

Republic of Serbia Ministry of Agriculture, Forestry and Water Management Nemanjina 22-26, 11000 Belgrade

# SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM (SDIP)

# ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

for

Construction of a warehouse for mobile equipment for flood protection, plateau in front of the warehouse and existing workshop, access road and drainage system, on cadastral plot no. 767/2 in Surcin



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# Abbreviations

| DWM    | Directorate for Water Management                              |
|--------|---|
| EHS    | Environmental, Health and Safety                              |
| EIA    | Environmental Impact Assessment                               |
| ESMP   | Environmental and Social Management Plan                      |
| ESMF   | Environmental and Social Management Framework Document        |
| ESS    | Environmental and Social Standards                            |
| ESSS   | Environmental and Social Safeguard Specialist                 |
| SDIP   | Sava and Drina River Corridors Integrated Development Program |
| GEMM   | General Environmental Mitigation Measures                     |
| IFC    | International Financial Corporation                           |
| MAFWM  | Ministry of Agriculture, Forestry and Water Management        |
| MCTI   | Ministry of Construction, Transport and Infrastructure        |
| MEP    | Ministry of Environmental Protection                          |
| INP    | Institute for Nature Protection                               |
| IPCM   | Institute for Protection of Cultural Monuments                |
| ISRBC  | International Sava River Basin Commission                     |
| PIU    | Project Implementation Unit                                   |
| PPE    | Personal Protective Equipment                                 |
| PSC    | Project Supervision Consultant                                |
| PWMC   | Public Water Management Company                               |
| RDNEIA | Request for decision about the need for EIA                   |
| RoS    | Republic of Serbia  |
| SSIP   | Site Specific Implementation Plan                             |
| WB     | The World Bank Group  |
|        |   |

## INTRODUCTION

A pivotal feature of the Western Balkans region is the Sava River Basin, one of Europe's largest transboundary basins. It covers over one third of the Western Balkans in area and population and connects five of the eight Western Balkan countries (Slovenia, Croatia, BiH, Serbia, and Montenegro). The Drina is the Sava's largest tributary, draining over 20,000 km<sup>2</sup> of mountainous area. The economy and jobs in the region depend heavily on these shared water resources, to transport goods, generate energy, grow food and fibers, sustain biodiversity, as well as provide for leisure and eco-tourism activities.

This document presents the Environmental and Social Management Plan (ESMP), which has been prepared to ensure that the proposed Sava and Drina River Corridors Integrated Development Program (SDIP) is implemented in accordance with the World Bank Environmental and Social Standards (ESS) and local legislation related to environmental protection and social safeguarding. The main purpose of this ESMP is to serve as a valuable tool for identifying possible key environmental and social impacts that will result from the project and proposing mitigation measures to address the most significant impacts. The ESMP also shows the responsibilities of different parties involved in the project implementation. Although the SDIP project has been classified as High risk according to the World Bank ESF, the proposed sub-project is classified as Substantial as the type of works envisaged by the technical documentation require extensive excavation, large quantities of material and dredging. However, there are no resettlement impacts, including no physical displacement. All mitigation measures, both environmental and social adequately respond to the identified impacts, living residual impacts at an almost negligible scale..

# 1. SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM - DESCRIPTION

## 1.1. Background

The Sava and Drina have a proclivity for both dry spells and devastating floods—most recently occurring in 2010 and 2014. The 2014 Sava flood—the largest flood in a century—caused 79 casualties and a damage of €1.5 billion in Serbia (4.7% of GDP), €2.0 billion in Bosnia and Herzegovina (15% of GDP) and €300 million in Croatia (0.5% of GDP) . In 2010 the Drina was flooded extensively—partly due to spilling hydropower reservoirs—and saw its highest levels in 100 years. Flash floods destroyed houses, bridges and sections of roads, while rising water levels resulted in flooding of both urban and rural areas.

The Sava Drina River Corridors Integrated Development Project (Phase 1 of the Program) main focus is to improve flood protection, and transboundary water resources management in selected catchment areas of the Sava and Drina river corridors, with the higher level objective being to enhance regional economic integration and growth through improved flood protection, waterway navigability and freight transport connectivity, and transboundary water management along the Sava and Drina Corridor.

This project will implement sub-projects with high implementation readiness and relevance to the program objectives, with detail designs and tender documents likely ready by Effectiveness in Montenegro, BiH (Brcko District), and Serbia, while simultaneously preparing subprojects that will be implemented during the second phase of the Regional Program. The project consists of three components as described below:

- Component 1: Integrated Development of the Sava River Corridor
- Component 2: Sustainable Management of Environmental Assets in Drina Corridor
- Component 3: Enabling regional economic integration, institutional strengthening and program management

## 1.2. Surcin Project Description

The construction of a warehouse for mobile equipment for flood protection in Surcin includes demolishing/dismantling of the two existing warehouses, construction of a new warehouse for storing mobile flood protection equipment, a plateau in front of the new warehouse and an existing workshop, an access road and a drainage system, on a cadastral plot number 767/2 cadastral municipality Surcin.

The construction of a prefabricated hall for storing mobile flood protection equipment is foreseen on parcel no. 767/2, with a surface of about 1500 m2, including all of the accompanying objects, right next to

the existing building, Brace Nikolica Street, Surcin. The new facility (warehouse) is designed as a groundfloor hall with an annex used for office space and a dual pitch roof, and depending on the adopted structural solution, covering the hall and annex or with a single pitch roof over the annex. Gross dimension are dependent on the adopted structural solution and will be either 39.64 \* 5.60 m or 37.50 \* 5.60 m. The two proposed structural solution differ in adopted roof structure, concrete girder or steel truss, which dictates the necessity of a middle column. There are existing vehicle and pedestrian accesses which will be reconstructed to meet the functional demands of the new warehouse. The Design evisages a construction of a plateau for manipulation of mobile flood protection equipment.

## 1.2.1. Location description (baseline conditions)

Subject sub-project is located in Belgrade, capital city of the Republic of Serbia, in the municipality of Surcin. New warehouse project area is at approximately 7 km away from the Sava River. The location is fully developed and is currently in use by the Public Water Management Company "Galovica". It is located on the main transit route in Surcin and equipped with existing utility connections, which will be used for the new warehouse, and the area surrounding the existing warehouse within the subject cadastral plot is fully developed with access roads, plateaus and other infrastructure. Surrounding the project zone are farmlands and mostly residential buildings, with a couple of commercial buildings, and as such the area is mostly used for residential and agricultural purposes. The nearest two residential buildings border the subject cadastral plot with one of them being located approximately 2 meters away from the construction zone. As the construction works, operation of machinery and equipment will take place within the fenced zone no advesre impacts are anticipated impacting the assets and land adjacent to the construction site. The construction activities will not produce and incremental effect to the already high level of activities connected with the daily operations of the Public Water Company.

Mitigation measures addressing community helath and safety, pprevention of damages to assets during movement of machinery and equipment will be inplace. Any damages that could occur as a accident and unintentiaonal act of the Contractor will be delth by the Grevance Mechanism in place and covered by the Contractors insurance policy for liability against third parties damage and injuries.



Picture 1: Project location, Belgrade, municipality of Surcin



Picture 2. Project location, Surcin, warehouse zone



Picture 3. Project location, existing warehouses

# 1.3. Baseline conditions assessed during route survey

Preconditions from relevant institutitons, including the Institute for Nature Protection of Serbia (INP) and Institute for Protection of Cultural Monuments, have not yet been obtained since the procedure for acquiring a Construction had not been initiated.

The proposed project area is in use, fully developed with access roads, plateaus for manipulation of machinery, offices and utilities. The location has a fuel station, an underground fuel tank, as well as an

underground septic tank. (Picture 4.) However, it is important to emhasize that existing fuel station and underground tank <u>are not included</u> in this project.



Picture 4. Existing fuel station

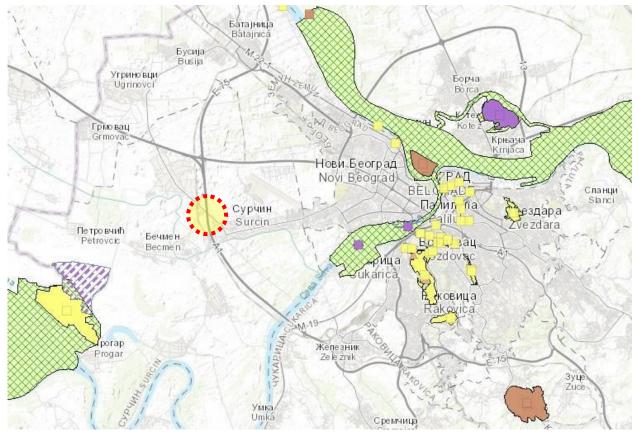
The site hosts a large number of storage containers used for storing of mobile flood protection equipment, which is planned to be stored in the new warehouse proposed for construction. (Picture 5.)



Picture 5. Existing warehouse proposed for demolition/dismantling, storage containers and residential bulding bordering the cadastral parcel

## 1.3.1. Nature Protected Zone

According to the map of protected areas, and official list of nature protected areas<sup>1</sup> prepared by Institute for Nature Protection of Serbia (INP), project area is not included in the ecological network, nor in the area of registered natural assets. Inside the wider area surrounding the project section there are many natural assets. Pictured below are protected natural monuments and areas, ecological corridors and natural area for whom the protection procedure has been initiated, and due to extreme distance from the project zone, with all of them being completely spared from any negative project impact.



Picture 6. Project zone in regards to Ecological corridors (green hatch) protected areas (yello, orange, purple and brown fill) protected monuments (yellow squares) and areas for whom the protection procedure has been initiated (purple hatch)

## Protection of cultural monuments

Upon inspecting the publicly available database of cultural assets<sup>2</sup>, the following cultural monuments were identified inside Surcin municipality:

- Church of St. Petka;
- Church of St. Paraskeva;
- Church of St. Jovan Preteca;
- National Aeronautical Museum.

With the nearest asset to the project zone being the Church of St. Petka located approximately 1.5 km away. In regards to the limited works and footprint of the proposed construction works no identified cultural assets will be impacted.

1.3.2. Land acquisition and Property – Legal affairs

<sup>&</sup>lt;sup>1</sup> <u>http://www.zzps.rs/novo/index.php?jezik=en&strana=zastita\_prirode\_zasticena\_prirodna\_dobra</u>

<sup>&</sup>lt;sup>2</sup> <u>http://heritage.gov.rs/english/nepokretna\_kulturna\_dobra.php</u>

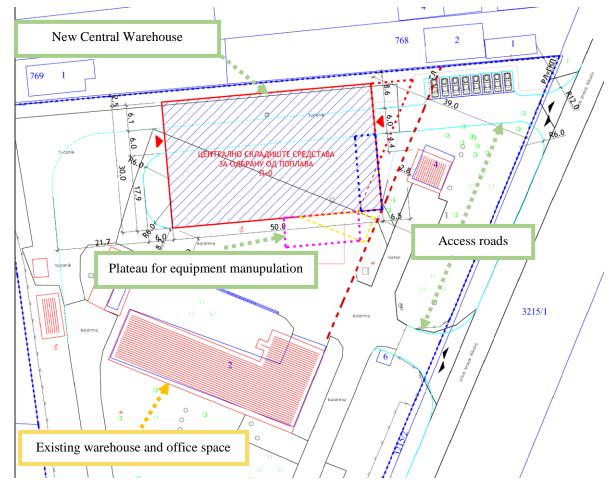
The warehouse to be upgraded is part of a larger complex for decades (since 1967) used and owned by the PWC "Galovica"a water management company owned entirely by the State. The land was subject to expropriation and evidence of lawfull acquisitiona nd payment of compensation was presented in the course of the social Due diligence. The total area of land of the entire complex is approximately 1500 m2. The development of the Warehouse will not require acquisition of unoccupied or unutilized land (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or inaccessible. "Land" includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements, and appurtenan water bodies.

