

FINAL REPORT
ON IMPLEMENTATION OF MEASURES
DETERMINED IN THE ENVIRONMENTAL MANAGEMENT PLAN
for the Contract 3A.3

Odra-Vistula Flood Management Project

OVFMP Subcomponent	3A Flood Protection of Upper Vistula Towns and Cracow
Contract Task	3A.3 Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage
Investor / Project Implementation Unit	State Water Holding Polish Waters Regional Water Management Authority in Cracow 22. Marszałka J. Piłsudskiego Street, 31-109 Cracow, Poland
Project Implementation Office (PIO)	Project Implementation Office in Cracow 22. Marszałka J. Piłsudskiego Street, 31-109 Cracow, Poland
Contractor of Works	KELLER POLSKA Sp. z o.o. 172. Poznańska Street, 05-850 Ożarów Mazowiecki, Poland
Engineer	AECOM Polska Sp. z o.o. Project Office: 1. Pokoju Alley, 31-548 Cracow, Poland



This report has been developed under the guidance of:

1. Barbara Chammas – Project Manager
2. Artur Adamski – Environmental Management Senior Supporting Expert

Date	Approved by	Signature
05/04/2023	Barbara Chammas – Project Manager	

Date	Verified by	Signature

TABLE OF CONTENTS

INTRODUCTION	4
1 BASIC INFORMATION ON CONTRACT 3A.3	5
2 BASIC INFORMATION ON THE EMP FOR CONTRACT 3A.3	7
2.1 MITIGATION MEASURES DETERMINED IN APPENDIX 1 TO THE EMP.....	7
2.2 MONITORING MEASURES DETERMINED IN APPENDIX 2 TO THE EMP.....	8
3 SYSTEM OF SUPERVISION OVER IMPLEMENTATION OF MEASURES DETERMINED IN THE EMP FOR CONTRACT 3A.3	9
3.1 CONTRACTOR.....	9
3.2 ENGINEER.....	9
3.3 PROJECT IMPLEMENTATION OFFICE (PIO).....	10
3.4 ODRA-VISTULA FLOOD MANAGEMENT PROJECT COORDINATION UNIT (PCU).....	10
4 IMPLEMENTATION STATUS FOR MITIGATION MEASURES UNDER APPENDIX 1 TO THE EMP	11
4.1 CONTRACTOR’S MEASURES.....	11
4.2 ENGINEER’S MEASURES.....	12
4.3 INVESTOR’S MEASURES.....	13
4.4 ISSUES REFERRING TO IMPLEMENTATION OF MITIGATION MEASURES LISTED IN APPENDIX 1 TO THE EMP.....	13
5 IMPLEMENTATION STATUS FOR MONITORING MEASURES UNDER APPENDIX 2 TO THE EMP	18
5.1 CONTRACTOR’S MEASURES.....	18
5.2 ENGINEER’S MEASURES.....	18
5.3 INVESTOR’S MEASURES.....	19
5.4 ISSUES REFERRING TO IMPLEMENTATION OF MONITORING MEASURES LISTED IN APPENDIX 2 TO THE EMP.....	20
6 OTHER ACTIONS AND EVENTS RELATED TO THE ENVIRONMENT, LOCAL SOCIETY, HEALTH AND SAFETY..	21
6.1 ACTIONS OF THE CONTRACTOR.....	21
6.2 ACTIONS OF THE ENGINEER.....	21
6.3 ACTIONS OF THE INVESTOR.....	21
6.4 OTHER ACTIONS.....	21
6.5 EXCEPTIONAL EVENTS, THREATS AND CATASTROPHES.....	21
6.6 ACCIDENTS.....	22
6.7 SECURING CONDITIONS OF PAYMENT AND WORK FOR THE PERSONNEL.....	22
6.8 PREVENTING CASES OF SEXUAL HARASSMENT AND MOBBING.....	22
7 SUMMARY	23
8 SOURCE MATERIALS	25
9 LIST OF APPENDICES	26

INTRODUCTION

This paper, as developed by the Contract Engineer within the framework of Consulting Services Contract no. 5.2 *Design and Construction Supervision. Project Management, Technical Assistance and Training, Technical Support for the Project and Strengthening of PIU's Institutional Capacity*, presents a final report on implementation of measures determined in the Environmental Management Plan (EMP) for Works Contract 3A.3 *Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage*.

The report covers the following period:

- from the Commencement Date for the Works under Contract 3A.3 (i.e. **from February 5, 2020**);
- to the completion date for the works considered as essential, as results from the Time for Completion for the aforementioned Contract (i.e. **to September 15, 2022**).

The following was presented for the Contract:

- basic information on Contract 3A.3 (including e.g. the scope of works and basic deadlines for the Contract);
- basic information on the Environmental Management Plan for Contract 3A.3;
- organizational system for supervision over implementation of the EMP;
- status of implementation for mitigation measures listed in Appendix 1 to the EMP;
- status of implementation for monitoring measures listed in Appendix 2 to the EMP;
- description of other measures and events associated with the ESHS;
- summary.

