REGIONAL DIRECTOR OF ENVIRONMENT RPOTECTION IN SZCZECIN

ZZMiUW in Szczecin RECEIVED

2013-08-29

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WOOS-TS.4233.1.2013.DK.20

DECISION No. 11/2013 about environmental conditions

On the basis of:

- Art. 104 of the Act of 14 June 1960 Administrative Proceedings Code (Journal of Laws of 2013 item 267).
- Art. 71 Section 2 point 2, Art. 75 Section 1 point 1, Art. 84, Art. 85 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, item 1227 with amendments)
- § 3 Section 1 point 65 of the ordinance of Council of Ministers of 9 November 2010 regarding undertakings that can have significant impact on the environment (Journal of of Laws, No. 213, item 1397)

after examination

of the application submitted on 14 March 2013 by the Director of Westpomerania Management of Land Reclamation and Water Devices ZZMiUW) in Szczecin with the regard to the decision about the environmental provisions

I declare

the lack of obligation to perform the assessment of impacts on the environment for the planned undertaking called: 'Reconstruction of the flood embankments along the Odra River in the area of Gryfin administrative district''.

JUSTIFICATION

On 27 February 2013 to the Regional Directorate of Environment Protection in Szczecin was submitted the application of the Westpomerania Drainage and Water Devices Management in Szczecin, Al. Papieża Jana Pawła II 42, 70-415 Szczecin, regarding issuance of the decision about environmental conditions for the undertaking called: "Reconstruction of the flood embankments along the Odra River in the area of Gryfin administrative district".

According to Art. 75, Section 1 point 1 and the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, item 1227 as emended), the

organ proper for issuance of the decision about environmental conditions, in case of undertakings regarding realization of investment in the meaning of the Act of 8 July 2010 about specific rules regarding preparations to the investment realization within the scope of flood protection constructions (Journal of Laws of 2010 No. 143 item 963), is a organ of local jurisdiction (regional director of environment protection).

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After determination of the organ proper for issuance of the decision about environmental conditions for the objective undertaking, with the letter of 5 march 2012, case sign: WOOŚ-TS.4233.1.2013.DK.1, this organ called the Investor to complete the formal errors in the submitted application. Appropriate completion was submitted on 14 March 2013. Finally, according to Art. 74, Section 1 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, Section 1227 as amended), to the application regarding issuance of the above mentioned decision for the undertaking that can have potential significant impact on the environment the following appendixes were attached:

- 1. Undertaking information card.
- 2. Copies of evidential maps certified by the proper organ, covering anticipated area, on which the undertaking will be realized and covering also the area, on which the undertaking will have an impact.
- 3. Extracts from the land register, covering the area, on which the undertaking will be realized and also covering the area, on which the undertaking will have an impact.

According to Art. 74 Section 1, to application regarding issuance of the decision about environmental provisions for undertakings, for which the organ leading the proceeding is the regional director of environment protection, should be attached extract from the local spatial planning act, if it was resolved or information about absence of such act, with exception of the antiflood constructions realized on the basis of the Act of 8 July 2001 about the special preparations rules for realization of the investment within the scope of the flood control constructions.

According to Art. 64 and Art. 77 of the Act mentioned above, before issuance of the decision about the environmental provisions for the undertaking regarding the construction of the flood embankments, the opinion of the Sanitary Inspections is not needed.

The investment is qualified for the investments listed in § 3 Section 1 point 65 of the Ordinance of the Council of Ministers of 9 November 2010 regarding the undertakings that can have significant impact on the environment (Journal of Laws No. 213, Section 1397), e.g. the antiflood constructions, excluding reconstruction of the flood embankments by sealing the body of embankments and its basis to minimize the possibility of dissolving and damaging of the flood embankments during the high water periods, and also the regulation of the waters or drainage understood as the water management that will allow to use the waters for the navigation purposes. According to the ordinance mentioned above, the objective investment is the investment that potentially can have significant impact on the environment, for which on the basis of the Art. 71 Section 2 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, Section 1227 as amended) the decision about environmental provisions is needed, and the obligation for preparation of the assessment the undertaking impact on the environment is optional.

During the course of proceedings, because of the number of parties participating in the proceedings that was higher than 20 According to Art. 74, Section 3 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, Section 1227 as amended) all parties are informed about the decisions or other activities preformed by the public administrations organs on the basis of announcements or in other commonly used

manner. According to Art. 61 § 4, Art. 10 § 1 and Art. 49 of the Act of 14 June 1960 Administrative Proceedings Code (Journal of Laws of 2000 No. 98, Section 1071 as amended), with announcement of 21 March 2013, sign: WOOS-TŚ.4233.1.2013.DK.2 the organ informed parties of the proceeding about beginning of the administrative proceeding with regard to objective matter and notified all parties of the proceeding about every stage of the proceeding and about the possibility of announce with regard to the documents submitted by the investor and submitted requests, and also about the right to submit own remarks, questions and explanations.

According to Art. 64 Section 1 in connection with Art. 63 Section 1 of the Act mentioned above, decision regarding necessity of the assessment of the undertaking impact on the environment is issued by the organ proper for such decisions about the environmental provisions, e.g. the Regional Director of Environment Protection in Szczecin.

With the letter of 11 April 2013, sign: WOOŚ-TŚ.4233.1.2013.DK.5, the Investor was obliged for completion and provide more detailed information included in the undertaking information card. On 1 July 2013 the completion was submitted to this organ. With the letter of 16 July 2013 the Investor was obliged again to give an explanations and was informed about new term of the objective matter settlement. On 18 July 2013 the completion was submitted to this organ that provided enough information constituting the basis for the lack of obligation to perform the assessment of undertaking impacts on the environment.

This organ withdraws from the obligation regarding assessment of the planned investment impacts on the environment, it examined the case with regards to the materials submitted by the applicant, conditions resulting from Art. 63 Section 1 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, item 1227 with amendments). Furthermore, the provisions of Westpomeraniae Province Natural Valorization (BKP, Szczecin 2010) and provisions of the Data Standard Forms for the following Nature 2000 area were used: "Dolina Dolnej Odry" PLB320003, "Dolna Odra" PLH320037.

Among the conditions about withdraw from the obligation to perform assessment of the objective investment impacts on the environment, the following facts have prejudged:

I. Type and characteristics of the undertaking, including:

- 1. Scale of the undertaking and size of the area and their mutual proportions. The objective undertaking includes the reconstruction of the flood embankments on the sections with regard to the locations along the Odra River:
- The flood embankment Marwice Krajnik at 708+680 712+165 km of the Odra River, e.g. for reconstruction 3485,00 m;
- The flood embankment Gryfino Mniszki at 718+850 720+966 km of the Odra River, e.g. for reconstruction 2116,00 m;
- The flood embankment Zabnica Debce at 723+190 724+000 km of the Odra River, e.g. for reconstruction 810,00 m;
- The flood embankment Debce Lubnica at 724+400 726+231 km of the Odra River, e.g. for reconstruction 1831,00 m. Localization of the above mentioned flood embankment is the right bank of the Odra Wschodnia.

