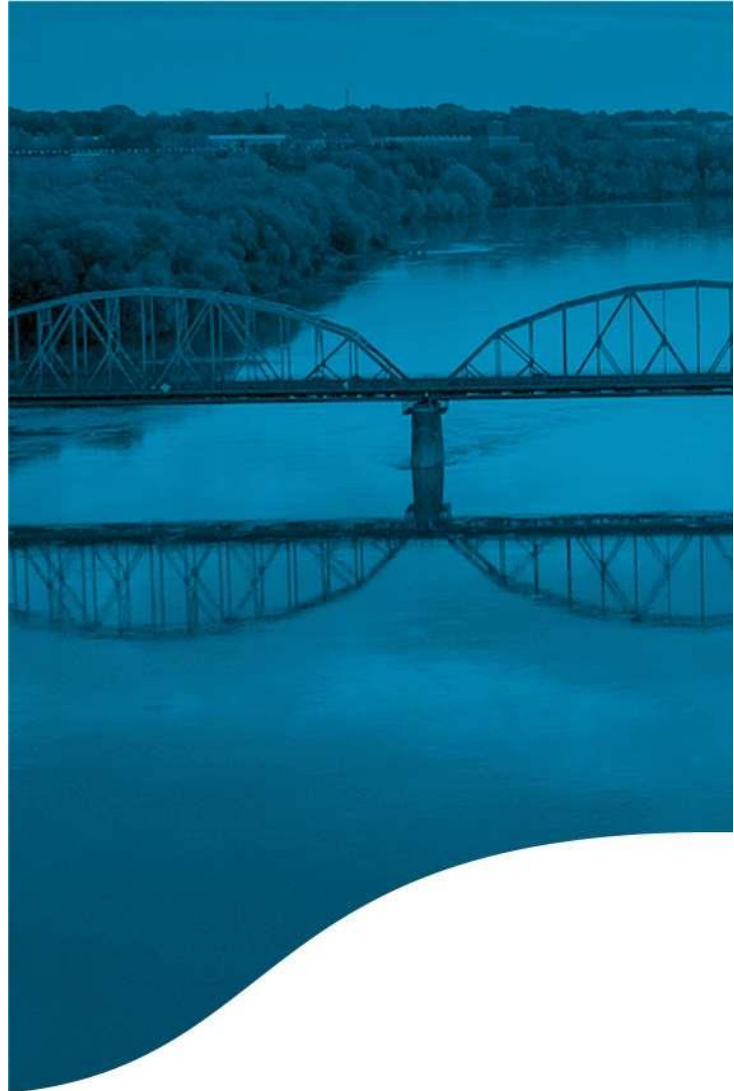




Final Report

Environmental Management Plan



ODRA - VISTULA FLOOD MANAGEMENT PROJECT

CO-FINANCED BY:

State Budget

World Bank (WB), Loan Agreement no. 8524 PL

Council of Europe Development Bank (CEB), Frame Loan Agreement no. LD 1866



ODRA – VISTULA
FLOOD MANAGEMENT PROJECT



Państwowe
Gospodarstwo Wodne
Wody Polskie



FINAL REPORT

ON IMPLEMENTATION OF MEASURES LISTED IN THE ENVIRONMENTAL MANAGEMENT PLAN FOR CONTRACT 1A.1

Odra – Vistula Flood Management Project

Subcomponent	<i>1.A: Flood protection of areas in Zachodniopomorskie Voivodeship</i>
Contract Task	<i>1A.1 Chlewice - Porzecze. Backwater embankment of the Odra River at the Myśla River. Modernization of the Marwicki Polder Stages I and II. (since Aug 2020 1A.4 Implementation of works involving the completion of flood embankment Chlewice, Marwice-Krajnik, Mniszki-Gryfino).</i>
Employer / Project Implementation Unit	<i>State Water Holding Polish Water Regional Water Management Board in Szczecin</i>
Project Implementation Unit (PIU)	<i>Project Implementation Unit in Szczecin</i>
Contractor	<i>Energopol Szczecin S.A., Contract dated 15 May 2017 (terminated on 17 Sep 2019) ETP S.A., Contract dated 20 Aug 2020</i>
Contract Engineer	SWECO Polska Sp. z o.o., ul. Franklina Roosevelta 22, 60-829 Poznań <u>Mailing address:</u> SWECO Polska Sp. z o.o. ul. Łyskowskiego 16 71-641 Szczecin

Authors of the Report (Appendix): [*first and last name or team headed by (first and last name, position)*]:

