

## **Appendix 1 - Plan of Mitigation Measures**

This Appendix to the Environment Management Plan for the Odra-Vistula Flood Management Project – *Contract 1B.1/1 (a): Reconstruction of the Odra River control infrastructure - adjusting to the III class of waterway, on the section from the village of Ścinawa to the estuary of the Nysa Łużycka River – Stage II* presents measures mitigating negative environment impacts which constitute guidelines for the Contractor as part of the *Contract 1B.1/1 (a)*. Requirement relating to discussion of the EMP implementation during work meetings and Site Meetings (item 84) concerns also the Engineer and PIU representatives.

The conditions described in the Appendix 1 of the EMP are grouped in the following categories:

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Explanations of the table in Appendix 1 of the EMP:

- 1) unless otherwise stated in a particular case, the term **Task implementation area** means the area of performing any preparatory works, essential works (including the Permanent Works and Temporary Works), and any works related to the removal of defects and faults or execution of the unfinished works specified in the Takeover Certificate or revealed during the Defects Notification Period, together with the lands subject to temporary acquisition.
- 2) unless otherwise stated in a particular case, the term **Task implementation period** means the duration of any preparatory works, essential works execution (including the Permanent Works and Temporary Works), and any works related to the removal of defects and faults or execution of the unfinished works specified in the Takeover Certificate or revealed in the Defects Notification Period.

Item	Issue	Place	Mitigation measures	Entity
<b>01 – AQUISITION OF LAND FOR DEVELOPMENT</b>				
1.	Land area and landscape protection	Task implementation area	<p><b>Restricted use and transformation of the area</b></p> <p>It is required to ensure the minimal use of the area and minimal transformation of its surface while carrying out works connected with the Task implementation.</p>	Contractor
2.	Land area and landscape protection	Task implementation area	<p><b>The rules for designating and equipping of temporary occupation sites</b> The following rules should be applied upon designating and equipping of temporary occupation sites:</p> <ul style="list-style-type: none"> <li>a) before starting the construction works stage, it is necessary to prepare construction backyards to serve as: storage sites for the building materials, soil and humus, garage, a place to refuel and conduct current repairs of vehicles, machinery and devices, location of social facilities (changing rooms, office, workshop, portable sanitary cabins) and waste containers.</li> <li>b) the surface designated for construction backyards should be limited to the essential minimum;</li> <li>c) construction backyards, equipment depots and temporary technological roads should be located outside the existing greenery (determined according to the geodetic classification), on hardened and insulated ground, in a manner ensuring economical use of the site and minimal transformation of its surface;</li> <li>d) the places specified in subsection c. must be located outside the area indicated by the Contractor's environmental team as environmentally valuable areas;</li> <li>e) the construction backyards will be located in the port areas of Cigacice, Nowa Śól and Krosno Odrzańskie.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
3.	Land area and landscape protection	Task implementation area	<p><b>Aspects concerning the location of technological roads</b></p> <p>Technological roads for transport of materials (fascine, stone) to the <i>Task implementation area</i> should be determined on the basis of existing roads outside the areas identified by environmental team as of high nature value. The surface should be limited to the essential minimum required for the Task implementation area.</p> <p>Requirements concerning the use of access roads to the Task implementation area as well as the surrounding area are described in item 22 of App. 1 of EMP.</p>	Contractor
4.	Land area and landscape protection	Task implementation area	<p><b>Rules while determining sites</b></p> <p>Materials used for groynes reconstruction can be stored in their immediate vicinity, but only in places that do not damage patches of natural habitat and the habitats of protected species of plants, fungi and animals. The location of these types of places, prior to their establishment, is agreed by the environmental experts team of the Contractor, taking into account the results of a singular environmental field inventory referred to in item 5 of App. 1 of EMP. The location of these types of places is submitted to the Engineer for their approval.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>02 – REQUIREMENTS CONCERNING PROTECTION OF THE BIOTIC NATURAL RESOURCE</b>				
5.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Carrying out one-off environmental inventory control</b></p> <p>All works should be preceded by one-off inventory (carried out by the team of environmental experts as referred to in item 84) of temporary and permanent construction sites in order to:</p> <ul style="list-style-type: none"> <li>a) establish up-to-date distribution of natural habitats included in Annex 1 of Habitats Directive (Council Directive 92/43/EWG), as well as sites of protected species of plants, animals and fungi,</li> <li>b) establish places of potential localities of these valuable species,</li> <li>c) submit the results of the inventory to the Engineer within 21 days of its completion.</li> </ul>	Contractor
6.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Prevention of the spread of invasive species and their elimination</b></p> <p>In order to prevent the spread of invasive species in the construction area and its surrounding, the following measures should be taken:</p> <ul style="list-style-type: none"> <li>a) Prior to commencement of earthworks, it is necessary to perform examination of the Task implementation area with phytosociologist/botanist to determine the habitats and population of invasive plants (mostly beggar-ticks <i>Bidens frondosa</i>);</li> <li>b) Once their localities are established and clearly marked, measures against spreading of invasive plants in the construction area should be taken such as removing of humus layer with the identified invasive species and relocate safely into composting plant or eliminate in other effective way.</li> <li>c) It is forbidden to mix the removed layer with humus layer full of native plant species.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
7.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Requisite permissions for departures from ban concerning protected species</b></p> <p>The Contractor (if necessary and in line with the results of environmental inventory referred to in item 5 of the App. 1 of the EMP) will get requisite permissions for departures from ban concerning protected species of plants, fungi and animals issued according to the of Act of April 16th, 2004 on nature conservation.</p> <p>If the relevant permissions are obtained, the Contractor shall perform activities specified in the administrative decisions and draw up required report on their implementation with accordance to their content. Reports shall be submitted to the Engineer 30 days prior to the date of their submission to the Authority that issues relevant permits.</p>	Contractor
8.	Protection of biotic nature	Task implementation area	<p><b>Relocation of protected species outside the borders of construction area</b></p> <p>In case of necessity of relocation of protected species outside the borders of construction area, the Contractor is obliged to organize all activities connected with the procedure including gaining relevant permissions, effective relocation and meeting other demands resulting from permissions (such as drafting and submitting reports to licensing authority).</p>	Contractor
9.	General principles of protection of the biotic natural resource	Task implementation area/Places of riffle removal	<p><b>Reduction of losses in specimens of mussels</b></p> <p>In order to reduce losses in specimens of mussels (remaining a breeding habitat for the protected species of fish – Amur bitterling) one shall verify materials dredged from the Odra bottom and collect specimens of mussels present on the surface of dredged materials. Collected specimens shall be transferred and placed in the river in locations assuring their safety. The verification shall be done directly after dredging and prior to the completion of works on a given day. In time, when the air temperature would amount to more than 20°C the verification of dredged materials shall be done at least every 4 hours.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
10.	General principles of protection of the biotic natural resource	Task implementation area/ Places of riffle removal	<b>Exemptions of fish spawning season from the dates for performing works</b>  Works related to the removal of excess sediments from the riverbed shall be carried out outside the spawning season of the fishes which are present at the sites intended for construction (i.e. outside the period from 1st March to 31st August).	Contractor
11.	General principles of protection of the biotic natural resource	Task implementation area	<b>Time limit of performing works due to the bird protection</b>  In order to eliminate the risk of disturbance of the protected bird species for which the Natura 2000 Special Protection Area Dolina Środkowej Odry PLB080004 has been established, the construction works and the hydrotechnical works shall be performed beyond the period from 1 March to 31 August.	Contractor
12.	General principles of protection of the biotic natural resource	Task implementation area	<b>Area limit due to the nature protection</b>  In order to avoid damage done to natural habitats, the territory used as a Task Implementation area should be limited to essential minimum.	Contractor
13.	General principles of protection of the biotic natural resource	Task implementation area	<b>Setting up proper work schedule for Task implementation</b>  The Contractor shall provide such a work schedule in which deadlines and locations of various stages of the Task implementation, will meet the conditions of the environmental decisions and EMP, as well as to the utmost extent will limit the negative impact on the protected species occurring in the area of the Tasks and its surroundings.  Demands concerning dates and deadlines of the works are mentioned also in items 10,11 and 41 of App. 1 of EMP.	Contractor
14.	General principles of protection of the biotic natural resource	Task implementation area	<b>The use of substances and materials which are safe for animals</b>  Substances and materials that could be lethal in relation to animals occurring in the Task implementation area and its vicinity should not be used during the Task implementation.	Contractor