The planned reconstruction of the facilities is intended to reduce the filtration through the embankment during the high waters periods on the Odra River by sealing with the anti-filtration

barrier the body and basis under the embankments, and also is intended to level the elevation of the embankments crown adopting it to the technical parameters defined for the class of the hydrotechnical constructions, according to the Ordinance of the Ministry of Environment of 20 April 2007, regarding the technical conditions for hydro-technical constructions and their localization, therefore changing their basic parameters. Realization of the investment will not change the the real length of the flood embankments, and only is intended to reconstruct some of the sections.

Furthermore, within the investment, on the flood embankment Gryfino - Mniszki and Debce - Lubnica repair of the road will be performed. This repair is intended to level and replenish the gravel aggregate. The road is located on the bank of the flood embankment, e.g. within its construction side, and from its downstream side. The roads designated for the repair are the exploitive roads and are localized on the bank of flood embankments forming in this way its structure. This roads are used only for the exploitation purposes, such as anti-flood activities and current maintenance of the facility.

The objective flood embankments are classified as class III importance of the hydro-technical construction.

The scope of the investment covers commune of Widuchowa and will be realized on the following record parcels No.: 12, 423, 431 district of Marwice, 41/1, 42, 43, 111, 114/2, 114/6, 114/7, 234/4 district of Widuchowa Miedzyodrze (flood embankment Marwice-Krajnik) and commune of Gryfino and will be realized on the following record parcels No.: 20, 21, 22 district of Gryfino 3, 58, 77/1, 77/2, 285/1, 285/2, 286, 290, 291 district of Gryfino 1 (flood embankment Gryfino-Mniszki), 1/1, 2/1, 3 district of Zabnica, 62/8, 64, 84 district of Czepino, 55, 73 district of Daleszewo Miedzyodrze (flood embankment Zabnica-Debice), 3, 6, 265, 267, 268, 335/1, 335/2 district of Daleszewo, 106, 107 district of Daleszewo Miedzyodrze (flood embankment Debice-Lubnica). The place of the investment realization is the east bank of the Regalica River.

Furthermore, within the zone of the investment impact, with the regard to technological process connected with the reconstruction of the flood embankments, including movement of the construction devices and placement of the node, in which the sealing mixture will be prepared for the body and basis of the embankment, the following record parcels will be used: 4, 5/5 district of Zabnica and 336/5 district of Daleszewo, commune of Gryfino. Actual parameters of the flood embankments on the objective sections differ from the values resulting from the obligatory law regulations. The elevation of the flood embankment crown is lowered with relation to required elevations resulting from the obligatory norms. With regard to the above, the reconstruction activities are intended to reach the proper parameters without any intervention in the natural ground cover of the river banks and bed. Therefore, within the investment works there is the necessity to cut-out 8 pieces of the trees (black alder) and 6691 m² of the bushes (willow, including: flood embankment Marwice-Krajnik 753 m², flood embankment Gryfino-Mniszki 2311 m², flood embankment Zabnica-Debce 417 m , flood embankment Debce-Lubnica 3210 m.

Within the scope of the designed flood protection, all the works are planned to be executed in the following order:

- 1. Cut-out of the trees with quantity of 8 pcs. and bushes with total quantity of 6691 m².
- 2. Realization of the flood embankments reconstruction consisting in realization of the antifiltration barrier in the axis of the flood embankment body.
- 3. Forming and leveling the crown of the flood embankment using the soil masses.
- 4. Forming the body of the flood embankment using the mixture of grasses to provide the biological strengthening.

- 5. Repair of the embankment road consisting in leveling and replenish the gravel aggregate.
- 6. Cleaning up the construction area after finishing all of the investment works.

The anti-filtration barrier, with designed height of 6.0m and width of 0.30 - 0.35m, will be realized in the narrow spatial excavation(s) technology using the milling and mining equipment. The dry mass is mixed in the specially adopted mixers in the form of silos, and pipelines is pressed to the machine responsible for the barrier realization. The water for the mixture realization process is delivered with the water-wagons as the sewage water. After realization of the anti-filtration barrier, in the not totally bound mixture, the geo-membrane HDPE is immersed. The upper elevation of the anti-filtration barrier will be realized on the depth of min. 0.8m under the crown of the flood embankment.

Cut-out activities regarding the trees and bushes within the objective undertaking will be limited to the required minimum. However, it should be emphasized that the Investor obliged himself to conduct all the works with special care, and when necessary to protect other trees and bushes, conducting the cut-out activities manually, minimization of the width of the work bend, conducting the works outside of the birds hatching periods, being simultaneously the resting time for the plants.

Investor is not planning to conduct the works from the water side and any interventions into the natural ground cover of the river banks and river ecosystem, and therefore, no changes in the waters flowing conditions and habitation of the life organisms will be provided. Furthermore, the transportation of the materials and movement of the equipment will realized in the existing road system, and on the crown of the flood embankment.

On the basis of the Ordinance of the Ministry of Environment of 20 April 2007 regarding technical conditions for the hydro-technical constructions and their localization (Journal of Laws of 2007 r., No. 86 Section 579), the designed flood embankments are classified as class III importance of the hydro-technical construction, and their parameters, according to the information card will be as follow:

- 1. Flood embankment Marwice-Krajnik: the length of the flood embankment section for the reconstruction 3485,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 4,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 3,00 m above the sea level;
- 2. Flood embankment Gryfino-Mniszki: the length of the flood embankment section for the reconstruction 2116,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 3,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 2,40 m above the sea level;
- 3. Flood embankment Zabnica-Debce: the length of the flood embankment section for the reconstruction 810,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 3,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 2,40 m above the sea level;
- 4. Flood embankment Debce-Lubnica: the length of the flood embankment section for the reconstruction 1831,00 m, technical parameters of reconstructed flood embankment, e.g. the width of crown 3,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 2,40 m above the sea level;

According to the submitted undertaking information card, the designed variant is the most preferred variant. The localization variants were not taken into consideration, because the fact, that this only the reconstruction of the existing flood embankments, and their reconstruction will be consisting in adaptation of their parameters to the obligatory law regulations by leveling the elevation of the embankments crown and sealing the body and the basis under the flood embankments. In view of the above, the selection of the most effective and least inconvenient technology with regards to the environment protection used for sealing and taking into account all the ground conditions under the embankment was very important. Into consideration were taken variants consisting in realization of the flood embankments sealing through:

a) variant I - sealing the flood embankment body with the anti-filtration barrier in the axis through the realization of the barrier in the narrow spatial excavation(s) technology. This is very easy technology that provides quick realization and convenient works organization. Not large number of the earth works, e.g. the body of the flood embankment is piratically not disassembled.

The effective technology without creation of the filtration windows:

- b) a) variant II sealing the flood embankment body with the anti-filtration barrier in the axis through the realization of the barrier using the block method. This is easy technology that provides very quick realization. However, in the conditions of the low-bearing soils in the ground, large number of the equipment used for the realization of the barrier can cause settlement of the flood embankment body. Furthermore, there is the risk of formation of the filtration windows, because the barrier is realized in the blocks that should couple into each other. Lack of precision during realization of the works can cause, that the needed tightness of the barrier will not be reached.
- c) variant III sealing the outer slope of the embankment outer slope and the basis with placing the HDPE geomembrane. Low cost of the realization in relation to variants I and II. This method is very inconvenient in the realization, because it needs that the body of flood embankment will be disassembled within the scope that will allow to place the HDPE geomembrane. Lack of possibility to dip the screen on the large depth below the basis of the flood embankment causes slight extension of the filtration channel under the flood embankment body. In the assumed ground conditions, placement of the screen below the basis of the flood embankment is almost impossible, because the organic grounds are characterizing by the great re-hydration. In such conditions, constant pumping of the water can be needed, that can have an impact on the lowered carrying capacity of the grounds skeleton and large deformations of the flood embankment body.

