

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** ISDSC5520

**Date ISDS Prepared/Updated:** 04-Feb-2015

**Date ISDS Approved/Disclosed:** 09-Feb-2015

## I. BASIC INFORMATION

### A. Basic Project Data

Country:	Kazakhstan	Project ID:	P114830
Project Name:	Hazardous and Persistent Organic Pollutants Waste Management Project (P114830)		
Task Team Leader(s):	Katelijn Van den Berg		
Estimated Appraisal Date:	06-Apr-2015	Estimated Board Date:	08-Jul-2015
Managing Unit:	GENDR	Lending Instrument:	Specific Investment Loan
GEF Focal Area:	Persistent Organic Pollutants		
Sector(s):	Solid waste management (100%)		
Theme(s):	Pollution management and environmental health (100%)		
Financing (In USD Million)			
Total Project Cost:	92.45	Total Bank Financing:	34.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			48.10
International Bank for Reconstruction and Development			34.00
Global Environment Facility (GEF)			10.35
Total			92.45
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

### B. Project Development Objective(s) / Global Environmental Objective(s)

#### 1. Project Development Objective(s)

The proposed Development Objective is to create a hazardous and POPs waste treatment facility

with appropriate environmental controls and to remediate selected PCB contaminated sites, reduce public and environmental exposure to these now contaminated lands

The Project will achieve its objective through: (i) creation of a facility to treat hazardous and POPs waste with appropriate environmental controls; (ii) remediation of selected historic PCBs contaminated waste disposal sites; and (iii) disposing the PCBs waste, PCBs equipment and PCBs contaminated soil with hazardous waste classification from these sites, remediated under the Project, in the constructed facility in line with the Stockholm Convention.

## **2. Global Environmental Objective(s)**

The overall Global Environment Objective of the proposed project is to reduce the environmental and health hazards associated with stockpiles of PCB-containing materials and waste and POPs-based pesticides, by eliminating stockpiles, establishing a treatment facility and safeguarding sites contaminated with these materials consistent with the country's obligations under the Stockholm Convention. For this purpose, the Global Environment Facility has in principle approved a US \$10.35 million Grant.

## **C. Project Description**

The proposed project will have four components: (1) development of a treatment/destruction facility; (2) remediation of selected historic PCB contaminated sites, including treatment of present PCB waste/equipment and PCB contaminated soil; (3) Strengthening Institutional and Regulatory Industrial Hazardous Waste Management Capacities; and (4) project management.

### **Component 1 – Creation of a Treatment/Destruction Facility**

This component aims to create a facility for treatment and destruction through incineration of hazardous waste and POPs and PCBs in line with Kazakhstan's obligations under the Stockholm convention. The siting process for this facility will be concluded during project preparation.

Site suitability for such central facility is based on an analysis of sites which had been identified by the Ministry of Environment and Water Resources (now Ministry of Energy) on the basis of technical site suitability criteria and based on support of local authorities. The technical site suitability selection criteria consist of: (i) possibilities for regular maintenance and servicing requirements, and intensive control procedures, including analytical facilities (PCB testing capacity); (ii) a continuous supply of fresh water, large quantities of chemicals for the scrubber and a reliable supply of electricity and fuel as well as an analytical facility to monitor and demonstrate environmental compliance; (iii) requirements for highly trained personnel. One of the possible sites is located in one of Kazakhstan's industrial zones (Pavlodar), and all are relatively far removed from population centers. The finalization of site selection will further be based on Kazakhstan legislation, the quantities and location of POP-containing wastes at the priority sites and the quantities, types and origin of other industrial hazardous waste suitable for co-incineration/destruction in the same facility as well as the Environmental Impact Assessment and public consultations.

Suitable fixed (non-mobile) incineration/treatment technologies are determined in the feasibility study currently ongoing during project preparation (funded by a Project Preparation Grant from the Global Environmental Facility and the Kazakhstan Republican Budget) and will also include a landfill cell or cells, possibly with some basic pre-treatment possibilities (e.g. for stabilization and/or dewatering). These technologies will be based on commercial availability of the technology, as technologies which still contain technological or scale-up risk cannot be considered for financing,

and taking into account that the disposal/destruction facility should be designed to handle solids and liquids as well as contaminated soil, materials, containers and packed waste with high levels of PCB contamination ( $> 50$  mg/kg).