1. Marcin Stoltman, Environmental Management Expert

	First and last name	Date and signature
<i>Prepared by</i>	Marcin Stoltman <i>Author of the report</i>	
<i>Approved by:</i>	Michał Kielsznia	
<i>Approved by:</i>	Waldemar Krzysztof	

CONTENTS

- 1. INTRODUCTION..... 6**
- 2. GENERAL INFORMATION ON CONTRACT 1A.1..... 6**
- 3. MITIGATING AND MONITORING MEASURES SPECIFIED IN EMP FOR CONTRACT 1A.18**
 - 3.1. CONDITIONS SPECIFIED IN APPENDIX 1 TO EMP 8**
 - 3.2. CONDITIONS SPECIFIED IN APPENDIX 2 TO EMP 8**
- 4. SYSTEM OF SUPERVISION OVER IMPLEMENTATION OF THE MEASURES SPECIFIED IN EMP FOR CONTRACT 1A.1 8**
 - 4.1. CONTRACTOR 9**
 - 4.2. ENGINEER..... 9**
 - 4.3. PROJECT IMPLEMENTATION UNIT (PIU)..... 9**
 - 4.4. PROJECT COORDINATION UNIT (PCU)..... 9**
- 5. PROGRESS OF MITIGATING MEASURES FROM APPENDIX 1 TO EMP 10**
 - 5.1. CONTRACTOR’S ACTIVITIES 10**
 - 5.2. ENGINEER’S ACTIVITIES 11**
 - 5.3. EMPLOYER’S ACTIVITIES..... 11**
 - 5.4. MATTERS RELATED TO IMPLEMENTATION OF THE MITIGATING MEASURES FROM APPENDIX 1 TO EMP 11**
- 6. IMPLEMENTATION PROGRESS OF THE MONITORING MEASURES FROM APPENDIX 2 TO EMP 17**
 - 6.1. CONTRACTOR’S ACTIVITIES 18**
 - 6.2. ENGINEER’S ACTIVITIES 18**
 - 6.3. EMPLOYER’S ACTIVITIES..... 18**
 - 6.4. MATTERS RELATED TO IMPLEMENTATION OF THE MONITORING MEASURES FROM APPENDIX 2 TO EMP 19**
- 7. OTHER ACTIVITIES AND INCIDENTS CONCERNING THE ENVIRONMENT, LOCAL COMMUNITY, HEALTH AND SAFETY 19**
 - 7.1. EXTRAORDINARY EVENTS, NEAR MISSES AND DISASTERS 19**
 - 7.2. ACCIDENTS..... 20**
 - 7.3. ENSURING WORK CONDITIONS 20**
 - 7.4. PREVENTING SEXUAL HARASSMENT AND MOBBING;..... 20**
- 8. SUMMARY..... 20**
- 9. SOURCE MATERIALS..... 21**
- 10. APPENDIX LIST 22**

1. INTRODUCTION

The Final Report describes implementation of the measures specified in the Environmental Management Plan (EMP) for the following Task: *1A.1 Chlewice - Porzecze. Backwater embankment of the Odra River at Myśla River. Modernization of the Marwicki Polder Stages I and II (since Aug 2020 1A.4 Implementation of works involving the completion of flood embankment Chlewice, Marwice-Krajnik, Mniszki-Gryfino).*

The report presents the actions and incidents on the construction site and their impact concerning environmental, social, health and safety (ESHS) matters, which occurred during the contract implementation in the course of the works Contract. The topics in the report are arranged as follows:

- Overall status of **mitigating** measures specified in Appendix 1 to EMP carried out by the Contractor; a detailed list of the measures is included in Appendix 1 to the Report (Implementation Checklist for the measures specified in Appendix 1 to EMP);
- Overall status of **monitoring** measures specified in Appendix 2 to EMP carried out by the Contractor and Engineer; a detailed list of the measures is included in Appendix 1 to the EMP Report (Implementation Checklist(s) for the measures specified in Appendix 2 to EMP);
- summary.

The Report covers the implementation period of the measures specified in the Environmental Management Plan limited by the following dates:

- notice to proceed with the Construction Works under Contract 1A.1 (i.e. from 30 May 2017);
- completion of works considered fundamental, time-based (i.e. to 26 Jan 2022).