1 BASIC INFORMATION ON CONTRACT 3A.3

Works Contract 3A.3 Section 4 – *The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage* is implemented under *Odra-Vistula Flood Management Project* (OVFM Project), as a part of Component 3 *Flood Protection of the Upper Vistula* and Subcomponent 3A *Flood Protection of Upper Vistula Towns and Cracow*.

An agreement with the Contractor for Contract 3A.3 has been signed on January 21, 2020. The works were commenced on February 5, 2020. The Time for Completion (962 days from the date of handing over the construction site) expired on September 15, 2022.

Basic information about the Contract is presented below.

Name of the Contract:

Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage.

Contractor:

KELLER POLSKA Sp. z o.o.

172. Poznańska Street, 05-850 Ożarów Mazowiecki, Poland

Scope of Works:

Contract 3A.3 refers to the redevelopment of the right flood embankment of Vistula between the estuary of Skawinka to the Kościuszko Barrage in Cracow, in three sections (hereinafter referred to as *Tasks 1, 2, and 3*) over the total length of about 3.9 km, including the following:

- Task 1* – comprises section of the right Vistula embankment over a length of about 1.3 km, from the estuary of Skawinka to the high slope of Grodzisko Mountain (i.e. from km 60+325 to km 61+662 of the embankment);
- Task 2* – comprises section of the right Vistula embankment over a length of about 1.2 km, from the high slope of Grodzisko Mountain to the high slope of Benedictine Abbey in Tyniec (i.e. from km 62+017 to km 63+183 of the embankment);
- Task 3* – comprises section of the right Vistula embankment over a length of about 1.4 km, from the high slope of Benedictine Abbey in Tyniec to the area at a bridge in vicinity of A4 Motorway, at the Kościuszko Water Barrage on the River Vistula (i.e. from km 63+779 to km 65+160 of the embankment).

Basic dates for the Contract:

Agreement signing date:	January 21, 2020
Date of handing over the construction site:	January 27, 2020
Commencement Date for the Works:	February 5, 2020
Time for Completion:	962 days from the date of handing over the construction site
Signing date for Annex no. 1:	February 28, 2020
Signing date for Annex no. 2:	July 17, 2020
Signing date for Annex no. 3:	November 24, 2020
Signing date for Annex no. 4:	March 16, 2021
Signing date for Annex no. 5:	January 14, 2022
Signing date for Annex no. 6:	May 13, 2022
Signing date for Annex no. 7:	July 8, 2022
Signing date for Annex no. 8:	October 12, 2022
Signing date for Annex no. 9:	March 3, 2023
Completion Date for the Works (according to the Time for Completion):	September 15, 2022
Date of signing the final acceptance certificate:	March 3, 2023

2 BASIC INFORMATION ON THE EMP FOR CONTRACT 3A.3

The Environmental Management Plan for Contract 3A.3 has been developed in June 2019 (final version). On June 24, 2019 the World Bank issued “No Objection” acceptance approving the Environmental Management Plan as one of documents for the bidding procedure applied to select the Contractor of construction works under the Contract. It is a document systematizing actions undertaken within the framework of the Contract and obliging all units participating in implementation of the Contract to observe the provisions given therein. A detailed description of contract implementation conditions referring to the environmental management has been developed in the form of appendices to the EMP – Appendix 1 containing the *Mitigation Measures Plan* (see description in chapter 2.1, below), and Appendix 2 containing the *Monitoring Measures Plan* (see description in chapter 2.2, below).

In July 2020, in connection with the issuance of the decision of RDOŚ in Cracow amending one of the conditions of the existing environmental decision for Contract 3A.3, Annex no. 1 to the EMP was developed. On August 12, 2020 the World Bank issued “No Objection” acceptance approving the above-mentioned annex.

2.1 MITIGATION MEASURES DETERMINED IN APPENDIX 1 TO THE EMP

Appendix 1 to the EMP for Contract 3A.3 contains 109 mitigation measures, which are to prevent and limit adverse impact of the investment on the environment. Those measures result from contents of the decisions on environmental conditions, as issued for the Contract in question (given in Appendix 4 to the EMP), as well as from procedural requirements of the World Bank and additional conditions determined during the works on development of the EMP. Table of mitigation measures given in Appendix 1 to the EMP described particular measures and determined locations of their implementation, as well as the units responsible for their implementation.

Mitigation measures listed in Appendix 1 to the EMP belong to the following 18 categories:

- a) requirements on schedule of works
(items no. 1-2 under Appendix 1 to the EMP);
- b) requirements on road access to the Contract area
(items no. 3-12 under Appendix 1 to the EMP);
- c) requirements on locations of site facilities and service roads and yards
(items no. 13-19 under Appendix 1 to the EMP);
- d) requirements on the quality and management of soils
(item no. 20 under Appendix 1 to the EMP);
- e) requirements on proceeding with topsoil/mineral soil
(items no. 21-26 under Appendix 1 to the EMP);
- f) requirements on removing (felling) trees and shrubs
(items no. 27-28 under Appendix 1 to the EMP);
- g) requirements on protecting trees and shrubs not intended for removal (felling)
(items no. 29-34 under Appendix 1 to the EMP);