Based on the selected site for the treatment facility and the functional design for the facility, an Environmental and Social Impact Assessment will be prepared, including the Environmental Management Plan to define the environmental technologies and performances for the proper operation, pre-treatment, advanced treatment, treatment of exit gases and removal of ashes etc as well as the corresponding monitoring requirements in line with international standards. These measures will consist of the specifications of post treatment such as gas scrubbing and air pollution control requirements, waste water treatment, treatment and/or disposal of ashes, slag and other residues and specifications for environmental monitoring of air emissions (carbon monoxide/dioxide, hydrogen chloride, particulates, PCBs, HCB, dioxins and furans etc), wastewater discharges and waste.

A detailed stakeholder and public engagement and consultation document will also be prepared as part of preparation which will include a citizen engagement and grievance system as well as the establishment of a transparent monitoring and disclosure of the works progress and environmental controls in place. It will also be explored if external public monitoring groups, journalist or NGOs could be involved with coverage in local media to stimulate transparency of monitoring results of the facility.

Component 2: Remediation of selected historic PCB contaminated sites, including treatment of present PCB waste/equipment and PCB contaminated soil

Based on the executed pre-feasibility study for remediation of POPs contaminated sites was with detailed site investigations, sampling and laboratory analysis to investigate the extent of PCBs and POPs contamination in the soil, the proposed project will focus on environmental remediation of a selection of priority sites for historic PCB contamination that urgently need remediation measures. The priority of sites was determined based on the detailed site investigations and risk assessment which were executed for the sites identified as priority sites. All the sites to be included in the remediation component will be sites for which the clean-up is the responsibility of the Government. These priority sites are:

1. Ust-Kamenogorsk Capacitor Plant (estimated amount of waste that would require off-site treatment between 50,000-150,000 cubic meter, to be determined based on the remediation plan)
2. Ust-Kamenogorsk Capacitor Sludge Pond (estimated amount of waste requiring off-site treatment: 21,000 cubic meter).

A third priority site will be included during execution of the Feasibility Study. The Feasibility Study will also prepare the full remediation plan for the priority sites before appraisal which will also define in more detail the amounts of soil which should be excavated and brought to the treatment facility. As there is no further PCB production on any of the sites, the Project will only focus on the historic legacies which are a government responsibility and no solution has to be found for ongoing PCB production from these sites.

Component 3 – Strengthening Institutional and Regulatory Industrial Hazardous Waste Management Capacities

This component will strengthen institutional and regulatory capacities in the field of industrial

hazardous waste management and support improvements to the regulatory framework to establish adequate and sustainable management of these industrial hazardous waste categories in Kazakhstan.

The component will support development of the establishment of a hazardous waste registry in the Ministry and strengthen the institutional and regulatory capacity in the following areas: (i) hazardous waste producers' responsibility to classify, store and transport hazardous waste; (ii) how companies would be obliged to use the hazardous waste treatment facility; (iii) control of hazardous waste producers' compliance with the hazardous waste management legislation and their responsibility to report to the environmental authorities regarding hazardous waste generation; and (iv) penalty system for hazardous waste producers in case of violation of the legislation.

#### Component 4 – Project Management

The objective of this component is to manage project resources in accordance with the Project's objectives and procedures as outlined in the Project Operations Manual (POM) which will be developed during project preparation.

This component will finance the operating costs of a Project Implementation Unit within the Ministry of Energy to carry out project management functions for Components 1, 2, and 3. Support will be provided for procurement, financial management, coordination, reporting, and monitoring and evaluation. It will also be explored if a communication officer could be part of the PMU to work with the communities and stakeholder engagement plan.

#### **D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The location of the treatment/destruction facility is being determined as part of preparation under the Feasibility Study financed by the Project Preparation Grant from the GEF and counterpart financing from the Republican Budget of Kazakhstan. Site suitability will be based on a site suitability analysis for identified suitable sites. Site suitability election criteria will consist of, amongst others: regular maintenance and servicing requirements, and intensive control procedures, including analytical facilities (assessment of in-country PCB testing capacity), are also necessary. A continuous supply of fresh water, large quantities of chemicals for the scrubber and a reliable supply of electricity and fuel are needed as well as an analytical facility to monitor and demonstrate environmental compliance. There are also requirements for highly trained personnel. It is therefore expected that the site will be located in one of Kazakhstan's industrial zones. The site identification will further be based on the legislation in Kazakhstan, the quantities and location of POP containing wastes at the priority sites and the quantities, types and origin of other industrial hazardous waste suitable for co-incineration/destruction in the same facility.