2. GENERAL INFORMATION ON CONTRACT 1A.1

Contract of Construction Works *1A.1 Chlewice - Porzecze. Backwater embankment of the Odra River at the Myśla River. Modernization of the Marwicki Polder Stages I and II*, carried out as part of the Odra-Vistula Flood Management Project (OVFMP), under Component 1, Lower and Middle Odra, Subcomponent: 1A (Flood protection of areas in Zachodniopomorskie Voivodeship).

Principal information regarding the Contract:

- The contract with the Contractor of Contract 1A.1, *Energopol Szczecin S.A.*, was concluded on 15 May 2017.
- The Site was handed over on 22 May 2017.
- The notice to proceed with the Construction Work was issued on 30 May 2017.
- On 17 Sep 2019 the Employer withdrew from Contract NP/BŚ/333/1/2016 for reasons attributable to the Contractor.

- The contract with the Contractor of Contract 1A.4, *ETP S.A.*, was concluded on 20 Aug 2020.
- The Site was handed over on 31 Aug 2020.
- The notice to proceed with the Construction Work was issued on 4 Sep 2020.
- On 26 Jan 2022 the Final Acceptance Certificate was signed; it acknowledged completion of the Subject Matter as per the Certificate date.

From 22 May 2017 all the measures resultant from the Environmental Management Plan were performed by the Contractor, *Energopol S.A.*, under the Engineer's supervision. On 17 Sep 2019 the Employer withdrew from Contract NP/BŚ/333/1/2016 for reasons attributable to the Contractor. In the light of meeting EMP requirements, also when there is no Contractor, the Engineer highlighted in the "Action Plan Following Withdrawal" provided with the monthly report (for September 2019) that until a new Contractor's appointment some mitigating and monitoring measures would be carried out by the Engineer. The Engineer analyzed the scope of mitigating and monitoring measures specified in the Environmental Management Plan against the need to modify the scope of recommendations in the interim period (until a Contractor is appointed). The scope of measures given in the document was prepared with special focus on the specificity of construction works which may have significant impact on the environment, while the EMP also lists several measures aimed at minimizing impact during breaks in works and others which should be continued regardless the progress of construction works. Therefore, it was decided there was no need to change the EMP's scope. It was agreed that the scope of the mitigating measures exercised by the Engineer would be adapted to the progress of works as of the day of withdrawal from Contract, adapted to deadlines specified in EMP, existing environmental conditions, and would relate mainly to ensuring safety of the general public. The aforementioned way of implementing EMP recommendations ensured compliance with World Bank investment requirements until the handover of the site (31 Aug 2020) to the new Contractor, *ETP S.A.* Having analyzed feasible scenarios of completing Task 1A.1, the remaining scope of the works consisting largely in completing the works was included in the following Task: "1A.4 Implementation of works involving the completion of flood embankment Chlewice, Marwice-Krajnik, Mniszki-Gryfino). Task 1A.4 did not include a different scope of works, so there was no need for an Amendment to EMP. To ensure consistency in assessing implementation of the Environmental Management Plan, the mitigating measures related to the works completed under Task 1A.1 were assigned the N/A status. From 31 Aug 2020 to 26 Jan 2022 the measures resultant from the Environmental Management Plan were implemented by the Contractor, *ETP SA.*, under the Engineer's supervision.

No circumstances requiring altering of EMP with an amendment occurred in implementation of the mitigating and monitoring measures from 30 May 2017 to 26 Jan 2022.

Scope:

Task 1A.1 consisted in building and restoring flood protection embankments and covered the following structures:

- „Chlewice - Porzecze. Backwater embankment of the Odra River at the Myśla River.” included construction of a new flood protection embankment encircling the village of Chlewice. The purpose of building the structure was to protect Chlewice against high water of the Odra River and backwater of the Myśla River (right-bank tributary of Odra).
- “Improvement of Marwicki Polder, Stages I and II”. The works consisted in reconstruction of a section of Marwice - Krajnik flood embankment at the Odra Wschodnia (Eastern Oder)

at km 712+165 - 708+680 (km 3.485) and Gryfino - Mniszki embankment of the Odra Wschodnia (Eastern Oder) at km 720+966 - 718+850 (km 2.116). The embankments are located in Gryfino and Widuchowa communities and are to provide flood protection for Marwice, Krajnik, Krzypnica, a part of Gryfino and Dolna Odra Power Plant.

