



# **FINAL REPORT**

# on the implementation of the measures specified in the ENVIRONMENTAL MANAGEMENT PLAN for Contract 3D.3

# Odra-Vistula Flood Management Project

OVFMP Subcomponent	3D: Passive and Active Protection in San Basin	
Contract Task	3D.3 Łęg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce	
Investor / Project Implementation Unit	State Water Holding Polish Waters – Regional Water Manage- ment Authority in Rzeszów, 35-103 Rzeszów, 17B. Hana- siewicza Street	
Project Implementation Office (PIO)	State Water Holding Polish Waters Regional Water Manage- ment Authority in Rzeszów, 35-103 Rzeszów, 17B. Hana- siewicza Street	
Works Contractor	EKOMEL Sp. z o. o. ul. Wojska Polskiego 21, 23-300 Janów Lubelski; Zakład Usług Wodno – Melioracyjnych i Rekultywacji Sp. J. Mieczysław Siemaszek, Antoni Gancarz ul. Portowa 14, 27 – 600 Sandomierz; ROBSON Sp. z o. o. ul. Przemysłowa 3, 27 – 600 Sandomierz	
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Subcomponent 3D - Passive and active protection in San basin

3D.3 Leg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce

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3D.3 Leg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce

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# INTRODUCTION

This document, prepared by the Contract Engineer within the framework of the Contract for Consulting Services 5.2 Design and Construction Supervision. Project Management, Technical Assistance and Training, Technical Support for the Project and Strengthening of PIU's Institutional Capacity in the implementation of the Odra-Vistula Flood Management Project, presents the final report on the implementation of the measures specified in the Environmental Management Plan (EMP) for Works Contract 3D.3 Łęg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce.

The report covers the period:

- from the Commencement Date of Contract 3D.3 (i.e. May 14, 2021);
- > to the date of completion of the works considered to be essential works, resulting from the Time for Completion for the said Contract under Amendment No. 5 (i.e. until August 31, 2023).

The following is presented respectively for this Contract:

- basic information on Contract 3D.3
   (including, inter alia, the physical scope and basic dates of the Contract);
- basic information on the Environmental Management Plan for Contract 3D.3;
- organisational system for supervising the implementation of the Environmental Management Plan;
- implementation status of the mitigation measures specified in Appendix 1 to the EMP,
- implementation status of the monitoring measures specified in Appendix 2 to the EMP,
- description of other activities and events concerning ESHS;
- summary.

#### 1 BASIC INFORMATION ON CONTRACT 3D.3

Works Contract 3D.3 Leg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce is implemented as part of the Odra-Vistula Flood Management Project (OVFM Project), under Component 3 – Protection of the Upper Vistula and Subcomponent 3D – Passive and active protection in San basin.

An agreement with the Contractor for Contract 3D.3 was signed on May 14, 2021. On May 14, 2021, the handover of the construction site took place. Due to the provisions of the Decision of environmental conditions, no essential construction works were performed for the Contract between the handover of the construction site and the end of July 2021. During this period, the Contractor prepared the documentation and carried out selected preparatory works in accordance with the recommendations of the EMP and the Decision on Environmental Conditions. The works up to 08/18/2021 were supervised by the Investor himself. On 08/19/2021, a Contract Engineer was appointed to start supervising the implementation.

The original time for completion (731 days from the date of handover of the construction site) expired on May 14, 2023. Under Amendment No. 5 of January 31, 2023, amending, in particular, the time conditions of the Contract, the completion date was set at August 31, 2023.

The basic information about the Contract is presented below.

### **Title of the Contract:**

*Leg IV* – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce.

#### **Contractor:**

EKOMEL Sp. z o. o., ul. Wojska Polskiego 21, 23-300 Janów Lubelski Zakład Usług Wodno – Melioracyjnych i Rekultywacji Sp. J. Mieczysław Siemaszek, Antoni Gancarz, ul. Portowa 14, 27 – 600 Sandomierz; ROBSON Sp. z o. o., ul. Przemysłowa 3, 27 – 600 Sandomierz

#### **Physical scope:**

The Works Contract 3D.3 refers to the extension of flood protection embankments of the estuarine section of the Łęg river - the left embankment at km 0+082-5+030 and the right embankment at km 0+000-5+236. The Contract will be executed in Podkarpackie Province, within the Tarnobrzeg Poviat, in the Gorzyce Commune. The implementation of Works Contract 3D.3 results from the necessary improvement of flood protection and the reduction of flood losses in the areas situated along the estuarine section of the Łęg river valley within the boundaries of the Gorzyce Commune.

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#### **Key Dates of the Contract:**

Date of signing the Contract: May 14, 2021

Date of handing over the Construction

Site:

May 14, 2021

Commencement Date of Works<sup>1</sup>: May 14, 2021

840 days from the date of handing over the Time for Completion:

construction site

Amendment no. 1 was signed on: October 26, 2021

Amendment no. 2 was signed on: November 29, 2021

Amendment no. 3 was signed on: July 26, 2022

Amendment no. 4 was signed on: September 6, 2022

Amendment no. 5 was signed on: January 31, 2023

Amendment no. 6 was signed on: May 31, 2023

Amendment no. 7 was signed on: August 1, 2023

Amendment no. 8 was signed on: August 30, 2023

Completion date of Works

(acc. to Time for Completion): August 31, 2023

Date of signing

the Final Acceptance Certificate: August 31, 2023

<sup>&</sup>lt;sup>1</sup> Commencement date of Works acc. to an entry in the Construction log. No essential construction works were performed for the Contract until the end of July 2021. During this period, the Contractor prepared the documentation and carried out selected preparatory works in accordance with the recommendations of the EMP and the Decision on Environmental Conditions.