Item	Issue	Place	Mitigation measures	Entity
15.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Taking into account the specificities resulting from the existence of protected areas</b></p> <p>In the course of construction works, the Contractor is obliged to comply with the norms, prohibitions and indications and to respect the limitations resulting from the existence of areas and objects created on the basis of the Act of 16th April 2004 on the Nature Conservation.</p>	Contractor
16.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Reduction of animal mortality during construction works</b></p> <p>The works should be executed in a way that allows avoiding killing of animals. Works within groynes, vicinity of which may contain amphibian habitats (in accordance with the results of a singular environmental field inventory referred to in item 5 of App. 1 of EMP) shall be commenced under the supervision of an expert herpetologist, who, in the case of their increased mortality, will determine additional conditions for the construction that would limit that rate.</p>	Contractor



Item	Issue	Place	Mitigation measures	Entity
<b>03 – REQUIREMENTS CONCERNING EARTH MASS EXCAVATED DURING CONSTRUCTION WORKS</b>				
17.	Requirements concerning control tests and treatment of excavated earth masses	Task implementation area	<p><b>Requirements concerning treatment of soils from riverbed</b></p> <p>The following rules should be followed for dealing with sediments extracted from the riverbed:</p> <ul style="list-style-type: none"> <li>a) if contaminated soils are discovered (with exceeded values of permissible substance concentrations in accordance with current regulations concerning Waste Act, Environmental Law and executive acts of the aforementioned Acts), they must be removed and handed over to entities holding adequate permissions for their further management.,</li> <li>b) in case of uncontaminated soils, it is possible to restore them or reuse them for groyne reconstruction. Surplus soil will be shipped with the use of floating equipment to the ports serving as construction backyards (in Nowa Sól, Cigacice, Krosno Odrzańskie) and managed there according to applicable law (pursuant to the Waste Act),</li> <li>c) in accordance with the results of qualitative tests of the extracted output and its classification in that respect, contaminated sludge will be transported by water to the unloading sites situated in the above-mentioned ports to be eventually loaded onto the means of land transport and shipped to the appropriate landfills,</li> <li>d) the exact locations of the designated landfills to which contaminated sludge will be transported shall be selected by the Contractor and must be pre-approved by the Engineer. These landfills must meet, in accordance with legal regulations, requirements in terms of storage capacity of ground masses with different levels of pollution.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
18.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Ban on storage of the excess of ground masses in the riverbed and in the inter-groyne zone</b></p> <p>Excessive ground masses and other materials obtained from rebuilt groynes and sediment on the bottom shall not be stored in the riverbed and in the areas between groynes or in the inter-embankment zone of the Odra River. Excessive ground masses and other materials shall be managed in accordance with guidelines in item 17 of App. 1 of EMP and relevant waste management regulations.</p>	Contractor
19.	Requirements concerning treatment of excavated earth masses	Task implementation area	<p><b>Principles of transporting and handling of ground masses</b></p> <p>The shipment of excavated material by water can be carried out by any means of transport accepted by the Engineer. Loading, transport and unloading of materials should be carried out in accordance with the provisions of SHP, OHS and road traffic regulations (in the case of transport that takes place on public roads, of materials derived from dredging works).</p> <p>The technology of transshipment works, including the provisions for a temporary storage of ground masses within ports, will be described by the Contractor in the Quality Assurance Plan, which must be approved by the Engineer prior to the commencement of works included in it. The adopted technology can not cause environmental pollution within adjacent areas. The area of the river bank used for reloading of ground masses should be equipped in devices for rainwater treatment (in order to protect surface waters against contamination with oil derivatives).</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>04 – REQUIREMENTS CONCERNING COMMUNICATION SERVICE IN THE TASK IMPLEMENTATION AREA</b>				
20.	Land area and landscape protection	Task implementation area	<p><b>Transport of building materials to construction sites</b></p> <p>Transport of building materials and machines for reconstruction of groynes will be carried out by water to particular sections of construction sites. It is possible to use light construction equipment on existing unpaved roads providing they do not affect the deterioration of natural environment, such as Natura 2000 in particular. While establishing the access routes, the results of one-off environmental inventory mentioned in item 5 of App. 1 of EMP should be taken into consideration.</p> <p>The location of the access routes should be submitted by the Contractor to the Engineer for their approval.</p>	Contractor
21.	Protection of material goods Protection of human health and safety Land area protection	Task implementation area	<p><b>Conditions for the use of access roads to the Task implementation area</b></p> <p>In the scope of the use of access roads to the <i>Task implementation area</i> the following conditions apply:</p> <ul style="list-style-type: none"> <li>a) The Contractor shall prepare design of traffic organization of the Task implementation area in accordance with Technical Specifications and regulations of Road Authorities concerning transport roads and conditions for their use;</li> <li>b) The Contractor is obliged to agree the traffic and work protection designs with the Road Authorities. The Contractor is obliged to carry out the traffic organization according to the agreed designs (marking and securing the <i>Task implementation area</i> and marking detours and recommended road marking connected with a change of traffic organization, etc.);</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
			<p>c) Prior to the works, the Contractor shall submit the traffic organization and work protection designs agreed with the Road Authorities to the Engineer for approval. Depending on the needs and progress of works the designs of road traffic changes shall be updated by the Contractor on a regular basis. (these adjustments have to be agreed with the Road Authorities );</p> <p>d) The Contractor shall ensure proper markings of all access roads to the <i>Task implementation area</i> in accordance with applicable law and as agreed with the relevant Road Authorities. These markings will be monitored regularly, and in the case of damage or theft, the Contractor shall immediately restore or supplement these markings;</p> <p>e) Hardened surfaces (e.g. access roads), over which the vehicular traffic transporting building materials and aggregates will take place, should be kept clean and in due technical condition;</p> <p>f) The Contractor is obliged to prepare photographic documentation of the entire Task implementation area and of the access roads, with a special emphasis on the technical condition of roads and buildings located near the routes used for transporting building materials,</p> <p>g) The Contractor shall be responsible for all damage to buildings and structures, roads, drainage ditches, culverts, water and gas pipes, poles and power lines, cables, points of geodetic control network and installation of any kind, and objects of another kind as horizontal and vertical marking, navigation marking, signage, cultural objects, etc., caused by him or his Subcontractors within the <i>Task implementation period</i>. The Contractor is also responsible for restoring the flow capacity of ditches and drainage systems in the area of works and used transport roads in the event of damage caused by construction works and transport connected with the works;</p> <p>h) The Contractor shall immediately repair any resulting damage at his own expense and, if necessary, carry out other work ordered by the Engineer;</p>	

