Ust-Kamenogorsk Environmental Remediation Project (P078342)

EUROPE AND CENTRAL ASIA | Kazakhstan | Environment Global Practice | IBRD/IDA | Specific Investment Loan | FY 2007 | Seq No: 13 | ARCHIVED on 22-Nov-2014 | ISR16729 |

Implementing Agencies: Committee of Water Resources

Key Dates

Key Project Dates

Board Approval date: 01-Feb-2007  Effectiveness Date: 15-Dec-2008
Planned Mid Term Review Date: 28-Mar-2012  Actual Mid-Term Review Date: 16-Mar-2012
Original Closing Date: 30-Mar-2013  Revised Closing Date: 31-Dec-2014

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
The project has two development objectives: (i) Prevent the groundwater contamination plume's further migration towards the residential areas, the city's sources of drinking water supply and eventually into the Irtysh River; and (ii) Strengthen institutional mechanisms for groundwater quality monitoring to enable control of ongoing groundwater pollution from local municipal and industrial sources.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
No

Components

Name
Comp. A. Containment of High-priority Sources of Groundwater Contamination.: (Cost $22.00 M)
Comp. B. Remediation of Current Contaminated Groundwater Sites.: (Cost $20.00 M)
Comp. C. Project Management and Monitoring: (Cost $0.60 M)

Overall Ratings

Name | Previous Rating | Current Rating
--- | --- | ---
Progress towards achievement of PDO | Moderately Unsatisfactory | Moderately Unsatisfactory
Overall Implementation Progress (IP) | Moderately Satisfactory | Moderately Satisfactory
Overall Risk Rating | -- | --
Implementation Status and Key Decisions

The following key activities have been completed thus far under the Project: (a) site investigation programs; (b) preparation of detailed design for remediation of six industrial waste dumps, the seventh site was earlier remediated with public funding when the design work for the other sites was carried out; (c) supply of leak detection and laboratory equipment to local stakeholders; and (d) implementation of water leakage reduction program in Ust-Kamenogorsk. The activities (a) and (c) were financed from European Commission co-funding and were completed satisfactorily before its closing date in 2010. The other two activities have been financed from the counterpart financing from Kazakhstan. Civil works for the physical remediation works for the high priority industrial waste dumps have started as of April 2013. Works at the Kazzinc and the Power Plant dumps under the Project are 95% complete. All PCB contaminated water at the capacitor sludge pond have been treated in accordance with the Kazakh drinking water standards and stabilization of sludge and covering of the area is ongoing. The remediation of the waste dumps at Titanium Magnesium Plant did not start yet. The key decisions for disclosure are i) submitting to the World Bank the request for cancellation of US$7 million and closing date extension of the project, ii) submitting to the Bank the request for replenishment of the designated account; iii) resolving the issue with the contractor's access to the historical industrial waste dump at the Titanium Magnesium Plant with the support from Prime Minister's Office to start the remediation works, and iv) expediting the conclusion of construction expertise for the historic industrial waste dump at the Ulba Metallurgical Plant.

Risks

Systematic Operations Risk-rating Tool

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political and Governance</td>
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<tr>
<td>Macroeconomic</td>
<td>--</td>
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<tr>
<td>Sector Strategies and Policies</td>
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<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
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<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
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<tr>
<td>Fiduciary</td>
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<tr>
<td>Environment and Social</td>
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<tr>
<td>Stakeholders</td>
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<tr>
<td>Other</td>
<td>--</td>
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<tr>
<td>Overall</td>
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Results

Project Development Objective Indicators

- Reduce level of heavy metals & other hazardous pollutants in groundwater, thereby reducing risk of contamination of city's soil & groundwater system, drinking water wells, & surface water of Irtysh. (Text, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline data will be determined after completion of a 2 year detailed monitoring program and detail design has been prepared.</td>
<td>The current levels of pollutants which are higher than the KZ drinking water and fishing water standards at the key receptors at risk (but lower than international limits.</td>
<td>Level of heavy metals pollution in groundwater is below international limits.</td>
<td>Level of heavy metals pollution in groundwater reduced to below international limits.</td>
<td></td>
</tr>
</tbody>
</table>
international values, except one) are:
Oktyabirski wellfield
Barium- 0.12 mg/l
Oil products- 0.58 mg/l
Phenol- 0.004 mg/l
Alpha activity- 0.11 Bq/L
Irtysh River
Selenium- 0.006 mg/l
Manganese- 0.026 mg/l