- h) requirements on securing protected natural resources (items no. 35-46 under Appendix 1 to the EMP);
- i) requirements on recreation of the site after the completion of construction works (items no. 47-48 under Appendix 1 to the EMP);
- j) requirements on the prevention of the environmental pollution (items no. 49-73 under Appendix 1 to the EMP);
- k) requirements on waste management (items no. 74-78 under Appendix 1 to the EMP);
- l) requirements on health and safety protection (items no. 79-83 under Appendix 1 to the EMP);
- m) requirements on extraordinary threats to the environment (items no. 84-86 under Appendix 1 to the EMP);
- n) requirements on conservation of historic monuments (items no. 87-89 under Appendix 1 to the EMP);
- o) requirements on the Contractor's staff engaged in the implementation of the EMP (items no. 90-95 under Appendix 1 to the EMP);
- p) requirements on reporting (item no. 96 under Appendix 1 to the EMP);
- q) requirements after completion of works (items no. 97-99 under Appendix 1 to the EMP);
- r) remaining ESHS requirements (items no. 100-109 under Appendix 1 to the EMP).

Contents of individual mitigation measures given in Appendix 1 to the EMP have been quoted in the *Check List* forming *Appendix no. 1* to this report.

2.2 MONITORING MEASURES DETERMINED IN APPENDIX 2 TO THE EMP

Appendix 2 to the EMP for Contract 3A.3 contains a set of 109 monitoring measures, which are to monitor implementation of mitigation measures described in Appendix 1. A tabulated summary of monitoring measures, as given in Appendix 2 to the EMP, contains the same breakdown into categories as in case of the mitigation measures. The table of monitoring measures determines e.g. location, method, time, and frequency of monitoring, as well as the units responsible for its implementation.

3 SYSTEM OF SUPERVISION OVER IMPLEMENTATION OF MEASURES DETERMINED IN THE EMP FOR CONTRACT 3A.3

Supervision over implementation of mitigation measures and monitoring measures determined in the EMP for Contract 3A.3 was performed on the level of all of the organizational units participating in the Contract implementation, i.e. Contractors, Engineer, Project Implementation Office (PIO), and Project Coordination Unit (PCU). Information on the scope of performance for individual units is presented below.

3.1 CONTRACTOR

A person directly responsible for implementation of measures determined in the EMP on the Contractor's side was the Site Manager. In accordance with item no. 91 in Appendix 1 to the EMP, in order to provide support to the Site Manager in the implementation of the EMP, the EMP Coordinator has been appointed in the Contractor's team. The task of that person was an ongoing cooperation with the Site Manager, with the remaining members of the Contractor's personnel, and with the Environmental Management Expert of the Engineer's team in securing implementation of the EMP conditions, as well as provision of ongoing reporting in that range. Furthermore, in accordance with items no. 92, 93 and 94 under Appendix 1 to the EMP, the Contractor assured participation of expert teams of environmental, archaeological and sapper supervision, in the scope compliant with the EMP requirements.

After completing each month, the EMP Coordinator summarized the current status of implementation of individual EMP conditions (in the form of a checklist). Information on the implementation of the EMP was provided to the Environmental Management Expert of the Engineer's team, along with appropriate attachments (including notes, opinions, environmental supervision reports, etc.).

3.2 ENGINEER

Direct supervision over implementation of the EMP conditions by the Engineer's team was done by the Environmental Management Expert cooperating in that range with the Resident Engineer, supervising inspectors, and other members of the Engineer's team providing investor's supervision over implementation of the investment. The Environmental Management Expert was in an ongoing contact with the Site Manager and with the EMP Coordinator of the Contractor's team, while establishing the range of conditions to be necessarily met on a given stage of works, supervising the implementation status for particular EMP conditions, participating in solving ongoing issues, and performing inspections on work sites. After completing each and every reporting period (month and quarter), the Environmental Management Expert was verifying environmental documentation of the Contractor and developing reports, which were subsequently handed over to the Project Implementation Office.

3.3 PROJECT IMPLEMENTATION OFFICE (PIO)

Direct supervision over implementation of the EMP conditions by the Project Implementation Office (PIO) was done by the Environmental Specialist, who cooperated in that range with the PIO Manager, with other members of the PIO team, as well as with other organization units of the RZGW in Cracow. The Environmental Specialist and the PIO Manager were in a direct contact with the Environmental Management Expert of the Engineer's team, while supervising the implementation status for particular EMP conditions and participating in solving of the ongoing issues. After completing each and every reporting period (month and quarter), the Environmental Specialist and the PIO Manager were verifying environmental documentation of the Contract, and subsequently handed it over to the Project Coordination Unit (in the scope compliant with the EMP conditions).

