

Environmental Protection Report

- Request for evaluation of the need for environmental impact assessment –

**Construction of Revetments on the Sava River**

- Okunšćak, Rugvica, Oborovo, upstream of Prevlaka lock,

downstream of Prevlaka lock, upstream of Dubrovčak –



Zagreb, August 2012

**6. CONCLUSION**

**6.1 DESCRIPTION**

The Sava River dike is an integral part of the flood control system in the Middle Sava basin. The Middle Sava flood control system (MSFCS) represents a number of planned projects and structures aimed at providing protection to towns and settlements, industrial and infrastructural systems and creating conditions for stable agricultural production in the Middle Sava basin. In geographical terms, the Middle Sava basin covers a wide area from the border with the Republic of Slovenia on the west to Nova Gradiška on the east.

It is only the capital city of Zagreb that is adequately protected from the high waters of the Sava. It is estimated that Zagreb is protected from a 1,000-year flood. Other areas along the Sava are mostly not protected to a sufficient degree. Downstream of Zagreb all the way to the border with the Republic of Serbia, many areas along the Sava have a level of protection lower than required, since the MSFCS is incomplete and the existing dikes are not high enough in many places. The main reason behind the development and construction of the MSFCS were frequent and heavy Sava floods in this region. Sava regulation and flood control works in this region date far back, but systematic approach and coordinated activities began after the catastrophic flood of 1964.

The conceptual solution of the MSFCS established in the late 1960s is still topical and has been integrated as such into the national spatial plans. The construction of the system began in the early 1970s. Since this is a highly complex and financially demanding task, phased development of the system is foreseen with the following objectives: priority is given to works on protecting the settlements, towns and infrastructure directly at risk from the high waters of the Sava and its tributaries; the works that are carried out shall not deteriorate the existing high water regime; and safe agricultural production shall be ensured. It is estimated that approximately 40% of the planned works have been completed so far.

For erosion protection, water regulation and protection structures are gradually constructed and maintained, protective anti-erosion works are carried out and protective measures are taken. Anti-erosion works in the basin include forestation, cultivation and maintenance of protective vegetation, formation of terraces on the sloping terrain and the like, while in torrential channels works on anti-erosion protection and channel stabilisation are carried out by developing sills, consolidation belts, flood barriers, channel lining, applying protective biological water engineering, etc. Anti-erosion protection measures also include bans and restrictions on cutting down trees and shrubs, bans and restrictions on excavating sand, gravel and stone, adequate methods of exploiting agricultural and other land, and other similar measures. The water management sector is in charge of construction and maintenance of water regulation and protection structures and cleaning of torrential channels, while other anti-erosion works and measures are under the responsibility primarily of rangers and farmers.

On the left Sava riverbank at locations Okunšćak, Rugvica, Oborovo, downstream of Prevlaka lock, upstream of Prevlaka lock and upstream of Dubrovčak, damaged revetments and bank landslides have been recorded. The scope of the Environmental Protection Report is the planned construction of revetments on the left Sava riverbank at a stretch from app. 675th to 649th kilometre of the Sava River. The main purpose of such project is to protect the left Sava riverbank, and thus area behind the bank, from high waters. The defenced area lies for the most part on the territory of the Municipality of Rugvica, and to a lesser extent on the territory of the Town of Ivanić Grad and the Municipality of Orle. The project as a whole lies on the territory of Zagreb County.

The main information about the Sava stations and lengths of damage for each particular location and a short description of the technical solution follow below.

**Okunšćak**

On the left Sava riverbank, near the village of Okunšćak, from station 675+850 to 676+150 a landslide has been registered. It is app. 300 m long and lies app. 200 m downstream of the apex of the river’s right bend.

The remediation project will ensure bank stability by performing new channel regulation, the bank slope will be formed with stable inclination, and a retaining structure will stabilize the toe of bank slope. Further erosion of sandy materials will be prevented by lining the slope and using geotextiles.