The social due diligence conducted concluded that the land of the intended warehouse is public land owned by the Republic of Serbia. The construction will be constrained to the footprint of the exiting warehouse therefore confined to public land. However prior to actual development activities the social due ddilligence shall be verified by a walkover survey, and cadastral verification as these are currently unavailable due to an ongoing administrative procedure. It is not expected that the outcome of the follow up due diligence will differe from these findings but are proposed as best practice implementation case.

In term of relevance of the ESS5 it is assessed that these are not relevant.

# 1.4. An overview of the Construction work on Surcin sub-project

A new warehouse for mobile flood protection equipment in Surcin will be built close to the old office building and warehouse. Gross dimension of the new warehouse are dependent on the adopted structural solution and will be either 39.64 \* 5.60 m or 37.50 \* 5.60 m, with a gross area, including the manipulative plateau, parking spaces and access roads, of cca 1500 m<sup>2</sup>. All of the facilities will be built on the existing cadastral parcel 767/2, cadastral municipality Surcin. (Picture 4.)



ENVIRONMENTAL MANAGEMENT PLAN - ESMP, WAREHOUSE FOR MOBILE EQUIPMENT FOR FLOOD PROTECTION IN SURCIN

## Picture 7. Conceptual architectural solution

Crucial project activities are:

- Demolition (dismantling) and removal of the existing warehouses; (Picture 5.)
- Construction of a new warehouse. Gross area of about 220 m<sup>2</sup>;
- Plateau in front of the warehouse for manipulation of equipment;
- Access road and a plateau next to it with 8 parking spaces;
- Drainage system;
- Electrical instalations.



Picture 8. Existing warehouse which needs to be demolished (dismantled) and the residential building closest to the construction zone

SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM - SDIP Environmental and Social Management Plan - ESMP



Picture 9. Existing warehouse which needs to be demolished (dismantled)

## 2. LEGAL AND INSTITUTIONAL FRAMEWORK

## 2.1. Relevant Institutions

In the Republic of Serbia SDIP will be implemented through two PIU's which are formed in the Ministry of Agriculture, Forestry and Water Management (MAFWM) and the Ministry of Transport, Construction and Infrastructure (MCTI).

The MAFWM and the Ministry of Environmental Protection (MEP) are the key relevant institutions for environmental management for SDIP related projects.

The other aspects of environmental management related to SDIP projects are dealt with several other institutions, among which are the Institute for Nature Protection of Serbia and the Institute for Protection of Cultural Monuments of the Republic of Serbia, and the Public Water Management Companies (PWMC) "Srbijavode", "Beograd Vode" and "Vode Vojvodine".

## 2.2. EIA procedure in the Republic of Serbia

In the juridical system of the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment, which is completely in line with European EIA Directive (85/337/EEC, 97/11/EC, 2003/35/EC and COM 2009/378). According to that Law, preparation of the Environmental Impact Assessment is not required for the flood protection projects unless their alignments are placed within or in the vicinity of the nature or culture protected areas. In such cases the Project Proponent is obliged to submit so-called "Request for Decision about Need for Environmental Impact Assessment of the Ministry of Environmental Protection (MEP). Depending on the Ministry's assessment of significance of potential environmental impacts of the project, it is decided if there is a need (or not) to apply partial or full EIA procedure for the relevant sub-project.

Request for opinion regarding necessity of EIA procedure for each sub-project which is found to be adjacent or within the nature/cultural protected area will be submitted to the Department of Environmental Impact Assessment within the Relevant Institution.

# 2.3. Relevant Government Policies, Acts, Rules, Strategies and Guidelines

Environmental protection in Republic of Serbia is regulated by several national and municipal laws and by-laws. The environmental legislation in force in Serbia is summarized in Annex 1.

The main legal documents are:

- The Constitution of Serbia ("Official Gazette of RS" No. 98/06).
- The National Strategy for Sustainable Development ("Official Gazette of RS" No. 72/09, 81/09)
- Law on Environmental Protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09, 43/11, 14/16)
- Law on Environmental Impact Assessment ("Official Gazette of RS" No. 135/04)
- The Law on Waste Management ("Official Gazette of RS" No. 36/09, 88/10, 14/16)
- The Law on Water ("Official Gazette of RS" No. 30/10, 93/12, 101/16)
- The Law on Occupational Safety and Health ("Official Gazette of RS" No. 101/05, 91/15)
- Law on Planning and Construction ("Official Gazette of RS" No. 72/09, 81/09, 64/10, 24/11, 121/12, 42/13, 50/13, 98/13, 132/14, 145/14)
- Law on Nature Protection, ("Official Gazette of RS" No. 36/09, 88/10, 91/10, 14/16)
- Agricultural Land Law, ("Official Gazette of RS" No. 62/06, 41/09, 112/15)

## Regulations established on the basis of the Law on EIA include the following:

- Regulation on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08)
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS" No. 69/05)

## Regulation on Labour, Working Conditions and Gender equality

- Labor Law ("Official Gazette of RS" No. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017 , 113/2017 and 95/2018)
- Law on Civil Servants ("Official Gazette of RS" No. 79/2005, 81/2005, 83/2005, 64/2007, 67/2007, 116/2008, 104/2009, 99/2014, 94/2017 and 95/2018)
- The Law on Peaceful Settlement of Labor Disputes ("Official Gazette of RS" No. 125/2004, 104/2009 and 50/2018)
- Law on Employment and Unemployment Insurance ("Official Gazette of RS" No. 36/2009, 88/2010, 38/2015, 113/2017 and 113/2017)
- Law on Employment of Foreign Citizens ("Official Gazette of RS" No. 128/2014, 113/2017, 50/2018 and 31/2019)
- Law on Retirement and Disability Insurance ("Official Gazette of RS" No. 34/2003, 64/2004, 84/2004, 85/2005, 101/2005, 63/2006, 5/2009, 107/2009, 101/2010, 93/2012, 62/2013, 108/2013, 75/2014, 142/2014, 73/2018 i 46/2019)
- Law on Health Insurance ("Official Gazette of RS" No. 25/2019)
- Law on the Prohibition of Discrimination ("Official Gazette of RS" No. 22/2009)
- Law on the Prevention of Harassment at the Workplace ("Official Gazette of RS" No. 36/2010)
- Rulebook on Conduct of Employers and Employees in Relation to Prevention and Protection from Harassment at Work ("Official Gazette of RS" No. 62/2010)
- Law on Protection of Whistle Blowers ("Official Gazette of RS" No. 128/2014)
- Law on Gender Equality ("Official Gazette of RS" No. 104/2009)

# 2.4. Applicable Environmental and Social Standards

|         | E & S Standards  | Relevance                 |
|---------|--|---------------------------|
| ESS1    | Assessment and Management of Environmental and Social Risks and Impacts                          | Relevant                  |
| ESS2    | Labor and Working Conditions   | Relevant                  |
| ESS3    | Resource Efficiency and Pollution Prevention and Management                                      | Relevant                  |
| ESS4    | Community Health and Safety  | Relevant                  |
| ESS5    | Land Acquisition, Restrictions on Land Use and Involuntary Resettlement                          | Not Relevant              |
| ESS6    | Biodiversity Conservation and Sustainable Management of Living Natural Resources                 | Not Relevant              |
| ESS7    | Indigenous Peoples/Sub-Saharan African Historically Underserved<br>Traditional Local Communities | Not Relevant              |
| ESS8    | Cultural Heritage  | Not Relevant              |
| ESS9    | Financial Intermediaaries  | Not Relevant              |
| ESS10   | Stakeholder Engagement and Information Disclosure  | Relevant                  |
| OP 7.50 | Projects on International Waterways  | Not Relevant <sup>3</sup> |

Environmental and Social Standards relevant for Surcin Project are:

# 3. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

During the implementation of the subproject, impacts on environment will be a consequence of human presence and construction machines, and the nature of construction works at a location, which are limited to the location of works or its surrounding vicinity. The expected impacts are limited to the construction period, and can be easily mitigated through the application of relevant mitigation measures, as set forth in this ESMP.

The construction of a new warehouse in Surcin would not pose significant risks to the environment. In addition, the project aim is only to improve the efficiency of flood control systems. As a consequence, the range of impacts is limited (impacts directly related to the construction activities) and their magnitude remains small (localized impacts and no significant effect on future operation). Considering the nature of the proposed project, it is anticipated that adverse environmental and social impacts can be expected in the construction phase mainly. The aspect of health and safety at work is also taken into consideration. It is to be noted that parts of the construction work are taking place in an urban environment, however in all parts in an environment already strongly influenced by human activities. Broadly, the impacts in the <u>construction phase</u> can be of the following types:

- Soil and Water Pollution: during construction activities, when using machinery, there is a possibility of soil contamination due to accidental spills of oils and fuel from construction machinery. In the area of construction works, construction waste is generated which, if not properly disposed of, may result in adverse impacts. The construction works carried out inside the river bed results in a temporary increase of turbidity of the watercourse.
- **Disposal of excavated materials and construction wastes**. Demolition debris and waste are usually generated and are anticipated mostly during the demolition / dismantling works with minor impacts ancticipated during the construction phase;
- **Degradation of landscapes and soil erosion**. The impacts on vegetative cover will be short-term, localized, and totally associated with demolition / dismantling and construction works;
- **Impacts from temporary access roads and work areas**. Temporary disposal sites for excavated materials can enhance soil erosion, and degrade the landscape, as well as excess dirt and mud being spread from the machinery leaving construction site;

<sup>&</sup>lt;sup>3</sup> Relevant for the overall SDIP project implementation, not relevant for proposed sub-project

- Noise and vibration disturbances during construction and temporary air pollution (dust) related to the transportation of construction materials and truck traffic. These impacts will occur during the demolition / dismantling and construction / reconstruction works, but will be only short-term. Effects include dust from construction activities, noise during trench excavation, possible effect of vibration caused by operation of heavy machinery, increased traffic in some sections of roads, etc.;
- Safety hazards from construction activities. No major hazards are expected the construction of the proposed project elements, as long as proper construction practices and safety procedures are applied;
- **Impacts on historic-cultural and archaeological monuments.** No archaeological or cultural resources are expected to be encountered during project implementation since major works consist in construction of new warehouse in place of the two existing ones, and in case of any findings the Contractor shall cease with works momentarily and notify the relevant IPCM.
- Key Labor Risks. Contractor's employees will perform everyday construction activities, any OHS impacts will be mitigated by applying the procedures put forth in this ESMP document and relevant national legislation and the World Bank EHS Guidelines. All Employers of direct or contracted workers, in the project must ensure safety and health at work and strict adherence to the legal provisions in respect to worker's rights.