3.4 ODRA-VISTULA FLOOD MANAGEMENT PROJECT COORDINATION UNIT (PCU)

Direct supervision over implementation of the EMP conditions by the Project Coordination Unit was done by the Environmental Management Expert, who cooperated in that range with other members of the PCU team. The expert was in a direct contact with the PIO Manager and with the Environmental Specialist of the PIO team. He was also cooperating with persons responsible for implementation of the EMP on the side of remaining organizational units of the investment process, i.e. the Environmental Management Expert of the Engineer's team, as well as the Site Manager and the EMP Coordinator of the Contractor's team. The Environmental Management Expert was supervising the implementation status for particular EMP conditions, while participating in solving of ongoing issues, and participating in site inspections. After completing each quarterly reporting period, he was verifying environmental documentation handed over by the PIO, and was developing contents for PCU reports, which were 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 3A.3, units responsible for implementation of mitigation measures determined under Appendix 1 to the EMP are as follows: **the Contractor (109 measures:** items no. 1-109 under Appendix 1 to the EMP), **Engineer (3 measures:** items no. 18, 19, 108 under Appendix 1 to the EMP) and **the Investor (2 measures:** items no. 18, 19 under Appendix 1 to the EMP). In total, the EMP for Contract 3A.3 envisages implementation of 109 mitigation measures¹, including at least 97 measures to be implemented within the reporting period (in case of remaining 12 measures it was not necessary to implement them – see: below).

The EMP for Contract 3A.3 expects implementation of 109 mitigation measures in total, including implementation of at least 97 measures within the reporting period. 1 measure has been implemented and completed within previous reporting periods (see below).

4.1 CONTRACTOR'S MEASURES

According to information presented in monthly reports and in quarterly reports on implementation of measures determined in the EMP:

- a) Within the reporting period the Contractor implemented 97 (89.0%) mitigation measures, including:
 - 69 (63.3%) measures were implemented in the scope required within the reporting period (items no. 1, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 19, 23, 24, 26, 27, 28, 31, 34, 35, 36, 42, 43, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 76, 77, 78, 81, 83, 85, 87, 90, 95, 96, 97, 98, 99, 102, 103, 104, 105, 106, 109 under Appendix 1 to the EMP);
 - in case of 28 (25.7%) measures issues and / or inconsistencies associated with their implementation – as discussed in chapter 4.4 – were identified (items no. 2, 3, 4, 9, 20, 21, 22, 25, 29, 30, 32, 39, 44, 74, 75, 79, 80, 82, 84, 88, 91, 92, 93, 94, 100, 101, 107, 108 under Appendix 1 to the EMP).
- b) Within the reporting period the Contractor was not implementing 12 (11.0%) mitigation measures, including:
 - 1 (0.9%) measure was finally completed prior to the commencement of works (item 18 under Appendix 1 to the EMP);
 - implementation of 11 (10.1%) measures was not necessary throughout the entire period included in this report (items no. 12, 33, 37, 38, 40, 41, 45, 46, 64, 86, 89 under Appendix 1 to the EMP);

¹ Contents of particular mitigation measures given in Appendix 1 to the EMP have been quoted in the *Check List* forming *Appendix no. 1* to this report.

- cases of missing implementation for measures required within the reporting period were not identified.

Mitigation measures were implemented by the Contractor with the participation of, among others, Site Manager, EMP Coordinator, environmental experts team (including: coordinator of a team of experts [acting simultaneously as a chiropterologist/dendrologist expert], botany expert, entomologist expert, ornithologist expert, and herpetologist/theriologist expert), archaeological supervision team, sapper supervision team, and H&S specialist.

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: Environmental Management Expert, key expert – Real Estate Specialist, senior supporting experts – Supervising Inspectors, key expert – Resident Engineer, and Project Manager), and by the Investor's team (with participation of the following persons: Environmental Specialist, Re-settlement Specialists, and PIO Manager).

4.2 ENGINEER'S MEASURES

According to information presented in monthly reports and in quarterly reports on implementation of measures determined in the EMP:

- a) Within the reporting period the Engineer was implementing 2 (1.8%) mitigation measures, including:
 - 1 (0.9%) measure was implemented in the scope required within the reporting period (item no. 19 under Appendix 1 to the EMP).
 - in case of 1 (0.9%) measure issues and / or inconsistencies associated with its implementation – as discussed in chapter 4.4 – were identified (item no. 108 under Appendix 1 to the EMP).
- b) Within the reporting period the Engineer was not implementing 1 (0.9%) mitigation measure, including:
 - 1 (0.9%) measure was finally completed prior to the commencement of works (item 18 under Appendix 1 to the EMP);
 - cases of missing implementation for measures required within the reporting period were not identified.

Mitigation measures were implemented by the Engineer at participation of selected specialists of the Engineer's team (composition of the team has been informed in chapter 4.1).

4.3 INVESTOR'S MEASURES

According to information presented in monthly reports and in quarterly reports on implementation of measures determined in the EMP:

- a) Within the reporting period the Investor was implementing 1 (0.9%) mitigation measure, including:
 - 1 (0.9%) measure was implemented in the scope required within the reporting period (item no. 19 under Appendix 1 to the EMP).
 - in case of none of the measures issues and / or inconsistencies associated with their implementation were identified.
- b) Within the reporting period the Investor was not implementing 1 (0.9%) mitigation measure, including:
 - 1 (0.9%) measure was finally completed prior to the commencement of works (item 18 under Appendix 1 to the EMP);
 - cases of missing implementation for measures required within the reporting period were not identified.

Mitigation measures were implemented by the Investor at participation of selected members of the PIO's team (composition of the team has been informed in chapter 4.1).