Item	Issue	Place	Mitigation measures	Entity
			<p>i) The Contractor shall apply to statutory restrictions for the axle load at the transport of materials to and from the <i>Task implementation area</i>. The Contractor shall obtain all necessary permits for the transport of atypical loads and continuously notify the Engineer of any such carriage.</p>	
22.	Protection of human health and safety	Task implementation area	<p><b>Safety conditions for water transport</b></p> <p>In the case of means used for waterway transport, the following guidelines should be applied:</p> <ul style="list-style-type: none"> <li>a) means of transport (sets of floating equipment) must meet the requirements applicable in this respect, and be in accordance with the regulations in force in the Republic of Poland covering the inland navigation,</li> <li>b) means of transport (sets of floating equipment) in terms of parameters must be adapted to the conditions resulting from the current class of the waterway,</li> <li>c) the use of vessels in the implementation of works requires agreement with the waterway administrator and relevant local Director of the The Inland Waterways Authority,</li> <li>d) before the commencement of implementation a <i>Work and movement of vessels during construction instruction book</i> must be prepared, which requires to be approved by the administrator of waterway and Director of the Office of Inland Navigation in Wrocław,</li> <li>e) marking of the construction area and of the waterway informing about occurring hazards and limitations in waterway navigation traffic should be performed. The method of marking and the place of foundation should be agreed with the Director of the Office of Inland Navigation in Wrocław.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
23.	Land area and landscape protection/ Noise protection	Task implementation area	<p><b>Reduction of dusting and noise while transporting materials</b></p> <p>While transporting building materials by water or by land, following conditions should be met:</p> <ul style="list-style-type: none"> <li>a) it is necessary to apply required organizational and technical measures in order to maintain access roads to construction backyards in cleanliness,</li> <li>b) while transporting materials, it is required to drive with proper speed in the built-up areas,</li> <li>c) it is necessary to apply required organizational and technical measures in order to reduce noise,</li> <li>d) and protect the load with proper covering to reduce the possibility of causing burdens to inhabitants (such as dusting).</li> </ul>	Contractor
24.	Protection of human health and safety	Task implementation area	<p><b>Keeping allowable total load capacity of means of transport</b></p> <p>During transport of building materials and construction works with technology using access from water, it is necessary to observe total load capacity of vehicles and barges and other floating equipment.</p>	Contractor
25.	Land area and landscape protection	Task implementation area	<p><b>Reduction in the use of heavy equipment during construction works</b></p> <p>Introduction of the heavy equipment at the construction site should be limited to the necessary minimum.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>05 – ORGANIZATION OF CONSTRUCTION AREA, CONSTRUCTION BACKYARDS, WAREHOUSES AND STORAGE SITES</b>				
26.	Land area and landscape protection	Task implementation area	<p><b>Proper organization of works</b></p> <p>The Task implementation area should be kept clean and proper organization of works should be provided.</p>	Contractor
27.	Land area and landscape protection	Task implementation area	<p><b>Equipping sites of potential contamination with sorbents</b></p> <p>Temporary occupation sites such as technological roads, construction backyards, storage sites for construction material, parking must be equipped with sorbents for liquidating possible leakages and spillages of petroleum substances.</p>	Contractor
28.	Protection of human health and safety	Task implementation area	<p><b>Location of construction backyards</b></p> <p>Construction backyard must be situated as far from residential development areas as possible.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>06 – REQUIREMENTS CONCERNING WASTE MANAGEMENT</b>				
29.	Protection of human health and safety	Task implementation area	<p><b>Principles of hazardous waste management</b></p> <p>If hazardous substances and materials are stored in the building site, they must be protected appropriately, preventing the access of unauthorized persons, and information on a hazard must be provided on warning boards.</p> <p>Hazardous waste shall be segregated and stored separately in designated airtight containers set on hardened ground, secured against unauthorised access until handed over to entities authorised to manage such waste further.</p>	Contractor
30.	General waste handling	Task implementation area	<p><b>General principles of waste management</b></p> <p>Waste management should be carried out according to the following requirements:</p>	Contractor