3. MITIGATING AND MONITORING MEASURES SPECIFIED IN EMP FOR CONTRACT 1A.1

The Environmental Management Plan for Contract 1A.1 was prepared in August 2016 (final version). On 8 Jul 2016 the World Bank gave "No Objection", approving the Environmental Management Plan as one of the documents of the tender procedure for selecting the Contractor for the construction works of the Contract. It is a document that structures the measures of the Contract and obliges all the entities taking part in the Contract's delivery to observe its provisions. Detailed description of the contract delivery terms related to environment management is developed as Appendix s to EMP: Appendix 1 is the *Plan of Mitigating measures* and Appendix 2 is the *Plan of Monitoring Measures*.

3.1. CONDITIONS SPECIFIED IN APPENDIX 1 TO EMP

Appendix 1 to EMP for Contract 1A.1 contains 151 mitigating measures aimed at preventing and limiting adverse impact of the undertaking on the environment. The measures result from the content of Environmental Decision issued for the Contract (specified in Appendix 4 to EMP) and from procedural requirements of the World Bank as well as additional terms and conditions specified when preparing EMP. The table of mitigating measures from Appendix 1 to EMP describes specific measures, their locations and entities responsible for their performance. The mitigating measures specified in Appendix 1 to EMP belong to the following 7 categories:

- a) land acquisition terms and conditions (items 1-3 of Appendix 1 to EMP);
- b) actions to be taken before commencement of the works (items 4-14 of Appendix 1 to EMP);
- c) requirements related to ensuring roads of access to the sites (items 15-25 in Appendix 1 to EMP);
- d) organization of site facilities, warehouses, and storage yards (items 26-47 in Appendix 1 to EMP);
- e) requirements related to clearance of trees and shrubs (items 48-53 in Appendix 1 to EMP);
- f) requirements at the work performance stage (items 54-149 in Appendix 1 to EMP);
- g) requirements after completion of the works (items 150-151 in Appendix 1 to the EMP).

Contents of specific mitigating measures from Appendix 1 to EMP is included in the Checklist attached to Appendix 1 hereto.

3.2. CONDITIONS SPECIFIED IN APPENDIX 2 TO EMP

Appendix 2 to EMP for Contract 1A.1 contains 151 monitoring measures aimed at monitoring implementation of the mitigating measures specified in Appendix 1. The table of monitoring measures presented in Appendix 2 to EMP is structured like the mitigating measures. The table of monitoring measures specifies, i.e., location, manner, period, and frequency of the monitoring, as well as the entity in charge of the implementation.

4. SYSTEM OF SUPERVISION OVER IMPLEMENTATION OF THE MEASURES SPECIFIED IN EMP FOR CONTRACT 1A.1

Implementation of the mitigating and monitoring measures specified in EMP for Contract 1A.1 was supervised at the level of all the organization units taking part in delivery of the Contract, i.e.

the Contractor, Engineer, Project Implementation Unit (PIU), and Project Coordination Unit (PCU). Scopes of the units' measures are as follows:

4.1. CONTRACTOR

The person directly in charge of implementing the measures specified in EMP on behalf of the Contractor was the Site Manager. Environmental supervision team was appointed in the Contractor's team for support of the Site Manager in implementing EMP. The environmental supervision team of the Contractor included specialists in the following fields: herpetology, ornithology, chiropterology, entomology, botany, and water protection. The environmental supervision was responsible for on-going control of the location and manner of performing the construction works to minimize the impact on the natural environment. Furthermore, pursuant to items 145 and 143 of Appendix 1 to EMP, the Contractor provided support of an archeological supervision and ordnance disposal teams in the scope compliant with EMP. After the end of every month the Contractor submitted a report on implementation of the measures specified in EMP, including a checklist specifying the EMP implementation progress in the month. The list was sent to the expert for the environment management in the Engineer's team, including the required Appendix s (including, i.a., requests, environmental supervision statements, et.).

4.2. ENGINEER

Direct supervision over implementation of EMP requirements on behalf of the Engineer was exercised by the environmental management expert, working in the respect with the Resident Engineer, construction site inspectors, and other members of the Engineer's team performing the investor representation services. The environmental management expert maintained regular contacts with the Site Manager, determining the requirements that needed to be met at the stage of the works, supervising the implementation process of specific EMP requirements, taking part in settling current issues, and performing control over the site.

After each reporting period (month and quarter) the environmental management expert verified the Contractor's environmental documentation and prepared own reports submitted to the Project Implementation Unit.