The variant selected by the Investor is also the most convenient variant for the environment, because among others, all the works will be conducted using the equipment that will be moving on the crown of embankments, without any interventions to the habitations adjoining with the planned investment. The movement of the construction equipment will be realized in roads along the flood embankments. The protected natural habitations localized near the investment will not be destroyed, and also the environmental conditions will not be disturbed. The trees cut-out activities are minimized up to required minimum, e.g. to pcs. of the trees and 6691 m2 bushes and will be realized outside of the hatching periods of birds. Furthermore, no works will be conducted in the bed of the river.

2. Usage of the natural resources

Realization and exploitation of the undertaking will not need to use surface and underground water resources. Eventual demands for the water will be connected with usage of the water to provide

proper moist of the embankment grounds during formation and sealing of the flood embankment. During the realization stage will be used only typical for this kind of the undertaking materials, raw products and fuels.

All construction works will conducted by using the mechanical equipment. Usage of the liquid fuels provided as the source of the energy for the construction equipment is foreseen. The exploitation stage will not need the usage of the raw products, water, fuels and materials.

3. Emissions and other nuisances.

Introduction of the gas, dust emissions or noses into the environment will take place during the realization stage of the investment. Sources of emission for gases, dusts and also noses will be machines, equipment and devices used during the reconstruction phase of the objective flood embankments. Additionally, increase of the temporary pollination can cause the displacement of the soil masses during realization of the works. This will be emissions with local range, of short duration, that cease with completion of the investment phase. However, to limit the emission of the pollutions to the air, the equipment conforming with the obligatory norms will be used, characterized by low emission indexes.

Because of the character of the planned investment and its range, the realization of the works will cause periodic emission of the noises connected with the specificity of the construction works and necessity to use equipment that can cause the above-standard emission to the environment. On the near vicinity of the area on which the undertaking will be realized, there are not areas covered with the acoustic protection (except Grifino-Mniszki section, that beginning and end are adjacent to the developed areas). Taking into consideration the above and the declaration that the works will be realized during daytime, emitted levels of the noise will not have any impact on the areas. To delimit the excessive emission of the noise to the environment, and also minimize the possibility of scaring of fauna, for the execution of the planned works will be used equipment with lowest possible levels of emission to the environment.

With regards to the planned reconstruction of the flood embankments, the interventions to the ground-water environment will be existing. However, all planned works will be conducted within the existing already flood embankments. During the works conducted, only the flood embankment will be reshaped, especially its surface, overgrown with flora, trees and bushes. This stage will include also the usage of the access roads to the flood embankments by the vehicles, thus pressing and thickening by the heavy equipment. In addition, the construction stage will create also the threat of passing petroleum derivative substances to the grounds and other technological pollutions caused by the transportation services. To avoid and limit the contamination of the ground-water environment, especially with petroleum derivative substances, only technically operated equipment will be used for realization of the investment. Furthermore, the investor obliged himself to eliminate possibilities of spilling any fuels during transportation and usage of the mechanical devices and machines, and to provide for its personnel absorbers of the petroleum derivative substances. In addition, for the realization of the investment only natural and neutral for the environment materials will be used, that will not cause any threat for the ground-water environment.

According to the information provided by the investor, the transportation of the materials and movement of the equipment will be realized on the existing road system, and on the crown of the flood embankment. The works conducted will not exceed the premises of the reconstructed flood embankments. The investment area, including back side of the construction area, after finishing the reconstruction of the embankments will be cleaned up.

Any impacts on the ground-water environment will be short-term and will cease after completion of the construction works. During the realization stage and usage of the investment, the ground water level on the adjacent areas will not change, any changes in water levels of rivers and channels are not anticipated. The exploitation stage will not cause any impacts on the ground-water environment. In connection with the character of the works and type of works planned for the realization, the impact on the natural environment will take place, e.g. temporarily liquidation of the flora on the flood embankments, migration of some species of fauna, caused by the noise, vibrations, fumes and intensive presence of people, that must assessed as only temporary, and also liquidation of the ground fauna habitations on the area of the works due to liquidation of the soil covers in places where the modernization will take place. All the impacts mentioned above will have only short-term character and will be limited spatially. In a general scale, such impacts will not be essential and will not change the biodiversity.

Furthermore, during the investment realization stage, according to the undertaking information, only waste materials belonging to the following groups will be created: 15 01 01 - packagings made of paper and cardboard, 15 01 02 - packaging made of plastics and 20 03 01 - non-aggressive (mixed) municipal wastes.

Created waste materials will be collected and stored in the proper containers, and then systematically disposed to the dumping grounds. With regard to the above, appointing of the waste materials storage areas will be not provided. It must be clear, that the areas valuable in terms of natural science, places of potential occurrence of the valuable species of fauna and flora, birds hatching places or waterlogged areas will not be destroyed or polluted with the generated waste materials.

The exploitation stage of the investment will not include any emissions of the gas, dust pollutions or noise emission to the air, and also generation of the waste materials and living and housing sewages. Furthermore, during the realization and exploitation stage will not be generated any technological sewages. Exploitation of the flood embankments will include provision of the proper technical state through the mow down the greenery occurring on the flood embankment that will be performed outside of the birds hatching periods. The liquidation of the objective flood embankments is not planned. Any interactions of the investment with other existing or planned undertakings are not considered. The investment is concerning the reconstruction of the existing flood embankments by obtaining the proper parameters and sealing the flood embankments, and according to this it will nit cause any changes in the ground water levels or usage of the area.

- 3. Risks of serous damages, taking into account used substances and technologies. Due to the character of the investment, the planned undertaking is not the investment that can cause any serious damages.
- II. Localization if the investment, taking into account all possible threats for the environment, especially with the regards to the actual usage of the area, ability to self-cleaning of the environment and restoration of the natural resources, natural values provisions of the local spatial; development plans including:
- 1. Water-mud area and other areas with not deep underground waters. The investment will be conducted outside of the water-mud areas.

2. Shore areas.

The planned investment will not be realized on the shore areas.

3. Mountain and forest areas.

The planned undertaking will not be realized on the mountain or forest areas.

4. The protected areas, including the protected zones of the water intakes and protected areas of the inland water reservoirs.

Realization of the investment will not be performed within the borders of he water intakes and protected areas of the inland water reservoirs.

5. Areas needed the special protection due to occurrence of the animal and flora species or their habitations or protected natural habitations, including Nature 2000 areas and other forms of the nature protection.