Item	Issue	Place	Mitigation measures	Entity
			<p>a) Production of waste generated during the implementation of the Task shall be reduced to the minimum to prevent negative impact on the environment.</p> <p>b) Waste shall be segregated and selectively stored in airtight containers or in designated and suitable locations in conditions that prevent dust emission and prevent the wind picking up light fractions resulting in a negative environmental impact.</p> <p>c) Regular waste collection shall also be ensured by entities authorised to manage the waste further.</p> <p>d) Ship waste containing oil derivatives and lubricating greases, load waste produced on board and other floating equipment, sewage and waste water shall be collected within the area of floating units in such a way to protect the environment against contamination.</p> <p>e) Ship waste shall be handed over to ship waste collectors located within ports in Nowa Sól, Cigacice and Krosno Odrzańskie</p> <p>Waste management shall be carried out according to requirements of the Waste act of 14 December 2012, Inland Navigation Law of 21 December 2000 and Waste Management Plan as referred to in item 71 of App. 1 of EMP.</p>	
31.	General waste handling	Task implementation area	<p><b>Designating places for waste deposit and storage</b></p> <p>The Contractor, in agreement with the Engineer, will designate places for depositing and storing waste. However, areas located in the Odra river inter-embankment zone cannot be selected for this purpose.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
32.	General waste handling	Task implementation area	<p><b>Management of waste produced by workers</b></p> <p>Waste produced by the workers shall be collected in specially marked containers and bags, the content of which shall be handed over to entities with appropriate permits to utilize it. Particular attention should be paid to the successive accumulation of waste generated by the employees in the immediate vicinity of the riverbed in order to avoid its pollution.</p>	Contractor
33.	General rules for domestic waste-water management	Task implementation area	<p><b>Maintaining proper hygienic conditions in the construction sites</b></p> <p>It is necessary to equip the Task implementation area with a required number of portable toilets and provide workers with training about maintaining proper hygienic conditions of the construction sites and surrounding. The Contractor's workers shall not relieve themselves outdoors but only in the places designated for this purpose.</p>	Contractor
34.	General rules for domestic waste-water management	Task implementation area	<p><b>Principles of domestic waste-water management</b></p> <p>In case of lack of possibility to discharge domestic waste-water to the nearest sewage system, the waste shall be collected in tights, septic containers and regular disposal by entities with appropriate permits shall be provided.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>07 - REQUIREMENTS CONCERNING POSSIBLE FELLING OF TREES AND PROTECTION OF TREES AND SHRUBS</b>				
35.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Reduction in trees and shrubs felling</b></p> <p>Possible felling of trees and shrubs must be limited to an absolute minimum only to the sites for which the conditions of such felling were included in administrative decisions due to their occurrence in the place of earthworks and construction works.</p> <p>The Contractor is obliged to obtain administrative decisions concerning felling of trees and shrubs required for the Task implementation. The Contractor also meets all of the conditions resulting from the issued administrative decisions. In the case of overlap of thematic ranges contained in the issued administrative decisions regarding the felling of trees and shrubs with the conditions included in the EMP, the Contractor shall apply stricter rules related to environmental protection.</p>	Contractor
36.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Protection of trees in the Task implementation area</b></p> <p>In order to protect existing trees growing in the vicinity of the Task implementation and at risk of being damaged due to vehicle traffic, equipment handling, it is recommended:</p> <ol style="list-style-type: none"> <li>to secure trunks of the trees growing nearby against damage, e.g. by putting coverings made of wooden strips around the trunks up to the minimum height of 1.5 m,</li> <li>to carry out earth works manually if near to the root system of the trees,</li> <li>to cover the trunks to protect them against drying (summer) or freezing (winter) with the use of straw, sandbag materials or peat,</li> <li>to protect the soil under the trees from storing building site back-up materials and excavated soil as it stops the exchange of gases between air and ground and may lead to dying or rotting of the roots.</li> </ol>	Contractor