### 2 BASIC INFORMATION ON THE EMP FOR CONTRACT 3D.3

The Environmental Management Plan for Contract 3D.3 was developed in November 2020 (final version). On December 23, 2020, the World Bank awarded a "No Objection" approving the Environmental Management Plan as one of documents of the bidding procedure for the selection of the Contractor for construction works under the Contract. This is a document that systematises the activities undertaken under the Contract, obliging all those involved in the implementation of the Contract to comply with the provisions contained therein. A detailed description of the contract implementation conditions for environmental management was developed in the form of appendices to the EMP – Appendix 1 containing the *Plan of minigation measures* (see description in 2.1 below), and Appendix 2 containing the *Plan of monitoring measures* (see description in 2.2 below).

#### 2.1 MITIGATION MEASURES LISTED IN APPENDIX 1 OF THE EMP

Appendix 1 of the EMP for Contract 3D.3 contains 120 mitigation measures to prevent and reduce the project's negative environmental impacts. These measures result from the content of the decision on environmental conditions issued for the Contract (included in Appendix 4 of the EMP), as well as from procedural requirements of the World Bank and additional conditions defined during works on the preparation of the EMP. The table of mitigation measures in Appendix 1 of the EMP describes the individual measures and identifies where they will be implemented and who will be responsible for their implementation.

The mitigation measures given in Appendix 1 of the EMP fall into the following 19 thematic categories:

- a) Requirements on the schedule of works and implementation of the EMP (items 1-2 in Appendix 1 to EMP);
- b) Requirements on purchase and compensation (items 3-4 in Appendix 1 to EMP);
- c) Requirements on access roads to the Contract Area (items 5-12 in Appendix 1 to EMP);
- d) Requirements on locations of site facilities and technological roads and yards (items 13-15 in Appendix 1 to EMP);
- e) Requirements on removal of trees and shrubs (items 16-18 in Appendix 1 to EMP);
- f) Requirements on protection of trees and shrubs not intended for removal (items 19-25 in Appendix 1 to EMP);
- g) Requirements on securing protected natural resources (items 26-49 in Appendix 1 to EMP);
- h) Requirements on ground management (including topsoil)

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(items 50-55 in Appendix 1 to EMP);

- Requirements on land reclamation after completion of works (items 56-57 in Appendix 1 to EMP);
- j) Requirements on prevention of pollution emission to the ground and water environment (items 58-75 in Appendix 1 to EMP);
- k) Requirements on prevention of pollution emission to the air (items 76-78 in Appendix 1 to EMP);
- 1) Requirements on prevention of noise emission (items 79-83 in Appendix 1 to EMP);
- m) Requirements on waste management (items 84-88 in Appendix 1 to EMP);
- n) Requirements on health and safety protection (items 89-95 in Appendix 1 to EMP);
- Requirements on extraordinary threats to the environment (items 96-99 in Appendix 1 to EMP);
- p) Requirements on conservation of historic monuments (items 100-101 in Appendix 1 to EMP);
- q) Requirements on the Contractor's personnel implementing the EMP (items 102-107 in Appendix 1 to EMP);
- r) Requirements on reporting on the implementation of the EMP (items 108-109 in Appendix 1 to EMP);
- s) Remaining ES requirements (items 110-120 in Appendix 1 to EMP)

The content of the individual mitigation measures in Appendix 1 of the EMP is provided in the *Checklist* attached as *Appendix no. 1* to this report.

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#### 2.2 MONITORING MEASURES LISTED IN APPENDIX 2 OF THE EMP

Appendix 2 of the EMP for Contract 3D.3 contains 120 measures aimed at monitoring the implementation of the mitigation measures described in Appendix 1. The tabular list of monitoring measures, presented in Appendix 2 of the EMP, takes into account the same thematic categorisation as applied to mitigation measures. The table of monitoring measures determines, inter alia, the monitoring places, the method of monitoring, the period and frequency of monitoring, as well as the units responsible for conducting the monitoring.

# 3 SYSTEM OF SUPERVISION OF THE IMPLEMENTATION OF THE MEASURES SPECIFIED IN THE EMP FOR CONTRACT 3D.3

Supervision over the implementation of the mitigation measures and monitoring measures specified in the EMP for Contract 3D.3 was conducted at the level of all organisational units participating in the execution of the Contract, i.e. the Works Contractor, Engineer, Project Implementation Office (PIO) and Project Coordination Unit (PCU). Information on the scope of the particular units' activities is presented below.

## 3.1 CONTRACTOR

The Site Manager was the person directly responsible for implementing the measures defined in the EMP on behalf of the Works Contractor. As per item no. 102 of Appendix 1 to the EMP, in order to provide support to the Site Manager in the implementation of the EMP, the EMP Coordinator was appointed within the Contractor's team. The role of the EMP Coordinator was to regularly cooperate with the Site Manager, the rest of the Contractor's personnel and the Key and Supporting Expert for Environmental Management in the Engineer's team in ensuring the implementation of the EMP conditions, and also to conduct current reporting in the abovementioned scope. Furthermore, in accordance with item 103, 105 and 106 of Appendix 1 of the EMP, the Contractor has ensured the participation of a team of experts of environmental, archaeological and sapper supervision, in the scope consistent with the requirements of the EMP. At the end of each month, the EMP Coordinator summarised the current implementation status of the individual EMP conditions (in the form of a checklist). Information on the implementation of the EMP was forwarded to the Key and Supporting Expert for Environmental Management in the Engineer's team, together with the relevant attachments (including but not limited to notes, opinions, environmental supervision reports, etc.).