4.4 ISSUES REFERRING TO IMPLEMENTATION OF MITIGATION MEASURES LISTED IN APPENDIX 1 TO THE EMP

According to information provided in monthly reports and in quarterly reports on implementation of measures determined in the EMP, the following issues and / or inconsistencies associated with implementation of 28 mitigation measures from Appendix 1 to the EMP for Contract 3A.3 (in order compliant with numbers of items under Appendix 1 to the EMP) were identified:

- 1) Delay in completing establishments with road Administrators in the scope of marking the access roads to the construction site
[related to items no. 2, 3, 4, 9 under Appendix 1 to the EMP]:

From the 2nd to the 4th quarter of 2020, the Contractor was making establishments with road Administrators in reference to marking the access roads to the construction site. The establishments were only completed in March 2020 (for the municipality of Liszki) and in December 2020 (for the municipality of Cracow), by concluding agreements on the use of public roads in both municipalities for the purposes of Contract implementation. Under such contracts, the municipalities did not impose the necessity to introduce traffic organization and left it to the Contractor's responsibility to secure the entry roads to and exit roads from the construction site. The Contractor secured safety on the access roads using temporary marking.

- 2) Delay in submission of the *Waste Management Programme* to the Engineer [related to items no. 20, 74 under Appendix 1 to the EMP]:

In the 2nd quarter of 2020, the Contractor submitted the *Waste Management Programme* to the Engineer. This measure was implemented after the date specified in the EMP (in May 2020, i.e. after the commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 3) The case of removing a layer of topsoil from a section of an embankment prior to obtaining a decision changing the permissible dates for topsoil removal [related to item no. 21 under Appendix 1 to the EMP]:

In the first decade of May 2020, on the occasion of works related to the organization of additional construction background facilities on the right-bank area beyond the embankment of the Vistula River, the Contractor removed a layer of topsoil from a section of the embankment at the area of *Task 2* (from the crest and downstream slope of the embankment at the level of the construction background facilities), outside the then effective dates for removal of a topsoil layer¹ and without the required inspections of nature supervision. After the Site Manager's intervention, the above activities were interrupted and were not resumed until awarding the decision of RDOŚ in Cracow of 05/20/2020 allowing to remove a topsoil layer for the whole year. The Engineer has requested the Contractor to provide an opinion from nature supervision concerning the potential environmental effects of the above-mentioned event and the need to perform any remedial measures. The Contractor's nature supervision held a site visit to the place of incident and established the above-mentioned opinion. According to the nature supervision's opinion, the incident concerned a relatively short section of the embankment (approx. 180 m), located in the direct neighborhood of the organized construction background facilities and away from naturally valuable areas. The information gathered by the nature supervision experts shows that the said section of the embankment did not provide a habitat for the occurrence of protected species. In view of the above, in the opinion of the nature supervision, the said event – although it constituted an action that did not comply with the conditions of the then effective environmental decision – did not cause any losses to protected environmental resources, and no special remedial and/or compensation measures need to be taken. As a result of the above-mentioned incident, the Engineer has instructed the Contractor that the Site Manager intensifies its supervision of the activities of the Contractor's personnel and that the activities carried out on the worksite be closely consulted with the nature supervision (in particular for observing the implementation dates of the measures stipulated in the environmental decision and in the EMP).

¹ A restriction in the dates of removing the topcoat layer of soil (topsoil) between March and August, introduced in the environmental decision of 05/20/2015, was yet valid at that time. The Investor submitted a request to RDOŚ in Cracow in March 2020 to change the above-mentioned provision of the decision, and the administrative proceedings in this case were concluded with the issuance of a decision by RDOŚ in Cracow of 05/20/2020 permitting to remove the topcoat layer of soil for the whole year (i.e. also in the period from March to the end of August), under the conditions specified in the above-mentioned decision.

- 4) The heaps of collected topsoil were not stockpiled
[related to item no. 22 under Appendix 1 to the EMP]:
In the 1st quarter of 2020, the topsoil removed from the embankment section on the area of *Task 1* was not formed as stockpiles (it was stockpiled in April 2020, after the target location of heaps was moved).
- 5) Cases of no protection for trees and shrubs, which shall not be logged
[related to items no. 29, 2, 100 under Appendix 1 to the EMP]:
From the 2nd quarter of 2020 to the 3rd quarter of 2022, the Contractor was implementing measures referring to the current protection of trees, which shall not be logged (provision of boarding for trunks and/or fencing for sites within the tree crown's projection); however, those measures have not been performed within the full scope (some trees and shrubs growing in the neighborhood of the works in progress and the planned roads, technological roads, etc., have not been protected properly). The Contractor's nature supervision provided ongoing inspections for the aforementioned sites, and has not found that the described cases would pose a threat to the health condition of the trees and shrubs.
- 6) Storage of construction materials underneath crowns of trees and shrubs
[related to items no. 30, 32, 75, and also 22, 25, 2, 100 under Appendix 1 to the EMP]:
From the 2nd quarter of 2020 to the 3rd quarter of 2022, cases of storing building materials (including soil masses) at a distance of less than 1 m from the border of the crown projection of trees and shrubs not intended to be cut down were found due to spatial limitations of the site of works. All the cases listed above have been remedied by the end of August 2022. The Contractor's nature supervision provided ongoing inspections for the aforementioned sites, and has not found that the described cases would pose a threat to the health condition of the trees and shrubs.
- 7) Issues with removal of water pits at the site of works
[related to items no. 39, 100 under Appendix 1 to the EMP]:
From the 2nd quarter of 2020 to the 4th quarter of 2021, the presence of water pits, which may potentially be inhabited by protected species of amphibians, was identified within the site of works. Due to the local configuration of the site, the removal of those water pits was difficult and – despite the measures undertaken by the Contractor – it has not been efficiently done in all locations. The Contractor's nature supervision provided ongoing inspections for the aforementioned sites, and has not identified traces of protected amphibian species' habitats.
- 8) The Contractor's report on the use of the derogation decision was not submitted on time
[related to items no. 44, 100 under Appendix 1 to the EMP]:
In the 1st quarter of 2022, the Contractor submitted to RDOŚ in Cracow a report on the use of the permits referred to in a derogation decision issued by RDOŚ in Cracow in April 2020. The report was submitted the month following the date specified in the aforementioned decision.