# 3.1. Potential environmental impacts of Surcin Project

In general, all negative impacts in the phase of construction are temporary and can be mitigated by applying good construction practices.

Significant negative impacts on natural environment in the <u>operational phase</u> are not expected. On the contrary, impacts in the operational phase are considered to be highly positive, as project aims at prevention of risks for environment, humans and civil infrastructure.

Project impacts by phases are shown in following table:

| Phase                     | Type of impact  |
|---------------------------|---|
| Construction phase        | Soil compaction and erosion   |
| -                         | Dust emission   |
|                           | Noise   |
|                           | Soil and water pollution  |
|                           | Damages to and removal of trees surrounding the old metal warehouse                               |
|                           | Risk to people and/or animals of unfenced and<br>unlabelled construction site                     |
|                           |   |
|                           | Health hazards and environmental impacts due to the generation of<br>construction waste           |
|                           | Pollution due to possible hazardous materials arising from the<br>demolition of the old warehouse |
|                           | Health and safety risk for workers on the construction  |
|                           | site  |
| Operational phase         | Low impact on natural environment on the project  |
|                           | location  |
|                           | Positive impact in terms of prevention of risks for   |
|                           | environment, humans and property  |
| Degree of negative impact | Minimum if mitigation measures are applied  |

## 3.2. Potential social impacts of the Surcin Project

Construction of the new warehouse will be carried on existing place and same cadastral parcel (plot no. 767/2 cadastral municipality Surcin). The project neither requires land acquisition or involuntary resettlement, clearance of occupied public land, nor leads to loss of assets, access to assets or loss of livelihood or access to means of livelihood as defined by ESS 5, nor long lasting disruptions to the natural environment and human settlements and activities.

## 3.2.1. Community information and grievance mechanism

The PIU will disclose sub-project information to allow the affected community and other stakeholders to understand the risks and impacts of the Sub-project, and potential opportunities. In course of the stakeholder engagement activities the community will be engaged in meaningful consultation with access to the following information:

- The purpose, nature and scale of the project prior to commencement of the activities;
- The duration of proposed project activities;
- Potential risks and impacts of the Sub-project on local community;
- The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate;
- The time and venue of any proposed public consultation meetings, and the process by which meetings will be notified, summarized, and reported; and
- The process and means by which grievances can be raised and will be addressed.

An official and formal LGD and CFD will be established as a forum for grievances and comments in relation to expropriation, temporary impact to any kind of property, damages in relation to execution of the works. The information about the GM will be publicly disclosed and available on the notice board of the Construction site and the Municiaplity of Surcin.

Prior to commencing construction, the implementing agency should:

- Distribute a one-page information brochure to directly affected people with the following information: (i) the purpose, nature, and scale of the project; (ii) the duration of proposed project activities and working hours; (iii) any risks ( in case of tresspasing) to and potential impacts on such people and relevant mitigation measures; and (iv) contact information to receive further information of submit concerns or complaints.
- At the work site there should be a visible sign with the name of the project, planned duration and contact information.

Below is a brief description of the procedure and responsibilities for receiving, processing and responding to communication and complaints from the public regarding this sub-project:

- Communications and complaints can be received directly by the contractor at the work site or by the Municipality through the contact information it provides to the public. It must be noted that the Municipality is the responsible for responding to any communication.
- Such communications are noted in a "communications log" to be maintained by the Municipality and the person sending the communication (verbally or on writing) receives an acknowledgement of receipt of his/her communication.
- The communication should be processed and responded two in no more than 15 days.
- The response to the communication, and any corrective action required as a result of it, must also be registered in the "communication log".

An example of a project grievance mechanism is given in Annex 2.

3.2.2. Capacity Strengthening and Training

Through SDIP project implementation relevant national agencies will familiarize themselves with WB Environmental and Social Standards through consultations and public presentations, as well as with good practices in their purposeful implementation.

Engaged Contractors will be obliged to familiarize their workers and staff engaged on Sub-Projects implementation with the Environmental and Social Standards, increasing general awareness and knowledge.

## 3.3. Other positive impacts of SDIP Project

The sub-project is expected to create a short-term project depended employment opportunities.

In case of unemployment and poverty in the project area, manpower resources will not be reduced. If some of the unemployed are employed or if employment has impact on unemployment, the project creates social benefits due to decreased social support or aid to the unemployed.

# 3.4. Potential negative Impacts and recommended Mitigation Measures

Summary of key impacts during construction phase and recommended mitigation measures are described in following table:

| impact   | significance   | comment   |  |  |
|--|----------------|---|--|--|
| impacts on<br>land use/<br>settlements,                    | low            | There will be no land acquisition as defined by WB ESS 5<br>during the project implementation. This shall be confirmed<br>by a follow up social due diligence including a walkover<br>survey prior to commencement of sub-projects activities.  |  |  |
| ground and surface water,                                  | low            | Due to low amount of drainage water that can be potentially<br>drained into any river the consequential impact is expected<br>to be minimal to negligible.<br>Also, improper disposal of excavated materials and  |  |  |
|  |                | construction wastes could adversely impact ground and surface water   |  |  |
| air quality,   | low            | Outdoor air pollution by dusts during preparation of working<br>materials and other working procedures and material<br>transport. Indoor air pollution by dust, noises etc. Temporary<br>impact. Local air quality may experience some moderate<br>and temporary deterioration due to dust from transportation<br>of construction materials and truck traffic and elevated<br>levels of nitrogen oxide (Nox) and sulphur oxide (Sox) from<br>construction equipment exhausts. Impact can be mitigated<br>by following GEMM procedures |  |  |
| flora and<br>fauna<br>(protected<br>areas and<br>species), | low            | Minimal loss or damage of vegetation and loss and damage<br>or disruption to fauna can occur during works. Removal<br>and/or damages to trees surrounding the metal<br>warehouse.Impacts can be offset or mitigated by following<br>GEMM procedures. In case of removal of trees replanting is<br>necessary. There will be no negative impacts on protected<br>areas due to nature of works.  |  |  |
| Noise and vibration,                                       | low            | Outdoor noises by electric generators, preparation of<br>construction materials, material transport etc. Only limited<br>temporary impact during the construction phase. Mitigation<br>measures in form of noise deflecting shields will be placed<br>where the work-scheduling activities cannot have desired<br>effect. Impact can be mitigated by following GEMM<br>procedures.  |  |  |
|  |                | Soil contamination can occur from:  |  |  |
| Soil quality,  | low            | Spillage of hazardous and toxic chemicals. Contamination<br>by inappropriate paints, lubricants etc. Impact can be<br>mitigated by following GEMM procedures  |  |  |
| Loss of top<br>soil  | low/negligible | Site is fully developed impact is negligible  |  |  |
| existing<br>infrastructure                                 | low            | Increased traffic due to construction activities, as well as destruction of existing road infrastructure. Impact can be partially mitigated by using main traffic routes.   |  |  |
| Waste,   | low            | Health hazards and environmental impacts can happen due<br>to improper waste management practices. Demolition waste<br>and other waste management impacts can be mitigated by<br>following GEMM procedures, Law on Waste management   |  |  |

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| impact   | significance   | comment  |  |  |
|--|----------------|--|--|--|
|  |                | and the Local Waste Management Plan for the city of Belgrade <sup>4</sup> .  |  |  |
| cultural and<br>religious<br>issues,   | low/negligible | No identified cultural assets in the vicinity of the project area, works will be executed in place of existing buildings.  |  |  |
| Cumulative impacts etc.  | negligible     | There are no cumulative impacts of the works   |  |  |
| Staff safety   | low            | Construction workers may be affected adversely due to hazardous working environments where high noise, dust, unsafe movement of machinery etc. may be present.   |  |  |
| Community<br>Health and<br>Safety we we have a state of the sta |                | Risk to community health and safety (ESS4). The major risks<br>tied to Community health and Safety relate to potential traffic<br>and road safety risks to workers, affected communities and<br>road users throughout the project life. These risks mainly<br>stem from increased traffic on haulage routes from and to<br>potential borrow and deposit areas to be used by the<br>Contractors during construction works. Increased risk from<br>hazardous materials including UXOs, mines and mine-<br>exploding devices might be found which shall adequately be<br>addressed through development of "Unexploded ordnance<br>and mines chance finds procedure. Health and safety risks<br>posed by the influx of workers or people providing support<br>services into an area are almost considered negligent, while<br>Gender-Based Violence (GBV) or Sexual Exploitation and<br>Abuse (SEA) of children, or communicable diseases are not<br>anticipated in relation to the project. |  |  |

# Table 2: Identification of main risks

| Activity                      | Possible Risks   |
|-------------------------------|--|
| Demolition/construction works | Risk for contamination of the territory elements that can be dispersed at groundwater sources.   |
|                               | Risk on workers life if not respecting technical safety conditions. Risk by accidents caused by electrical power and humidity.                 |
|                               | Risk of improper waste management and possible impact from hazardous materials during the demolition phase.                                    |
|                               | Risk on workers' health in case of air pollution or other contamination by waste waters and materials to be used on contraction/rehabilitation |
| Transport                     | Risk of life of inhabitants, pedestrians and workers in the road from construction site  |
| Infrastructure                | Road consummation and destruction of road pavement by passing of big transport vehicles.   |

## Table 4: Identification of possible impacts and risks during operation phase

<sup>&</sup>lt;sup>4</sup> <u>http://www.sepa.gov.rs/download/UpravOtpad/BeogradLPUO.pdf</u>

| Activity                              |         |                      | Possible impacts/risks                  |
|---------------------------------------|---------|----------------------|---|
| Using<br>materials/cho<br>maintenance | emicals | inappropriate<br>for | Possible contamination of the territory |

Possible adverse effects as a consequence of temporary construction activities shall, among other things, consist of: damages to access roads, noise, waste and dust; gaseous emissions; potential soil and water contamination; short-term disruptions to surrounding ecosystems; and momentary disruptions to neighbouring settlements through various project and operational activities.

Increasing the intensity of the road transport during the construction works, may increase the risk of accidents for pedestrians.

Of activities not present directly at the construction site, the following stand out: quarry and borrow pit operations which if not managed properly, may lead to temporary adverse impacts.

# 3.5. Potential water / wetland contamination

Considering possible pollutions after works completion, they are limited to accidents only. In which case as defined by the Ministry of Interior and the Law on Water, procedures for incidental situations will be applied.

Spillage of fuels and oils may, in most cases, occur on manipulative surfaces where equipment and construction mechanization are maintained and cleaned. Effluent dirty water should be treated in separators of adequate size before being discharged towards the recipient.

If any spillage occurs inside the project area, the Contractor is obligated to react by applying absorbing materials, such as absorbing carpets / linens, and/or sand, as well as remove the layer of contaminated soil and move it to an approved location, in accordance with the Law.

# 4. ENVIRONMENTAL MITIGATION MEASURES

This document presents a site-specific ESMP, prepared by the ESSS and is required for each SDIP subproject. A site-specific ESMP is an action plan detailing which of the Environmental Assessment report recommendetations and alternatives are adopted and implemented. It can be produced as part of Detailed Design, or like the subject ESMP, as a free-standing document. It ensures incorporation of the relevant environmental factors, key impacts and their proposed mitigation measures into the overall project design and links the project to other relevant Environmental and Social Standards.