#### 3.2 ENGINEER

The Key Expert for Environmental Management and Senior Environmental Protection Supporting Expert, cooperating in this regard with the Resident Engineer, supervision inspectors and other members of the Engineer's team providing investor's supervision over the project implementation, exercised direct supervision over the implementation of the EMP conditions on behalf of the Engineer's team. The environmental management experts were in regular contact with the Site Manager and the EMP Coordinator in the Contractor's team, establishing the scope of conditions needed to be met at a given stage of the works, overseeing the implementation status of individual EMP conditions, participating in problem solving and conducting the site inspections. After the end of each reporting period (month and quarter), the environmental management experts reviewed the Contractor's environmental documentation and prepared reports submitted to the Project Implementation Office.

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## 3.3 Project Implementation Office (PIO)

The Environmental Specialist, cooperating in this regard with the Head of the PIO, other members of the PIO team, as well as other organisational units of RZGW in Rzeszów, exercised direct supervision over the implementation of the EMP conditions on behalf of the Project Implementation Office (PIO). The Environmental Specialist and the Head of the PIO remained in contact with the Key Expert for Environmental Management and Senior Environmental Protection Supporting Expert in the Engineer's team, overseeing the implementation status of the particular conditions of the EMP and engaging in resolving the current issues. After the end of each reporting period (month and quarter), the Environmental Specialist and the Head of the PIO reviewed the current environmental documentation of the contract, and then forwarded it to the Project Coordination Unit (to the extent consistent with the EMP conditions).

# 3.4 PROJECT COORDINATION UNIT (PCU)

The Environmental Protection Expert, cooperating in this regard with the other members of the PCU's team, exercised direct supervision over the implementation of the EMP conditions on behalf of the Project Coordination Unit. The Expert remained in regular contact with the Head of the PIO and with the Environmental Specialist in the PIO team. He/she also cooperated with those responsible for the implementation of the EMP on behalf of the other organisational units of the investment process, namely the Key Expert for Environmental Management and Senior Environmental Protection Supporting Expert in the Engineer's team, as well as the Site Manager and the EMP Coordinator in the Contractor's team. The Environmental Management Expert oversaw the implementation status of individual EMP conditions, by engaging in resolving the current issues and by participating in site inspections. After the end of each quarterly reporting period, the Expert reviewed the environmental documentation provided by the PIO and prepared an input to the PCU's reports subsequently submitted to the World Bank.

# 4 IMPLEMENTATION STATUS FOR MITIGATION MEASURES UNDER APPENDIX 1 TO THE EMP

In accordance with contents of Appendix 1 to the EMP for Contract 3D.3, the units responsible for implementation of mitigation measures determined under Appendix 1 to the EMP are as follows: **Contractor** (118 measures: items 1-2, 4-29, 31-120 in Appendix 1 of the EMP), **Engineer / Consultant** (3 measures: items 3, 4, 118 in Appendix 1 of the EMP) and **Investor** (4 measures: items 3, 4, 30 and 57 in Appendix 1 of the EMP). The EMP for Contract 3D.3 expects that 120 mitigation measures<sup>1</sup> are implemented in total, and at least 104 measures should be implemented within the reporting period (for the remaining 16 measures no implementation was necessary – see below).

#### 4.1 CONTRACTOR'S MEASURES

In line with the information provided in monthly and quarterly reports on the implementation of the measures specified in the EMP:

- a) The Contractor implemented 104 (86.7%) mitigation measures within the reporting period, including:
  - 73 (60.8%) measures were implemented in the scope required within the reporting period
    - (items 1-2, 4-6, 9, 11-12, 15, 26, 31, 33, 35-38, 42-48, 50-53, 55-56, 58-60, 62-65, 67, 73, 75-76, 78-79, 81, 87-88, 90-92, 94-111, 113-117, 119-120 under Appendix 1 to the EMP);
  - in case of 31 (25.8%) measures, problems and/or irregularities were identified with their implementation, as described in Chapter 4.4
    - (items 7-8, 10, 13-14, 19-21, 24, 27-29, 41, 49, 54, 57, 66, 68-72, 74, 77, 84-86, 89, 93, 112, 118 under Appendix 1 to the EMP).
- b) The Contractor did not implement 14 (11.7%) mitigation measures within the reporting period, including:
  - the implementation of 14 (11.7%) measures was not necessary for the entire period covered by this report (items 16-18, 22-23, 25, 32, 34, 39-40, 61, 80, 82-83 under Appendix 1 to the EMP);
  - cases of lack of implementation of the measure required within the reporting period were not identified.

Mitigation measures were implemented by the Contractor with the participation of specialists from the Contractor's environmental team. In the reporting period, this team consisted of the following persons: the EMP Coordinator (who was also a botanist-phytosociologist and a zoologist-chiropterologist), expert herpetologist, entomologist, expert ornithologist, water protection expert, archaeologist, and H&S Coordinator and a sapper.