Works on riverbank improvement and development of the bank revetment shall be performed in the following order:

1. It is first necessary to mow the grass and remove the vegetation and trees in the relevant section of the bank. The tree stumps remaining after the removal of trees shall be pulled out and transported to a permanent disposal site.
2. Mechanical excavation to form bank geometry. Mechanical excavation includes excavation of excess material on the bank slope and excavation to form a revetment toe.
3. The level of excavation for the toe of slope varies depending on the riverbed depth. It shall be made with a 1:1 inclination at a depth of 2.0 m from the riverbed bottom. The width of the excavation bottom and foundation of the stone toe is 3.0 m.
4. Geotextile with a geogrid shall be laid on the foundation soil. Separating geotextile 200 gr/m2 shall be laid along revetment slope to the broken stone toe.
5. The bank revetment toe shall be made of stone with grain diameter 200-500 mm which shall be put onto the laid separating geotextile. The stone for developing the toe shall be backfilled from the bank with mechanical and manual adjustment in order to achieve the desired toe geometry and ensure that each grain wedges in properly.
6. Once the bank revetment toe is made, a drainage layer shall be developed on the berm. The drainage layer has grain sizes of 8-32 mm.
7. As the upper slope of the dike is generally in a designed slope of 1:2, once the required geometry is achieved, the upper bank slope shall be covered with top soil and grass.

**Rugvica**

On the left Sava riverbank, near the village of Rugvica, from station 673+500 to 673+800 a landslide has been registered. It is app. 100 m long, but instabilities have been observed in the wider landslide zone in the length of 300 m. The landslide lies app. 300 m downstream of the apex of the river’s right bend.

The development of a retaining zone made of stone is foreseen in the bank toe. Geotextile shall be laid on the improved foundation soil over the entire surface of the bank revetment. At the place of landslide where a deeper slip plane is identified, in addition to the retaining zone made of stone and bank revetment of broken stone, a protective wall made of steel sheet piles will also be made. The works on the development of the bank revetment in order to improve the left Sava riverbank near the settlement of Rugvica shall be performed in the summer period when lower Sava water levels and the lowest groundwater levels in the area behind the banks are expected.

Works on riverbank improvement and development of the bank revetment shall be performed in the following order:

1. Bank clearing (removal of trees, shrubs, brushwood and other vegetation);
2. Staking out the route of bank rehabilitation and the axis of the retaining structure made of steel sheet pile;
3. Developing a working plateau for the formation of steel sheet piling at 96.00 m above sea level;
4. Placement of steel sheet piles with characteristics according to AU 16 in accordance with design drawings;
5. Connecting the installed steel sheet piles with a tie beam (steel profile UPN 220). The steel sheet piles and the steel beam shall be connected by welding.
6. Developing a reinforced concrete head beam 50 x 50 cm in cross section.
7. Underwater excavation (below the water level of 95% duration) to develop a stone retaining zone at the bank revetment toe.
8. Underwater laying of geotextile and geogrid on the surface of excavation for the stone retaining zone at the bank revetment toe.
9. Underwater development (below the water level of 95% duration) of the retaining zone at the bank revetment toe made of coarse stone 20-50 cm in size.
10. Stepped excavation of the bank slope for the purpose of developing the bank revetment.
11. Lining the surfaces of the stepped excavation with geotextile.
12. Developing the bank revetment by lining the excavated and improved bank slopes with coarse stone 20-50 cm in size.
13. Levelling the terrain in the flood zone.
14. Excavating the bank slope to develop a macadam service road.
15. Laying geotextile on the surfaces of excavation to develop the macadam service road.
16. Placing gravel material with particles 8-32 mm in size into the subgrade of the macadam service road. Gravel is placed with compaction to the minimum modulus of compressibility MS≥40 MPa.
17. Measuring horizontal displacements in the existing vertical inclinometer (the inclinometer is installed into borehole S-100-10-02). The displacements are measured during the execution of works on bank improvement and development of the bank revetment.

**Oborovo**

On the left Sava riverbank, near the village of Oborovo, from station 661+750 to 662+100 a landslide has been registered. This landslide, which suggests instabilities of the left bank, is app. 350 m long. It lies at the apex of the river’s right bend and stretches to the ramp to a Sava ferry.

Works on riverbank improvement and development of the bank revetment shall be performed in the following order:

1. Filling the depressions formed by bank landslide and levelling the bank slope using fine-grained gravel.
2. Placing geotextile on the levelled bank slope.
3. Stabilizing and protecting the geotextile with a layer of coarse-grained gravel.
4. Developing the stone lining.

**Upstream of Prevlaka lock**

On the left Sava riverbank, immediately upstream of Prevlaka lock, from station 656+000 to 656+200 a landslide has been registered. It is app. 200 m long.