Item	Issue	Place	Mitigation measures	Entity
37.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Preservation of damaged trees</b></p> <p>In case of damaging trees, the Contractor is obliged under supervision of phytosociologist/botanist to take care of maintenance of the damaged trees and introduce treatment limiting the adverse effects.</p>	Contractor
38.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Assessment of potential occurrence of beetle species before tree felling</b></p> <p>In the planned tree felling sites, it is necessary to:</p> <ul style="list-style-type: none"> <li>a) prior to the felling of trees of circumference exceeding 100 cm (measured at the height of 1,3m) an expert entomologist should inspect individual tree specimens for the purpose of assessing if protected species of beetles are present at the site,</li> <li>b) secure and/or relocate the species to a different habitat of similar conditions if trees occupied by beetles are found,</li> <li>c) prior to the execution of abovementioned activities Contractor shall obtain a legally required administrative decision for derogation from prohibitions regarding protected animal species created on the basis of the Act of 16 April 2004 on the Nature Conservation,</li> <li>d) works detailed in subsection b) shall be carried out under the supervision of an expert entomologist and in accordance with applicable conditions contained in administrative decisions pursuant to the Act of 16 April 2004 on the Nature Conservation,</li> <li>e) the Contractor shall prepare relevant reports on the course and the scope of undertaken activities which were authorised to derogate from prohibitions regarding protected animal species.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
39.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Assessment of potential occurrence of bats before tree felling</b></p> <p>In order to reduce losses in the species of protected bats which may live in tree hollows, it is necessary to:</p> <ul style="list-style-type: none"> <li>a) prior to the felling of trees of circumference exceeding 100 cm (measured at the height of 1,3m) an expert chiropterologist should inspect individual tree specimens for the purpose of assessing if protected species of bats are present at the site,</li> <li>b) should any presence of protected bat species be confirmed in trees to be felled, Contractor shall obtain a legally required administrative decision for derogation from prohibitions regarding protected animal species created on the basis of the Act of 16 April 2004 on the Nature Conservation prior to the tree felling,</li> <li>c) further works shall be carried out under the supervision of an expert chiropterologist and in accordance with applicable conditions contained in administrative decisions pursuant to the Act of 16 April 2004 on the Nature Conservation,</li> <li>d) the Contractor shall prepare relevant reports on the course and the scope of undertaken activities which were authorised to derogate from prohibitions regarding protected animal species.</li> </ul>	Contractor
40.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Dates for tree felling</b></p> <p>Trees and bushes felling within the scope indispensable for the Task implementation must be carried out beyond the breeding season of birds ( from 16 October to the end of February).</p>	Contractor
41.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Protection of area below the tree crowns</b></p> <p>Places for storage of building materials, earth mass, for parking of vehicles and building equipment should be located beyond vertical projection of crowns of trees which are not intended for felling. The construction backyards will be located in the port areas of Cigacice, Nowa Sól and Krosno Odrzańskie.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
42.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Protection of vegetation growing beyond the border of Task implementation area</b></p> <p>During construction works it is prohibited to damage vegetation situated beyond the borders of Task implementation area.</p>	Contractor
43.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Preservation of natural habitats and habitats of protected species in the inter-groyne areas</b></p> <p>During construction works connected with rebuilding of groynes and outside the area of direct interference, it is required to preserve diversity of natural habitats and habitats of protected species within the riverbed such as boulders or stones from eroded groynes, wooden logs, sandy patches and other similar elements.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>08 – REQUIREMENTS CONCERNING PREVENTION OF ENVIRONMENTAL POLLUTION</b>				
44.	Land area and landscape protection / General principles of protection of the biotic natural resource	Task implementation area	<p><b>Carrying out works with the use of floating equipment</b></p> <p>Planned works connected with reconstructions of groynes and riffle removal within the riverbed will be carried out with the use of floating equipment (such as barges, pontoons, pusher crafts).</p>	Contractor
45.	Protection of soil, surface waters	Task implementation area	<p><b>Prevention of leakage and soil, ground and water contamination.</b></p> <p>In order to prevent soil, ground and water contamination during construction works or while organising the Task implementation area, it is necessary to:</p> <ul style="list-style-type: none"> <li>a) avoid the leakage or spillage and seal potentially endangered surface such as containers or designated sites where machine unloading and filling up the fuel take place;</li> <li>b) introduce the proper measures and procedures of collecting and storing hazardous substances such as oil derivatives in strictly set quantities;</li> <li>c) store materials and equipment in designated sites, properly secured against polluting surface and ground waters.</li> </ul>	Contractor
46.	Protection of soil, surface waters	Task implementation area	<p><b>Rules governing refuelling of machinery</b></p> <p>Refuelling of machinery and vehicles shall only take place in designated areas. It is necessary to follow the instructions while filling up the fuel.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
47.	Protection of soil, surface waters and air protection	Task implementation area	<p><b>Maintaining proper technical conditions of equipment</b></p> <p>Equipment used during construction works must fulfil the following conditions:</p> <ul style="list-style-type: none"> <li>a) be fully operational and meet the requirements for its use,</li> <li>b) the type and technical condition of the equipment used during construction must ensure protection of land, surface waters and groundwater against contamination, as well as protection against noise emission to the environment;</li> <li>c) the technical condition of construction and transportation machinery shall be monitored to eliminate leaks of carbohydrate petroleum derivatives into the ground, within the vessels and into the water.</li> </ul>	Contractor
48.	Protection of soil, surface waters	Task implementation area	<p><b>Current control land repairs of equipment</b></p> <p>Appropriately to demand one shall provide necessary repairs and maintenance for the operated machinery (to prohibit any leakage in hydraulic and fuel systems).</p>	Contractor
49.	Protection of soil, surface waters and air protection	Task implementation area	<p><b>Supervision over operation of the motor vehicles</b></p> <p>The Contractor's team must exercise proper supervision over operation of the motor vehicles of the ground transport as well as of the vessels deployed for the Task Implementation.</p>	Contractor