The flood embankments planned for the reconstruction, including flood embankment Marwice - Krajnik 708+680 - 712+165 km, flood embankment Gryfino - Mniszki 718+850 - 720+966 km, flood embankment Zabnica - Debce 723+190 - 724+000 km, flood embankment Debce - Lubnica 724+400 - 726+231 km are localized within the borders of Nature 2000 area, e.g., on the birds special protection "Dolina Dolnej Odry" PLB320003 and the area very important for the community "Dolna Odra" PLH320037. According to the provisions of Westpomeraniae Province Natural Valorization (BKP, Szczecin 2010) the objective flood embankments are localized in the near vicinity of "Dolina Dolnej Odry" natural landscape area, but in its buffer. In the submitted undertaking information card, the impacts of the investment on all components of the natural environment were analyzed, on the area covered by the investment and its near vicinity. In document mentioned above, all results of the natural inventory were submitted:

The objective flood embankments are running along the Regalica River. They are localized between the bed of the river and the complex of the meadows and polders lying on the old river bog moors. The flora consist of accumulations of alder swamp forests and marshy meadows - especially wet meadows, reed and sedge rushes, and riparian herbaceous plants. The flora of the investment area is constructed mainly of the different forms of fitted accumulations, fallows, and fragments of the ruderal accumulations, and also impoverished forms of meadows of *Arrhenatheretalia*, order that overgrown the sites and the crown of the flood embankment on its full length. The flood embankments fragmentarily, their basis and near vicinity is overgrown by the, belonging to the complexes of *Salicetum triandro-viminalis* (from the river side) and *Salicetum pentandro-cinereae* (from outside and in the vicinity o some channels and bays), and also by the fragments of alder swamp forests *Ribeso nigri-Alnetum*. On the remaining length, at the side adjacent to the river, the flood embankments are overgrown by the reed rushes, and at the internal side - wet mallows *Calthion* and grasslands *Agropyro-Rumicion crispi*. The basis of the flood embankment and also it near vicinity from the external side is overgrown by the nitrophile riparian herbaceous plants or streaky cultured riparian herbaceous plants with Filipendula Ulmaria.

On the area of the investment do not occur the species of the flora covered with strict or partial protection, excluding: garden angelica {Angelica archangelica subsp. Litoralis} and guelder-rose (Viburnum opulus). From the information obtained from the Investor results, that the realization of the investment will not include cut-out activities, and therefore destruction of guelder-rose habitations. In some places the habitations of garden angelica can be destroyed. The investment will be realized under the environmental supervision, and in case when it will be necessary to destroy its habitations, the special permit should be obtained, mentioned in Art. 56 of the Act of 16 April 2004 about the nature protection (Journal of of Laws, No. 151, item 1220).

According to the information included in the undertaking information card, during realization of the terrain examinations discovered both animal species covered with strict protection, and also with partial protection, on the basis of the Ordinance of the Ministry of Environment of 12 October 2011 regarding animal species protection (Journal of of Laws, No. 237, item 1419). Within the area of the investment, 9 species of invertebrata were discovered, where 2 species are protected: red-tailed bumblebee and buff tailed bumblebee. Mollusca are represented by 3 species: edible snail, land snail, red slug. Because of the fact, that the investment will have an impact on the environment during comparatively short period of time during the realization stage, the negative impact on the animals will not occur, including invertebrata, that come back to the area and the vicinity of the flood embankments after completion of the investment works. To minimize and eliminate any impacts of the work performed on the existing fauna and flora, the investor will provide the environmental supervision.

Herpetofauna is represented by marsh frog - species covered with the strict protection that needs the active protection. However, the investment will not have an impact on such species, because, as defined in the submitted documentation, this habitation was discovered outside the investment area. It should be pointed out that realization of the investment will be conducted under the environmental supervision, which scope will cover actual inspections of the place and manner of the investment realization to minimize the results of investment impacts on the natural environment. An impact on the species mentioned above can be connected with the works conducted and according to this with temporarily excluding this area as the area of existence of the above mentioned species. However, all the works will be conducted under the environmental supervision, and after completion of the investment stage all the species should come back on the objective area. According to this, and also to the fact that all realization work will not go beyond the premises of the reconstructed flood embankments and existing roads, the investment should not have an impact on the inventoried natural habitations.

The bird species observed and discovered on the objective area are: sea eagle {Haliaeetus albicilla}, sparrow hawk (Accipiter nisus), buzzard {Buto buteo}, rough-legged buzzard (Buteo lagopus), common blackbird (Turdus merula), Eurasian blackcap (Sylvia atricapilla), Eurasian blue tit (Parus caeruleus), great tit (Parus major), common chaffinch (Fńngilla coelebs), sea mew (Larus canus), raven (Corvus corax), hooded crow (Corvus cornix), magpie (Pica pica), grey heron (Ardea cinerea), cormorant (Phalacrocorax carbo), ring dowe (Columba palumbus). The inventoried represent ants of the mammalia are: roe-deer, beaver, otter, wild boar, mole, fox. From among this species, beaver and otter are covered with partial protection, and also are subjects to the protection within the borders of the area of "Dolna Odra" PLH320037, whose existence was discovered within the Zabnica-Debce flood embankment. However, the investment will not have an impact on such species, because, as defined in the submitted documentation, this habitation was discovered outside the investment area. It should be pointed out that realization of the investment

will be conducted under the environmental supervision, which scope will cover actual inspections of the place and manner of the investment realization to minimize the results of investment impacts on the natural environment.

On the basis of the submitted by the investor conception of the objective investment, e.g. scope of works and manner/conditions of works realization, this organ ascertained that there will be no impact on fauna and flora existing in the Regalica River and also on the ecosystem of this river. As defined in the submitted documents, any works that can interfere with the natural ground covers of the rover banks or river bed will not be executed.

It should be pointed out, that such interferences will be of short duration and limited specially and will not be essential and will not have an impact on the biodiversity of this area. The investment will not have the substantial negative impact on the environment, it will not cause any irreversible negative changes in the ecosystems in place and in near vicinity of the elements of this investment. The undertaking will not cause any depletion in biodiversity and worsening the conditions of the natural environment.

The area designed for the objective investment is localized within the borders of Nature 2000 area "Dolna Odra" PLH320037, that was designed for protection of natural habitations and wild fauna and flora. According to this, the impact of the investment on the above mentioned Nature 2000 area should be considered taking into account maintenance of the natural habitations range, that can not be diminish, keeping their specific structure and ecological functions and the typical state for the species. According to the Standard Data Form prepared for the above mentioned Nature 2000 area, the following items are protected here:

- natural habitations with codes 3150, 3270, 4030, 6120, 6210, 6430, 6510, 9110, 9130, 9160, 9170, 9190, 91 DO, 91E0, 91F0, 9110;
- invertebrata species: stag beetle (*Lucanus cereus*), hermit beetle (*Osmoderma eremita*), great capricorn beetle (*Cerambyx cerdo*), ramshorn snail (*Anisus vorticulus*);
- fish species: white-finned gudgeon (*Gobio albipinnatus*), asp (*Aspius aspius*), goat (*Cobitis taenia*), that existence in the place of the investment, because of its localization and characteristics, should be excluded;
- amphibia and reptilia species: great crested newt (*Triturus cristatus*), fire-bellied toad (*Bombina bombina*);
- mammalia species: western barbastelle bat (Barbastella barbastellus), pond bat (Myotis dasycneme), mouse-eared bat (Myotis myotis), beaver (Castor flber), otter (Lutra Lutra).

