

# **European Bank for Reconstruction and Development London, UK**

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**Capljina Water Supply  
Environmental and  
Social Due Diligence**

**Environmental And  
Social Action Plan**

# European Bank for Reconstruction and development London, UK

## Capljina Water Supply Environmental and Social Due Diligence

## Environmental And Social Action Plan

Prepared by	Signature	Date
Elmedina Krilasevic		November 2011
Sanja Pokrajac		November 2011
Controlled by	Signature	Date
Massimiliano Monetti		November 2011
Giovanni De Franchi		November 2011
Approved by	Signature	Date
Paola Rentocchini		November 2011
Undersigned by	Signature	Date
Roberto Carpaneto		November 2011

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**ČAPLJINA WATER SUPPLY  
ENVIRONMENTAL AND SOCIAL DUE DILIGENCE  
ENVIRONMENTAL AND SOCIAL ACTION PLAN**

**1 THE PURPOSE OF ESAP**

Taking into account the findings of the environmental and social appraisal and the result of consultations, the Environmental and Social Plan (ESAP) has been developed for the Project. The ESAP contains mitigation and performance improvement measures and actions that address the identified social and environmental issues/gaps. The mitigation measures are actions designed to ensure that the Project will operate in compliance with relevant local laws and regulations, as well as EBRD's Environmental and Social Policy (2008) in all relevant stages of the Project. The ESAP focuses on avoidance of identified environmental and social impacts where possible, or on the mitigation measures to minimize or reduce possible impact to acceptable levels.

## **2 RESPONSIBILITY FOR IMPLEMENTATION**

The Client (Public Utility Company Čapljina, [PUC]) is responsible to implement ESAP in accordance with the proposed measures and defined time schedule.

Specific personnel (including a direct responsible) in charge of HSE management and ESAP implementation should be designated within the Company, and a HSE Plan should be developed, defining systems and procedures which will apply to the Project as well as to the Company general activities.

The Client will ensure that employees with direct responsibility for activities relevant to the Project's or the company's social and environmental performance are adequately qualified and trained so that they have the knowledge and skills necessary to perform their work.

### **3 MONITORING AND REPORTING REQUIREMENTS**

The Client will establish procedures to monitor and measure compliance with the environmental and social provisions of the legal agreements including effective implementation of the ESAP and improvements achieved over time against the baseline established during appraisal. The procedure should be developed before the Project implementation.

Monthly progress reports should be prepared by the Contract Supervisor and sent to Municipality/Company HSE management for approval. ESAP and PR compliance implementation issues should be explicitly included in the monthly Progress Reports. In addition, periodic HSE progress reports should be prepared by the responsible HSE person and a summary should be made publicly available according to PR10 and the SEP.

As part of their regular reporting to the Bank, the Client will provide the EBRD with updates on its progress in implementing the ESAP.

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
1	PR1 – Social and Environmental Assessment and Management System/ Organizational Capacity and Commitment	<p>The lack of a comprehensive HSE Management Plan at Corporate level has repercussions on the global HSE performance of the Company.</p> <p>An organizational structure to manage and implement the Feasibility Study and the ESAP requirement is needed.</p>	<p>The Company management to define its own HSE Policy, HSE Standards and Procedures in accordance with cited international standards (ISO 14001/18001).</p> <p>Designate a responsible person within the Company for HSE Management and the implementation of the ESAP.</p> <p>Develop and Implement Corporate HSEL Policies, Plans, standards and procedures to meet the Banks PRs.</p> <p>Review HSE Training needs, establish a training matrix and implement a training programme by Company management</p> <p>Monitor contractors during project implementation.</p>	70,000-80,000 € <sup>1</sup>	Prior and during project implementation	Company	High
2	PR 1 – Contractor Management	Implement a Construction Management Plan	<p>Require Contractor's to include a HSE-MS as part of tender requirements for the new water supply system construction. As a minimum the HSE-MS should require compliance with relevant regulatory requirements and operational controls to be defined within the Construction Environmental Management Plan (EMP) for the following as a minimum:</p> <p>OHS Risk assessment</p> <p>Noise</p> <p>Waste</p> <p>Hazardous Materials Management – chlorine gas in line with relevant MSDS (<a href="http://www.inchem.org/documents/icsc/icsc/eics0126.htm">http://www.inchem.org/documents/icsc/icsc/eics0126.htm</a>)</p> <p>Trench Safety - Safety fencing during</p>	Part of the tender/contract preparation activity – Construction Management Plan	Prior to Project implementation	Contractor	High

<sup>1</sup> Investment need to develop a comprehensive Environmental Management Plan at both Corporate and Project level (including all standards and procedures with the exclusion of the job standard operating procedures). The cost is based on similar assignments carried out by D'Appolonia.