Item	Issue	Place	Mitigation measures	Entity
50.	Protection of soil, surface waters and air protection Noise protection	Task implementation area	<p><b>The use of equipment that ensures the protection of sanitary condition of the air</b>The equipment used and construction machinery must meet the following conditions for the protection of sanitary condition of the air:</p> <ul style="list-style-type: none"> <li>a) construction machinery should have modern drive units with limited emission of combustion gases.</li> <li>b) the level of pollution emitted by ground vehicles and vessels cannot exceed the European standards contained in Directive EURO IV (98/69/EC &amp; 2002/80/EC) as well as in the Directive EURO V (2007/715/EC[13]),</li> <li>c) the type and technical condition of the equipment used during construction must ensure protection against exceeding the permissible values for dust and gaseous substances emission into the atmosphere.</li> </ul>	Contractor
51.	Protection of soil, surface waters and air protection	Task implementation area	<p><b>The use of materials which are the least harmful to the environment</b></p> <p>During the Task implementation materials which are the least harmful to the vegetation and the soil and water environment shall be used.</p>	Contractor
52.	Protection of soil, surface waters and air protection	Task implementation area	<p><b>Proper storage of materials and equipment</b></p> <p>Building materials and equipment should be stored in designated areas, adequately protected against contamination of the soil and water environment.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
53.	Protection of soil, surface waters	Task implementation area	<p><b>Protection of the Inter-embankment of the Odra river against pollution</b></p> <p>Storage of any waste related to repairs and maintenance of equipment, machinery and devices used in construction works is not permitted in the inter-embankment of the Odra River. All machine repairs and service should be carried out by specialized companies or individuals authorized by the manufacturer (authorized service). Waste generated during this type of work (such as damaged parts, gaskets, filters, emptied grease and liquid containers, used oils and liquids, etc.) will be collected by repairers or service providers and will not be stored on site. It should then be managed in accordance with the regulations and included in the Waste Management Plan as referred to in item 71 of the App. 1 of the EMP.</p>	Contractor
54.	Air protection	Task implementation area	<p><b>Reduction of exhaust fumes from machinery and vehicles</b></p> <p>It is necessary to seek reduction of the work time for internal-combustion engines of machinery and the vehicles. Prolonged work of internal-combustion engines of construction machines and vehicles should not be allowed during stoppage (limit emission in so-called idle phase).</p>	Contractor
55.	Air protection (against dusting)	Task implementation area	<p><b>Reduction in dusting of vehicles</b></p> <p>Dusting caused by vehicles should be limited, inter alia, by:</p> <ul style="list-style-type: none"> <li>a) cleaning vehicle wheels before entering public roads,</li> <li>b) cleaning inner surfaces of technological roads,</li> <li>c) using airtight tarpaulin on vehicles carrying materials that produce dust, or transporting bulk materials in containers,</li> <li>d) using airtight tarpaulin on vessels carrying materials that produce dust, or transporting bulk materials in containers</li> <li>e) other actions preventing contamination of local roads by the sand and mud carried by vehicles.</li> <li>f) sparkling inner surfaces of technological roads.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
56.	Protection of water and soil	Task implementation area	<p><b>Providing designated places for parking of machinery and vehicles</b></p> <p>Equipment, machinery and vehicles used for the construction work must have designated parking spots, which shall be protected against any penetration of petroleum derivatives into the soil and water environment. During the periods that the equipment, machinery and vehicles are not used, they should be present in the designated areas.</p>	Contractor
57.	Protection of water and soil	Task implementation area	<p><b>Prevention and action concerning penetration of pollution into the ground and water environment</b></p> <p>The Task shall be designed and implemented in a manner excluding penetration of any pollutions, especially petroleum derivatives to the ground and water environment.</p> <p>In the case of possible leakage of petroleum derivatives the following rules of conduct shall be adhered:</p> <ul style="list-style-type: none"> <li>a) the leak shall be immediately removed and polluted soil layers shall be immediately removed and managed in accordance with binding regulations.</li> <li>b) areas affected by the leakage of petroleum derivatives shall be restored to the condition preceding structure implementation (land reclamation).</li> <li>c) in the event of leakage into the water, ensure immediate constraint of the contamination spread and mechanically collect the petroleum derivatives from the surface of the water.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>09 – GUIDELINES CONCERNING REDCUTION OF BURDEN TO THE ENVIRONMENT BY THE USE OF PROPER MATERIALS</b>				
58.	Protection of water and soil	Task implementation area	<p><b><i>The use of materials harmless for the environment</i></b></p> <p>For groynes reconstruction only the natural materials shall be used, such as stone and fascine.</p>	Contractor
59.	General principles of protection of the biotic natural resource	Task implementation area	<p><b><i>Rules concerning obtaining of fascine</i></b></p> <p>Materials, including in particular fascines, for the purpose of the Task implementation shall be obtained from areas not protected under Natura 2000 network.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>10- REQUIREMENTS CONCERNING NOISE PROTECTION OF ADJACENT AREAS TO CONSTRUCTION SITES</b>				
60.	Noise protection	Task implementation area	<p><b>Reduction of working hours to daytime</b></p> <p>In order to limit nuisance generated by the noise, the construction works shall be conducted during daytime (6:00 a.m. – 10:00 p.m.).</p>	Contractor
61.	Noise protection	Task implementation area	<p><b>Noise reduction by the use of proper technologies and good work organization</b></p> <p>Technologies that cause least acoustic nuisance during construction work shall be applied, as well as, a good work organization, correct equipment operation and its technical maintenance.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>11 – REQUIREMENTS CONCERNING LAND RECLAMATION OF TEMPORARY OCCUPATION SITES</b>				
62.	Land area and landscape protection	Task implementation area	<p><b>Land reclamation upon completion of construction works</b></p> <p>In the event of deformation of the ground surface by imposed earthwork and operation of heavy equipment, these areas shall be restored to the condition preceding structure implementation (land reclamation).</p> <p>Upon completion of all construction works, it is necessary to recover temporary occupation sites to their previous condition (restored to its original form). After the task has been implemented, the site shall be reinstated as it was originally, maintaining the most natural character of that zone. Works connected with land reclamation of temporary occupation sites shall be carried out with the participation of botanist/phytosociologist from the Contractor's environmental team.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
63.	Land area and landscape protection	Task implementation area	<p><b>Implementing actions concerning the collection of humus layer and land reclamation of temporary occupation site.</b></p> <p>In order to protect humus in the Task implementation area:</p> <ul style="list-style-type: none"> <li>a) if carrying out of the construction work is necessary in places with a fertile soil layer - humus, before the commencement of works, a layer of humus should be collected with a thickness of not less than 0.2 m;</li> <li>b) works related to the stripping of humus should be carried out in the period from the beginning of September to the end of February;</li> <li>c) detailed location of humus heaps should be agreed in advance with the environment expert board referred to in item 81 of the App. 1 of the EMP (including a phytosociology expert) so that storage of topsoil does not result in degradation of natural habitats and natural conservation sites for protected species;</li> <li>d) stored humus heaps should be protected from damage, running over, thickening, storage of construction materials, etc.;</li> <li>e) stored humus heaps should be regularly sprinkled with water depending on the weather (never allow the heaps to become dry for over 5 days);</li> <li>f) after completion of construction works, stored humus should be used to restore the layer of fertile soil;</li> <li>g) works connected with land reclamation of temporary occupation sites shall be carried out with the participation of botanist/phytosociologist from the Contractor's environmental team.</li> </ul> <p>The actions related to humus recovery and land reclamation of greenery shall be taken as soon as its implementation is possible.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>12 – REQUIREMENTS CONCERNING PROTECTION OF CULTURAL MONUMENTS</b>				
64.	Protection of archeological values	Task implementation area	<p><b>Actions taken in registered archeological sites</b></p> <p>During the Task implementation, the Contractor shall provide the participation of archeological team of experts (archeological supervision).</p> <p>The participation of the archeological team will ensure the protection and the removal of valuable objects and other elements of historical value from the working site and will enable the performance of specific works.</p> <p>Dependent upon actual needs, the team of expert archaeologists may consist of one or more persons having appropriate industry qualifications. The composition of the team of expert archaeologists is subject to the Engineer’s approval. Prior to the commencement of the works, the Contractor shall submit to the Engineer’ approval a <i>Quality Assurance Plan</i> defining the scope of activities of expert archaeologists’ team.</p>	Contractor
65.	General provisions concerning cultural heritage and the monuments conservation	Task implementation area	<p><b>Actions taken in the case of finding of artefacts or archeological sites</b></p> <p>If, during the works, Contractor’s team finds an object for which it is reasonable to suppose or be certain that it may be an artefact or have a historical value, the Contractor is:</p> <ul style="list-style-type: none"> <li>a) obliged to stop immediately all the works which may damage and destroy the find, secure the object and the site where it was found (using available means),</li> <li>b) immediately notify the relevant heritage conservator’s, and if it’s not possible an appropriate local head of commune (Voyt or Mayor). Contractor simultaneously shall notify the Engineer about the abovementioned.</li> </ul>	Contractor
66.	General provisions concerning cultural heritage and the monuments conservation	Task implementation area	<p><b>Obtaining permit issued by the relevant heritage conservator’s</b></p> <p>For the purpose of implementing provisions mentioned in items 64 and 65 of the EMP connected with the protection of cultural heritage sites and historic monuments, the Contractor, if necessary, will also obtain a permit issued by the relevant heritage conservator’s to carry out archeological rescue explorations.</p>	Contractor