Works on riverbank improvement and development of the bank revetment shall be performed in the following order:

Works phase I:

1. Developing ramps to access the landslide;
2. Staking out the excavation and retaining structure made of sheet piles;
3. Clearing, excavating and forming the slope and the working plateau;
4. Developing the working plateau at 97.00 m asl (excavation, geotextile, backfilling);
5. Driving sheet piles;
6. Excavation and development of a stone retaining zone next to the sheet piles;
7. Reconstructing the slope made of gravel material or crushed stone;
8. Lining the slope with coarse stone at an inclination of 1:2; lining the plateau with stone up to the level of 98.00 m asl;
9. Levelling the terrain in the flood zone;
10. Installation of measuring equipment for technical observation;
11. Finishing works;

Works phase II:

1. Staking out the location where a fascine mattress will be placed;
2. Clearing, excavating and forming the working plateau;
3. Forming the fascine mattress;
4. Positioning the fascine mattress, filling it with gravel and crushed stone and submersing it;
5. Supplementing the crushed stone lining underwater using a dredger;
6. Underwater surveying and control of the as-built state.

**Downstream of Prevlaka lock**

On the left Sava riverbank, downstream of Prevlaka lock, from station 656+700 to 655+950 a landslide has been registered. It stretches downstream of the inlet plateau of the Prevlaka lock in the length of app. 250 m, at the river’s right bend.

Works on the rehabilitation of the landslide on the left Sava riverbank downstream of the Prevlaka lock foresee works on both banks. The works are independent in terms of their progress dynamics, but it is proposed that the works on the right bank be performed first, since they are expected to have a positive effect on the left bank. The works shall be performed in the following order:

Works on the right bank:

1. Clearing the vegetation, cutting the trees and developing an access road;
2. Cutting, land clearing and cleaning of channels for the evacuation of high waters;
3. Channel levelling;
4. Clearing the vegetation and cutting the trees at the apex of the right bend in the belt width of 40 m;
5. Excavating the bank at the apex of the right bend in the belt width of 10 m;

Works on the left bank:

1. Developing an access ramp to develop the bank revetment;
2. Staking out the excavation and the retaining structure made of sheet piles;
3. Clearing, excavating and forming the slope and the working plateau;
4. Developing the working plateau at 96.00 m asl (excavation, geotextile, backfilling);
5. Driving sheet piles;
6. Excavation and development of the stone retaining zone next to the sheet piles;
7. Reconstructing the slope made of gravel material or crushed stone;
8. Lining the slope with coarse stone at an inclination of 1:2; developing a stone berm at 98.00 m asl;
9. Providing access to improve the bank using biotechnical engineering (access ramp);
10. Clearing the vegetation and cutting the trees;
11. Excavating and forming the bank slope at an inclination of 1:2;
12. Forming the top soil;
13. Planting grass and willow;
14. Levelling the terrain in the flood zone;
15. Installation of measuring equipment for technical observation;
16. Finishing works

**Upstream of Dubrovčak**

On the left Sava riverbank in Dubrovčak Lijevi a landslide has been registered. It is app. 300 m long and lies at Sava station km 649+000 to km 649+300.

Works on the rehabilitation of the landslide on the left Sava riverbank near the village of Dubrovčak shall be performed in the following order:

1. Development of ramps to access the landslide;
2. Clearing the terrain from vegetation;
3. Staking out the project zone and retaining structure made of sheet piles;
4. Clearing, excavating and forming the slope and the working plateau;
5. Developing the working plateau at 95.00 m asl (excavation, geotextile, backfilling);
6. Driving sheet piles;
7. Excavation and development of the stone retaining zone next to the sheet piles;
8. Staking out the location where a fascine mattress will be placed;
9. Forming the fascine mattress;
10. Positioning the fascine mattress, filling it with gravel and crushed stone and submersing it;
11. Supplementing the crushed stone lining underwater using a dredger.
12. Underwater surveying and control of the as-built state;
13. Reconstructing the slope made of gravel material or crushed stone;
14. Lining the slope with coarse stone at an inclination of 1:2; lining the plateau with stone up to the level of 98.00 m asl;
15. Levelling the terrain in the flood zone;
16. Installation of measuring equipment for technical observation;
17. Finishing works.

**6.2 DESCRIPTION OF POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS**

The settlements of Struga Nartska, Jalševec Nartski, Nart Savski, Okunšćak, Rugvica, Novaki Oborovski, Preseka Oborovska, Oborovo, Vrbovo Posavsko, Prevlaka, Prečno, Pretovec, Dubrovčak, etc. lie on the right side of the Sava River.