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
			<p>trench works shall be required in addition to warning notices.</p> <p>HSE Training - Contractors to provide HSE training for all contractors working on site. All workers in site should receive at least an induction course.</p> <p>Grievance mechanism for workers. Tender documentation should include the requirement for contractors to :</p> <ol style="list-style-type: none"> <li>1. implement the mitigation measures reported in the Feasibility Study, the ESRS, ESAP and the comply with the Banks PRs.</li> <li>2. demonstrate that it employs human resource policies appropriate to its size and workforce in compliance with PR 2 requirements.</li> </ol>				
3	PR 1 – Environmental and Social Appraisal	The project environmental and social impacts and relevant measures summarized in the FS. Other impacts not assessed in the FS have been evaluated in the ESRS and the EBRD PR Compliance Reports. The corrective measures designed to address the impacts identified in the ESRS are provided in this ESAP.	Tender documentation should include the mitigation measures required in the Feasibility Study and ESAP.	Part of the tender/contract preparation activity (no extra resource need expected)	Prior to Project implementation	Municipality and Company	High
4	PR 1 – Service Areas	The location of service areas, temporary construction sites and worker's camps are not yet defined.	Review the HSE risks and re-assess the area of influence of the project following the selection of all service areas to be utilized by the project e.g. temporary construction sites, waste disposal. Define any mitigation measures required to ensure compliance with the Banks PRs and monitor their implementation.	20,000 €	Prior to Project implementation	Municipality and Company	Low



No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
5	PR 1 – Performance Monitoring and Review	At present, HSE issues are only verbally discussed in meetings between Managers and the Director, but periodic reports are not prepared either for the Director or for the Supervisory Board nominated by the Municipality.	Monthly progress reports should be prepared by the Contract Supervisor and sent to Municipality/Company HSE management for approval. ESAP and PR compliance implementation issues should be explicitly included in the monthly Progress Reports. Periodic HSE progress reports should be prepared by the appointed Responsible person for HSE and a summary should be made publicly available according to PR10 and the SEP.	Part of the Contract Supervisor duties	During Project Implementation	Company and Contractors	High
6	PR 2 – Labour and Working Conditions	The Client in practice has a well-established mechanism for employee-employer relations, direct communication, oral or in writing. However, the Client lacks written procedures and policies manage these relations besides the ones that are a part of legal regulations.	<p>Prepare H&amp;S procedures and manuals in written format in compliance with PR2 requirements and provide training of:</p> <ul style="list-style-type: none"> <li>- rules of internal communication;</li> <li>- use of protective equipment and monitoring of workers and contractors on the use of the equipment; and</li> <li>- emergency procedures in case of accident or other specific emergencies and emergency drills.</li> <li>- Develop an internal policy on Equal Opportunities based on the requirements of local legislation.</li> </ul>	6,000 €	Prior to Project implementation (end of January)	Company	Medium