Item	Issue	Place	Mitigation measures	Entity
<b>13 – REQUIREMENTS CONCERNING PROTECTION OF HUMAN HEALTH AND SAFETY</b>				
67.	Protection of human health and safety	Task implementation area	<p><b>Proper storage of building materials</b></p> <p>Materials used in construction works should be stored in the manner securing them against damage and in the manner not posing a risk to the human and property.</p>	Contractor
68.	Protection of human health and safety	Task implementation area	<p><b>Providing proper communication devices</b></p> <p>Workers shall be provided with the voice communication devices (walkie-talkies or other means of wireless communication).</p>	Contractor
69.	Protection of human health and safety	Task implementation area	<p><b>Providing safety during operation of machinery, construction equipment and other devices</b></p> <p>Operation of machinery, construction equipment and other devices should be carried out in the manner not posing a risk to the human and property safety, excluding falling over, sliding down or falling down of machinery and equipment.</p>	Contractor
70.	Protection of human health and safety	Task implementation area	<p><b>Providing workers with safety and health protection plan (SHP)</b></p> <p>The Contractor is obliged to prepare safety and health protection plan (SHP), to obtain the Engineer's approval for its content and should comply with its recommendations until the completion of the Task.</p> <p>While drafting safety and health protection plan (SHP), the Contractor should pay special attention to perform works in a safe manner when using the floating equipment, when construction works take place in the close vicinity of flowing waters and when the adverse weather conditions in autumn-winter seasons occur (all provisions concerning performing works should be described in great detail and workers should be provided with proper personal protective equipment and clothing).</p> <p>The fire safety requirements in the SHP should also include a ban on igniting fires and incinerating flammable materials within the construction site.</p>	Contractor

71.	Drafting additional Plans concerning crisis situations management	Task implementation area	<p><b>Additional documents concerning crisis and environment management drafted by the Contractor:</b></p> <ul style="list-style-type: none"> <li>a) Within 42 days since commencing works, the Contractor shall prepare and submit for the Engineer’s approval a <i>Waste Management Plan</i>, specifying management method for the waste generated during works, considering, inter alia, guidelines within the waste management items contained in the EMP;</li> <li>b) Contractor shall prepare and submit to the Engineer for approval, and then execute a <i>Construction Site Flood Protection Plan</i> which will take local hydrological and meteorological conditions in the Task implementation area into consideration. In case of flood, the Contractor shall follow the procedures included in the abovementioned document;</li> <li>c) the Contractor shall prepare and submit for the Engineer’s approval <i>A construction site organization design</i>, which should include i.a. the following elements: backyard location, backyard management, backyard protection, access roads, environmental protection in the backyard;</li> <li>d) Contractor is obliged to draw up and execute a <i>Quality Assurance Plan</i> submitted to the Engineer for approval which should include i.a. the following elements: organization of works execution, organization of traffic at the construction site and the marking of works, Safety and Health Protection and the environmental protection, list of working teams, the responsibilities of key personnel, quality control, laboratory research;</li> <li>e) <i>ESHS Management Strategy and Implementation Plans</i> (management strategies and implementation plans for Environmental, Social, Health and Safety hazards), <i>ESHS Code of Conduct</i> - submitting for the approval of the Contract Engineer, prior to commencement of work, <i>ESHS Code of Conduct</i> and <i>ESHS Management Strategy and Implementation Plans</i> as described in the Bidding Documentation, part ItB 11.1 (h) developed at the stage of submitting a bid and periodic revision of the said documents as the result of the recommendations of the Contract Engineer.</li> </ul>	Contractor
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Item	Issue	Place	Mitigation measures	Entity
72.	Protection of human health and safety	Task implementation area	<p><b>Obligation to identify and mark danger zones</b></p> <p>Danger zones, posing a threat to the health and life of people shall be identified and marked with warning signs, preventing any unauthorized entry into their limits.</p>	Contractor
73.	Protection of human health and safety	Task implementation area	<p><b>Obligation to ensure health and safety of people during construction works</b></p> <p>The Contractor shall ensure and maintain human safety during the conduction of the works.</p>	Contractor
74.	Protection of human health and safety	Task implementation area	<p><b>Obligation of proper security and marking of the Task implementation area</b></p> <p>The Contractor is obliged to secure and provide permanent marking of the building site. Occupational Health and Safety (OHS) Supervisors of the Contractor shall be responsible for providing a proper marking of the construction site in accordance with applicable law. This marking will be checked regularly, in the event of destruction or theft of the signs, the Contractor shall immediately recondition or replenish them.</p>	Contractor
75.	Protection of human health and safety	Task implementation area	<p><b>Obligation to ensure proper visibility conditions</b></p> <p>In case of carrying out works after dusk or in conditions of limited visibility, the Contractor is obliged to ensure the proper lighting of the construction site with appropriate adjustment of light intensity.</p> <p>The Contractor shall ensure constant visibility conditions during the day and at night of such barriers and signs for which it is obligatory for safety reasons.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
76.	Protection of human health and safety	Task implementation area	<p><b>Principles concerning HIV-AIDS prevention</b></p> <p>(Contract Bidding Documents - General Terms, Clause 6.7)</p> <p>HIV-AIDS prevention. The Contractor shall implement an awareness raising training and programme on spreading HIV-AIDS disease through an approved service supplier and shall take all other measures outlined in the Agreement (General Terms, Clause 6.7) in order to reduce a risk of HIV transfer among the Contractor's personnel and local population and to promote early diagnostics and support for infected people. These actions shall be carried out throughout the entire duration of the Contract (as well as during defects and faults submission period) at least every second month. These shall include informational, educational and awareness-raising campaigns concerning the dangers of spreading HIV-AIDS.</p>	Contractor
77.	Protection of human health and safety	Task implementation area	<p><b>Actions taken in case of finding unexploded ordnance</b></p> <p>In the event that unexploded ordnance is found, the Contractor shall:</p> <ol style="list-style-type: none"> <li>immediately stop the works,</li> <li>evacuate workers,</li> <li>immediately notify police and a licensed explosive ordnance disposal unit, and follow their recommendations,</li> <li>notify the Engineer and the Employer</li> <li>In no case shall unexploded ordnance be picked up, excavated, buried, carried or thrown into the fire or water, etc.</li> </ol>	Contractor
78.	Protection of human health and safety	Task implementation area	<p><b>Ensuring an explosive ordnance disposal team</b></p> <p>In order to reduce the risk of encountering explosive remnants of war , the Contractor is obliged to:</p> <ol style="list-style-type: none"> <li>ensure explosive ordnance disposal team during the earthwork (the Contractor's sapper's supervision) which consists in conducting ongoing inspections and clearing the area of dangerous items of military origin and their disposal;</li> <li>comply with the procedures included in item 77 of the App. 1 of the EMP if such explosive ordnance are found.</li> </ol>	Contractor

