

BIJELJINA PHASE 2 – WASTE WATER TREATMENT PLANT, WASTEWATER COLLECTION AND WATER SUPPLY NETWORK

ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY

1. INTRODUCTION: PROJECT HISTORY

In 2005 the Municipality of Bijeljina launched a project for development of wastewater collection and treatment system. Until now some EUR 13 million have been invested, out of which EUR 7.0 million through a loan from European Bank for Reconstruction and Development (EBRD). Remaining funds were provided through the Bijeljina municipal budget.

So far a 2,004 metres long section of the primary wastewater collector was built and the main wastewater pumping station PS1 (PS “Dasnica”), which currently pumps the wastewater into the canal Dasnica. Furthermore the main secondary wastewater collector No. 4 (GSFK4) running along the Svetog Save and Filipa Visnjica streets, together with adjacent secondary and tertiary sewers was built, with total length of 5,828 m. Construction of another two main secondary wastewater collectors (GSFK1 and GSFK10) with adjacent secondary and tertiary sewers with total length of 5,360 metres is being completed. Construction of surface water drains and replacement of dilapidated water mains is carried out simultaneously with construction of the wastewater collector. Completion of this project is expected in June 2010.

Public Company Vodovod i Kanalizacija Bijeljina a.d., supported by the Bijeljina Municipality and Republika Srpska, applied for a second loan from EBRD in the amount of EUR 5 million towards financing the second phase of the wastewater collection and treatment project as well as for the extension of the water supply network.

The project managed to mobilise significant grant funds for investment co-financing. European Union approved grant fund in the amount of EUR 5.5 million: of which EUR 2.0 million from the IPF Municipal Window programme and EUR 3.5 million from the national IPA 2009 programme. Furthermore the Swedish International Development and Cooperation Agency (SIDA) approved grant fund in the amount equivalent to EUR 4.0 million.

2. PROJECT DESCRIPTION – PHASE 2

The Bijeljina Phase 2 Project includes the following components:

1. Construction of a Wastewater Treatment Plant (WWTP) with initially capacity of 40,000 population equivalent but with possibility for later expansion. WWTP must be compliant in all aspects with relevant local legislation and EU Directives related to urban wastewaters and sludge treatment. For the purpose of the construction of this WWTP Municipality of Bijeljina purchased from the Sugar Refinery in Vellika Obarska a part of the existing WWTP site that was used by the Refinery.

2. Construction of primary wastewater collector from the main pumping station PS1 at Dasnica canal to the future WWTP in Velika Obarska. The collector will be 6.4 kilometres long with diameter of ND1100 mm.
3. Construction of the main secondary wastewater collector No.8 (GSFK8) along the “Zrtava fasistickog terora” street with adjacent secondary and tertiary sewers giving total length of 5.0 kilometres.
4. Construction of water supply network in the northern parts of the municipality (so called Northern Ring) connecting settlements with registered high percentage of endemic nephropathy (kidney failure).
5. Subject to the availability of funds, partial construction of the main secondary wastewater collector GSFK3 in Majevicka street having a total length of 7.4 kilometres including the adjacent secondary and tertiary sewers.

See enclosed maps with indicative locations.

3. SUMMARY OF IMPACTS AND ISSUES

Current Situation

Drinking water

The quality of the drinking water supplied by Vodovod i Kanalizacija Bijeljina fully meets the standards set in the European Union Drinking Water Directive (DWD 98/83/EC) and in the local Regulations on hygienic quality of drinking water (Republika Srpska Official Gazette 40/03). The local regulations are derived from DWD although some parameters are slightly different. Regular analyses of the drinking water are carried out by independent licensed laboratories and by the company's own laboratory. Results are published on the company's web site.

Wastewater

The company is not compliant with the European Union Directive for Urban Wastewater (UWD 91/271/EEC) and sewage sludge directive (86/278/EEC and amendments thereto). It is also not compliant with related local regulations because the wastewater collection system is in early stage of development and there is no waste water treatment plant. Currently the collected wastewater is currently discharged into irrigation canal Dasnica, consequence of which is that the quality of the water downstream from the discharge point is considerably worsened although it still satisfies the standards recommended for this category of surface water.

The project will enable substantial reductions in the pollution load to groundwater to be achieved over time and reduce pollution of the canal. As groundwater is being used for potable water it is important that a waste water collection system is established as soon as possible.

Accordingly the project Bijeljina Phase 2 will enable Vodovod i Kanalizacija Bijeljina to achieve full compliance with European Union directives for urban wastewater and sludge treatment and to maintain full compliance with the European Union directive for drinking water.