The proposed Project will also focus on environmental remediation of a selection of priority sites for historic PCB contamination that urgently need remediation measures. These priority sites are:

1. Ust-Kamenogorsk Capacitor Plant
2. Ust-Kamenogorsk Capacitor Sludge Pond.

A third priority site will be added during execution of the Feasibility Study

#### **E. Borrowers Institutional Capacity for Safeguard Policies**

The Environmental Impact Assessment and Environmental Management Plan will be prepared as part of the Feasibility Study. The implementing agency is the Ministry of Energy under which the

Department of Environment is located.

Kazakhstan law requires the EIA to be prepared by the same company that prepares the detailed design for such a facility, which is contrary to WB requirement for an independent EIA for a Category A project. Therefore, it may be necessary for two separate documents to be prepared by two different parties, despite the fact that they will draw upon the same database (any differences in analysis and conclusions between the two EIAs will warrant particular attention). It will be important to ensure there are no substantive inconsistencies in the EMP aspect of the two documents. Alternatively, the Borrower could opt for an independent review of the EIA prepared by the Design firm, but this would require prior approval by the WB Board. EIA will be updated at the detailed design stage.

The PMU has sufficient capacity for safeguards during project preparation; it will be assessed as part of preparation if further strengthening is needed for project implementation.

#### **F. Environmental and Social Safeguards Specialists on the Team**

Frank Van Woerden (GENDR)

Lola Ibragimova (GSURR)

## **II. SAFEGUARD POLICIES THAT MIGHT APPLY**

<b>Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	<p>Yes. Site remediation has very positive impacts, but disposal site for haz/POPs waste and the handling and transport of these materials to the disposal site will need crucial controls to prevent or mitigate environmental risks. A hazardous waste treatment facility is a polluting enterprise, but with proper environmental controls (such as flue gas treatment) and operated properly air pollution is minimal.</p> <p>To address potential environmental and social impacts, the borrower will conduct a full ESIA which will contain, in particular, the analysis of alternatives carried out at the pre-feasibility study stage, which explanation for rejecting alternative approaches examined at that stage (e.g. use of cement kiln for destruction of hazardous waste)</p> <p>The ESIA will also cover component 2 of the remediation of sites and component 3 which will provide TA to strengthen institutional and regulatory capacities relating to industrial hazardous waste management.</p>
Natural Habitats OP/BP 4.04	No	All construction and project activities will be within existing sites. These Project sites are industrial (brownfield) sites.
Forests OP/BP 4.36	No	All construction and project activities will be within

		existing sites. These Project sites are industrial (brownfield) sites.
Pest Management OP 4.09	No	There will be no procurement of pesticides or fertilizers, or any works within the project which would lead to the use or the increased use of pesticides.
Physical Cultural Resources OP/BP 4.11	No	All construction and project activities will be within existing sites. These Project sites are industrial (brownfield) sites.
Indigenous Peoples OP/BP 4.10	No	It is very unlikely that there any of the potential disposal or remediation sites identified by the Govt are within areas where indigenous people are found; this will be double checked during preparation.
Involuntary Resettlement OP/ BP 4.12	TBD	This will be defined as part of the Feasibility Study, but as part of the preliminary site identification which the Ministry has undertaken, possible sites are at industrial zones and without population present.
Safety of Dams OP/BP 4.37	No	The Project will not finance construction or rehabilitation of any dams, nor will it rely on the performance of an existing dam or a dam under construction, as defined in this Policy.
Projects on International Waterways OP/BP 7.50	TBD	Whether there is the possibility to impact international waterways will be determined as part of the ESIA.
Projects in Disputed Areas OP/ BP 7.60	No	The project sites are not in a disputed area.

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 15-Mar-2015

**B. Time frame for launching and completing the safeguard-related studies that may be needed.**  
**The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

ESIA preparation started October 2014 and completion is planned in March 2015.

### IV. APPROVALS

Task Team Leader(s):	Name: Katelijn Van den Berg	
<b><i>Approved By:</i></b>		
Regional Safeguards Coordinator:	Name: Agnes I. Kiss (RSA)	Date: 09-Feb-2015
Practice Manager/ Manager:	Name: Kulsum Ahmed (PMGR)	Date: 09-Feb-2015

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.