Impact of the objected investment will be without any doubts during the realization stage connected with liquidation of the flora existing on the objected flood embankments. In connection with the reconstruction of the objective flood embankments, 8 pieces of trees and 6691 m² of bushes (willow) is planned to cut-out. According to the information provided in the submitted documents, flora designed for removal does not include any natural habitations described in Appendix I to the Directive 92/43/EC of 21 May 1992. The investor obliged himself to conduct any cut-out activities outside the vegetation time and bird hatching periods, e.g. outside the period of time between 1 March- 31 August. The investment does not include any activities with regard to reed fields. According to the provisions of Westpomeraniae Province Natural Valorization (BKP, Szczecin 2010), in the near vicinity of the Marwice-Krajnik flood embankment, the natural habitation is located that is described in Appendix I of the Habitation Directive, e.g. habitation with code number

91E0 - willow-, poplar, alder and ash meadows. However, as results from the submitted documents, after conducting the detailed inventory ascertained that they are degraded alders. Furthermore, in the vicinity of objective flood embankments, from the outer slope, ascertained existence of habitations with code number 6430 - mountain herbaceous plants and riparian herbaceous plants. Taking the above into the consideration presented investment scope, it has to be said that inventoried habitations 6430 will not be physically destroyed during the realization of the works. Additionally, as provided in the submitted documentation, the reconstruction of the flood embankments will not have any impact on the habitation provisions determining the existence of the above mentioned habitations.

The planed investment is localized within the borders of Nature 2000 area "Dolina Dolnej Odry" PLB320003, that was designed for protection of the populations existed without the borders of the mentioned above birds areas from Appendix I of Bird Directive and their habitations. Taking the above into consideration, the impact of the investment on the Nature 2000 area must be especially considered from the protection point of view. This means, that preservation of the proper state of the protection object, e.g. preservation of the number of birds that will guarantee keeping the biocenosis for the longer time, maintain the natural range of the species and necessary area of habitations needed by it. The list of avifauna species protected within the borders of Nature 2000 area was published in Standard Data Form and they are: Eurasian bittern (Botaurus stellaris), whooper swan (Cygnus Cygus), mew (Mergus albellus), black kite (Milvus migrans), red kite (Milvus milvus), white-tailed eagle (Haliaeetus albicilla), western marsh harrier (Circus aeruginosus), montage's harrier (Circus pygargus), osprey (Pandion haliaetus), peregrine falcon (Falco peregrinus), spotted crake (Porzana porzana), little crake (Porzana parva), Corn crake (Crex crex), common crane (Grus grus), ruff

(Philomachus pugnax), wood sandpiper (Tringa glareola), Mediterranean gull (Larus melanocephalus), little gull (Larus minutus), common tern (Sterna hirundo), little tern (Sternula albifrons), black tern (Chlidonias niger), Horned owl (Bubo bubo), short-eared owl (Asio flammeus), common kingfisher (Alcedo atthis), bluethroat (Luscinia svecica), aquatic warbler (Acrocephalus paludicola), , and also the species regularly existing and migrating not mentioned in Appendix I to Directive of the Council, for protection of which is designed special protection area -"Dolina Dolnej Odry" PLB320003, e.g. mute swan (Cygnus olor), bean goose (Anser fabalis), greater white-fronted goose (Anser albifrons), greylag goose (Anser anser), common shelduck (Tadorna tadorna), Eurasian wigeon (Anas penelope), gadwall (Anas streperà), Eurasian teal (Anas crecca), mallard (Anas piatyrhynchos), northern pintail (Anas acuta), Common pochard (Aythya felina), tufted duck (Aythya fuligula), greater scaup (Aythya marila), common goldeneye (Bucephala clangula), mergus (Mergus merganser), Eurasian coot (Fulica atra), eurasian oystercatcher (Haematopus ostralegus), northern lapwing (Vanellus vanellus), Savi's warbler (Locustella luscinioides), bearded reedling (Panurus biarmicus), cormorant (Phalacrocorax carbo sinensis). The areas adjacent to flood embankments are for these species places of feeding or convenient bio-top. Because of fact that the objective flood embankments are mow down, they are the place used by birds for establishment of nests and hatching. The reconstruction of the objective flood embankments includes the course of the existing bank, and as described in information card, the realization of the investment will be realized under the environmental supervision. Additionally, for minimizing the impact of the investment on the existing avifauna species has the fact, that all works will be conducted outside the birds hatching season, e.g. outside the period from 1 March to 31 August. At the same time, it is important to highlight that the objective application does not include any cut-out activities with the regard to reed fields. In despite of the above, the impact on the existing on the objective area and in its vicinity species of avifauna will include periodic, local and relatively of short duration scaring, what is unavoidable. However, the such impact will take place only during realization stage of the investment. Further to the above, it can be expected that during realization of the investment animals will not use this area, as the existence area, but after completion of the investment works they will come back to this area. Realization of the investment will not cause any disappearance of the habitations and species being under protection within the borders of areas covered with protection. Additionally, the investor is also bonded with the obligatory law regulations to obtain the permit of the proper organ for scaring and annoying of the avifauna on the area covered with the impacts of the investment, according to Art 56 of the Act about nature protection.

Because all the works will be conducted under the environmental supervision outside of the vegetative and hatching period, and also because of the scope and character of the investment, significant and negative impact of the investment on the environment and on object and target f the Nature 2000 areas can not be expected, including coherency and integrity of Nature 2000 areas.

During the exploitation stage of the investment, it will be necessary to periodically mow down the flood embankments. Such activities will be performed outside the period from March 1 to August 31.

Realization of the objective undertaking, e.g. the reconstruction of the flood embankments will absolutely have an impact on the natural environment. However, this the public-purpose investment, which realization has to provide the anti-flood protection, and its realization is necessary, because of the safety requirements. Furthermore, the objective flood embankments are the existing constructions, that will be only reconstructed to the technical parameters fulfilling the actually obligatory regulations and actually existing water levels.

It must be made clear, that during realization of the investment according to the designed conception and maintain the provisions of the realization defined by the investor, this investment will not have significant and negative impact on the environment, with irreversible and negative changes in the ecosystems in the place and in vicinity of the investment, and also it will not cause constant depletion of the biodiversity and deterioration of the natural environment conditions. In connection with the realization of the works, the temporary liquidation of the fauna existing on the flood embankments will take place and permanent liquidation of the bushes within the crown of the flood embankments. Furthermore, realization of the works and modernization activities will cause the migration of some fauna species, because of the noise, vibrations and intensive presence of the people. However, such migration will be of temporary character and it can be predicted that it will take place into the adjacent areas. Additionally, part of the species that are characterized by synantropization and large adaptation abilities to change the natural conditions, will stay within the near vicinity of the investment realization place, and the majority of them will come back after completion of the construction stage.

The investment works after fulfilling by the investor all the provisions defined in the information card regarding the realization of the investment will not cause the disappearance of the habitations and species protected on this areas, and the method of the work realization will not also cause the direct mechanical devastation of the protected and threated species of the existing flora and fauna, is spite of they are existing in the near vicinity of the objective flood embankments.

Because all the works will be conducted under the environmental supervision outside of the vegetative and hatching period, and also because of the scope and character of the investment,

significant and negative impact of the investment on the environment and on object and target f the Nature 2000 areas cannot be expected, including coherency and integrity of Nature 2000 areas.