<sup>&</sup>lt;sup>1</sup> The content of the individual mitigation measures in Appendix 1 of the EMP is provided in the *Checklist* attached as Appendix no. 1 to this report.

Mitigation measures were agreed with (if required by the conditions of Contract and/or the EMP) and supervised by the Engineer's team, with participation of the following persons from the Engineer's team: Key Expert for Environmental Protection, Senior Environmental Protection Supporting Expert, Senior Supporting Expert – H&S Inspector, Senior Supporting Expert for technical assistance, Senior Supporting Experts – Supervision Inspectors and Key Experts - Resident Engineer and Project Manager.

#### 4.2 ENGINEER'S MEASURES

In line with the information provided in monthly and quarterly reports on the implementation of the measures specified in the EMP:

- a) In the reporting period, the Engineer/Consultant implemented 2 (1.6%) mitigation measures (item 4, 118 under Appendix 1 to the EMP);
- b) In the reporting period, the Engineer/Consultant did not implement 1 (0.8%) mitigation measure (item 3 under Appendix 1 to the EMP) due to the fact that there was no need to implement it.

Mitigation measures were implemented by the Engineer with participation of the selected experts from the Engineer's team (composition of the team is given in Chapter 4.1).

## 4.3 INVESTOR'S MEASURES

In line with the information provided in monthly and quarterly reports on the implementation of the measures specified in the EMP:

- a) In the reporting period, the Investor implemented 1 (0.8%) mitigation measure (item 4 under Appendix 1 to the EMP).
- b) In the reporting period, the Investor did not implement 3 (2.4%) mitigation measures (items 3, 30, 57 under Appendix 1 to the EMP) due to the fact that there was no need to implement it.

Mitigation measures were implemented by the Investor with participation of the selected experts from the PIO's team (composition of the team is given in Chapter 4.1).

# 4.4 PROBLEMS WITH IMPLEMENTATION OF MITIGATION MEASURES UNDER APPENDIX 1 TO THE EMP

In line with the information provided in monthly and quarterly reports on the implementation of the measures specified in the EMP, the following issues and/or inconsistencies associated with implementation of 31 mitigation measures listed under Appendix 1 to the EMP for Contract 3D.3 were identified (in order according to the item numbers under Appendix 1 to the EMP):

- a) items 7, 8 in Appendix 1 of the EMP (2nd and 3rd quarter of 2021) Agreement on temporary traffic organization designs.
  - In the periods indicated above, the Contract did not present all the required documents with the relevant agreements from road managers for the Engineer's information. The Engineer recommended to supplement the documents, the shortcomings of which implied partial completion of the task. The Contractor supplemented the incomplete documents in the next reporting period.
  - The above shortcoming has no actual impact on the environment.
- b) item 10 in Appendix 1 of the EMP (spring, autumn and winter quarterly periods) Keeping the access roads clean
  - In the periods indicated, occasional cases were identified of pollution of access roads to the works area (on public roads). Despite difficulties caused by adverse weather conditions in the autumn, winter and early spring periods, the Contractor made efforts to keep the roads clean.
  - No significant negative impact of the shortcoming on the surrounding environment was identified.
- c) items 13, 14, 68 in Appendix 1 of the EMP (from the 3rd quarter of 2021 to the first quarter of 2022, second quarter of 2023) Organisation of the site facilities, their equipment (including marking and equipment of servicing sites for vehicles, machines, and devices, hazardous materials storage sites, and hazardous waste storage sites within the site facilities), organisation of service roads and storage yards.
  - In the periods indicated above, the Engineer identified shortcomings consisting of the short-term lack of: complete Construction Site Organisation Plan (initial stage of construction), of the required site facilities, their marking, equipment of servicing sites for vehicles, machines, and devices, hazardous materials storage sites, and hazardous waste storage sites. Each time, the Contractor followed the Engineer's recommendations and took efforts to supplement the POPB document as soon as possible, to provide the work area with all locations of facilities and their appropriate development, in line with the contract documents.
  - The above shortcomings have no actual impact on the environment.
- d) items 19, 20, 21, 24 in Appendix 1 of the EMP (from the 2nd quarter of 2021 to the 3rd quarter of 2022; from the third to the fourth quarter of 2022 and from the second to the third quarter of 2023) Ensuring the protection of greenery left outside the felling.

In the periods indicated above, the Engineer identified shortcomings consisting of: inappropriate storage of earth masses and construction materials and the parking of construction vehicles in the vicinity of trees, inadequate protection of zones of exposed tree roots during earthworks, lack of fencing of some tree trunks exposed to damage from the works conducted, lack of adequate fencing of the zone under crowns of trees and shrubs. Each time, the Contractor followed the Engineer's recommendations and implemented appropriate greenery protection measures in the neighbourhood of the conducted works.

No significant negative impact of the shortcomings on the surrounding environment was identified.

e) item 27 in Appendix 1 of the EMP (from the 1st quarter of 2022 to the 2nd quarter of 2022) – Traffic of construction vehicles within the construction site.

In the periods indicated above, the Engineer found incidental cases of construction vehicles moving out of the Contract area. Each time, the Contractor followed the Engineer's recommendation and made efforts to ensure that the boundaries of the Contract area are not overstepped, and was regularly making the operators of construction machinery aware to respect the boundaries of the work area. In addition, the Contractor was regularly completing the fencing of the work zone (has made improvements to its technical condition in particular).

No significant negative impact of the shortcoming on the surrounding environment was identified.