4.3. PROJECT IMPLEMENTATION UNIT (PIU)

Direct supervision over implementation of EMP requirements on behalf of the Project Implementation Unit (PIU) was exercised by the Environmental Specialist, working in the respect with PIU Manager, other PIU team members, and other organizational units of RZGW Szczecin. The Environmental Specialist and PIU Manager maintained regular contacts with the environment management expert in the Engineer's team, supervising the implementation process of specific EMP requirements, and getting involved win settling current issues. After each reporting period (month and quarter) the Environmental Specialist and PIU Manager verified the current environmental documentation of the contract and submitted it to the Project Coordination Unit.

4.4. PROJECT COORDINATION UNIT (PCU)

Direct supervision over implementation of EMP requirements on behalf of the Project Coordination Unit was exercised by the Environment Management Expert, working in the respect with other PCU team members. The Expert maintained regular contacts with PIU Manager and Environmental Specialist in PIU team. After each reporting period (month and quarter), the Expert verified the environmental documentation submitted to PIU and prepared own contribution to PCU reports submitted subsequently to the World Bank.

5. PROGRESS OF MITIGATING MEASURES FROM APPENDIX 1 TO EMP

This chapter describes the progress of the 151 mitigating measures aimed at preventing and limiting adverse impact of the undertaking on environmental resources specified in Appendix 1 to EMP for OVFMP 1A.1. contract. Information on progress of the works is also provided in the *Checklist* attached hereto as *Appendix 1*. Implementation of the measures specified in EMP started on the day of the notice to proceed with the Construction Works, i.e. on 30 May 2017, and ended on the day of signing the final acceptance certificate, i.e. on 26 Jan 2022.

The Contractor's environmental supervision prepared an inventory of construction sites and land acquired temporarily from June to August 2017. The inventory determined presence of protected species (dwarf everlast, *Helichrysum arenarium*, red-stemmed feathermoss, *Pleurozium schreberi*, broom forkmoss, *Dicranum scoparium*, reindeer lichen, *Cladonia portentosa*, 22 bird species, and 3 mammal species). Derogation decisions were obtained for the species before starting the works in relevant locations. The nature inventory was prepared again by experts of the newly selected Contractor from September to October 2020, and no protected species were identified.

In September 2017 the Contractor's archeological supervision verified the construction site for presence of archeological sites, and stated that a new round of surveys was not required, thus considering the mitigating measure number 10 conclusively completed. Contractual works were under on-going archeological supervision of the Contractor (item 145). The archeological supervision identified no historic monuments.

In September 2017 and in September-October 2020 the Contractor's ordnance disposal supervision surveyed the construction site(s) for presence of unexploded bombs or munitions (item 13). During the Contract's delivery, the civil works were under on-going ordnance disposal supervision of the Contractor (item 143). The ordnance disposal supervision identified no unexploded bombs or munitions.

5.1. CONTRACTOR'S ACTIVITIES

In accordance with Appendix 1 to EMP for Contract 1A.1, the party responsible for implementation of the mitigating measures specified as items 1-151 in Appendix 1 to EMP is the Contractor, and as item 148 in Appendix 1 to EMP, also the Engineer and the Employer. In total, EMP specifies 151 mitigating measures. According to the information provided by the Contractor, the Engineer, and the Employer:

a) 151 mitigating measures were implemented throughout the implementation period, including:

- a) 121 mitigating measures were essentially completed by the date of completing the works covered by the contract (items 1, 3, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, 21, 22, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 97, 98, 99, 100, 105, 106, 108, 109, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 126, 128, 129, 130, 131, 132, 133, 134, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, and 151 in Appendix 1 to EMP).
- b) Ultimately, 30 mitigating measures were completed by the date of completing the works covered by the contract (items 2, 4, 5, 13, 14, 20, 23, 24, 30, 49, 50, 51, 52, 53, 74, 91, 96, 101, 102, 103, 104, 107, 110, 111, 112, 124, 127, 135, 136, and 150 in Appendix 1 to EMP).

The mitigating measures were implemented by the Contractor with specialists from the Contractor's natural environment team. In the implementation period, the team consisted of

specialists in the following fields: herpetology, ornithology, chiropterology, entomology, botany, and water protection. The Contractor's resources included also ordnance disposal supervision and archeological supervision.

If required by provisions of the Contract and / or EMP, the mitigating measures were consulted with and supervised by the Engineer with the involvement of environmental management expert and of the Resident Engineer.

5.2. ENGINEER'S ACTIVITIES

As specified in the monthly and quarterly reports on progress of mitigating measures specified in EMP, throughout the implementation period the Engineer implemented 1 mitigating measure (1%), together with the Contractor and the Employer, i.e. item 148, regarding monthly EMP meetings.