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
7	PR 2 – Labour and Working Conditions	OHS risk assessment is lacking	Carry out OHS risk assessment to EU standards for work activities, evaluate the risk and prioritize appropriate control measures. Include practical recommendations to control the risks and monitor their implementation. Ensure operational control procedures for gas chlorine storage,	15,000 €	Prior to Project implementation	Company	High
8	PR 2 – Labour and Working Conditions	Grievance mechanism for internal grievance management of the Client is not formalized and communicated to all employees	Develop procedure for internal grievance management, and communicate it to all employees	-	Prior to Project implementation December 20, 2011 (for the Company)	Company's Legal Officer and Contractor	High
9	PR3 – Excavation	Implement a safe and systematic approach to excavation works to protect workers and others who may be affected by the work	A safe and systematic approach to excavation work is to be adopted whenever any ground disturbance is carried out to protect workers and others who may be affected by the work. This should include following best industry practise, assessment of the risks, adequate supports to prevent collapse, methods to detect unhealthy atmospheres before allowing any entry into any excavation, adequate means to enter and leave the excavation which are to remain in situ for the duration, instruction and information to all workers on the hazards associated with excavations and the risks to their health and safety and any other controls that minimise the risks which were identified during the initial assessment.	Within implementation of CMP	During Project implementation	Contractor	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
10	PR3 – Dust	Implement mitigation measures to reduce the negative impacts of dust during the construction	<p>Client PUC will develop detailed instructions for minimizing potential adverse impacts on air. Dust suppression measures will be specified in tender documents and contracts, which should address at minimum:</p> <ul style="list-style-type: none"> <li>- the use of dirt, unpaved roads to be kept to a minimum;</li> <li>- work vehicles tyres to be cleaned prior to leave the working site and entering public roads. Trucks transporting dusty materials should be covered; and</li> <li>- regular watering of soil during the excavation phases.</li> </ul>	Within implementation of E MP	Prior to tendering.	Municipality and Company	High
11	PR3 – Noise	Implement mitigation measures to reduce the negative impacts of noise during the construction	<p>Client will develop detailed instructions for minimizing potential adverse impacts on noise. Noise mitigation measures will be specified in tender documents and contracts, and should include as a minimum:</p> <ul style="list-style-type: none"> <li>- Maintenance of equipment will be carried out to ensure compliance with type specific noise emission requirements;</li> </ul> <p>Timing of operations will be undertaken so that night time limits (Hospital, sanatorium 40 dB(A) – Tourist, recreational, recovery centre 40 dB(A) -Purely residential, educational and health institutions, public green and recreational areas 45</p>	Within implementation of EMP	Prior to and during Project implementation	Municipality and Company	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
			<ul style="list-style-type: none"> <li>- dB(A) - Commercial, office and residential housing along the transport corridors, warehouses without heavy transport 50 dB(A)- Business 60 dB(A)</li> <li>- Industrial, storage, service and traffic area, unpopulated area dB(A) are never exceeded – in general night time working is not recommended; and</li> <li>- If necessary, noise shielding of sensitive areas will be provided</li> </ul>				
12	PR3 – Soil	Implement mitigation measures to reduce the negative impacts of soil during the construction	<p>Client will develop detailed instructions for minimizing potential adverse impacts on soil via Soil Management Procedure. These will be included in tender documents and contracts. In particular:</p> <ul style="list-style-type: none"> <li>- during the construction phase, the top soil will be carefully removed;</li> <li>- the removed top soil will be properly protected to avoid loss and/or degradation; and</li> <li>- After the construction works have been completed, the soil will be placed back on and pre-construction conditions reinstated.</li> </ul>	Within implementation of EMP	Prior to and during Project implementation	Municipality and Company	High
13	PR3 – Groundwater	Implement mitigation measures to reduce the negative impacts of groundwater during the construction	<p>Client will develop Hazardous Materials Management Plan to minimizing potential adverse impacts on groundwater. These will be included in tender documents and contracts. In particular:</p> <ul style="list-style-type: none"> <li>- Spillages of polluting materials, particularly fuel, oils and lubricants will be avoided;</li> <li>- If a temporary fuel tank is used, it will be of the double walled type; and</li> <li>- oil absorbent materials will be kept on site to mitigate any spillages.</li> </ul> <p>As the Chlorination of water process is performed using gas chlorine, Hazardous Material Management Plan shall include</p>	Within implementation of EMP	Prior to and during Project implementation	Municipality and Company	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
			<ul style="list-style-type: none"> <li>- dB(A) - Commercial, office and residential housing along the transport corridors, warehouses without heavy transport 50 dB(A)- Business 60 dB(A)</li> <li>- Industrial, storage, service and traffic area, unpopulated area dB(A) are never exceeded – in general night time working is not recommended; and</li> <li>- If necessary, noise shielding of sensitive areas will be provided</li> </ul>				
			measures to control potential release of gas chlorine and H&S and emergency procedures for dangerous level of exposure to gas chlorine.				
14	PR3 – Waste Management	During the construction activities, solid materials will likely to be generated either as waste or for temporary storage pending their use for reinstatement. An appropriate Waste Management Plan has not been developed yet.	Development and implement a Waste Management Plan in compliance with PR3 requirements and PUC monitor compliance with its requirements for all project related activities.	Within implementation of EMP	Prior to and during Project implementation	Municipality and Company	High
15	PR4 – UXO	A proper management of UXO should be ensured for the protection of the on-site workers and community.	A procedure for the management of UXO's shall be established, which includes a stop work procedure and safety measures to be adopted in the event of a UXO find.	Within implementation of EMP	Prior to Project implementation	Municipality and Company	Medium
16	PR4 – Transportation Plan	The project foresees moving equipment on public roads and other forms of infrastructure; the client will seek to prevent the occurrence of incidents and accidents associated with the operation of such equipment.	A Transportation Plan for moving equipment on public roads and other forms of infrastructure and also including community safety measures, advance notice to project affected people, safety measures etc. should be developed by contractors as part of the EMP and approved by the Company in advance of works commencing..	Within implementation of EMP	Prior to Project implementation	Company /Contractor	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
17	PR4 – Emergency and Disaster Response	Emergency preparedness and response plan for the overall Project activities missing.	A specific Emergency Preparedness and Response Plan including responsibilities, procedures, communication, training, and liaison with the local Authorities should be developed by contractors as part of the EMP and approved by the Company in advance of works commencing. Supporting procedures should include requirements for chlorine gas incidents.	Within implementation of EMP	Prior to Project implementation	Company /Contractor	Medium
18	PR8 – Cultural Heritage	Introducing precautionary measures to protect potential cultural heritage at the Project sites	<p>Develop a specific Chance Find Procedure in compliance with PR 8: it is required from the Client to set in place a provision for managing chance finds, defined as physical cultural heritage encountered unexpectedly during the project implementation. Such provisions include:</p> <ul style="list-style-type: none"> <li>- notification of relevant competent bodies of found objects sites;</li> <li>- alerting project personnel to the possibility of chance finds being discovered;</li> <li>- fencing-off the area of finds to avoid any further disturbance or destruction.</li> </ul> <p>The Company and Contractors will not disturb any chance finds until an assessment by a designated and qualified specialist is made and actions consistent with national legislation and PR 8 are identified.</p>	Within implementation of EMP	Prior and during Project implementation	Company and Contractors	Medium
19	PR5 and PR10 – Public Consultations	The Municipality has carried out consultations with the Project Affected People with regards to the Project on the need basis in Local Community Offices. The Client however needs to ensure meaningful and informed consultations with regards to expropriation and other project impacts.	Implement a defined Company corporate policy and procedures for mitigating any adverse impacts to project affected people who can demonstrate that they have been physically or economically impacted by the Project, in compliance with PR 5 requirements. Resettlement Plans or Livelihood Restoration Frameworks to be submitted to EBRD.	5,000 €	Prior to and during expropriation	Company and Municipality	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
20	PR5 and PR10 – Economic Impact	Implement mitigation measures to reduce potential affordability impacts on vulnerable persons	<p>Define in Company procedures and implement mitigation measures for vulnerable people who suffer affordability impacts in the event of higher water bills.</p> <p>Provide information in the public domain on assistance available to vulnerable households. E.g. social security subsidise covering part of the cost of higher water payments in households defined as 'vulnerable' [e.g. unemployed, elderly, pensioners] and other subsidies to low-income households.</p>	-	Prior to foreseen rise in water bills	Company and Municipality	High
21	PR5 and PR10 – Public Consultations	Consultations with the affected stakeholders with regards to the Project on the need basis in Local Community Offices.	<p>The Contractor shall distribute information on a timely basis prior to work commencing as defined in Stakeholder Engagement Plan, particularly concerning:</p> <ul style="list-style-type: none"> <li>- Inform affected communities about any works that may affect them (traffic and access obstructions, noise and dust);</li> <li>- Inform affected communities on the progress of works.</li> <li>- Provide the possibility to raise grievances through project grievance form</li> </ul>	-	Prior and during Project implementation	Contractor	High
22	PR5 and PR10 – Grievance Mechanism	There is no grievance mechanism set in place and communicated to the stakeholders	Implement the SEP requirements including the grievance mechanism that is to be used by PUC and its contractors prior to work commencing. Publicise the Company grievance policies and procedures as defined in the SEP, monitor and report on its implementation to EBRD annually.	-	SEP Issued by the beginning of 2012 and implemented.	Company, Municipality and Contractors	High