- f) item 28 in Appendix 1 of the EMP (2nd and 3rd quarter of 2021) One-time environmental inventory of the Contract Area prior to the commencement of works.
  - The Contractor performed an environmental inventory of the Contract area prior to the commencement of works, i.e. in the period of the 2nd quarter of 2021. At the same time, the Contractor submitted an incomplete document for the Engineer's approval. The Engineer recommended to supplement the document, the shortcomings of which implied partial completion of the task. The document was supplemented by the Contractor in the next reporting period.
  - The above shortcoming has no actual impact on the environment.
- g) item 29 in Appendix 1 of the EMP (3rd quarter of 2022) Preventing the spread of invasive species in phase of the contract implementation
  - In the period indicated, the Engineer found a delay in the removal of the site of an invasive plant by the Contractor. The Contractor, after promptly urging the Engineer, has marked the site of the invasive plant and subsequently removed it.
  - No significant negative impact of the shortcoming on the surrounding environment was identified.
- h) items 41, 66 in Appendix 1 of the EMP (3rd quarter of 2021, from the first quarter of 2022 to the second quarter of 2023) Elimination of stagnant water at the construction site and the implementation of draining the excavations.

In the periods indicated above, the Engineer found isolated deficiencies consisting in the failure to promptly eliminate stagnant water resulting from heavy rainfall (no presence of amphibian breeding habitats in the area of the stagnant water). Each time, the Contractor followed the Engineer's recommendation and implemented measures to remove stagnant water with participation of a herpetologist specialist from the Contractor's Environmental Team.

No significant negative impact of the shortcomings on the surrounding environment was identified.

i) item 49 in Appendix 1 of the EMP (2nd and 3rd quarter of 2021) - Obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals identified in the Contract Area.

In the periods indicated above, the Contractor submitted an incomplete document for the Engineer's approval – an application for obtaining a decision allowing for exceptions to the principles of species protection of plants, fungi and animals identified in the Contract Area. The Engineer recommended to supplement the document, and after corrections, the document was submitted by the Contractor to RDOŚ in Rzeszów. For the duration of construction works, the Contractor obtained the relevant permit for exceptions to the principles of species protection of fauna and flora.

The above shortcoming has no actual impact on the environment.

j) item 54 in Appendix 1 of the EMP (from the 3rd quarter of 2021 to the second quarter of 2023) - Ensuring the proper storage of topsoil.

In the periods indicated above, the Engineer identified incidental and occasional short-comings consisting of: masses of stored topsoil were being driven over, delays in transporting topsoil to the site intended for temporary storage, inadequate marking and protection of topsoil masses from degradation. Each time, the Contractor followed the Engineer's recommendation and made efforts to ensure that topsoil masses are sufficiently protected.

No significant negative impact of the shortcoming on the surrounding environment was identified.

k) item 57 in Appendix 1 of the EMP (from the 2nd quarter of 2022 to the 3rd quarter of 2023) – Caring for grasslands.

In the periods indicated above, the Engineer found occasional shortcomings consisting of failure to ensure adequate maintenance of grassed areas, including delays in grass mowing. The Contractor each time followed the Engineer's recommendation and made efforts to ensure the entire spectrum of maintenance activities for the grassed areas on the embankments, during the relevant periods associated with the vegetation of the flora.

No significant negative impact of the shortcoming on the surrounding environment was identified.

1) items 69, 70 in Appendix 1 of the EMP (1st and 2nd quarter of 2022) – Performance of regular service actions to vehicles, machines, and devices.

In the periods indicated above, the Engineer found occasional shortcomings consisting of the lack of appropriate marking of: servicing sites for vehicles, machines, and devices, hazardous materials storage sites, and hazardous waste storage sites within the site facilities. Each time the Contractor followed the Engineer's recommendation and implemented an improvement to the execution of mitigation measures related to the marking of the above-mentioned zones.

The above shortcomings have no actual impact on the environment.

m) item 71 in Appendix 1 of the EMP (3rd and 4th quarter of 2021) – Assuring the availability of absorbents.

In the periods indicated above, the Engineer found occasional shortcomings consisting of the lack of equipping all the site facilities with access to absorbent. The Engineer recommended that all site facilities be provided with absorbent containers. The Contractor implemented actions to provide the site facilities with access to absorbents as well as ensuring that staff are properly trained in the use of absorbent in the event of spills of petroleum derivatives to the ground.

No significant negative impact of the shortcoming on the surrounding environment was identified.

n) item 72 in Appendix 1 of the EMP (3rd quarter of 2021) – Ensuring access to sanitary facilities.

In the indicated period, the Engineer identified an occasional shortcoming consisting of the short-term lack of one of site facilities where access to sanitary equipment was required. The Engineer instructed to ensure that the site facilities are properly organised and that access to sanitary facilities is provided without delay, including the completion of the missing site facilities. The Contractor took appropriate actions resulting in the preparation of the missing facilities and access to the above-mentioned equipment.

The above shortcoming has no actual impact on the environment.

o) item 74 in Appendix 1 of the EMP (3rd quarter of 2021) – Protection of the ground environment against pollution of petroleum derivatives.

In the indicated period, the Engineer identified an occasional shortcoming consisting of delay in removing an oil stain from a site machine's spillage. The Engineer instructed the Contractor to urgently remove the oil stain, the Contractor took immediate appropriate actions to remove the spill from the ground.