The Bregana-Zagreb-Lipovac (A3) motorway runs nearby, northeast from the project area, at a distance of app. 2 km from the settlements of Okunšćak and Rugvica.

The Prerovec water protection zone lies in the vicinity of the project area, near the planned revetments upstream and downstream of the Prevlaka lock and upstream of Dubrovčak.

In the wider project area behind the riverbank, the terrain is flat, with houses and tilled agricultural land. Further progression of damage to the protective structures may put the stability of the constructed Sava dikes at risk. This would indirectly also put at risk the protection of the area behind the riverbank from the high waters of the Sava. This is an area which was hit by a heavy flood in 2010. The heavy Sava flood of September 2010 affected the territories of the towns of Zaprešić, Samobor, Zagreb and Velika Gorica and of the Municipalities of Rugvica, Orla and Martinska Ves. A catastrophe of an extent similar to the 1964 flood was prevented with the established flood control system.

**Impact on water**

During the performance of works, the pollution of water is possible from hydrocarbons from the fuels and lubricants from operating machines and vehicles moving over the area of works (due to improper operation of construction machines or careless handling). It is forbidden to store fuels and lubricants. Fuel shall be transported in a special vehicle with a fuel tank and the machines will be filled with it on the developed impermeable plateau equipped with an oil and grease separator, after which water may be discharged into the receiving water body. For that purpose, an impermeable plateau will have to be developed on the bank.

With the removal of the plant cover at the dike site and with backfilling, erosion processes are very likely; these may result in outwash and input of dike material, and turbidity of the watercourse (receiving water body). Such events can be restricted to a short period of time as they will be significantly reduced once the dike is biologically recultivated.

In the event of high water, construction material may get washed away.

During operation, the project won’t have any impact on water quality, since the water regime will not change compared to the current one.

**Impact on soil**

A direct impact of dike improvement refers to the occupation of land plots lying on the project route and damage to soil due to the construction of access roads. This is an adverse, permanent, irreversible impact to which all the surfaces will be exposed, but since this is a flood zone, the impact is not considered significant.

An indirect impact on soil and land refers to the changes in the water regime, i.e. reduced flooding of the area beyond the project scope. With the construction of the dike, the flooding risk on the land beyond the dike has been reduced, thus enabling more stable agricultural production. Likewise, due to reduced flooding, the impact of pollution of the areas outside of the project scope with different pollutants often present in floodwaters (e.g. heavy metals) will be reduced. Based on the above, it can be claimed that this is a relatively favourable impact on soil and agricultural land.

**Impact on habitats, flora and fauna**

During the construction of the planned revetments, it is expected that small surfaces of the existing vegetation by the Sava riverbank along the sections included in the project will be lost. The belt of the riparian vegetation of underbrush and willow and poplar forests in the sections of the left riverbank is narrow and mostly discontinuous due to the vicinity of the dike and settlements. For that reason, the impact is not assessed as significant. The existing access routes will be used when possible, and new access roads will be developed in some places, where the vegetation will be permanently lost. On the entire section of the Rugvica site, the construction of a macadam (service) road 4 m wide at the toe of the dike is planned. Downstream of the Prevlaka lock, on the right bank, an access road to the construction site, 6.0 m wide and 1,350 m long, will be made along the entire bend. The areas currently covered with vegetation will also be permanently lost by clearing the vegetation for the purpose of improving the right bank downstream of the Prevlaka lock (rehabilitation of an evacuation channel, clearance in order to expand the flow zone and shortening the right bank at the bend). In view of the project’s spatial restriction, distribution of riparian alluvial willow underbrush (National Habitat Classification code D.1.1) and riparian alluvial willow and poplar forests (National Habitat Classification code E.1) on the Croatian territory and the fact that the area under project scope is not specified by Vukelić et al. (2008) as a representative area of forest habitat types, the described impact will not significantly affect the distribution of these habitats.

Impacts on animal organisms will be reflected both in a temporary modification of habitat conditions (turbidity of water due to sediment suspension, noise, vibrations, emissions of dust and exhaust gases) and in a permanent modification of a small area of favourable habitats. During preparation and construction of access roads and revetments, individual instances of animals getting hurt are possible, as well as damaged or permanently lost nests and other animal dwellings along the working zone. By laying the stone lining and the fascine mattress at locations upstream of the Prevlaka lock and downstream of Dubrovčak, the existing habitats in the narrow zone of the river bottom will be lost. In view of the project size and it being restricted to a belt along one bank of the river, this is a localised and short-term modification which may impact poorly mobile or sedentary organisms (mostly invertebrates which retain along or within the substrate on the river bottom).