Regional Director of Environment Protection in Szczecin, as the organ for monitoring of the Nature 2000 area, analyzed also the matter regarding the impact of the planned investment on the above mentioned Nature 2000 areas in relation to the coherency and integrity of the Nature 2000 areas. In the assessment of this organ, and taking into consideration character of the investment, e.g. reconstruction of the existing flood embankments, including adaptation of their parameters to the obligatory norms and regulations and usage of the activities mitigating the impact of the investment on the environment, it can be declared that analyzed undertaking will not have significant and negative impact also on the coherency and integrity of the Nature 2000 areas, because of the fact that realization of the works will not cause any destructions, mitigation of the area and disconnection of the natural ecological connections of the Nature 2000 areas. The cumulative impact of the objective investment on the other planned investments is also not considered and it will not take place. Taking into consideration the above during assessment of the size and status of the impacts that can eventually be accumulated, many aspects were considered, among others type of the unavoidable changes in the environment, even in case when the investment will not be realized, degree, in which the realized activities caused formation of the current conditions (structures and processes), time of duration, e.g. whether the impact will be periodical or continuous, scope, e.g. percentage of the habitation or population that can lost, "value" and resistance (endurance) of the given element of the environment that is impacted and probability, that used mitigating measures will bring the needed result. Taking into consideration the above and the fact that the investment consists of the reconstruction of the existing flood embankments. e.g. adaptation of their parameters to the existing provisions of the law, and proposed by the investor mitigating measures during the construction stage minimizing the impact on the natural environment, not causing any damages to the habitations and species of fauna and flora during realization of the investment, for which Nature 2000 areas were established, it is ascertained that the cumulative impact will not take place.

According to the provisions of the Standard Data Forms, prepared for the objective Nature 2000 areas, reconstruction of the flood embankments by adaptation of their parameters to the obligatory technical parameters, does not belong to the indicated and advisable threats for objects and aims of the Nature 2000 areas. However, it must be underlined, that according to the provisions of the Standard Data Forms, prepared for the area important for the Community "Dolna Odra" PLH320037, the existing facilities and devices connected with the anti-flood protection must be maintained in the proper technical state. However, during realization of this elements, attention should be paid to the maintenance of the good ecological state of the valley and to not to deteriorate the state of the habitations and species, which protection is used for creation of the Nature 2000 area. Taking into consideration, that the investment will be conducted under the provisions minimizing the impact of the investment on the Nature 2000 area, including the environmental supervision, deterioration of the habitations and fauna and flora species, for which this area was established.

6. Areas, on which the quality standards of the environment were exceeded. The objective undertaking will not be realized on the area, on which the quality standards of the environment were exceeded, such as industrial areas with developed heavy industry, that cause considerable increase

of the gases, dusts emission, in other words emission of the heavy metals and areas with exceeded quality standards for underground and surface waters.

7. Areas with scenery that are historically, culturally or archaeologically important The area designed for the realization of the investment, according to the information included in appendix to the information card, is located outside of areas that are historically, culturally or archaeologically important. No archaeological facilities are present on this area

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8. Population density

No residential developments are present on this areas.

9. Areas adjacent to the lakes.

Realization of the investment is localized outside the areas adjacent to the lakes. The reconstruction of the flood embankments by the Odra River along the Regalica River. The objective flood embankments are determining the border between the river's bed and meadow fields.

10. Health resorts and conservation areas

The planned undertaking is not localized on the area of health resorts and conservation areas.

- III. Type and scale of the possible impact in relation to conditions described in points I and II, resulted from:
- 1. Range of impact geographical area and population, on which the undertaking can have an impact.

Because of the investment character and localization, the range of impact will have the local character, connected with only realization stage of the investment and it will be limited to the plots covered with scope of the investment. However, the exploitation and maintenance

of the modernized flood embankments in good state is intended to protect the adjacent areas against the flood.

2. The cross-border character of the investment impact on individual natural elements. Because of the character, range and fact that the impact of the investment will be local and closed

within the objective plots, on which the realization of the investment is planned, the cross-border impact of the investment on the environment is not anticipated.

3. Size and complexity of the impact, including predispositions of the existing infrastructure.

The direct impact of the investment in the environment will be limited to the investment stage. Realization of the investment includes areas, on which the existing flood embankments are located. For the investment purposes, construction of the technological roads is not needed, because the transportation of the materials and movement of the equipment will be realized on the levee roads. The magnitude of the eventual impact of the investment on the environment will be controlled by the environmental supervision. The exploitation of the flood embankments will be limited to the periodical mow down of the flood embankments, e.g. removal of the flora, that will be realized outside the birds hatching period.

4. Probability of the impact.

The impact of the investment on the environment will take place only during the realization stage, resulting from emissions of the gases, dusts and noises to the environment, production of wastes. However, during the construction and exploitation stage the investment will not create any significant threat for the natural environment, because for the realization will be used the equipment with low emission indicators, any emissions to the air will be limited by the rational usage of fuels and construction equipment. Furthermore, the investor obliged himself to avoid the spillage of the fuels during transport activities, operation of machines and devices, and to equip the construction site with absorbers of the petroleum derivative substances. Management of the produced waste materials will be realized according to the obligatory regulations.

The exploitation stage of the investment will not include any emissions of the gases, dusts or noise to the air. During the exploitation stage no waste materials will be produced.

Impact on the natural environment will be minimized by many activities proposed by the investor, such as removal of the trees and bushes will be performed outside the birds hatching period, and in case of the eventual justifiable necessity, the beginning of the works will be before the March 1-st and preceded by scaring activities. The proper permit must be obtained for any scaring activities, described in Art. 56 of the Act of 16 April 2004 about the nature protection (Journal of Laws No. 151, item 1220), of the proper organ for intentional scaring and annoying of the avifauna, covered accordingly with partial and strict protection on the area impacted by the investment.

Additionally, all trees localized in the close vicinity of the works will be protected against any damages.

The Odra River, by which bed the reconstruction of the flood embankments will be realized, is located within the homogeneous part of the surface waters - Odra River from Odra Zachodnia do Parnica River. The water levels in the mentioned above homogeneous part of the surface waters is determined as bad, in other words determining the hydro-morphological changes and necessity to

perform repair activities, according to Directive 2000/60/CE of the European Parliament and the Council of 23 October 2000, establishing frames for the Community actions within the water policy. In the Water Management Plan, the risk of not reaching the environmental aims of the Water Directive was determined as threaten. Additionally, because of the fact that the scope of works planned for realization within the objective investment does not include any interventions in the natural ground cover of the river banks, and refers to the reconstruction of the existing flood embankments by reaching the proper parameters, it must be made clear that the realization of the investment will not deteriorate the actual state of the water levels in this river. Furthermore, the reconstruction of the objective flood embankments is not connected with any interventions in the natural habitations, it will not cause any changes in water levels for surface and underground waters, and also it will not cause any changes regarding the flow of the underground and surface waters, and therefore any existence conditions within the river's bed for fauna and flora species. In conclusion, as results from the information card, realization of the objective investment will not

deteriorate the existing underground and surface waters state and it will not have any negative impact on the environmental aims, because the planned undertaking includes the reconstruction of the flood embankments by providing the correct parameters, and all the works conducted will not exceed the premises of the flood embankments, and will not interfere with natural ground cover of the river's banks. realization of the investment will not change flow of the waters and existence of the life organisms. Furthermore, during realization of the investment, any adverse elements or substance will not be used that can cause any threat for the surrounding natural environment, directly or indirectly within the objective investment. Only usage of the natural and environmentfriendly materials is planned, or neutral materials, commonly used in the water-drainage construction industry. Realization of the investment will be conducted in most convenient manner for the environment, that will eliminate as far as possible any negative impacts, such as: extensive noise, soil contamination with petroleum derivative substances, contamination of the underground and surface waters. Additionally, any substantial and negative direct, indirect, cumulative, short-, medium-, and log-term, constant and temporary impacts on the environment are not anticipated for the described investment.