# 4.1. Cost Estimates

Scope of prescribed mitigation measures for the subject project works is such that it correlates with good environmental practises during construction and their implementation will have a negligible impact on the total cost of the works.

It is the Contractor's obligation to cost implementation of environmental mitigation measures in his overall cost. The Contractor will be required to provide a short statement that confirms that:

- the ESMP conditions have been costed into the tender price,
- the Contractor has a qualified and experienced person on the Contractor's team who will be responsible for the environmental compliance requirements of the ESMP
- the Contractor and its sub-contractors will comply with Republic of Serbia national laws and Lender requirements.

## 4.2. Mitigation Measures

4.2.1. General

This section details out the potential environmental and social impacts of the SDIP sub-projects including Surcin project.

## 4.2.2. Environmental and Social Impacts and Respective Mitigation Measures

## Potential air pollution - Dust

**Impact** - Possible sources of air pollution will be dust due to maintenance activities, machinery movement and other sources. Construction works involve breaking up, digging, crushing, transporting, and disposal of small quantities of dry materials. Locally, the air quality may experience some moderate and temporary deterioration due to dust from construction traffic and elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhausts. The dust may settle on vegetation, crops, structures and buildings.

**Mitigation Measures -** Spraying of water is the main way of controlling dust. Water is, in any case, required to be added to fill material during the repair / reconstruction works.

### Potential water contamination

**Impact -** Water contamination may occur during the execution of the project from site run off, spills from the equipment maintenance areas from the work site. As for the potential pollution during operation, these are mostly limited to accidents. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

**Mitigation Measures -** Fuel and lubricant spills can occur at the work site while maintaining and washing equipment and work vehicles. During the normal operations, these areas should be equipped with the adequately sized, gravity oil separator. Should spills occur, to mitigate the problem the Contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and dispose them in approved facility, in accordance with the Water Law.

Contractor should produce a Waste Management Plan for the Project. Mitigation measures should, among other requirement, contain contractor obligations to:

- Locate the garbage pit/waste disposal site min 500 m away from the residential area so that people from Surcin are not disturbed with the odour likely to be produced from anaerobic decomposition of wastes at the waste disposal places. Encompass the waste disposal place by fencing and tree plantation to prevent children to enter the area. All solid waste will be collected and removed from the work camps and disposed in approval waste disposal sites.
- In case oil and grease are trapped for reuse in a minimum 60cm thick lined pit, care shall be taken to ensure that the pit should be located at the lowest end of the site and away from the residential areas.
- In case of filling of low-lying areas with wastes, it needs to be ensured that the level matches with the surrounding areas. In this case care should be taken that these low lying areas are not used for rainwater storage.
- Ensure that all construction waste from demolition/dismantling of existing warehouses, as well as municipal waste generated throughout the project cycle is handed over to the responsible authority for waste collection.

### Equipment maintenance and fuelling

**Impact** - **e**quipment maintenance and fuelling may cause contamination of soils and watercourses, including groundwater, if handling of lubricants, fuels and solvents is improper or careless.

**Mitigation Measures -** To avoid damage to natural environment there is a need to ensure proper handling of lubricants, fuels and solvents while maintaining the equipment.

### **Occupational Health and Safety**

**Impacts** - Construction workers may be affected adversely due to hazardous working environments where high noise, dust, unsafe movement of machinery etc. may be present.

**Mitigation Measures -** The Contractor shall instruct his workers in health and safety matters, and require from the workers to use the provided personal safety equipment. Contractor has to ensure that all operators of heavy or dangerous machinery are properly trained/certified, and also insured. He will have to provide first aid facilities, rapid availability of trained paramedical personnel, and emergency transport to nearest hospital with accident and emergency facilities.

## <u>Noise</u>

**Impact** - Noise caused by the repair / reconstruction works will have only a temporary impact. Although temporary and mostly moderate, noise impacts in the vicinity of residential areas may cause negative health impact, if not mitigated.

**Mitigation Measures -** In sensitive areas (schools, nature parks, hospitals) special care regarding noise emission will be taken by the Contractor, strictly respecting the ESMP requirements. In case of noise disturbance with noise emissions which are above permitted level, temporary noise barriers should be considered as appropriate mitigation measure. Awareness building and administrative measures should be taken to ensure proper maintenance of vehicles. In case of exceeded noise limits for sensitive areas the Contractor should erect temporary shields to prevent a free noise spreading to the sensitive receptors.

Based on the preliminary assessment, key mitigation measures recommended under this Environmental and Social Management Plan (ESMP) are listed as follows:

- Identify and locate on project plans any sensitive natural resources in the project area including but not limited to patches of natural habitat, bird colonies, and wetlands, unique plant communities etc. (consult with local nature protection authorities).
- Provide for zones of preliminary accumulation of wastes that will cause no damage to the vegetation cover and other components of the environment.
- Transport and disposal of construction concrete rubbles, debris and spoils in approved paths and landfills/disposal sites.
- Delineate existing access roads/ work areas carefully and prevent their expansion.
- Rehabilitate access roads and work areas after work completion (scratch soil with special engine, put fertile topsoil in place, etc.).
- Use closed/covered trucks for transportation of construction materials.
- Clean the surrounding area from dust by water sprinkling, removal of excess materials and cleaning of sites upon completion of activities.
- Restoration to quasi-original conditions of landscape after completion of construction and repair / reconstruction works.
- Arrange necessary preservation measures (establish protection zones, by-pass these areas during transportation and other).
- Cease the works as soon as historical and cultural monuments are encountered during earthworks and provide relevant information to the competent Institution for Historical and Cultural Monuments Protection.

## <u>Labor risk</u>

**Impacts** - Workers may be exposed to usual construction site hazards associated with these moderate risk construction works but may be exposed to working at hights, scaffolding, operating of and around equipment and machinery

# Mitigation Measures – The Contractor shall deploy a commensurate Health and Safety Plan to be approved by the Engineercovering the workplace risks.

## Imapcts - Workers may have workplace disputes and concerns,

**Mitigation measure>** Establishment of a worker specific grievance mechanism for project workers. The project worker is entitled to give suggestions, remarks and information regarding health and safety at work. He/She may refuse to work if his/her life or safety is endangered or if appropriate measures for provision of health and safety at work are not in place. The project workers should be informed on available grievance mechanisms upon their employment or engagement. Contracted parties should demonstrate their willingness to implement these mechanisms, even if such requirement is not prescribed by any law of the domicile country.

# Prior to initiating works, the Contractors will be required to prepare and submit for approval Site-Specific Implementation Plans (SSIP) consisting of:

- Waste and wastewater management plan
- Site Organization Plan
- Re-foresting plan
- Emergency response plan

The following table presents the Mitigation Plan for SDIP Sub-project Surcin and it is intended as a checklist to ensure that relevant mitigation measures are implemented at appropriate project stages.

Contractors are obligated to familiarize their workers with the Environmental and Social protection measures put forth within the subject ESMP document.

# 4.3. Mitigation Plan for SDIP Sub-Project SURCIN

| Phase                  | Problem/activity<br>impact  | Mitigating measure  | Institutional responsibility                             | Comment   |
|------------------------|---|---|--|---|
| PRE-<br>CONSTRUCTION   | EIA Procedure and Tender documents preparation  |   |  |   |
|                        | Tender documents<br>prepared with access to<br>or use of the this ESMP in<br>a translated version | No tender documents will be prepared without<br>incorporated a (Serbian) copy of the mitigation and<br>monitoring plan ESMP, which shall be included in the<br>safeguard clauses of the Technical Specifications in the<br>contracts and commitment to comply with Lender<br>Requirements | PIU on behalf of the Investor<br>PWMC "Srbijavode"       |   |
| Planning/<br>Designing | Increased possibility of<br>employment and gaining<br>income in the local<br>community.           | Prioritise qualified local population in employment.  | Contractor   | Problems should be regulated through tender documentation.  |
| Planning/<br>Designing | Assure compliance with relevant construction field legislation                                    | Acquire construction permit Provide Water management guidelines if subprojects are executed near surface watercourses.  | Project applicant  |   |
| Planning/<br>Designing | Assure compliance with relevant construction field legislation                                    | Acquire construction permit Provide Water management guidelines if subprojects are executed near surface watercourses.  | Project applicant  |   |
| CONSTRUCTION           |   | Material supply   |  |   |
|                        | Quarry, concrete and asphalt plant .  | use existing quarries, concrete and asphalt plants, use<br>licensed suppliers for other materials; requirement for<br>official approval or valid operating license  | Quarry, concrete and asphalt<br>plant, material supplier | to be specified in tender<br>documents -Conditions<br>for selection of<br>subcontractors for<br>material supply |
| CONSTRUCTION           |   | Material transport  |  |   |

| Phase  | Problem/activity<br>impact   | Mitigating measure   | Institutional responsibility | Comment  |
|--|--|--|------------------------------|--|
|  | Dust, fumes  | All trucks are to be covered   | Truck operator               | a)-d) to be specified in<br>tender documents-<br>Technical<br>Specifications for<br>realization of works |
|  | Stone, Dust  | wet or cover truck load  | Truck operator               |  |
|  | Sand and gravel,<br>Dust   | wet or cover truck load  | Truck operator               |  |
|  | Dust emissions from the<br>site may impact air quality<br>and pose a health threat<br>to workers and<br>neighbours | In case of disposal of dredged or excavated materials<br>the debris shall be kept in controlled area and sprayed<br>with water mist to reduce debris dust<br>During pneumatic drilling/compaction dust shall be<br>suppressed by ongoing water spraying and/or installing<br>dust screen enclosures at site<br>The septic tank (in case of reconstruction of existing<br>ones) installed at toilet should be enclosed in quite<br>hermetic manner to avoid unpleasant smells.<br>The surrounding environment (side walks, roads) shall<br>be kept free of debris to minimize dust<br>There will be no open burning of construction / waste<br>material at the site<br>There will be no excessive idling of construction vehicles<br>at sites<br>All materials will be supplied/transported in a manner<br>which minimizes dust – including covered truck loads or<br>closed off truck loads, with dust suppressing measures<br>through water spraying<br>Wheels of transport vehicles will be washed prior to<br>leaving the construction site | Construction Contractor      |  |
| Rehabilitation/<br>Reconstruction/<br>Repair | Population at increased<br>risks of traffic accidents<br>and construction works to<br>population.                  | Assure adequate warning signs, lighting, protective<br>fencing etc.<br>Observe traffic rules.<br>Clean construction waste form the construction site both<br>in the construction phase and after works completion,   | Contractor                   | Problems should be<br>regulated through the<br>Works execution<br>contract.                              |