- 9) Delay in submission of the *Construction Site Organization Plan* to the Engineer [related to item no. 79 under Appendix 1 to the EMP]:

In the 2nd quarter of 2020, the Contractor submitted *Construction Site Organization Plan* to the Engineer. This measure was implemented after the date specified in the EMP (in May 2020, i.e. after the commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 10) Delay in performance of explosive ordnance survey of the site [related to item no. 80 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, the Contractor performed explosive ordnance survey of the site of works. This measure was implemented after the date specified in the EMP (in March 2020, i.e. already after the commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 11) Problems with ensuring safety at the construction site [related to items no. 82, 101, 100 under Appendix 1 to the EMP]:

In the 1st quarter of 2021, cases of inconsistencies in ensuring safety at the site of works were identified (cases of inadequate protection of dangerous areas). After the Engineer's intervention, the Contractor rectified the identified inconsistencies.

In the 2nd quarter of 2021, a construction vehicle fire occurred at the site of works – see description in chapter 6.5 of this report.

- 12) Problems with agreeing upon the *Flood protection plan for the construction site* [related to item no. 84 under Appendix 1 to the EMP]:

In February 2020, the Contractor has presented for the Engineer's approval the *Flood protection plan for the construction site*. The Engineer has requested the Contractor to supplement the above-mentioned document (lack of agreement with the Crisis Management Centre). Works for obtaining the above-mentioned agreements were completed in May 2020.

- 13) Delay in submission to the Engineer of a request for acceptance of the EMP Coordinator in the Contractor's team

[related to item no. 91 under Appendix 1 to the EMP]:

In February 2020, the Contractor appointed a person coordinating and supervising the measures related to EMP implementation, had not however submitted a request to the Engineer to approve the above-mentioned person (the request was submitted in March 2020). The Engineer has requested the Contractor to observe precisely the procedures laid down in the EMP.

- 14) Delay in provision of the *Quality Assurance Plan* to the Engineer in scope of activities of the team of environmental experts

[related to item no. 92 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, the Contractor presented for the Engineer's approval the *Quality Assurance Plan* in scope of activities of the team of environmental experts. This measure

was implemented after the date specified in the EMP (in March 2020, i.e. already after the commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 15) Delay in provision of the *Quality Assurance Plan* to the Engineer in scope of activities of the team of archaeology experts

[related to items no. 93, 88 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, the Contractor presented for the Engineer's approval the *Quality Assurance Plan* in scope of activities of the team of archaeology experts. This measure was implemented after the date specified in the EMP (in March 2020, i.e. already after commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 16) Delay in provision of the *Quality Assurance Plan* to the Engineer in scope of activities of the team of sapper supervision

[related to item no. 94 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, the Contractor presented for the Engineer's approval the *Quality Assurance Plan* in scope of activities of the team of sapper supervision. This measure was implemented after the date specified in the EMP (in March 2020, i.e. already after commencement of works). The Engineer has requested the Contractor to comply with the dates for implementation of the mitigation measures specified in the EMP.

- 17) Delay in provision to the Engineer of an information leaflet for employed persons

[related to item no. 107 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, the Engineer reminded the Contractor that it is necessary to prepare an information leaflet for employed persons concerning the submission of complaints and proposals referring to the conditions of work and pay. Works over the leaflet were completed in June 2020.

- 18) Delay in provision to the Contractor of a set of procedures related to the ongoing provision of information on ESHS issues

[related to item no. 108 under Appendix 1 to the EMP]:

In the 1st quarter of 2020, Engineer provided the Contractor with a set of procedures related to the ongoing provision of information on ESHS issues, referred to in item no. 108 under Appendix 1 to the EMP. This measure was implemented after the date specified in the EMP (on 03/06/2020, i.e. within a period longer than 30 days from the date of commencement of the Contract).