Project impacts

The Project, once completed, is expected to have considerable positive environmental and social impacts. Those impacts include:

- Reduction of soil contamination with wastewater from septic tanks of consumers that will be connected to the wastewater network;
- Reduction of groundwater pollution including the well-field Grmic;
- Improved quality of surface waters especially in Dasnica canal that acts as recipient of all untreated wastewater at the location of PS1;
- Reduction in number of persons contracting the endemic nephropathy through abandonment of individual wells and connection to the potable water supply system;
- General improvement of living standard in the town of Bijeljina through introduction of wastewater collection and treatment services and expansion of potable water supply network.
- Compliance with the EU Directive requirements e.g. Urban Waste Water Treatment Directive and Sewage Sludge Directive, Drinking Water standards.

Most of the potential negative environmental and social impacts are expected during the construction phase. These potential impacts include:

- Pollution and degradation of soil by spillages of fuel and other polluting substances (oils, sealants etc.) or inadequate management of topsoil in agricultural land and in parks;
- Air pollution from works themselves, usage of unpaved roads, odour from areas of septic tank discharges, exhaust emissions from the machinery and vehicles in use;
- Noise and vibration pollution from the machinery and vehicles in use during construction but also from the WWTP during exploitation;
- Solid waste from excavated topsoil, tarmac and concrete surfaces and from replaced water mains;
- Traffic disturbances due to unavoidable though temporary closure of certain street sections to both vehicles and pedestrian;
- Ground and surface water pollution (temporary impact) due to lowering of groundwater level, spillages of fuel and other polluting substances (oils, sealants), seepages of contaminated water into the excavations;
- Health and safety risks coming from excavated trenches, deposited excavate material, stored pipes, manoeuvrings of machinery and vehicles.

The project will require a limited land acquisition, part of which is on temporary basis during the construction of the main wastewater collect from PS1 Dasnica to WWTP Velika Obarska. The project does not envisage any resettlement, physical and economic displacement and relocation of residences or businesses. During construction activities, at several sections along the pipelines under construction, access to a number of private residences and businesses will temporarily be restricted. Also, since a lot of works will be carried out in urban area there is a risk of minor damages to buildings along the excavated trenches.

Overall, the positive socio-economic benefits arising from this project will be greater than the negative impacts during the construction.

4. SUMMARY OF MITIGATION MEASURES AND MANAGEMENT OF IMPACTS

Independent consultants had carried out a detailed environmental assessment of the current situation and of the overall strategy for development of wastewater collection and treatment system for the municipality of Bijeljina. The assessment included detailed identification of potential environmental and social impacts and appropriate mitigation measures. In addition a project specific Environmental and Social Action Plan (ESAP) will be implemented in order to meet the requirements of the EBRD Environmental and Social Policy (2008) . The ESAP will include the following actions:

- Defining Contractor Environmental, Health, Safety and Social requirements in contracts and improving the monitoring of contractor performance;
- The Contractors will implement Environmental, Health & Safety Management System (EHS-MS) in line with International good practice;
- All workers will be given EHS induction training prior to starting work on site;
- A Noise and Vibration Plan will be established by the Contractors;
- Dust suppression methods will be defined in a specific plan;
- Hazardous Materials and Waste Management Plans will be provided by the Contractors;
- A Project Emergency Preparedness and Response Plan will be prepared in coordination with the local community and local emergency responders.

5. OBJAVLJIVANJE INFORMACIJA

Environmental and Social information on the project have been disclosed in accordance to the RS laws. The environmental assessments are available at the following website:

<http://www.bnvodovod.com>

This Environmental and Social Review Summary, Stakeholder Engagement Plan, (SEP), including Grievance Procedure will be available at the following websites:

<http://www.bnvodovod.com>

<http://www.sobijeljina.org>, kao i u zgradi Opštine Bijeljina.

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The SEP includes more detailed information on the current and future stakeholder consultation activities, including activities to be undertaken by Contractors.

6. MONITORING AND REPORTING

Vodovod i Kanalizacija Bijeljina will monitor the EHSS performance of the Contractors through the appointment of an Independent Engineer.

Vodovod i Kanalizacija Bijeljina will monitor and report to the Bank annually on the EHSS impacts and on the implementation of the ESAP.

Vodovod i Kanalizacija Bijeljina will report to the Bank on any material accidents or incidents and conduct its business with due regard to National and EU Environmental Regulations and Standards.