| Phase        | Problem/activity<br>impact   | Mitigating measure  | Institutional responsibility | Comment                      |
|--------------|--|---|------------------------------|------------------------------|
|              |  | when closing the construction site.<br>Assure medical supplies and aid through institutional and<br>administrative arrangements with municipal hospitals at<br>the construction site.<br>Implement the Construction Site Organisation Plan.   |                              |                              |
| CONSTRUCTION |  | Construction site   |                              |                              |
|              |  |   |                              |                              |
|              | Excavation works may<br>uncover archaeological or<br>other significant findings                  | Stop all works on site in case of chance finding and notify proper authorities.   | Construction Contractor      | Project implementation delay |
|              | Potential water and soil<br>pollution from improper<br>material storage,<br>management and usage | organize and cover material storage areas; isolate<br>concrete, works from watercourse by using sealed<br>formwork or covers; isolate wash down areas of concrete<br>trucks and other equipment from watercourse by<br>selecting areas for washing that are not free draining<br>directly into watercourse  | Construction Contractor      |                              |
|              | Water and soil pollution from improper disposal of waste materials                               | dispose waste material at location protected from washing out, should be marked in the site plan; if not on site, then at authorized landfill / depot   | Construction Contractor      |                              |
|              | Water and soil pollution<br>from improper disposal of<br>waste materials                         | Storage of wastes according to international best practice<br>(IFC EHS General Guideline). Apply additional measures<br>for storage of hazardous wastes (such as use of<br>secondary containment, access restriction, provision of<br>PPE etc.) as necessary to prevent harm to construction<br>staff, environment and public. Use and labelling of<br>designated waste collection containers and storage areas<br>for different kinds of wastes. | Construction Contractor      |                              |
|              | Improper waste management may cause  | Designated waste disposal areas will be allocated on site, including waste collection bins for smaller waste,   | Construction Contractor      |                              |

| Phase | Problem/activity<br>impact   | Mitigating measure   | Institutional responsibility | Comment |
|-------|--|--|------------------------------|---------|
|       | pollution of soil and<br>groundwater or cause<br>scattering by<br>wind/animals and pose a<br>health risk | and designated areas for bulkier waste<br>All waste, including construction debris and excavated<br>materials will be regularly and timely transported off site<br>and managed through an authorized agency or disposed<br>of at a site that was officially designated by the local<br>authorities – Surcin Municipality<br>Waste collection and disposal pathways and sites will be<br>identified for all major waste types expected from<br>demolition and construction activities.<br>Mineral construction and demolition wastes will be<br>separated from general refuse, organic, liquid and<br>chemical wastes by on-site sorting and stored in<br>appropriate containers.<br>The records of waste disposal will be maintained as<br>proof for proper management as designed.<br>Whenever feasible the contractor will reuse and recycle<br>appropriate and viable materials<br>Removed vegetation may best be composted on site, at |                              |         |
|       |  | a designated and managed area.<br>All oily wastes will be separately collected, in bins which<br>are leak- proof, and will be handled over to the authorized<br>management and Disposal Company, receipts for which<br>shall be kept.  |                              |         |
|       | Water and soil pollution from improper disposal of waste materials                                       | Transport of waste in marked vehicles designed to the<br>type of waste to minimise the risk of release of materials<br>(hazardous and non-hazardous materials) and windblown<br>debris. Training of drivers in handling and disposal of<br>their cargo and the documentation of the transport<br>describing the nature of the waste and its degree of<br>hazard.   | Construction Contractor      |         |
|       | Potential contamination of<br>soil and water from<br>improper maintenance                                | apply best engineering practice in safe storage and<br>handling of lubricants, fuel and solvents by secured<br>storage; ensure proper loading of fuel and maintenance  | Construction Contractor      |         |

| Phase | Problem/activity<br>impact  | Mitigating measure   | Institutional responsibility | Comment |
|-------|---|--|------------------------------|---------|
|       | and fuelling of equipment   | of equipment; collect all waste and dispose to permitted waste recovery facility   |                              |         |
|       | Improper material storage<br>and use may cause<br>pollution of air, soil or<br>water  | Store all materials in original containers in adequate<br>locations, which allow for leak-proof storage<br>Do not dispose of paint and other waste containers<br>except through adequate handling procedures<br>Ensure workers are familiar with safety regulations and<br>storage requirements for each product.  | Construction Contractor      |         |
|       | Construction works on<br>site may impact the<br>quality of surface<br>waters(small natural<br>ponds) and subsequently<br>ground water | The site will establish appropriate water and sediment<br>control measures such as e.g. silt fences to prevent<br>water sediment from moving off site and causing<br>pollution.<br>Collectors will be provided to avoid surface water<br>dispersion in case of watering of sand or gravel to<br>control the dusts<br>Construction vehicles and machinery will be washed only<br>in designated areas where runoff will not pollute natural<br>surface water bodies, and will be adequately collected<br>and managed<br>Before starting the painting activity, the bottom will be<br>covered by plastic paper to ensure collection of colours<br>drops in the soils. After finalization of work this plastic<br>will be removed and disposed at places defined by local<br>authorities.<br>Prepare mixed cement etc. in isolated space. Pave with<br>cement a surface of 20m2 in appropriate distance and<br>into the warehouse territory, avoiding penetration in<br>ground layers of several building material components.<br>Avoid repair, refuelling or any interventions on<br>equipment on unpaved areas with inadequate leak<br>control trays. Information of workers and operators in the<br>importance of respecting the preventions to avoid<br>possible contamination | Construction Contractor      |         |

| Phase | Problem/activity<br>impact      | Mitigating measure   | Institutional responsibility | Comment |
|-------|---------------------------------|--|------------------------------|---------|
|       |                                 |  |                              |         |
|       | Workers safety                  | provide workers with safety instructions and protective equipment; safe organization of bypassing traffic  | Construction Contractor      |         |
|       | Workplace disputes and concerns | Labour Grievance Mechanisam in place   | PIU/Contractor               |         |
|       | Community health and safety     | <ul> <li>Preparation of all pertaining parts of Construction H&amp;S<br/>Management Plan (OHS, community safety plan, traffic<br/>management plan, hazardous materials safety plan,<br/>training programme, emergency preparedness and<br/>response etc.)</li> <li>Traffic Management Plan</li> <li>Following emergency preparedness and response plans<br/>will be prepared, as a minimum:</li> <li>Spill Response Plan,</li> <li>Fire Response Plan (fire and explosion hazards,<br/>identify evacuation routes;</li> <li>Traffic Accident Response Plan</li> <li>Structure Collapse Preparedness and Response<br/>Plans</li> <li>Flooding preparedness and response plan</li> <li>Unexploded ordnance preparedness and Response<br/>Plan (which will include Unexploded Ordnance Chance<br/>Finds Procedure;</li> <li>Minimum content of plans - Organisational structure,<br/>Responsibilities, Communication, Procedures, Training,<br/>Resources.</li> <li>When required by the National Legislation, Contractor is<br/>obliged to consult relevant Institutions/Ministries and<br/>obtain approval for these plans.</li> <li>Security personnel Code of Conduct and awareness<br/>training</li> <li>Avoid night time construction when noise is loudest.</li> </ul> | Construction Contractor      |         |

| Phase | Problem/activity<br>impact   | Mitigating measure  | Institutional responsibility | Comment |
|-------|--|---|------------------------------|---------|
|       |  | <ul> <li>Avoid night-time construction using heavy machinery, from 22:00 to 6:00 near residential areas.</li> <li>No discretionary use of noisy machinery within 50m of residential areas and near institutions, manual labor can be used at this point.</li> <li>Good maintenance and proper operation of construction machinery to minimize noise generation.</li> <li>Where possible, ensure non-mechanized construction to reduce the use of machinery</li> <li>Undertake regular maintenance of generatorregulate traffic and pedestrian circulation in instances of increased risk; put up signs visualizing construction site boundaries;</li> </ul>   |                              |         |
|       | Labor risks  | Workers may raise their concerns (safety, discontent, maltreatment or else) through the Grievance Mechanism.  | Construction Contractor      |         |
|       | The overall worker safety,<br>and risks of unauthorized<br>and un desired access to<br>construction site | The inhabitants leaving close to construction site will<br>be notified of the works, objectives and temporary<br>expected negative impacts through appropriate<br>communication; public meetings, etc. All legally<br>required permits will be acquired for construction<br>and/or rehabilitation. Contractor formally agrees that all<br>work will be carried out in a safe and disciplined<br>manner designed to minimize impacts on neighbouring<br>residents and environment. Including organization of<br>transport to minimize impacts on neighbourhood, and<br>washing of vehicle tires to minimize spreading of<br>debris on the roads. Workers will comply with<br>international good practice (always hardhats, as<br>needed masks and safety glasses, harnesses etc.).<br>Workers also will be contracted respecting Serbian<br>legislation, and the developer should respect all<br>hygienic and safety rules conditioned by Serbian<br>legislation. Life insurance of workers etc. will be<br>provided by the employer. Technical security | Construction Contractor      |         |

| Phase | Problem/activity<br>impact  | Mitigating measure  | Institutional responsibility | Comment                                      |
|-------|---|---|------------------------------|--|
|       |   | measures will be provided by the employer.<br>Emergency safety kit should be placed close to the<br>working place for intervention in case of accidents.<br>Emergency contacts and numbers should be clearly<br>posted on site. In case of contact with polluted waters<br>of channels or sediments the workers should have<br>safety clothes. Appropriate warning signposting of the<br>working sites, visual barriers etc., will be used to<br>prevent accidents. |                              |  |
|       | Accidents during<br>construction works may<br>cause unintentional<br>damage to the local<br>infrastructure or power<br>supply net | Ensure all adequate permits from local utilities have<br>been obtained. Ensure familiarity with networks in the<br>proximity of the site. In case of accidental disruption,<br>immediately stop all works, notify proper authorities in<br>Surcin and emergency remediation of damaged network<br>in line with the legal requirements   | Construction Contractor      |  |
|       | Use of raw materials may<br>pose an additional stress<br>on the natural<br>environment  | Use raw materials (sand, gravel, stone) only from suppliers that have valid licenses issued by the Relevant Institution.  | Construction Contractor      |  |
|       | Noise generated during<br>works may pose a threat<br>and risk to the workers on<br>site, animals and<br>neighbouring properties   | Construction noise will be limited to restricted times<br>agreed to in the permit in respect with Serbian<br>Environmental Legislation. During operations the engine<br>covers of generators, air compressors and other<br>powered mechanical equipment shall be closed, and<br>equipment placed at station territory.  | Construction Contractor      |  |
|       | Works done on site may<br>damage or permanently<br>remove vegetation  | Ensure no damage to vegetation occurs on site.<br>In case of unavoidable damage, re-plant same species<br>on site. Ensure visually the same appearance as before<br>works started.  | Construction Contractor      | Temporary decrease of green cover efficiency |
|       | Use of heavy-duty   | Ensure local community is aware of any major transport requirements and disruptions to the regular traffic  | Construction Contractor      | Temporary decrease of green cover efficiency |