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

In accordance with contents of Appendix 2 to the EMP for Contract 3A.3, units responsible for implementation of monitoring measures determined under Appendix 2 to the EMP are as follows: **the Contractor (109 measures:** items 1-109 under Appendix 2 to the EMP), **the Engineer (109 measures:** items 1-109 under Appendix 2 to the EMP), and **the Investor (2 measures:** items 18, 19 under Appendix 2 to the EMP). In total, the EMP for Contract 3A.3 envisages implementation of 109 monitoring measures¹, and all of the measures shall be implemented 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 implemented through the following: (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) Within the reporting period the Contractor was implementing 109 (100%) monitoring measures, including:
 - 109 (100%) measures were implemented in the scope required within the reporting period (items no. 1-109 under Appendix 2 to the EMP);
 - in case of none of the measures issues and / or inconsistencies associated with their implementation were identified.
- b) cases of missing implementation for monitoring measures assigned to the Contractor within the reporting period were not identified.

Monitoring measures were implemented by the Contractor at participation of the Contractor's personnel listed in chapter 4.1.

5.2 ENGINEER'S MEASURES

Within the reporting period the Engineer was implementing measures associated with implementation monitoring for mitigation measures, as described in Appendix 2 to the EMP. The monitoring was implemented through the following: (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.

¹ Those measures referred to the implementation monitoring for particular mitigation measures given in Appendix 1 to the EMP, contents of which have been quoted in the *Check List* forming *Appendix no. 1* to this report.

- a) Within the reporting period the Engineer was implementing 109 (100%) monitoring measures, including:
- 109 (100%) measures were implemented in the scope required within the reporting period (items no. 1-109 under Appendix 2 to the EMP);
 - in case of none of the measures issues and / or inconsistencies associated with their implementation were identified.
- b) cases of missing implementation for monitoring measures assigned to the Engineer within the reporting period were not identified.

Furthermore, within the reporting period the Engineer was also supervising implementation of 109 monitoring measures assigned, in accordance with Appendix 2 to the EMP, to the Contractor.

Monitoring measures and supervising measures in the range referring to the EMP were implemented by the Engineer at participation of selected experts of the Engineer's team (composition of the team has been 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 implemented through the following: (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.

- a) Within the reporting period the Investor was implementing 2 (1.8%) monitoring measures, including:
- 2 (1.8%) measures were implemented in the scope required within the reporting period (item no. 18, 19 under Appendix 2 to the EMP);
 - in case of none of the measures issues and / or inconsistencies associated with their implementation were identified.
- b) cases of missing implementation for monitoring measures assigned to the Investor within the reporting period were not identified.

Furthermore, within the reporting period the Investor was also supervising implementation of 109 monitoring measures assigned, in accordance with Appendix 2 to the EMP, to the Contractor and to the Engineer.

Monitoring measures and supervising measures in the range referring to the EMP were implemented by the Investor at participation of members of the PIO's team listed in chapter 4.1.

5.4 ISSUES REFERRING TO IMPLEMENTATION OF MONITORING MEASURES LISTED IN APPENDIX 2 TO THE EMP

In accordance with information presented in monthly reports and in quarterly reports on implementation of measures determined in the EMP, issues with implementation of the monitoring measures listed in Appendix 2 to the EMP for Contract 3A.3 were not identified within the reporting period.

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

6.1 ACTIONS OF THE CONTRACTOR

Within the reporting period the Contractor has been carrying out works within the framework of Contract 3A.3, including e.g. implementation of particular measures determined in the Environmental Management Plan, as assigned to the Contractor.

Furthermore, within the reporting period the Contractor was implementing e.g. the following other measures referring to Contract 3A.3 and related to the environment, local society, health and safety:

- due to a threat of spreading coronavirus infections causing COVID-19 disease, from the first quarter of 2020 to the first quarter of 2022 the Contractor was providing the Engineer with weekly reports on situation referring to that threat for Contract 3A.3.

6.2 ACTIONS OF THE ENGINEER

Within the reporting period the Engineer was supervising works carried out within the framework of Contract 3A.3, including e.g. implementation of particular measures determined in the Environmental Management Plan, as assigned to the Engineer.

Furthermore, within the reporting period the Engineer was implementing e.g. the following other measures referring to Contract 3A.3 and related to the environment, local society, health and safety:

- due to a threat of spreading coronavirus infections causing COVID-19 disease, from the first quarter of 2020 to the first quarter of 2022 the Engineer was monitoring the situation on Contract 3A.3, due to the epidemic threat, and was providing the Investor with subsequent reports referring to the aforementioned threat.

6.3 ACTIONS OF THE INVESTOR

Within the reporting period the Investor was carrying out its activities associated with implementation of Contract 3A.3, including e.g. implementation of particular measures determined in the Environmental Management Plan, as assigned to the Investor, and was supervising the measures implemented by the Contractor and by the Engineer.

6.4 OTHER ACTIONS

Not applicable to the present reporting period.

6.5 EXCEPTIONAL EVENTS, THREATS AND CATASTROPHES

In the 2nd quarter of 2021 a construction vehicle fire took place on the area of Contract 3A.3. On 06/24/2021, due to breaking of a hydraulic hose, a fire started at a haul truck used for deliveries of soil. The Contractor's Personnel attempted to extinguish the fire on its own using fire extinguishers, and notified the site supervisors about the situation. As attempts to fight the fire were unsuccessful, a fire brigade was immediately called and it extinguished the fire.