Throughout the implementation period, one non-compliance was identified in the respect (March 2019 and March 2020); the measure was not implemented although the obligation was stipulated in EMP. The reason for no meeting in March 2019 were extremely intense works on agreeing the amendment regarding change of the screen technology. The March 2020 meeting was not held due to the introduction of the state of epidemic. The EMP scope was discussed at site meetings in these months.

5.3. EMPLOYER'S ACTIVITIES

As specified in the monthly and quarterly reports on progress of mitigating measures specified in EMP, throughout the implementation period the Employer implemented 1 mitigating measure (1%), together with the Contractor and the Engineer, i.e. item 148, regarding monthly EMP meetings.

Throughout the implementation period, individual non-compliances were identified in the respect (March 2019 and March 2020); the measure was not implemented although the obligation was stipulated in EMP. The reason for no meeting in 2019 were extremely intense works on agreeing the amendment regarding change of the screen technology. The 2020 meeting was not held due to the state of epidemic. The EMP scope was discussed at site meetings throughout the implementation period.

5.4. MATTERS RELATED TO IMPLEMENTATION OF THE MITIGATING MEASURES FROM APPENDIX 1 TO EMP

According to the information provided by the Contractor, the Engineer, and the Employer:

- a) in the case of 97 mitigating measures specified in Appendix 1 to EMP implemented throughout the implementation period no recurrent problems with the implementation were reported (items 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 17, 18, 22, 26, 29, 31, 34, 36, 39, 41, 44, 46, 48, 49, 50, 51, 52, 55, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 71, 76, 77, 78, 79, 81, 82, 83, 85, 87, 88, 89, 90, 91, 92, 94, 95, 96, 97, 98, 99, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 120, 121, 122, 123, 127, 128, 129, 131, 134, 135, 136, 142, 143, 144, 145, 147, 149, and 151 in the Appendix 1 to EMP). The measures were implemented by the Contractor under the Engineer's supervision and the Contractor followed, on an on-going basis, the Engineer's recommendations regarding the implementation.
- b) in the case of 54 mitigating measures implemented throughout the implementation period (items 4, 12, 16, 19, 20, 21, 23, 24, 25, 27, 28, 30, 32, 33, 35, 37, 38, 40, 42, 43, 45, 47, 53, 54, 56, 57, 58, 62, 72, 73, 74, 75, 80, 84, 86, 93, 100, 101, 106, 119, 124, 125, 126, 130, 132,

133, 137, 138, 139, 140, 141, 146, 148, and 150 in Appendix 1 to EMP) the following periodic and recurring problems in the implementation were reported:

The following measures specified as not implemented [NU] are items that were not implemented in at least one reporting period (month) [in the order following the numbering of items in Appendix 1 to EMP]:

In the case of item 12, from Sep 2019 to Nov 2019 no environmental supervision of the construction site was performed due to termination of the contract with the current Contractor. In the period, the site was temporarily monitored by the Engineer for natural risks. In subsequent reporting periods, until a new Contractor was selected, the status was N/NN because of no current contract delivery. Due to no works performed, it had no adverse impact on the environment.

In the case of measures specified as items 23, 24, 25, from Aril 2018 to May 2018 the measures were not implemented. The Engineer pointed out that an inspection of the works performed on 26 April 2018 revealed use of a crossing with public roads without a relevant permit. The Engineer requested the Contractor to submit relevant documentation. Due to no reply by the set deadline, the measures were assigned the N/N status in the subsequent reporting period, i.e. May. The Engineer set another deadline for 11 June 2018. The Contractor submitted the permit by the deadline.

In the case of items 28, 30, in periods Oct 2017-Feb 2018, Apr 2018, the measures were not implemented due to a lack of Engineer's approval for the environmental supervision study regarding the location of site facilities in Chlewiec. Engineer requested the Contractor to revise the study. Ultimately, the Contractor verified the location of the facilities and submitted a statement that was accepted by Engineer. The incident had no impact on the Contract or natural environment.

In the case of the measure specified as item 30, from Nov 2019 to Jul 2020 the measure was not implemented. The Contractor did not tidy up the temporarily acquired land (termination of the contract with the Contractor). The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. Ultimately, the temporarily acquired land was cleaned by the new Contractor. The incident had no impact on the Contract or environment.

The measure specified as item 35 from Feb 2018 to Mar 2018 was not implemented, the Contractor did not store materials as required in the measure. Engineer requested the Contractor to modify the manner of storage. The Contractor implemented the measure completely in the subsequent reporting period.