No significant negative impact of the shortcoming on the surrounding environment was identified.

p) item 77 in Appendix 1 of the EMP (3rd quarter of 2021, from the 1st to the 3rd quarter of 2022) – Reduction of dust at the work site.

In the periods indicated above, the Engineer found occasional shortcomings consisting of lack of the Contractor's sufficient actions related to dust control during movement of construction vehicles. The dusting problem was intensified by periods of drought recorded during the Contract period. Each time, the Contractor followed the Engineer's recommendation and, as far as possible, sprayed the surface of the service roads during periods of increased dust.

No significant negative impact of the shortcoming on the surrounding environment was identified.

q) items 84, 85, 86 in Appendix 1 of the EMP (from the 3rd quarter of 2021 to the first quarter of 2022, third quarter of 2022, second quarter of 2023) – Waste management in the Contract area.

In the periods indicated above, the Engineer found short-term shortcomings consisting of: submission of an incomplete Waste Management Plan, inappropriate preparation of site facilities for providing zones for the temporary storage of wastes and insufficient preparation of proper waste segregation and storage rules. Each time, the Contractor followed the Engineer's recommendations - WMP document was supplemented immediately, took efforts to improve proper waste management in the Contract area, including the implementation of proper waste segregation and storage and supplementing the site facilities with marking and preparation of zones for storage of hazardous wastes.

No significant negative impact of the shortcomings on the surrounding environment was identified.

r) item 89 in Appendix 1 of the EMP (first quarter of 2022) – Development of documents related to safety in the Contract execution area.

In the period indicated, the Engineer found a single shortcoming consisting of lack of presentation of the IBWR and DQAP documents for some of the works carried out within the reporting period. The Engineer recommended to supplement the documents, the shortcomings of which implied partial completion of the task. The Contractor supplemented the missing documents in the next reporting period.

The above shortcoming has no actual impact on the environment.

- s) items 93, 112 in Appendix 1 of the EMP (4th quarter of 2021, the 1st quarter of 2022) Ensuring safety during the execution of works, provision of H&S Expert in the Contractor's team.
  - In the periods mentioned above, the Engineer found incidental shortcomings consisting in the failure of the Contractor's personnel to comply with H&S requirements and the Contractor delayed the transmission of the documents relating to the change of Contractor's personnel at the position of H&S specialist. The Engineer recommended to supplement the documents, the shortcomings of which implied partial completion of the task (item 112) and instructed the Contractor that the conditions of conducting the works be brought into line with the provisions of the contract documents specifying the health and safety conditions for the execution of works (item 93). The Contractor followed the Engineer's recommendation and supplemented the missing documents in the next reporting period.

The above shortcomings have no actual impact on the environment.

t) item 118 in Appendix 1 of the EMP (2nd quarter of 2021) – Development and implementation of procedures related to the ongoing provision of information on ES issues. The ES procedures required were not presented in the indicated period. Development and implementation of procedures related to the ongoing provision of information on ES issues took place in the next reporting period (during the period of the Engineer's appointment).

The above shortcoming has no actual impact on the environment.

# 5 IMPLEMENTATION STATUS FOR MONITORING MEASURES UNDER APPENDIX 2 TO THE EMP

In accordance with contents of Appendix 2 to the EMP for Contract 3D.3, the units responsible for implementation of monitoring measures determined under Appendix 2 to the EMP were as follows: **Contractor** (118 measures: items 1-2, 4-29, 31-120 under Appendix 2 to the EMP), **Engineer** / **Consultant** (119 measures: items 1-29, 31-120 under Appendix 2 to the EMP) and the **Investor** (2 measures: items 30 and 57 under Appendix 2 to the EMP). The EMP for Contract 3D.3 expects the implementation of 120 monitoring measures<sup>1</sup>, in total, including implementation of all measures within the reporting period.

#### 5.1 CONTRACTOR'S MEASURES

Within the reporting period, the Contractor was implementing measures associated with implementation monitoring for mitigation measures, as described in Appendix 2 to the EMP. The monitoring was carried out by: (i) verification of requirements determined under the EMP for the current stage of works; (ii) verification of Contractor's documents related to implementation of conditions under the EMP; (iii) ongoing inspections on site; (iv) actions listed under Appendix 2 to the EMP; and (v) ongoing establishments with representatives of the Engineer and of the Investor.

- a) The Contractor implemented 118 (98.3%) monitoring measures within the reporting period, including:
  - 118 (98.3%) measures were implemented in the scope required within the present reporting period (items no. 1-2, 4-29, 31-120 under Appendix 2 to the EMP).
  - none of the measures (0%) was implemented partially.
- b) Cases of lack of implementation for any of the monitoring measures assigned to the Contractor were not identified within the reporting period, including:
  - implementation of none of the measures was not finally completed within previous periods;
  - implementation of none of the measures was not unnecessary within the present reporting period;
  - cases of lack of implementation for measures required within the present reporting period were not identified.

Monitoring measures were carried out by the Contractor with the participation of the Contractor's Environmental Team, including the Environmental Supervision Coordinator and H&S Coordinator (composition of the team is given in Chapter 4.1).

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<sup>&</sup>lt;sup>1</sup> The measures relate to the monitoring of implementation of the individual mitigation measures under Appendix 1 to the EMP, the content of which is provided in the *Checklist* attached as *Appendix no. 1* to this report.