No.	EBRD Performance Requirement (PR) / Legislative Requirement/ Best Practice	Key Environmental and Social Issue	Proposed Action	Investment Needs /Resources	Timeframe	Responsibility	Priority
Area of Influence Issues (not directly related to the Project itself) to be implemented in future development phases (Long-term Development Plans)							
AOI	Area of Influence of the Project – Urban Solid Waste Management	Collected waste is disposed of at the municipal disposal site "Ada", located in the wider urban zone of the Town of Čapljina, on the right bank of the Neretva River and provided with no protection measure.	A specific program to meet EU requirements in terms of waste management should be developed and included in the Company HSE Management System, HSE Standards and Procedures.  New properly engineered and licensed disposal site (other than Ada site) should be used for Project's specific waste disposal.	NA (at least a Feasibility Study is necessary to define the possible investment need).	Prior to and during Project implementation	Company	High
AOI	Area of Influence of the Project – Wastewater Management	Actually no WW treatment is being performed in the central municipal system, and untreated water is directly discharged into the Neretva River and its tributaries through four outlets.	A specific program to meet EU requirements in terms of wastewater management should be developed and included in the Company HSE Management System.	NA (at least a Feasibility Study is necessary to define the possible investment need).	Prior to and during Project implementation	Company	High
AOI	Area of Influence of the Project – Biodiversity Conservation and Sustainable Management of Living Natural Resources (PR6)	Monitoring of long-term impacts on Hutovo Blato due to increased availability of water for agricultural production	Establish a joint monitoring programme of Water Quality in Hutovo Blato (for the presence of pesticides or other chemicals present due to increased agricultural production) to prevent potential impacts to Hutovo Blato waters of increased agricultural production due to availability of water for irrigation	-	After Project Implementation	Company, Municipality and Hutovo Blato	Low

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