As a consequence of the event described, no one was injured and no significant threats to the environment were identified. The Engineer has been notified about the event by e-mail on 06/25/2021. In the first decade of July 2021, after detailed findings concerning the circumstances and causes of the described event, the Contractor submitted an official memo in this case to the Engineer.

6.6 ACCIDENTS

6.6.1 Accidents with participation of Contractor's employees

No accidents involving the Contractor's employees were recorded within the reporting period.

6.6.2 Accidents with participation of other people authorized to access the site

No accidents involving other people authorized to access the Contract implementation area were recorded within the reporting period.

6.6.3 Accidents with participation of outsiders

No accidents involving outsiders were recorded within the reporting period.

6.7 SECURING CONDITIONS OF PAYMENT AND WORK FOR THE PERSONNEL

Within the reporting period the Contractor was securing proper conditions of payment and work for the personnel, in accordance with binding provisions of the labour law in Poland.

6.8 PREVENTING CASES OF SEXUAL HARASSMENT AND MOBBING

Events associated with cases of sexual harassment and mobbing have not taken place within the reporting period.

7 SUMMARY

This report presents a summary on implementation of the measures determined in the Environmental Management Plan (EMP) for Works Contract 3A.3 *Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage* within the framework of the *Odra-Vistula Flood Management Project (OVFMP)*.

The report refers to the measures implemented in the following period:

- from the Commencement Date for the Works under Contract 3A.3 (i.e. **from February 5, 2020**);
- to the completion date for the works considered as essential, as results from the Time for Completion for the aforementioned Contract (i.e. **to September 15, 2022**).

Within the reporting period the Contractor was carrying out the works in the range given in the Contract 3A.3 (see: description in chapter 1), including e.g. implementation of 97 mitigation measures determined in the EMP (see: description in chapter 4.1), monitoring of implementation for all of the 109 mitigation measures determined in the EMP (see: description in chapter 5.1), and participation in other events referring to the environment, local society, and health and safety (as listed in chapter 6.1).

Within the reporting period the Engineer was supervising the works in progress within the framework of Contract 3A.3, including e.g. implementation of the measures determined in the Environmental Management Plan in the range assigned to the Engineer (see: description in chapter 4.2), monitoring of the implementation status for all 109 mitigation measures determined in the EMP (see: description in chapter 5.2), and participation in other events referring to the environment, local society, and health and safety (as listed in chapter 6.2).

Within the reporting period the Investor was implementing measures assigned to it in the range of Contract 3A.3 implementation, including e.g. implementation of particular measures determined in the Environmental Management Plan in the range assigned to the Investor (see: description in chapter 4.3), monitoring of the implementation status for 2 mitigation measures determined in the EMP (see: description in chapter 5.3), and supervision over actions of the Contractor and of the Engineer.

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

- a) 97 out of 109 mitigation measures listed in Appendix 1 to the EMP were implemented, including:
 - issues with implementation were not identified in case of 69 measures;
 - issues and / or inconsistencies associated with implementation were identified in case of 28 measures, described in chapter 4.4 (in no case did they cause significant negative impacts on the environment).
- b) 12 out of 109 mitigation measures listed in Appendix 1 to the EMP were not implemented, including:

- implementation of 1 measure was finally completed prior to the commencement of works;
 - implementation of 11 measures was not necessary throughout the entire reporting period.
- c) 109 out of 109 monitoring measures listed in Appendix 2 to the EMP were implemented, including the following:
- issues and / or inconsistencies associated with implementation were not identified in case of any of the measures.

The Check List referring to implementation of the mitigation measures and of the monitoring measures listed in Appendix 1 and in Appendix 2 to the EMP, respectively, within the reporting period, was presented in Appendix no. 1 to this *Report*.

8 SOURCE MATERIALS

1. *Environmental Management Plan for Contract 3A.3 Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage.*
State Water Holding Polish Waters, Regional Water Management Authority in Cracow.
Cracow, June 2019.
2. *Annex No. 1 to the Environmental Management Plan for Contract 3A.3 Section 4 – The right embankment of the Vistula River from the estuary of Skawinka to the Kościuszko Barrage.*
State Water Holding Polish Waters, Regional Water Management Authority in Cracow.
Cracow, July 2020.
3. *Progress Reports* provided by the Contractor for Contract 3A.3 in subsequent months of the reporting period.
4. *Monthly Reports and Quarterly Reports on EMP Implementation* for Contract 3A.3, as provided by the Engineer in subsequent months / quarters of the reporting period (developed within the framework of Consulting Services Contract no. 5.2 *Design and Construction Supervision. Project Management, Technical Assistance and Training, Technical Support for the Project and Strengthening of PIU's Institutional Capacity*).

9 LIST OF APPENDICES

Appendix no. 1. Check List for implementation of the measures listed in Appendix 1 and 2 to the EMP for Contract 3A.3.

Appendix no. 2. Photo documentation.