According to the information provided in the undertaking information card, and because of the character of the area and existing protected fauna and flora species in the near vicinity of the investment, and also due to the natural habitations in the near vicinity of the investment, during realization of the investment the following measures that will mitigate the impact of the undertaking on the environment, including Nature 2000 area, will be conducted:

- 1. Protection of the trees and bushes during realization of the works to eliminate the possibility of any damages.
- 2. Limitation to the required minimum of the number of trees and bushes designed for removal (8 pieces of trees and 6691 m^2 of bushes).
- 3. Realization of the cut-out activities only manually, and minimization of the works corridor width.
- 4. Realization of the works outside the birds hatching period, e.g. from March 1 to August 1.
- 5. Realization of the animal scaring activities before commencement of the works, and also limitation of the work times, to minimize the negative impact on the animals existing in the near vicinity of the planned investment.
- 5. Duration, frequency and convertibility of the impacts.

because during realization of the planned works, in the realization stage the impacts on the individual elements of the environment will occur, including emission of the dust and gas impurities to the air and emission of the noise to the environment, or removal of the flora that covers the reconstructed flood embankments. The eventual impact of the investment on the environment will be short and periodic, connected with the realization stage, such impacts will be reversible and cease after completion of the works. Simultaneously, there will be impact on the natural environment that will not be significant, and it will not cause any changes in the biodiversity for the objected areas, it will not cause disappearance of the natural habitations and valuable fauna and flora species.

If the investor will use defined by him conditions of work realization and conception of the works, anticipated impacts will be short of duration, reversible and spatially limited. The impact of the investment on the environment will be limited mainly to the realization stage.

According to the submitted report, the objective investment does not need preparation of the limited usage area, on the basis of the Art. 135 of the Act - Environmental Protection Law.

Additionally, according to the information included in the card, any social conflicts connected with realization and exploitation of the investment are not anticipated.

The submitted materials regarding the planned investment and all data about the elements of the natural environment covered with the range of the planned investment allowed to adequately asses the impacts on the environment and forms of the nature protection. Therefore, taking into consideration localization, type, scope and character of the planned undertaking and conditions for usage of the area during realization and exploitation, it is approved that the planned investment does not need to perform the assessment of the impacts on the environment, including Nature 2000 areas.

After analysis of the submitted documents and taking into consideration the guidelines of the European Court of Justice and guidelines described in Habitations Directive, which stipulates that the rule of foresight should be used, which require, that in case of doubts regarding impacts of the investment on the Nature 2000 area, all protection aims of this area should be treated with priority, and also taking into consideration the fact that the planned investment will be realized within the already existing flood embankments and it will consist of adaptation of their parameters to the obligatory regulations, and because minimizing measures will be used, it is declared that realization of the investment will not have negative impact on the bird species and their habitations, for which the Nature 2000 area was established, e.g. areas of the special protection for birds - "Dolina Dolnej Odry" PLB320003, and also for fauna and flora and natural habitations, for which the areas important for the Community "Dolna Odra" PLH320037 were established.

According to Art. 10 § 1 of the Act of 14 June 1960 -Administrative proceedings code - all parties were informed about the conducted proceeding in every stage of the proceeding.

The number of parties in the proceeding exceeded 20. According to Art. 74, Section 3 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, Section 1227 as amened) all parties are informed about the decisions or other activities preformed by the public administrations organs on the basis of announcements or in other commonly used manner. The Parties were informed about the administrative proceeding and about the right to familiarize with the documentation and possibility to bring remarks in the objective case. During the administrative proceeding no remarks or conclusions were brought.

Taking into consideration the above, it was decided as in the

decision. The decision was issued on the basis of:

- Art. 104 of the Act of 14 June 1960 Administrative Proceedings Code (Journal of Laws of 2013 item 267),
- Art. 71 Section 2 point 2, Art. 75 Section 1 point 1, Art. 84, Art. 85 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, item 1227 with amendments)
- § 3 Section 1 point 65 of the ordinance of Council of Ministers of 9 November 2010 regarding undertakings that can have significant impact on the environment (Journal of Laws, No. 213, item 1397)

INFORMATION

The party unsatisfied with this the decision can appeal from this decision to the General Director of Environment Protection through the Regional Director of Environment Protection within 14 days from the decision reception date.

Annexes:

Characteristics of the planned undertaking according to Art. 82 of the Act of 3 October 2008 about providing the information about environment and its protection, participation of community in environment protection and assessment of impacts on the environment (Journal of Laws No. 199, item 1227 with amendments).

On the basis of Art. 7 point 2) of the Act of 16 November 2006 about the stamp duty payment (Journal of Laws of 2012 item 1282) the entity is exempt form the stamp duty payment.

Recipients:

- 1. Petitioner:
 - Director of Westpomerania Drainage and Water Devices Management in Szczecin
- 2. Parties of the proceeding, on the basis of Art. 49 of the Act of 14 June 1960 Administrative Procedure Code (Journal of Laws of 2013 item 267),

Characteristics of the undertaking

Appendix to the decision about the environmental provisions of August 2013, sign: WOOŚ-TŚ.4233.1.2013.DK.20, issued for the undertaking under the name: "Reconstruction of the flood embankments along the Odra River in the area of Gryfin administrative district".

The objective undertaking includes the reconstruction of the flood embankments on the sections with regard to the locations along the Odra River:

- The flood embankment Marwice Krajnik at 708+680 712+165 km of the Odra River, e.g. for reconstruction 3485.00 m:
- The flood embankment Gryfino Mniszki at 718+850 720+966 km of the Odra River, e.g. for reconstruction 2116,00 m;
- The flood embankment Zabnica Debce at 723+190 724+000 km of the Odra River, e.g. for reconstruction 810.00 m:
- The flood embankment Debce Lubnica at 724+400 726+231 km of the Odra River, e.g. for reconstruction 1831,00 m. Localization of the above mentioned flood embankment is the right bank of the Odra Wschodnia.

The planned reconstruction of the facilities is intended to reduce the filtration through the embankment during the high waters periods on the Odra River by sealing with the anti-filtration barrier the body and basis under the embankments, and also is intended to level the elevation of the embankments crown adopting it to the technical parameters defined for the class of the hydrotechnical constructions, according to the Ordinance of the Ministry of Environment of 20 April 2007, regarding the technical conditions for hydro-technical constructions and their localization, therefore changing their basic parameters. Realization of the investment will not change the the real length of the flood embankments, and only is intended to reconstruct some of the sections.

Furthermore, within the investment, on the flood embankment Gryfino - Mniszki and Debce - Lubnica repair of he road will be performed. This repair is intended to level and replenish the gravel aggregate. The road is located on the bank of the flood embankment, e.g. within its construction side, and from its downstream side. The roads designated for the repair are the exploitive roads and are localized on the bank of flood embankments forming in this way its structure. This roads are used only for the exploitation purposes, such as anti-flood activities and current maintenance of the facility.