## 5.2 ENGINEER'S/CONSULTANT'S MEASURES

Within the reporting period, the Engineer/Consultant was implementing measures associated with implementation monitoring for mitigation measures, as described in Appendix 2 to the EMP. The monitoring was carried out by: (i) verification of requirements determined under the EMP for the current stage of works; (ii) verification of Contractor's and Investor's documents related to implementation of conditions under the EMP; (iii) ongoing inspections on site; (iv) actions listed under Appendix 2 to the EMP; and (v) ongoing establishments with representatives of the Contractor and of the Investor.

- a) The Engineer/Consultant implemented 119 (99.2%) monitoring measures within the reporting period, including:
  - 119 (99.2%) measures were implemented in the scope required within the present reporting period (items 1-29, 31-120 under Appendix 2 to the EMP).
  - none of the measures (0%) was implemented partially.
- b) Cases of lack of implementation for any of the monitoring measures assigned to the Engineer/Consultant were not identified within the reporting period, including:
  - implementation of none of the measures was not finally completed within previous periods;
  - implementation of none of the measures was not unnecessary within the present reporting period;
  - cases of lack of implementation for measure required within the present reporting period were not identified.

Furthermore, within the reporting period, the Engineer/Consultant was supervising the implementation of 118 monitoring measures assigned to the Contractor, in accordance with Appendix 2 to the EMP.

Monitoring measures and supervision measures for implementation of the EMP were implemented by the Engineer/Consultant with participation of the selected experts from the Engineer's/Consultant's team (composition of the team is given in Chapter 4.1).

#### 5.3 INVESTOR'S MEASURES

Within the reporting period, the Investor was implementing measures associated with implementation monitoring for mitigation measures, as described in Appendix 2 to the EMP. The monitoring was carried out by: (i) verification of requirements determined under the EMP for the current stage of works; (ii) verification of Contractor's and Engineer's documents related to implementation of conditions under the EMP; (iii) ongoing inspections on site; (iv) actions listed under Appendix 2 to the EMP; and (v) ongoing establishments with representatives of the Contractor and of the Engineer.

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- a) the Investor implemented 2 (1.6%) monitoring measures within the reporting period, including:
  - measures implemented in the scope required within the present reporting period (items 30 and 57 under Appendix 2 to the EMP).
- b) cases of lack of implementation for monitoring measures assigned to the Investor were not identified within the present reporting period.

Furthermore, within the reporting period, the Investor was supervising the implementation of 118 monitoring measures assigned to the Contractor, in accordance with Appendix 2 to the EMP and 119 monitoring measures assigned to the Engineer, in accordance with Appendix 2 to the EMP.

Monitoring measures and supervision measures for implementation of the EMP were implemented by the Investor with participation of the Environmental Specialist in the PIO and Technical Specialist (Supervision Inspector) (composition of the team is given in Chapter 4.1).

# 5.4 PROBLEMS WITH IMPLEMENTATION OF MITIGATION MEASURES UNDER APPENDIX 2 TO THE EMP

In line with the information provided in monthly and quarterly reports on the implementation of the measures specified in the EMP, no problems were found in implementation of the monitoring measures specified in Appendix 2 of the EMP for Contract 3D.3.

# 6 OTHER MEASURES AND EVENTS RELATED TO THE ENVIRONMENT, LOCAL SOCIETY, HEALTH AND SAFETY

## **6.1 CONTRACTOR'S MEASURES**

Within the reporting period, the Contractor performed construction works under Contract 3D.3 and implemented the particular measures determined in the Environmental Management Plan in the scope assigned to the Contractor.

#### 6.2 ENGINEER'S MEASURES

Within the reporting period, the Engineer supervised the construction works conducted under Contract 3D.3 and implemented particular measures determined in the Environmental Management Plan in the scope assigned to the Engineer.

## 6.3 INVESTOR'S MEASURES

Within the reporting period, the Investor performed its actions associated with implementation of Contract 3D.3, including, notably, implemented particular measures determined in the Environmental Management Plan in the scope assigned to the Investor, and supervised actions of the Contractor and of the Engineer.

#### 6.4 OTHER MEASURES

Within the reporting period, an epidemic state was in force at the territory of the Republic of Poland in relation to SARS-CoV-2 virus infections, causing COVID-19 disease. The activities of the Contractor, the Engineer/Consultant and the Investor in the implementation of the measures related to the Environmental Management Plan were aligned with the applicable sanitary requirements related to the prevention of the spread of the SARS-CoV-2 virus.

#### 6.5 EXCEPTIONAL EVENTS, THREATS AND CATASTROPHES

No extraordinary events, hazards or disasters were noted during the reporting period.

#### 6.6 ACCIDENTS AND OTHER EVENTS

#### 6.6.1 Accidents with participation of Contractor's employees

In the reporting period, no accidents involving the Contractor's employees were recorded.

#### 6.6.2 Accidents with participation of people authorised to access the site

In the reporting period, no accidents involving other persons authorised to be present on the Contract area were recorded.

#### 6.6.3 Accidents with participation of outsiders

In the reporting period, no accidents involving the outsiders were recorded.

