Turkish Reg. Gaz. No. 28695, 02/07/13 Turkish Reg. Gaz. No. 28733, 12/08/13 Turkish Reg. Gaz. No 27092, 26/12/2008 (SDS) ESA Section 9.1.2.4 IFC PS2, EBRD PR4	Workers trained on handling/using hazardous materials, spill response. Training records are kept.	Initial training and regular refreshers	Trained personnel %	90% (i.e. only motivated exceptions allowed, e.g. presence of personnel for which training is planned in the short term)	SPV and EPC Contractor
SPL-02	Law No. 6331, IFC- EHS GL – Env. § 1.5 IFC PS2, EBRD PR4	Number of environmental incidents (i.e. spills) are recorded in monthly HSE statistics.	Ongoing	n.a.	HSE Statistics	EPC Contractor
SPL-03	Turkish Reg. Gaz. 27605 of 08/06/2010	Notify Provincial Directorate of Ministry of Environment and Urbanization if a release has entered the environment (i.e. drains, soil, water courses or permeable surfaces in the area.	If spill has entered the environment	n.a.	n.a.	SPV
SPL-04	Turkish Reg. Gaz. No. 28633, 30/04/2013 Turkish Reg. Gaz. No. 27092, 26/12/08 (SDS) IFC PS3, EBRD PR3 GIIP	 Daily check of all storage areas including: evidences of past/current spills (major staining, sign of stressed vegetation, pool of liquids, shining on water surfaces SDS available for chemicals Proper and adequate firefighting equipment Restricted access Safety signs in place Sufficient ventilation Suitable spill clean-up materials in place All containers (tanks, drums, etc.) properly closed and adequately stable to avoid liquid overflow Gas cylinders stored in a dedicated ventilated area, vertically, attached, protected from any risk of fall, repaired from direct sunlight and heat sources. Each type of gas cylinders stored in separated groups, according to their content. Fuel and combustible gas cylinders must be stored in separate locations. Condition of the secondary containments. 	Daily	n.a.	No spills, all conditions are met	EPC Contractor

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6.0 AUDIT AND REVIEW

The correct implementation of this Plan is verified through internal inspections and audits to be carried out according to the requirements included in "Internal audit" Section of the "ESMS Manual".

The schedule, the frequency, the scope and objectives of the audit as well as the responsible internal inspectors will be indicated in the Audit Program that will be developed and updated by SPV HSE Department.

Internal auditing will address:

- The correct implementation of this Plan;
- The correct development and implementation of EPC Contractor Procedure;
- The correct and timely implementation of an auditing and review system by the EPC Contractor;
- Each of the point indicated in the tables in Section 4 (mitigation actions/measures) of this Plan.

During the inspection, the major areas where inspectors will address in particular are given in Hazardous Materials Management and Monitoring Plan.

Evidences and results of the inspection and audit activities are included in the audit reports and in the "Non-Conformity and Preventive/Corrective actions" records.

SPV Management reviews results of audits and inspections and the progress of the Preventive/Corrective actions and takes additional appropriate actions if necessary.

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7.0 REPORTING

7.1 Audit reports (by SPV)

Evidences of the implementation of the actions/measures (detailed in Section 4 of this Plan) and related results are collected through inspection and auditing activities as detailed in section 6 "Audit and Review" of this Plan; these evidences are described in the audit reports.

7.2 EPC Contractor Monitoring Reporting

EPC Contractor is responsible to collect the HSE statistics which will include the number of environmental incidents i.e. spills and training statistics. EPC Contractor will also monitor the hazardous materials storage areas with the evidence of daily records. If any Subcontractor is involved, it is responsible for duly implementing requirements included in EPC Contractor Procedure under the EPC Contractor supervision.

The results of the inspection and audit activities will be summarized in a Report on a six monthly basis that will be made available to stakeholders which is under the responsibility of SPV. This report constitutes the basis for the monitoring report to be available for the Lenders.