The construction and maintenance of revetments may lead to the introduction and spread of allochthonous invasive plant taxa (e.g. Ambrosia artemisiifolia L., Solidago sp., Echinocystis lobata (Michx.) Torr. et Gray, Amorpha fruticosa L., Erigeron annuus (L.) Pers., etc.). Since this project is of a local character, partly on the left bank already in the vicinity of settlements and roads, its potential impact is not assessed as significant.

The pollution which may occur during construction due to unskilled or careless management of equipment and machinery is potentially dangerous. Since such adverse impact might potentially affect a larger area along the bank or the Sava course, it must be ensured that the works are done according to the highest professional standards and with appropriate precautionary measures, in order for the hypothetic adverse impact described above to be fully avoided.

According to the information available online from the Ministry of Environmental and Nature Protection (http://www.zastita-prirode.hr/) and according to the data of the State Institute for Nature Protection, in the project area and the in the area under its impact there are no areas protected under the Nature Protection Act (OG 70/05, 198/08, 57/11).

According to the data of the State Institute for Nature Protection, the scope of construction of revetments on the Sava river at sites Okunšćak, Rugvica, Oborovo, upstream of the Prevlaka lock, downstream of the Prevlaka lock, upstream of Dubrovčak on the left Sava riverbank lies in or in the vicinity of internationally important area for birds HR1000003 # Turopolje and area important for conserving wild taxa and habitat types HR2001116 # Sava. Further analysis and a conclusion about the impact of revetments on the Sava at Okunšćak, Rugvica, Oborovo, upstream of the Prevlaka lock, downstream of the Prevlaka lock, upstream of Dubrovčak are presented in the Screening Report, which is integral part of a Request for appropriate assessment for the ecological network. The Request will be submitted to the competent county authority once a confirmation about the project’s compliance with spatial planning documents is obtained. This process is under way.

**Impact from increased noise levels**

During the performance of works on the dike, emissions of noise will increase due to the movement and operation of machines and vehicles. In view of the distance from houses, these impacts will be poorly marked, are temporary in character and will terminate with the completion of works. The works shall be restricted to daytime in accordance with the Ordinance on maximum permitted levels of noise in an environment in which people work and stay (OG 145/04).

**Impact on air quality**

Due to an increased number of machines and vehicles, increased emissions of pollutants into the air are possible. The quantities of floating particles will also increase, but since this impact is limited to the period of construction, the impacts of works on air quality are insignificant.

**Impact from the generation of waste**

In the project area, inadequately disposed waste may appear, mostly bulk waste, end-of-life tyres and other mixed waste (plastic and wooden packaging).

During preparatory works (terrain clearing, surface clearing, etc.) and construction works and during the transport and operation of machinery, the generation of the following types of non-hazardous and hazardous waste is expected (the associated catalogue code of waste according to the Regulation on categories, types and classification of waste with a waste catalogue and list of hazardous waste (OG 50/05 & 39/09)):

* Bulk waste (20 03 07)
* Metals (20 01 40)
* wood other than that mentioned in 20 01 37 (20 01 38)
* End-of-life tyres (16 01 03)
* Plastic packaging (15 01 02)
* Wooden packaging (15 01 03)
* Dredging spoil containing dangerous substances (17 05 05\*)
* Other construction and demolition wastes (including mixed wastes) containing dangerous substances (17 09 03\*)
* Wood containing dangerous substances (20 01 37\*)
* Packaging containing residues of or contaminated by dangerous substances (15 01 10\*)
* Synthetic hydraulic oils (13 01 11\*)
* Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances (15 02 02\*)