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#### 6.6.4 Other events

An incident occurred on March 24, 2023 at the construction site at km 2+800 of the right embankment. In the morning hours, the Contractor's employee (excavator operator) was found unconscious in the area of conducted works. After cardiopulmonary resuscitation performed by the works manager and foreman and the Ambulance Service team that arrived shortly afterwards, the worker was pronounced dead. Police investigations were carried out at the scene and the body of the deceased employee was taken to Tarnobrzeg for an autopsy. The deceased employee had valid health and safety training and medical examinations. As a result of the investigation, the District Public Prosecutor in Tarnobrzeg issued a Decision (of 06/02/2023) on discontinuing the investigation, stating that there was no unintentional act committed causing the death of the Contractor's employee. Fresh acute myocardial infarction was indicated as the cause of death. Under Polish law, events not caused by external causes do not constitute accidents at work.

Due to the fatal accident of the Contractor's employee, an online meeting (Microsoft Teams platform) was held on April 19, 2023 to discuss formal issues regarding the above-mentioned event (meeting attended by the following parties: PCU, PIO (PGW WP, RZGW in Rzeszów), Consultant. On May 12, 2023, the PCU submitted a request to prepare an Event Report in accordance with the attached World Bank Guidelines (hereinafter: "Report"). In the second quarter of 2023, the Consultant prepared the Report in accordance with the WB guidelines, based on all the information collected. In June 2023, the document was sent to the PCU for further processing. On June 19, 2023, the report was sent to the World Bank.

#### 6.7 ENSURING THE CONDITIONS OF WORK AND PAY FOR THE PERSONNEL

Within the reporting period, the Contractor ensured the appropriate conditions of work and pay for the personnel in connection with the provisions of the labour law binding in Poland.

#### 6.8 Preventing the cases of sexual harassment and mobbing

Within the reporting period, no cases of sexual harassment and mobbing occurred.

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#### 7 SUMMARY

This report presents an account of the implementation of the measures specified in the Environmental Management Plan (EMP) for the project: Works Contract 3D.3 Leg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce as part of the Odra-Vistula Flood Management Project (OVFM Project).

The report pertains to the measures conducted:

- from the Commencement Date of Contract 3D.3 (i.e. May 14, 2021);
- > to the date of completion of the works considered to be essential works, resulting from the Time for Completion for the said Contract (i.e. until August 31, 2023).

Within the reporting period, the Contractor conducted works within the scope covered by Contract 3D.3 (see description in Chapter 1), has implemented 104 mitigation measures specified in the EMP (see description in Chapter 4.1), was monitoring the implementation status of 118 mitigation measures specified in the EMP (see description in Chapter 5.1) and was attending other events related to the environment, local community, health and safety (listed in Chapter 6.1).

Within the reporting period, the Engineer supervised the works conducted under Contract 3D.3, has implemented the particular measures specified in the Environmental Management Plan in the scope assigned to the Engineer (see description in Chapter 4.2), was monitoring the implementation status of 119 mitigation measures specified in the EMP (see description in Chapter 5.2) and was attending other events related to the environment, local community, health and safety (listed in Chapter 6.2).

Within the reporting period, the Investor performed its actions associated with implementation of Contract 3D.3, and, inter alia, implemented the particular measures specified in the Environmental Management Plan in the scope assigned to the Investor (see description in Chapter 4.3), was monitoring the implementation status of 2 mitigation measures specified in the EMP (see description in Chapter 5.3) and supervised actions of the Contractor and of the Engineer.

As a result of the monitoring measures conducted by the Contractor, the Engineer and the Investor, it was concluded that within the reporting period:

- a) 104 of the 120 mitigation measures specified in Appendix 1 of the EMP were implemented, including:
  - in case of 73 measures, no problems were identified with their implementation;
  - in case of 31 measures, problems and/or irregularities were identified with their implementation, as described in Chapter 4.4 (in no case did they result in significant negative environmental impacts).

Subcomponent 3D - Passive and active protection in San basin

3D.3 Leg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce

- b) 16 of 120 mitigation measures mentioned in the Appendix 1 to the EMP were not implemented (implementation of the measures was not necessary for the entire reporting period).
- c) 120 of the 120 monitoring measures from Appendix 2 of the EMP were implemented, including:
  - for any of the measures, no problems and/or irregularities were identified with their implementation.

A checklist for implementation of the mitigation and monitoring measures listed under Appendix 1 and 2 to the EMP in the reporting period is presented in Appendix 5 to this *Report*.

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#### 8 REFERENCE DOCUMENTS

- 1. Environmental Management Plan for Contract 3D.3 Łeg IV extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000 5+236 within the Commune of Gorzyce. State Water Holding Polish Waters Regional Water Management Authority in Rzeszów. Rzeszów, November 2020.
- 2. *Progress Reports* submitted by the Contractor of Contract 3D.3 in the following months of the reporting period.
- 3. Monthly and quarterly reports on the implementation of measures determined under the Environmental Management Plan for Contract 3D.3, submitted by the Engineer in the following months/quarters of the reporting period (prepared within the framework of the Contract for Consulting Services 5.2 Design and Construction Supervision. Project Management, Technical Assistance and Training, Technical Support for the Project and Strengthening of PIU's Institutional Capacity in the implementation of the Odra-Vistula Flood Management Project).

Subcomponent 3D - Passive and active protection in San basin

3D.3 Łeg IV – extension of the left river embankment at chainage km 0+082-5+030 within the Commune of Gorzyce, and of the right embankment at chainage km 0+000-5+236 within the Commune of Gorzyce

# 9 LIST OF APPENDICES

Appendix no. 1. Checklist for implementation of the measures listed under Appendix 1 and Appendix 2 to the EMP for Contract 3D.3.

Appendix no. 2. Photographic documentation.