The measures specified as items 37 and 40 were not implemented from Oct 2019 to Aug 2020 and in Oct 2020; waste generated during works at Gryfino - Mniszki was not disposed and was stored at the construction site. The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. Ultimately, the waste was disposed by the new Contractor. The incident had no impact on the Contract or natural environment.

The measure specified as item 38 was not implemented in Oct 2020. The Engineer reported a lack of containers and space for collection of hazardous waste. The Engineer requested the Contractor to provide what was missing at the site. The Contractor provided what was missing in the subsequent reporting period. The incident had no impact on the Contract or natural environment.

The measure specified as item 42 was not implemented from Feb 2018 to May 2018; the Contractor did not provide water discharge in the manner preventing contamination as required

in the Construction Site Facilities Plan. The Engineer requested the Contractor to completely implement the measure or revise the Construction Site Facilities Plan. The Contractor submitted the document revised in the subsequent reporting period.

The measures specified as items 43, 45 were not implemented in Nov 2019; despite Engineer's dunning letters, the Contractor did not provide toilets at the pump station (Krajnik). The measure was fully implemented in the subsequent reporting period. The incident had no impact on the Contract or natural environment.

The measure specified as item 47 was not implemented from Oct 2019 to Aug 2020; the site was not tidy. All site facilities were in desolate condition, with broken fencing, signs and guards of construction site skewed or damaged. Waste was reported at Gryfino - Mniszki construction site. The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. The waste and the space used during construction were ultimately taken care of by the new Contractor. The incident had no impact on the Contract or natural environment.

The measure specified as item 53 was not implemented from Oct 2019 to Aug 2020; there was no Contractor, so no replacement planting was done. The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. Ultimately, the replacement planting was done by the new Contractor. The incident had no impact on the Contract or natural environment.

The measures specified as items 57 and 58 were not implemented from Sep 2019 to Jul 2020; there were leaks under the trencher that lead to soil contamination. The contaminated soil was utilized by the new Contractor. The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. The incident had no impact on the Contract or natural environment.

The measure specified as item 62 was not implemented from Oct 2017 to May 2018; the Contractor did not secure parking space at Chlewice site facilities. The Engineer requested the Contractor to completely implement the measure and secure space for parking of machinery and equipment. Ultimately, the Contractor secured the place and completely implemented the measure. The incident had no impact on the Contract or natural environment.

The measure specified as item 72 was not implemented from Sep 2019 to Jul 2020; due to termination of the Contract and works performed before completion. Ultimately, the area was cleaned by the new Contractor. The incident had no impact on the Contract or natural environment.

The measures specified as items 73 and 74 were not implemented from Feb 2018 to March 2018; the Contractor did not secure space for storage of topsoil. The Engineer requested the Contractor to completely implement the measure and mark it using marking tape and / or cover with PE film. The Contractor implemented the measure in subsequent reporting periods. The incident had no impact on the Contract or natural environment.

The measure specified as item 75 was not implemented from Nov 2019 to Jul 2020 due to the Employer's termination of the contract by fault of the Contractor and termination of the works before completion. The temporarily acquired land was not restored (Marwice - Krajnik site facilities). Ultimately, the area was cleaned by the new Contractor. The incident had no impact on the Contract or natural environment.

The measure specified as item 80 was not implemented from Sep 2019 to Jul 2020. Oil derivative leaks were reported in the site facilities area (Chlewice) and at the trencher location at the

construction site (Gryfino). The Engineer requested the Contractor to remove the leakage results, especially of the oil derivatives. The Contractor declared bankruptcy and there was no possibility of exercising the rights resulting from the Contract. Ultimately, the contaminated soil was disposed by the new Contractor. The incident had no impact on the Contract or natural environment.

The measures specified as items 84 and 93 were not implemented from Sep 2019 to Jul 2020. Oil derivative leaks were reported at the site facilities area (Chlewice) and at the trencher location at the construction site (Gryfino); the Contractor was requested to inspect the equipment used because the Contractor had reasonable grounds to believe the equipment was not fully operational. The Contractor did not follow the Engineer's order. Ultimately, the area was cleaned by the new Contractor who used fully operational equipment for delivery of the Contract. The incident had no impact on the Contract or natural environment.

As for the measure specified as item 100 from Sep 2019 to Nov 2019 no environmental supervision of the construction site was performed due to termination of the contract with the current Contractor, therefore the construction site was not monitored for obligatory derogation permits regarding protected species of animals, plants, and fungi. In the period, the site was temporarily monitored by the Engineer for natural risks. In subsequent reporting periods, until a new Contractor was selected, the status was N/NN because of no current Contract delivery. Due to no works performed, it had no adverse impact on the environment.