Southern acquifer basin
Selenium- 0.095 mg/l
Alpha Activity- 0.63 Bq/L

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<tbody>
<tr>
<td>Comments</td>
<td></td>
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</table>

**Direct project beneficiaries (Number, Core)**

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>0.00</td>
<td>300000.00</td>
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<tbody>
<tr>
<td>Comments</td>
<td></td>
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</tbody>
</table>

**Contaminated land managed or dump sites closed under the project (Hectare(Ha), Core)**

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>25.90</td>
<td>25.90</td>
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</table>

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<tbody>
<tr>
<td>Comments</td>
<td></td>
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</tbody>
</table>

**Female beneficiaries (Percentage, Core Supplement)**
The World Bank
Ust-Kamenogorsk Environmental Remediation Project (P078342)

Implementation Status & Results Report

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>0.00</td>
<td>50.00</td>
</tr>
</tbody>
</table>


Comments

**Overall Comments**

**Intermediate Results Indicators**

- **Final containment of identified high risk waste dumps & slurry pond located in the city to eliminate pollution infiltration into groundwater.** (Text, Custom)

<table>
<thead>
<tr>
<th>Baseline</th>
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<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>7 uncontrolled high risk waste dump sites with pollution infiltration into groundwater.</td>
<td>Works started on 4 high risk waste dump sites with expected completion date of December 2014. For one dump, the contractor is expected to start as soon as spring weather will allow.</td>
<td>Works at 3 waste dumps are 95% complete, one is fully completed and 1 (capacitor pond) is advanced</td>
</tr>
</tbody>
</table>


Comments

- **Groundwater pump-and-treat system has been established and is operational.** (Text, Custom)

<table>
<thead>
<tr>
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<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>No groundwater treatment system in place.</td>
<td>Draft design based on one-year groundwater monitoring as well as pollutant modelling finished</td>
<td>This indicator will be dropped as part of restructuring as no groundwater treatment system is required.</td>
</tr>
</tbody>
</table>
### Build-up of pollutants from prioritized sources in the city's groundwater outside the industrial zone has stopped. (Text, Custom)

<table>
<thead>
<tr>
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<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Migration of pollutants from industrial sites to residential areas (cadmium, lead &amp; zinc) is not steady, therefore baseline will established in 2010 after completion of monitoring program.</td>
<td>Works are underway to stop pollution infiltration in 4 industrial waste dumps, 1 more industrial waste dump is expected to be remediated once weather will allow.</td>
<td>This indicator is also proposed to be dropped as part of restructuring as it is already covered under other indicators</td>
<td>Concentration of heavy metals in groundwater downstream of pump-and-treat system is below international limits.</td>
</tr>
</tbody>
</table>

### Capacity of local institutions to implement and manage monitoring program has been increased. (Text, Custom)

<table>
<thead>
<tr>
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<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current monitoring capabilities are inadequate.</td>
<td>One year of monitoring of groundwater pollution has been undertaken and consultant is in process of handing over the groundwater model Feflow to the Committee of Water Resources</td>
<td>One year monitoring of groundwater pollution has been implemented, Long term monitoring program is being defined.</td>
<td>Implementation of monitoring program is according to specifications.</td>
</tr>
</tbody>
</table>

### Overall Comments
Data on Financial Performance

Disbursements (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P078342</td>
<td>IBRD-48480</td>
<td>Effective</td>
<td>USD</td>
<td>24.29</td>
<td>24.29</td>
<td>0.00</td>
<td>5.00</td>
<td>19.29</td>
<td>21%</td>
</tr>
<tr>
<td>P078342</td>
<td>TF-58070</td>
<td>Closed</td>
<td>USD</td>
<td>4.96</td>
<td>3.74</td>
<td>1.23</td>
<td>3.47</td>
<td>0.00</td>
<td>93%</td>
</tr>
</tbody>
</table>

Key Dates (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>P078342</td>
<td>TF-58070</td>
<td>Closed</td>
<td>16-Jan-2008</td>
<td>16-Jan-2008</td>
<td>15-Dec-2008</td>
<td>28-Feb-2010</td>
<td>31-Aug-2010</td>
</tr>
</tbody>
</table>

Cumulative Disbursements

Restructuring History

Level  Approved on 26-Mar-2013

Related Project(s)

There are no related projects.