The objective flood embankments are classified as class III importance of the hydro-technical construction.

The scope of the investment covers commune of Widuchowa and will be realized on the following record parcels No.: 12, 423, 431 district of Marwice, 41/1, 42, 43, 111, 114/2, 114/6, 114/7, 234/4 district of Widuchowa Miedzyodrze (flood embankment Marwice-Krajnik) and commune of Gryfino and will be realized on the following record parcels No.: 20, 21, 22 district of Gryfino 3, 58, 77/1, 77/2, 285/1, 285/2, 286, 290, 291 district of Gryfino 1 (flood embankment Gryfino-Mniszki), 1/1, 2/1, 3 district of Zabnica, 62/8, 64, 84 district of Czepino, 55, 73 district of Daleszewo Miedzyodrze (flood embankment Zabnica-Debice), 3, 6, 265, 267, 268, 335/1, 335/2 district of Daleszewo, 106, 107 district of Daleszewo Miedzyodrze (flood embankment Debice-Lubnica). The place of the investment realization is the east bank of the Regalica River.

Furthermore, within the zone of the investment impact, with the regard to technological process connected with the reconstruction of the flood embankments, including movement of the construction devices and placement of the node, in which the sealing mixture will be prepared for the body and basis of the embankment, the following record parcels will be used: 4, 5/5 district of Zabnica and 336/5 district of Daleszewo, commune of Gryfino. Actual parameters of the flood embankments on the objective sections differ from the values resulting from the obligatory law regulations. The elevation of the flood embankment crown is lowered with relation to required elevations resulting from the obligatory norms. With regard to the above, the reconstruction activities are intended to reach the proper parameters without any intervention in the natural ground cover of the river banks and bed. According to above, there is the necessity to cut-out 5 pieces of trees (4 poplars and 1 ash) and 6691 m² of bushes (willow).

Within the scope of the designed flood protection, all the works are planned to be executed in the following order:

- 7. Cut-out of the trees with quantity of 8 pcs. and bushes with total quantity of 6691 m².
- 8. Realization of the flood embankments reconstruction consisting in realization of the antifiltration barrier in the axis of the flood embankment body.
- 9. Forming and leveling the crown of the flood embankment using the soil masses.
- 10. Forming the body of the flood embankment using the mixture of grasses to provide the biological strengthening.
- 11. Repair of the embankment road consisting in leveling and replenish the gravel aggregate.
- 12. Cleaning up the construction area after finishing all of the investment works.

The anti-filtration barrier, with designed height of 6.0m and width of 0.30 - 0.35m, will be realized in the narrow spatial excavation(s) technology using the milling and mining equipment. The dry mass is mixed in the specially adopted mixers in the form of silos, and pipelines is pressed to the machine responsible for the barrier realization. The water for the mixture realization process is delivered with the water-wagons as the sewage water. After realization of the anti-filtration barrier, in the not totally binded mixture, the geo-membrane HDPE is immersed. The upper elevation of the anti-filtration barrier will be realized on the depth of min. 0.8m under the crown of the flood embankment.

Cut-out activities regarding the trees and bushes within the objective undertaking will be limited to the required minimum. However, it should be emphasized that the Investor obliged himself to conduct all the works with special care, and when necessary to protect other trees and bushes, conducting the cut-out activities manually, minimization of the width of the work bend, conducting the works outside of the birds hatching periods, being simultaneously the resting time for the plants.

Investor is not planning to conduct the works from the water side and any interventions into the natural ground cover of the river banks and river ecosystem, and therefore, no changes in the waters flowing conditions and habitation of the life organisms will be provided. Furthermore, the transportation of the materials and movement of the equipment will realized in the existing road system, and on the crown of the flood embankment.

On the basis of the Ordinance of the Ministry of Environment of 20 April 2007 regarding technical conditions for the hydro-technical constructions and their localization (Journal of Laws of 2007 r., No. 86 Section 579), the designed flood embankments are classified as class III importance of the hydro-technical construction, and their parameters, according to the information card will be as follow:

- 5. Flood embankment Marwice-Krajnik: the length of the flood embankment section for the reconstruction 3485,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 4,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 3,00 m above the sea level;
- 6. Flood embankment Gryfino-Mniszki: length of the section designed for reconstruction 2116,00 m, technical parameters of flood embankment designed for reconstruction, e.g. width of the crown 3,0 m, inclination of the outer

slope - 1:2,5, inclination of the inner slope - 1:2,0, elevation of the crown - 2,40 meters above the sea level;

- 7. Flood embankment Zabnica-Debce: the length of the flood embankment section for the reconstruction 810,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 3,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 2,40 m above the sea level;
- 8. Flood embankment Debce-Lubnica: the length of the flood embankment section for the reconstruction 1831,00 m, technical parameters of reconstructed flood embankment, e.g the width of crown 3,0 m, inclination of the embankment outer slope 1:2,5, inclination of the embankment inner slope 1:2,0, elevation of the embankment crown 2,40 m above the sea level;

According to the submitted undertaking information card, the designed variant is the most preferred variant. The localization variants were not taken into consideration, because the fact, that this only the reconstruction of the existing flood embankments, and their reconstruction will be consisting in adaptation of their parameters to the obligatory law regulations by leveling the elevation of the embankments crown and sealing the body and the basis under the flood embankments. In view of the above, the selection of the most effective and least inconvenient technology with regards to the environment protection used for sealing and taking into account all the ground conditions under the embankment was very important. Into consideration were taken variants consisting in realization of the flood embankments sealing through:

- d) a) variant I sealing the flood embankment body with the anti-filtration barrier in the axis through the realization of the barrier in the narrow spatial excavation(s) technology. This is very easy technology that provides quick realization and convenient works organization. Not large number of the earth works, e.g. the body of the flood embankment is piratically not disassembled. The effective technology without creation of the filtration windows:
- e) a) variant II sealing the flood embankment body with the anti-filtration barrier in the axis through the realization of the barrier using the block method. This is easy technology that provides very quick realization. However, in the conditions of the low-bearing soils in the ground, large number of the equipment used for the realization of the barrier can cause settlement of the flood embankment body. Furthermore, there is the risk of formation of the filtration windows, because the barrier is realized in the blocks that should couple into each

- other. Lack of precision during realization of the works can cause, that the needed tightness of the barrier will not be reached.
- f) variant III sealing the outer slope of the flood embankment and the basis with placing the HDPE geomembrane. Low cost of the realization in relation to variants I and II. This method is very inconvenient in the realization, because it needs that the body of flood embankment will be disassembled within the scope that will allow to place the HDPE geomembrane. Lack of possibility to dip the screen on the large depth below the basis of the flood embankment causes slight extension of the filtration channel under the flood embankment body. In the assumed ground conditions, placement of the screen below the basis of the flood embankment is almost impossible, because the organic grounds are characterizing by the great re-hydration. In such conditions, constant pumping of the water can be needed, that can have an impact on the lowered carrying capacity of the grounds skeleton and large deformations of the flood embankment body.

The variant selected by the Investor is also the most convenient variant for the environment, because among others, all the works will be conducted using the equipment that will be moving on the crown of embankments, without any interventions to the habitations adjoining with the planned investment. The movement of the construction equipment will be realized on the roads along the flood embankments. The protected natural habitations localized near the investment will not be destroyed, and also the environmental conditions will not be disturbed.