| Phase       | Problem/activity<br>impact  |  |                            | Comment   |
|-------------|---|--|----------------------------|---|
|             | transport vehicles for<br>materials on site can<br>cause local traffic<br>disturbances              | pattern. Adequately manage traffic and use postings to warn others of possible congestion.   |                            |   |
|             | Construction material<br>leftovers after the closure<br>of temporary construction<br>sites          | All shivers and material that remain after the closure of<br>temporary construction sites are to be removed from the<br>location and reused/recycled where possible.<br>All remains are to be disposed of in a manner that will<br>not be harmful to environment; this is to be done by<br>companies that have permits to perform such works   | Contractor                 | Problems should be<br>regulated through the<br>Works execution<br>contract. |
|             |   |  |                            |   |
| MAINTENANCE |   | Construction site  |                            |   |
|             | Obligation of publishing<br>the results of<br>archaeological<br>excavations                         | It is necessary to provide funding for storing, publishing<br>and presenting for goods which will be discovered,<br>archaeologically excavated and researched, documented<br>and conserved for the sake of permanent scientific and<br>professional presentation encompassed in an investment<br>project   | Investor PWMC "Srbijavode" |   |
|             | Possible air, water and<br>soil pollution / dust,<br>vehicle exhaust, fuel and<br>lubricants spills | apply best engineering practice in safe storage and<br>handling of lubricants, fuel and solvents by secured<br>storage; ensure proper loading of fuel and maintenance<br>of equipment; collect all waste and dispose in line with<br>the Law on waste management ("Official Gazette of RS"<br>No. 36/09, 88/10, 14/16);<br>Organize and cover material storage areas; selecting<br>areas for washing that are not free draining directly or<br>indirectly into watercourse (Sava River);<br>dispose waste material at location protected from<br>washing out | Maintenance Contractor     |   |

| Phase     | Problem/activity<br>impact  | Wilfidating measure   |   | Comment |
|-----------|---|---|---|---------|
| Operation | Improper waste water<br>management may cause<br>contamination of ground<br>waters | Avoid any activities that may leak hazardous constituents<br>into the ground;<br>Ensure the existing septic tank is regularly emptied.                                    | Operator of warehouse and<br>Surcin Municipality          |         |
| Operation |   |   | Operator of warehouse with local waste collection utility |         |
| Operation | Leaks and spills in station<br>can pollute the surface<br>water                   | Have in place a leak control action plan. Provide leak<br>proof bins for collection of oily wastes or equipment which<br>can drip oil. Ensure waste is adequately managed |   |         |

## 5. ENVIRONMENTAL AND SOCIAL MONITORING ACTIVITIES

DWM/PIU and PSC will monitor overall environmental performance during project implementation, as put forth in the subject ESMP document.

For each of the environmental components, the monitoring plan specifies the parameters to be monitored; location of the monitoring sites and duration of monitoring. The monitoring plan also specifies the applicable standards, implementation and supervising responsibilities.

In addition to the critical locations selected during design stage, the environmental monitoring will also be done at the construction camp site and any other plant site as determined relevant during repair / reconstruction works stage.

World Bank guidance on the environmental aspects of project monitoring, including its health and socioeconomic aspects, is provided in Environmental Assessment Sourcebook Update 14 Environmental Performance Monitoring and Supervision (June 1996).

The project's monitoring program included air, water, noise, soil and social impacts occurring during construction and operation phases, unscheduled environmental compliance inspections during construction, final inspection upon completion to ensure site condition is satisfactory, and assessment of sites prior to and after construction to ensure no loss of natural values.

Elements of an environmental performance-monitoring program:

Objectives

Indicators linked to project impacts and mitigation measures

Measured parameters

Institutional responsibilities, timing

Reporting arrangements

Cost and financing provisions

The following table presents the monitoring activities and responsibilities over the implementation of proposed mitigation measures, during execution of SDIP sub-project Surcin.

# 5.1. Monitoring Plan for SDIP Sub-Projects SURCIN

| Phase                                       | What is the parameter to be   | Where the parameter                      | How the parameter<br>should be<br>monitored?/ type of | When the parameter should be monitored? (frequency of       | Why the parameter should be monitored?   | Institutional responsibility  |
|---|---|--|---|---|--|---|
| FlidSe                                      | monitored?  | should be monitored?                     | monitoring<br>equipment                               | measurement or continuous)                                  | (optional)   | Operate   |
| CONSTRUCTION                                |   |  | Material transport                                    |   |  |   |
| Concrete and<br>Asphalt plants,<br>Quarries | Possession of<br>environmental<br>permits for<br>concrete and<br>asphalt plants<br>and quarries and<br>other suppliers<br>from which<br>material is<br>supplied | Legal entities<br>that own the<br>plants | Insight into the documentation                        | During material supply                                      | ensure compliance of the<br>plants with<br>environmental and social<br>provisions and health<br>and safety at work | Supervision<br>body   |
| Stone                                       | truck load<br>covered or<br>wetted  | job site                                 | supervision   | unannounced inspections during work, at least once per week | and safety requirements and enable as  | Supervision<br>Contractor   |
| Sand and gravel                             | truck load<br>covered or<br>wetted  | job site                                 | supervision   | unannounced inspections during work, at least once per week | little disruption to traffic as it is possible   | Supervision<br>Contractor   |
| Traffic management                          | hours and routes selected   | job site                                 | supervision   | unannounced inspections during work, at least once per week |  | Supervision<br>Contractor   |
| CONSTRUCTION                                |   |  | Construction Site                                     | ·   |  |   |
| During construction                         | Chance findings   | On site                                  | Through site log                                      | Regularly through construction works                        | To ensure adequate<br>management of chance<br>findings   | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |

|                     | What is the  | Where the parameter                   | How the parameter should be                                 | When the parameter should be  |   | Institutional responsibility |
|---------------------|--|---------------------------------------|---|---|---|------------------------------|
| Phase               | parameter to be<br>monitored?  | should be<br>monitored?               | monitored?/ type of<br>monitoring<br>equipment              | monitored? (frequency of<br>measurement or continuous)                  | should be monitored?<br>(optional)  | Operate                      |
| During construction | Does the<br>construction site<br>meet the criteria<br>from the<br>guidelines for<br>good<br>construction<br>practice | At the construction site              | Visual supervision.<br>Insight into the<br>documentation.   | During the works execution  | Ensure application of<br>good construction<br>practises and Site<br>Orgazation Plan                     | Supervision<br>body          |
| During construction | Working hours<br>control   | At the works<br>execution<br>location | Visually and<br>comparison with the<br>Site Orgazation Plan | Upon received citizens'<br>complaints                                   | Ensure limiting of<br>construction generated<br>impacts to citizens,<br>protection if workers<br>rights | Supervision<br>body          |
| Dust                | air pollution<br>(solid particles)   | at and near job<br>site               | inspection and visual observation                           | unannounced inspections during<br>material delivery and<br>construction | health and safety<br>requirements and enable<br>as little disruption to<br>traffic as it is possible    | Supervision<br>Contractor    |

|                     | What is the  | Where the parameter                                 | How the parameter should be  | When the parameter should be  | Why the parameter   | Institutional responsibility  |
|---------------------|--|---|--|---|---|---|
| Phase               | parameter to be<br>monitored?                                    | should be<br>monitored?                             | monitored?/ type of<br>monitoring<br>equipment   | monitored? (frequency of<br>measurement or continuous)  | should be monitored?<br>(optional)  | Operate   |
| During construction | Air and Soil<br>quality  | On construction<br>site and<br>surrounding<br>areas | Visually inspect dust<br>generation and<br>control. Inspect<br>presence and if any<br>smell is emitted from<br>the septic tank on<br>site. Visually inspect<br>presence of<br>clandestine waste on<br>site and in<br>surroundings.<br>Visually inspect for<br>leaks of oily<br>materials.<br>Keep proof of waste<br>being collected by<br>authorized company.<br>Visually inspect signs<br>of open burning<br>of wastes. | Continuously during construction<br>works   | To ensure works are<br>conducted as per the<br>utmost safety and<br>environmental protection<br>standards | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| Workers safety      | protective<br>equipment;<br>organization of<br>bypassing traffic | job site  | inspection   | Unannounced inspections during<br>work. It is recommended to use<br>H&S template for this purpose<br>(next table) |   | Supervision<br>Contractor   |

| Phase               | What is the<br>parameter to be  | Where the parameter                                 | How the parameter<br>should be<br>monitored?/ type of   | When the parameter should be<br>monitored? (frequency of | Why the parameter should be monitored?  | Institutional responsibility  |
|---------------------|---|---|---|--|---|---|
| FlidSe              | monitored?  | should be<br>monitored?                             | monitored // type of<br>monitoring<br>equipment   | measurement or continuous)                               | (optional)  | Operate   |
| During construction | Notification,<br>information of<br>workers for the<br>importance of<br>environmental<br>and hygienic<br>protection,<br>Worker and<br>farmers safety<br>and health | On construction site                                | Maintain a log of<br>workers and<br>neighbour<br>notification, all<br>information efforts,<br>permits obtained,<br>supervisor will<br>provide regular<br>reports on ESMP<br>compliance, worker<br>safety, and on<br>possible complaints.<br>Number of registered<br>accidents Existence<br>of hygienic<br>Conditions for<br>workers, Protective<br>equipment application<br>Appropriate signs will<br>be inspected visually | Continuously during construction<br>works                | To ensure works are<br>conducted as per the<br>utmost safety and<br>environmental protection<br>standards | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction | Noise levels  | On construction<br>site and<br>surrounding<br>areas | Ensure compliance<br>with permit as per<br>Serbian law.<br>Measurements on<br>complaints from<br>neighbours.  | Continuously during construction works                   | To ensure noise levels<br>do not exceed<br>permissible  | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction | Water Quality   | On construction<br>site and<br>surrounding<br>areas | Visually and upon<br>complaints of, waste<br>materials in small<br>ponds, spills or leaks.  | Continuously during construction works                   | To ensure there is no pollution caused to the waters  | Contractor to<br>implement,<br>Supervisor to<br>review and report       |

SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM - SDIP Environmental and Social Management Plan - ESMP

| Phase                         | What is the parameter to be monitored?                                      | Where the<br>parameter<br>should be<br>monitored?   | How the parameter<br>should be<br>monitored?/ type of<br>monitoring<br>equipment  | When the parameter should be<br>monitored? (frequency of<br>measurement or continuous) | Why the parameter<br>should be monitored?<br>(optional)                                     | Institutional responsibility  |
|-------------------------------|---|---|---|--|---|---|
|                               |   |   |   |  |   | Operate   |
| Before/during<br>construction | Isolation of septic tank  | On construction site                                | Visually or by penetration  | In the reconstruction  | To ensure there is not<br>risk of contamination by<br>waste waters                          | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction           | Waste<br>management   | On construction<br>site and<br>surrounding<br>areas | Visually for<br>separation of wastes,<br>review receipts from<br>the collection<br>company, or<br>notification from the<br>commune on the<br>proper site of the<br>disposal | Continuously during construction works   | To ensure there is no risk<br>of environmental<br>pollution caused by<br>construction works | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction           | Damage to<br>vegetation or<br>other specific<br>habitats                    | On construction site                                | Site log and visual inspection  | Continuously during construction works   | To ensure no damage to vegetation and specific habitats                                     | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction           | Storage of paint,<br>oil or other<br>hazardous<br>materials                 | On site   | Visually ensure<br>proper storage, and<br>no leaks or spills  | Continuously during construction works   | To minimize risks of<br>pollution of hazardous<br>materials                                 | Contractor to<br>implement,<br>Supervisor to<br>review and report<br>on |
| During construction           | Quality of<br>executed works<br>Quality of<br>material that is<br>installed | At the construction site                            | Visual monitoring and through register  | Permanently during the works<br>execution and construction site<br>removal             | Ensure quality of works   | Supervision   |