**6.3 PROPOSAL OF ENVIRONMENTAL PROTECTION MEASURES**

**General measures**

1. Organize the construction site – define the area for the accommodation and turning of construction vehicles; define temporary disposal sites for material and waste; provide for toilet facilities (chemical toilet) for the staff;
2. Implement controlled disposal of municipal and other waste as required, i.e. prohibit any temporary or permanent disposal of waste onto the surrounding ground; and provide impermeable waste containers.
3. Whenever possible, use the existing roads and macadam roads to access the construction zone.
4. Regularly maintain and repair the machines and vehicles in order to prevent potential environmental pollution with harmful substances.
5. During the execution of works, make sure that fire protection measures are taken and that flammable and explosive materials are carefully handled and managed.
6. During the execution of works, make sure that fire protection measures are taken and that flammable and explosive materials are carefully handled and managed.
7. In the area of the sections covered by the project and between them in the flood zone, it shall be forbidden to store substances harmful to the environment (power-generating fuels, lubricants, PVC materials, materials prone to corrosion, etc.) and to park machines and vehicles, primarily trucks transporting stone material, over a longer period (e.g. during the night, over the weekend, etc.).
8. Upon the completion of works, all the temporary parking areas and areas for the movement of machinery shall be improved and the surface of the soil in the working zone shall be loosened for the surface to become covered with vegetation as soon as possible.

**Water**

1. Put up toilet facilities with impermeable cesspits. Their contents shall be emptied and disposed by an authorised company.
2. Fuels and lubricants shall not be stored at the dike construction site. Machines shall be filled with fuel and lubricant from a tank truck on an impermeable plateau with kerbs and an oil and grease trap. The plateau shall be placed along the access road and connected with drainage channels to the receiving water body.
3. Regularly clean the grease and oil trap.
4. Prevent any kind of watercourse pollution and act instantly in accordance with statutory provisions in the event of engine trouble, spill of harmful liquids, etc.

**Soil**

1. Use the existing roads and paths to access the construction site and open new ones only if necessary.

**Biodiversity**

1. During formation of the working zone and construction, avoid damage to peripheral trees and their roots by careful operation and respecting the required measures and procedures during construction.
2. The dike slopes and crests shall after the completion of works be, according to the design, planted exclusively with autochthonous grass mixtures spread naturally in the project area.
3. All excess material and biodegradable waste that will not be used during construction shall be systematically transported away and disposed at the designated sites (as required by the competent municipal service company).
4. Excess of the supplied construction material shall be disposed at the designated site outside of the flood zone. Excess excavated material (sand, gravel) shall be disposed along the left or right Sava riverbank within the existing river regulation lines, i.e. in the zone where it will be gradually taken away with the flow.
5. The borrow pit with material to repair the relevant sections of the bank shall not shall not leave the area of permanent change of use.
6. Works can be performed in the period between 1 August and 1 March, i.e. not in the bird-nesting period and the growing-up period of young birds, and not in the period of increased activities of amphibians and reptiles in order to avoid the destruction of their habitats in the reproduction period.
7. Works in the riverbed which include bank backfilling shall be performed gradually at the shortest possible sections of the bank, from the downstream to the upstream part, taking care to minimise damage to the natural substrate in the riverbed and the surrounding habitats.
8. After the completion of works, the natural vegetation along the bank and along the dike shall be restored by planting autochthonous vegetation in order to accelerate succession.
9. During maintenance, provide inspection of the revetments during a low water level in order to identify possible damage. The revetments shall be maintained taking account of the life cycles of the majority of animals (during a low water level, in the period between 1 September and 1 March).
10. During maintenance, make regular inspection in order to identify erosion of the bank on the opposite side of the river downstream of the stabilised bank and repair the vegetation cover of the stone lining if needed.

**Landscape**

1. All the areas where construction works were performed shall after the completion of works be restored to their near-original state.
2. After the completion of works, the areas shall be recultivated using top soil and fertile soil excavated during the works.
3. The dike slopes and crests and the surrounding ground where the natural surface cover has been removed shall be planted with grass mixtures with autochthonous species.

**Noise**

1. If possible, works shall be performed during daytime (from 8 a.m. to 6 p.m.).

*The measure complies with the Ordinance on maximum permitted levels of noise in an environment in which people work and stay (OG 145/04).*

**Waste**

1. It shall be forbidden to incinerate waste during the execution of works.
2. All the waste found on the location when clearing the terrain shall be collected separately (bulk waste, packaging waste, end-of-life tyres) and handed over to the authorised company.
3. Hazardous waste shall be collected separately, temporarily stored in special containers and handed over to the authorised company together an accompanying specification.

*The measures comply with the Waste Act (OG 178/04 and 87/09) and the Regulation on categories, types and classification of waste with a waste catalogue and list of hazardous waste (OG 50/05).*

**Environmental monitoring programme**

Due to the character of the project in which the strongest environmental impact occurs during construction, while no significant impacts are foreseen during use, no environmental monitoring programme is proposed.