Item	Issue	Place	Mitigation measures	Entity
<b>14 – REQUIREMENTS CONCERNING STAFF EMPLOYED BY THE CONTRACTOR IN THE TASK IMPLEMENTATION</b>				
79.	Implementation of EMP	Task implementation area	<p><b>Tasks of the team of environmental experts</b></p> <p>Tasks of the team of environmental experts should include:</p> <ul style="list-style-type: none"> <li>a) performing one-time field inventory according to rules provided in item 5 of the Appendix 1 of the EMP;</li> <li>b) supervision over introduction of mitigation measures concerning nature protection;</li> <li>c) inventory of area affected by the construction and hydrotechnical works, prior to their commencement and during the implementation;</li> <li>d) recommendations, if needed, for introducing mitigation measures, essential for limiting the adverse effects of the Task on natural habitats as well as species and habitats that are of interest for the Community and those subject to legal protection (protected species) and are not possible to be predicted and/or were not possible to reveal at the stage of establishing the conditions for the implementation of the Task (during the process of issuing an Environmental Decision),</li> <li>e) formulation of protection guidelines during the Task implementation,</li> <li>f) if needed get requisite permissions for departures from bans concerning protected species of plants, fungi and animals under conditions and procedure specified in the Act of April 16th, 2004 on nature conservation,</li> <li>g) formulation of protective indications during the Task implementation,</li> <li>h) if needed get requisite permissions for departures from bans concerning protected species of plants, fungi and animals under conditions and procedure specified in the Environmental Protection Act of 16 April 2004.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
80.	Implementation of EMP	Task implementation area	<p><b>Requirements concerning the team of environmental experts</b></p> <p>Throughout the Task implementation period, the Contractor shall ensure permanent participation of a team of environmental experts:</p> <ul style="list-style-type: none"> <li>a) The Contractor's team of environmental experts shall include the following experts: phytosociologist/botanist, entomologist, ichthyologist, herpetologist, ornithologist, mammologist, chiropterologist,</li> <li>b) all experts in the Contractor's environmental team shall provide documentary evidence in their experience as well as education in the field of environmental studies,</li> <li>c) team of environmental experts must be accepted by the Engineer prior to the commencement of works. .</li> </ul> <p>These experts will be engaged in introducing some measures included in the EMP, in particular:</p> <ul style="list-style-type: none"> <li>a) mitigation measures included in the Appendix 1 of the EMP in items: 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 35, 36, 37, 38, 39, 40, 41, 42, 43, 79, 81;</li> <li>b) monitoring measures included in App. 2 of the EMP in item 85.</li> </ul>	Contractor
81.	Implementation of EMP	Task implementation area	<p><b>Training of Contractor's staff in regard to the EMP implementation</b></p> <p>The Contractor is responsible for providing a training (concluded by a knowledge check for the participants) on the principles and conditions of the EMP and the protection guidelines during the Task implementation. Training and tests shall be conducted with the support of the Contractor's environmental team for the management staff and technical engineers supervising the construction. Contractor's employees, who will deal with fuels and other petroleum-derived substances, should be trained on the principles of protection of the ground and water environment and the deployment of protection measures, including the use of sorbents.</p> <p>In monthly reports submitted to the Engineer, the Contractor shall provide information on its personnel's training level in the scope of EMP provisions in the current reporting period.</p>	Contractor

Item	Issue	Place	Mitigation measures	Entity
82.	Implementation and reporting of EMP	Task implementation area	<p><b>Appointment of EMP co-ordinator in the Contractor's staff</b></p> <p>A person in charge of co-ordination and supervision of activities related to EMP implementation shall be appointed in the Contractor's staff.</p> <p>This person shall be responsible, among others, for:</p> <ul style="list-style-type: none"> <li>a) supervision over implementation of individual EMP conditions during various stages of Task implementation;</li> <li>b) regular monitoring of the implementation of individual conditions contained in App. 1 and 2 to the EMP in the <i>Task implementation area</i>;</li> <li>c) regular informing the Contractor's team management about duties stemming from the EMP at a given stage of works, as well as about any problems occurring in the scope of EMP implementation;</li> <li>d) collaboration with Contractor's remaining team members (including the team of environmental experts, team of archaeological experts and explosive ordnance disposal team,) in the scope of ensuring EMP implementation;</li> <li>e) reporting on EMP implementation;</li> <li>f) collaboration with persons in charge of EMP implementation in the Engineer's team and the Contractor's team.</li> </ul> <p>The person appointed to perform the above-mentioned functions is subject to Engineer's approval.</p>	Contractor
83.	Implementation and reporting of EMP	Task implementation area	<p><b>Reports from environmental team experts</b></p> <p>Environmental team experts shall conduct reporting that covers:</p> <ul style="list-style-type: none"> <li>a) reports (monthly , quarterly and final) on the implementation of the conditions specified in the EMP;</li> <li>b) drafting a monthly written reports - in the form of a checklist along with the necessary Appendixes, including reports on the implementation of environmental supervision;</li> <li>c) reports shall be submitted to the Engineer for their approval.</li> </ul>	Contractor

Item	Issue	Place	Mitigation measures	Entity
84.	Meetings concerning the implementation of mitigation and monitoring measures	Task implementation area	<p><b>EMP implementation discussion during working meetings and Site Meetings</b></p> <p>During the Task implementation period, monthly meetings of PIU representatives, the Engineer and the Contractor shall take place, which will be dedicated to discussion and control of the implementation of the mitigation and monitoring measures specified in the EMP.</p> <p>Irrespective of the foregoing, current requirements and problems related to the EMP implementation shall be discussed during Site Meetings.</p>	Contractor Engineer PIU
85.	General principles of protection of the biotic natural resource	Task implementation area	<p><b>Protection of ichthyofauna from increased concentration of suspended solids in the Odra River</b></p> <p>In order to prevent the ichthyofauna from increased concentration of suspended solids in the Odra River, works shall be carried out in accordance with the following principles:</p> <ul style="list-style-type: none"> <li>a) in case of recording concentration of suspended solids above level of 200 mg/l (in monitoring points located cca. 500 m below the construction sites) intensity of works shall be reduced (introduce a 2-hour recess after every 2 hours of work) and if concentration of suspended solids reaches above the level of 400 mg/l work shall be stopped for a period of 24 h,</li> <li>b) resumption of works after every break caused by an exceed of concentrations must be preceded by another measurement of concentration of suspended solids in monitoring point, works can be continued only if concentration of suspended solids in monitoring point is below the level of 200 mg/l.</li> </ul>	Contractor