|   | What is the  | Where the parameter                           | How the parameter<br>should be                 | When the parameter should be                           | Why the parameter   | Institutional responsibility |
|---|--|---|--|--|---|------------------------------|
| Phase   | parameter to be<br>monitored?  | should be<br>monitored?                       | monitored?/ type of<br>monitoring<br>equipment | monitored? (frequency of<br>measurement or continuous) | should be monitored?<br>(optional)  | Operate                      |
| After construction                            | construction Waste remnants<br>and soil<br>degradation   |   | Visually                                       | After the works completion                             |   | Contractor<br>Supervision    |
| Worker's rights                               | proof of lawfull<br>employment   | job<br>site/Contractor's<br>office            | inspection                                     | unannounced inspections during works execution         | ensure worker's enjoy rights guaranteed by Law  | Labor Inspection             |
| Duirng Construction                           | number of<br>registered<br>accidents<br>existence of<br>hygienic<br>conditions for<br>workers,<br>Protective<br>equipment<br>application | at the construction site                      | visually and insight<br>into the register      | permanently during the works<br>execution              | ensuring adequate health<br>and safety and working<br>conditions, ensuring<br>works execution in<br>accordance with relevant<br>labor legislation | Contractor,<br>Supervision   |
| OPERATION                                     |  |   |  |  |   |                              |
| Increased vehicle<br>speed                    | condition of<br>traffic signs;<br>vehicle speed  | Approach roads<br>to the<br>construction site | visual observation;<br>speed detectors         | unannounced  | enable safe traffic flow  | Traffic Police               |
| Erosion, rockfall,<br>hazardous<br>conditions | section included<br>in project   | condition of<br>hazard signs                  | visual observation                             | during maintenance activities                          |   | Contractor                   |

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| Phase                            | What is the<br>parameter to be<br>monitored?                                      | Where the<br>parameter<br>should be<br>monitored? | How the parameter<br>should be<br>monitored?/ type of<br>monitoring<br>equipment   | When the parameter should be<br>monitored? (frequency of<br>measurement or continuous) | Why the parameter<br>should be monitored?<br>(optional)                                      | Institutional<br>responsibility<br>Operate |
|----------------------------------|---|---|--|--|--|--|
| During operation/<br>maintenance | Waste collection<br>and<br>management   | On site   | Visually for<br>separation of wastes,<br>review receipts from<br>the collection<br>company, or<br>notification from the<br>municipality on the<br>proper site of the<br>disposal | Continuously during construction works   | To ensure there is no<br>risk of environmental<br>pollution from improper<br>wastemanagement | Warehouse<br>operator                      |
| During operation/<br>maintenance | Septic tank<br>maintenance<br>– clearing and<br>adequate<br>disposal of<br>wastes | On site   | Visually, or through measuring flow.   | Continuously   | To ensure that no contamination occurs from waste waters                                     | Warehouse<br>operator                      |
| During operation/<br>maintenance | Respecting of worker safety measures  | On site   | Visually, and ensure compliance with plan  | Continuously   | No life risk for workers and operators   | Warehouse operators                        |
| During operation/<br>maintenance | Leaks and spills in station   | On site   | Visually, and ensure compliance with plan  | Continuously   | To ensure no leaks of<br>oils or other materials<br>pollute the environment                  | Warehouse<br>operator                      |

### 6. ENVIRONMENTAL AND SOCIAL MANAGEMENT RESPONSIBILITIES

For each potential impact the ESMP identifies:

- the proposed mitigation measure(s); and
- the parties or agencies charged with implementing those measures, separated into:
- Executing agencies responsible for executing the measure. For this specific assignment the executing agencies (e.g. contracted design institutes) shall ensure that all necessary agreements and permits (e.g. EIA conclusion, permits for water use and discharge and for the disposal of excavated materials, wastes, and demolition debris) are obtained from relevant state and local authorities before the construction works are tendered out. Construction contractors shall take the responsibility for physical implementation of mitigation measures provided under the ESMP during the construction phases according to the Bank's policies and Serbia environmental legislation.
- Supervising agencies responsible for supervising the executing agencies to ensure that they execute the mitigation measures as planned. The Directorate of Water and Sava and Drina River Corridors Integrated Development Program Project Implementation Unit (PIU) will be responsible for supervising the timely, proper and reliable implementation of works and measures in the consequence provided by the ESMP. PIU will also ensure that all necessary agreements and permits are obtained by appropriate contractors from relevant state and local authorities before the construction works are tendered out. The World Bank during supervision missions may request randomly to check if such permits are issued and are valid (e.g., not expired) as well as if the ESMP mitigation and monitoring aspects are implemented on the ground during the construction phases according to the Bank's policies and Serbia environmental legislation.
- Various Ministries give different permits. Ministry of Finance together with Ministry of Construction, Traffic and Infrastructure and Ministry of Environmental Protection control License process for works. MAFWM with Directorate of Water, The Public Water Resources Management Companies "Srbijavode", "Beogradvode" and "Vode Vojvodine" providing preparation of water resources management technical documentation, different kind of license requested for works and supervise construction, organization and implementation of water pollution protection measures. Hydro meteorological Institute takes water samples and monitors the quality of water.

### 6.1. Environmentally sound clauses for civil works contracts

Most construction phase impacts will be possible to mitigate by including appropriate clauses into the civil works contracts. Revisions of clauses should cover, but not limited to, the following issues:

- Compliance with general national environmental guidelines;
- Compliance with relevant World Bank Environmental and Social Standards;
- Protection of Historic-cultural monuments;
- Adequate disposal of construction and excavation wastes;
- Proper location of construction camps;
- Restoration of the quasi-original conditions of landscape in construction sites after works completion;
- Occupational Health & Safety (Consultants and contractors working on the program will be required to adhere to all applicable laws and regulations controlling workplace health and safety), etc.

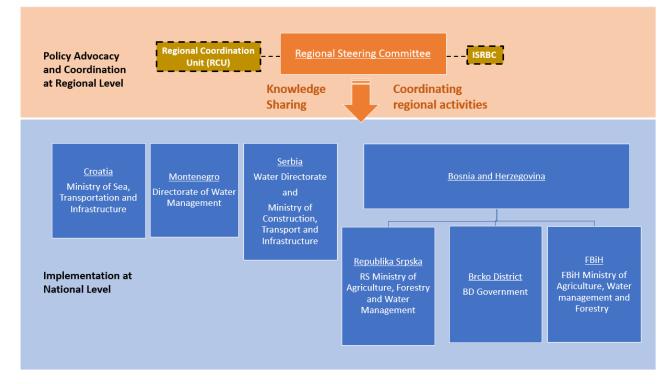
Construction works contracts shall include this ESMP with its Environmental and Social Mitigation Plan and Environmental and Social Monitoring Plan presented within the chapter 4 and chapter 5 of this ESMP document. This ESMP document will be a part of the bidding and contractual documents for which the contractor hired will be responsible to implement and to ensure that all works are completely conducted in a manner which will not generate negative impacts to the environment. The works Supervisor will ensure compliance with the ESMP listed measures and provide reports on compliance.

### 7. IMPLEMENTATION ARRANGEMENTS

The Regional Steering Comitee together with the Regional Coordination Unit will be responsible for policy advocacy and coordination at a regional level, while at a national level the two PIUs formed in the Water Directorate and the Ministry of Construction, Transport and Infrastructure will be responsible for project management functions and day to day operations.

While the National PIUs will be primarily responsible for M&E in respective countries, the **International Sava River Basin Commission (ISRBC)** will be responsible for overall monitoring and evaluation (M&E)

implementation and coordination between the riparian countries and will serve as a liaison with the WB at the regional level and PIUs in each of the riparian countries/entities. An integrated Management Information System (MIS) system will be developed and implemented as part of the program to support implementation and reporting.



Picture 10. Institutional and Implementation Arrangements

## 8. MONITORING AND REPORTING ARRANGEMENTS

## 8.1. SDIP Project Monitoring

The SDIP project will be monitored by PIUs under the DWM and MCTI. Information and data collected at each of the implementation agencies will be fed into overall M&E. The ISRBC and PIUs will collect and present data and reports for semi-annual reviews by the Regional Committee and respective National institutions responsible for project implementation, in conjunction with Bank missions.

The Construction contractor is obliged to perform all monitoring activities (sampling, measurement, etc.) prescribed within the Monitoring Plan of ESMP document produced for project on which the Contractor is engaged.

Supervision Consultant is responsible to monitor all construction activities, including environmental protection during project rehabilitation. PSC will be authorized to perform additional sampling in case he finds this needed.

## 8.2. Environmental Monitoring Plans

Monitoring plan for SDIP projects should be in respect of the tender documents. The main components of the monitoring plans include:

- Environmental and social issues to be monitored and the means of verification
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Monitoring of the procurement of materials (checks that valid permits are in place)
- Duration
- Institutional responsibilities for monitoring and supervision

## 8.3. Reporting Arrangements

### 8.3.1. Contractor to PIU

The Contractor will prepare his compliance reports in respect to ESMP and his SSIP as a Quarterly Progress Reports and submit them to PIU, in both Serbian and English language, in hard copy and electronic versions.

Construction Contractor will provide quarterly reports to PIU which document the environmental mitigation and protection measures, together with prescribed monitoring activities carried out during that quarter's reporting period. Construction Contractor will take care of the environment quality according to the mitigation and monitoring plan which are part of ESMP.

The same applies to the Environmental Monitoring and Supervision Contractors for their part of mitigation and environmental monitoring activities.

If any kind of accident or endangerment of environment happens, reporting will be immediate. PIU and the Contractor have joint responsibility for reporting and investigating incidents. The Contractor is obliged to inform the project manager and local authorities about accident immediately after it happened.

### 8.3.2. Project Supervision Consultant to PIU

The findings of the regular monitoring activities, including activities specified in the Generic Monitoring Plan, carried by the Contractor will be included in the quarterly PSC progress reports.

### 8.3.3. PIUs to MAFWM, MCTI, WB, Semi-Annual Environmental & Social Report

Each Contractor is obliged to produce and deliver to PIU an Semi-Annual Environmental and Social Report covering all project activities during 6 month period PIU shall provide Semi-Annual reports to MAFWM and WB regarding the status of implementation of mitigation measures by the Contractors, additional mitigation measures that may need to be implemented, incidents of non-compliance with applicable environmental permits, complaints received from local residents, NGOs, etc. and how these were addressed. In case of fatalities or major incidents on site the PIU will immediately report to WB.

Monitoring and compliance in accordance with ESMF and site specific ESMPs, including monitoring of implementation of site-specific measures on each sub-project/section during project implementation will be undertaken by PIU and its implementation unit, and reported in writing to the Bank on semi-annual basis. An environmental specialist will be appointed to the Project by PIU to ensure quality in the implementation of ESMPs.

In terms of social monitoring each Contractor shall keep records of grievances received (if any) directly and confirm they have been transmitted to the GRM. The Contractor shall keep monthly employment progress record per template to be provided by the Social Consultant of the PIU to monitor the enhancement of positive impacts of local employment created during the life of the Sub-Project.

Land acquisition shall be monitored weekly by the Social Consultant to inform the Monthly progress report which is already submitted at the end of each month to the World Bank to verify compliance with requirements set forth in the RPF, subsequent ARAP and this ESMP.

### 9. PUBLIC CONSULTATIONS AND PUBLIC DISCLOSURE OF THE ESMP

In accordance with WB ESS 10 a draft version of ESMP will be publicly disclosed in the Ministry of Agriculture and Environmental Protection, the Directorate of Water building and in the city of Belgrade, Surcin municipality during October 2019, on period of two weeks. The public consultation meeting will be held in the municipality of Surcin, in Belgrade.

### 10. REFERENCES

- 01 Terms of Reference for production of Technical Documents, Central Warehouse for Flood Protection in Surcin, PWMC "Srbijavode", "Hidrozavod dtd", 2019
- 02 Architectural Conceptual Design Solution, Andzor Engineering, 2019
- 02 The World Bank Environmental and Social Framework, 2017
- 02 Environmental Assessment Sourcebook No 25, Environmental Management Plans, The World Bank Environment Department, January 1999

- 03 Project Appraisal Document, PAD3402, Sava Drina River Corridors Integrated Development Program, 2019
- 04 Project Information Document, PIDC25739, Project Information Document (Concept Stage) Sava Drina River Corridors Integrated Development Program – P168862, February 2019
- 05 Environmental and Social Management Framework, ESMF, Sava Drina River Corridors Integrated Development Program P168862, October 2019
- 06 Resettlement Policy Framework, RPF, Floods Emergency Recovery Project P168862, October 2019

# Annex 1

# LEGISLATION

## MAIN SERBIAN LEGISLATION:

## ANNEX 1: RELEVANT NATIONAL LEGISLATION AS OF APRIL 2018

- The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection during planning, design, construction and operating of this Project are listed below:
- 1. Law on planning and construction ("Official Gazette of RS" No. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014)
- 2. Law on nature protection ("Official Gazette of RS", 36/09, 88/10, 91/10, 14/16)
- 3. Law on environmental protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09, 43/11, 14/16)
- 4. Law on EIA ("Official Gazette of RS" No. 135/2004, 36/09)
- 5. Law on Strategic EIA ("Official Gazette of RS" No. 135/04, 88/10)
- 6. Law on waste management ("Official Gazette of RS", 36/09, 88/10, 14/16)
- 7. Law on noise protection ("Official Gazette of RS", 36/09, 88/10)
- 8. Law on water ("Official Gazette of RS", 30/10, 93/12, 101/16)
- 9. Law on forest ("Official Gazette of RS", 30/10, 93/12, 89/15)
- 10. Law on air protection ("Official Gazette of RS", 36/09, 10/13)
- 11. Law on Safety and Health at Work ("Official Gazette of RS", 101/05, 91/15, 113/17)
- 12. Agricultural Land Law, ("Official Gazette of RS" No. 62/06, 65/08, 41/09, 112/2015, 80/2017)

Regulations established on the basis of the Law on EIA include the following:

- 13. Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS" No. 114/08)
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS" No. 69/05)
- 15. Rulebook on the contents of the EIA Study ("Official Gazette of RS" No. 69/05)
- 16. Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of RS" No. 69/05)
- 17. Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS" No. 69/05)
- 18. Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 72/10)
- 19. Decree on establishing class of water bodies ("Official Gazette of SRS" No. 5/68)
- 20. Regulations on dangers pollutants in waters ("Official Gazette of SRS" No. 31/82)

Regulation on Labour, Working Conditions and Gender equality

21. Labor Law ("Official Gazette of RS" No. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017, 113/2017 and 95/2018)

- 22. Law on Civil Servants ("Official Gazette of RS" No. 79/2005, 81/2005, 83/2005, 64/2007, 67/2007, 116/2008, 104/2009, 99/2014, 94/2017 and 95/2018)
- 23. The Law on Peaceful Settlement of Labor Disputes ("Official Gazette of RS" No. 125/2004, 104/2009 and 50/2018)
- 24. Law on Employment and Unemployment Insurance ("Official Gazette of RS" No. 36/2009, 88/2010, 38/2015, 113/2017 and 113/2017)
- 25. Law on Employment of Foreign Citizens ("Official Gazette of RS" No. 128/2014, 113/2017, 50/2018 and 31/2019)
- Law on Retirement and Disability Insurance ("Official Gazette of RS" No. 34/2003, 64/2004, 84/2004, 85/2005, 101/2005, 63/2006, 5/2009, 107/2009, 101/2010, 93/2012, 62/2013, 108/2013, 75/2014, 142/2014, 73/2018 i 46/2019)
- 27. Law on Health Insurance ("Official Gazette of RS" No. 25/2019)
- 28. Law on the Prohibition of Discrimination ("Official Gazette of RS" No. 22/2009)
- 29. Law on the Prevention of Harassment at the Workplace ("Official Gazette of RS" No. 36/2010)
- 30. Rulebook on Conduct of Employers and Employees in Relation to Prevention and Protection from Harassment at Work ("Official Gazette of RS" No. 62/2010)
- 31. Law on Protection of Whistle Blowers ("Official Gazette of RS" No. 128/2014)
- 32. Law on Gender Equality ("Official Gazette of RS" No. 104/2009)

Other relevant Serbian legislation

- Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of RS", 38/09)
- European Environment and Health Committee. Serbia. Copenhagen, WHO Regional Office for Europe, 2006 (http://www.euro.who.int/eehc/implementation/20061010\_9 accessed 29 December 2009).
- 35. National Assembly. Law on Protection against Environmental Noise. Official Gazette of the Republic of Serbia, No. 36/09, 88/10.
- 36. National Assembly. Law on Waste Management. Official Gazette of the Republic of Serbia, 2009, No. 36/09.
- 37. National Assembly. Constitution of the Republic of Serbia. Official Gazette of the Republic of Serbia, 2006, No. 98/06.
- 38. National Assembly. Law on Environmental Protection. Official Gazette of the Republic of Serbia, 2004, No. 135/04.
- 39. National Assembly. Law on Air Protection. Official Gazette of the Republic of Serbia, 2009, No. 36/09.
- 40. National Assembly. Law on Management of Chemicals. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

- 41. National Assembly. Law on Biocidal Products. Official Gazette of the Republic of Serbia, 2009, No. 36/09.
- 42. National Assembly. The Law on Environmental Protection. Official Gazette of the Republic of Serbia, 2009, No. 36/09.
- 43. National Assembly. Law on Occupational Safety and Health. Official Gazette of the Republic of Serbia, 2005, No. 101/05
- 44. National Assembly. Law on Environmental Impact Assessment. Official Gazette of the Republic of Serbia, 2004, No. 135/04 (http://www.basel.int/legalmatters/natleg/serbia-02e.pdf, accessed 11 January 2010).
- 45. Federal Assembly. Regulation on permitted level of noise in the environment. Official Gazette of the Republic of Serbia, 2010, No. 72/10.
- 46. National Assembly. Law on Integrated Pollution Prevention and Control. Official Gazette of the Republic of Serbia, No. 135/04 (http://www.basel.int/legalmatters/natleg/serbia-04e.pdf, accessed 11 January 2010).

# Annex 2

# STAKEHOLDER ENGAGEMENT

## **Identified Stakeholders**

Stakeholders can be defined as those people and organisations who may affect, be affected by, or perceive themselves to be affected by, a decision or activity. For the Project, the stakeholders range according to the following main groups:

Potential affected parties:

- Employees of PWMC and Contractors;
- Representatives of companies operating the area immediately adjacent to the Project;
- Residents from settlements within the zone of influence of the Project
- Statutory regulatory authorities, on local or regional level, such as: Local landowners and leaseholders within Project easements; and Potentially affected industries/businesses.

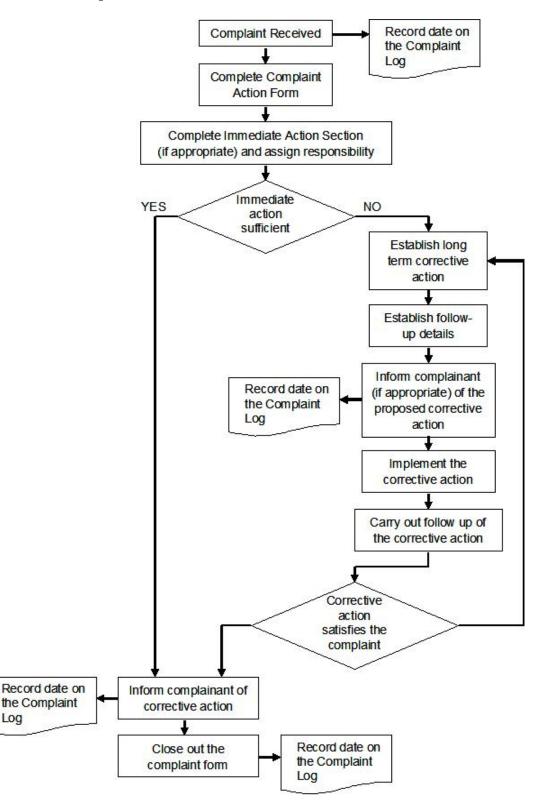
Interested parties:

- General public;
- Other companies operating on the National Grid; and
- Non-Governmental Organisations (NGO).

It is acknowledged that, as the Project develops, more stakeholders may be identified and engaged. In this regard, once identified, each stakeholder will be characterized in terms of their interests, concerns and requirements and will be included within this list.

Grievance mechanism and form

### Flowchart of Complaints/Grievance Procedure



Grievances to be resolved within 15 working days.

#### SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM - SDIP Environmental and Social Management Plan - ESMP

| Grievance Reference Number (to be filled in by [name ]):  |                          |  |      |        |  |  |  |
|---|--------------------------|--|------|--------|--|--|--|
| Contact Details   | Name:                    | Name:  |      |        |  |  |  |
|   | Address:                 | Address:   |      |        |  |  |  |
|   | Tel:                     | Tel:   |      |        |  |  |  |
|   | e-mail:                  | e-mail:  |      |        |  |  |  |
| How would you prefer to contacted? Please tick box  | • -                      | By phone   | By e | e-mail |  |  |  |
| Name and the identification information (from identity card).   |                          |  |      |        |  |  |  |
| Details of your grievance. Please describe the problems, who it happened to, when, where and how many times, as relevant           What is your suggested resolution for the grievance? |                          |  |      |        |  |  |  |
| How to submit this form<br>to /[name of   | By Post to:              |  |      |        |  |  |  |
| concessionaire]   | By hand: please drop the | By hand: please drop this form at  |      |        |  |  |  |
|   |                          | y e-mail: Please email your grievance, suggested resolution and referred contact details to: |      |        |  |  |  |
| Signature   |                          |  | Date |        |  |  |  |

## Annex 3

# **REPORT ON PUBLIC CONSULTATIONS**

ENVIRONMENTAL MANAGEMENT PLAN - ESMP, WAREHOUSE FOR MOBILE EQUIPMENT FOR FLOOD PROTECTION IN SURCIN

## ANNEX 3: REPORT ON PUBLIC DISCLOSURE AND PUBLIC CONSULTATION

This section will be incorporated after the completion of public consultations.