The measure specified as item 106 was not implemented from Sep 2019 to Jul 2020. The Contractor did not organize work in a way that would allow reduction of the time required to perform the works, and the scope of works was not fulfilled in accordance with the schedule. The circumstance was one of the reasons for terminating the contract with the Contractor. The newly selected Contractor performed the works without significant delays.

The measure specified as item 119 was not implemented in Aug 2018. Despite numerous requests from the Engineer in previous reporting periods, the Contractor did not present the Site Organization Plan that would meet the specified requirements. The incident had no impact on the Contract or natural environment.

The measure specified as item 124 was assigned the "N/NN" status from May 2018 to Jul 2018. The Contractor concluded the Contractor had no influence on marking of the construction site. The measure had "N/A" status until the end of the Contractor's delivery.

The measure specified as item 125 was not implemented from Sep 2019 to Nov 2019; despite the Engineer's numerous dunning letters, the Contractor did not provide the missing signage. The signage and protective measures were provided by the new Contractor. The incident had no impact on the Contract or natural environment.

The measure specified as item 130 was not implemented from Oct 2017 to Dec 2017, in Sep 2019, and Nov 2019; the Contractor did not provide sorbents for site facilities. Each time the Engineer requested the Contractor to provide the missing material. Ultimately, the Contractor provided what was missing. The incident had no impact on the Contract or natural environment.

The measure specified as item 132 was not implemented in Oct 2019; during a construction site inspection the Engineer noticed missing traffic lights at the embankment crossing in Chlewice. The Engineer requested the Contractor to provide the missing signage. The Contractor provided what was missing. The incident had no impact on the Contract or natural environment.

The measure specified as item 133 was not implemented in Sep 2020; the Contractor did not hold training and did not start HIV-AIDS awareness campaign. The Engineer requested the Contractor to start the campaign. The Contractor implemented the required measures in subsequent reporting periods. The incident had no impact on the Contract.

As for the measures specified as items 137, 138, 139, 140, and 141, from Sep 2019 to Nov 2019 no environmental supervision of the construction site was exercised due to termination of the contract with the current Contractor, therefore the measures covered by the measures were not performed. In the period, the site was temporarily monitored by the Engineer for natural risks. In subsequent reporting periods, until a new Contractor was selected, the status was N/NN because of no current Contract delivery. Due to no works performed, it had no adverse impact on the environment. The measure number 141 was not implemented also in Sep 2020 because of no environmental supervision report in the period. The Engineer requested the monthly EMP progress report for Sep 2020. The Contractor supplemented the documentation in a revised report.

The measure specified as item 146 was not implemented from Sep 2019 to Nov 2019 due to termination of the contract with the current Contractor. In the period, the site was temporarily monitored by the Engineer for signage and accident prevention. In subsequent reporting periods, until a new Contractor is selected, the status will be N/NN because of no current Contract delivery.

The measure specified as item 148 was not implemented in Mar 2019 and Mar 2020, no dedicated meeting was held due to the intensity of works related to agreeing an amendment for the change of screen technology (2019), due to the state of epidemic (2020); EMP issues were covered at one of the site meetings. The incident had no impact on the Contract or natural environment.

The measure specified as item 150 was not implemented from Sep 2019 to Nov 2019 due to no Contractor. No grass treatment works were performed in the grass-sown areas. The newly selected Contractor performed the grass treatment procedures. The incident had no impact on the Contract or natural environment.

The following measures with the partial implementation status assigned [PI] are the items that were implemented partially at least through the total period of 10 months or the number of months in which they were partially implemented exceeded the number of months in which they were implemented completely as required for the item (the order follows the numbering in Appendix 1 to EMP):

The measure specified as item 4 was partially implemented from Oct 2017 to Oct 2018 because of removing a thicker layer of topsoil in Chlewice (50 cm) in the first two months of the period. The Engineer did not question the measure implementation method as good civil engineering practice. In the subsequent months the partial implementation status resulted from the time frame for completion of the measure, i.e. significant postponement of the completion date. In this case the partial implementation did not constitute a non-compliance but resulted from updated conditions and progress of the works.

In the case of the measure specified as item 16 the measure implementation non-compliance reported for Oct 2017 - Sep 2018 resulted from the need to set up a temporary crossing over the Myśla River (the District Starosty in Myślibórz denied use of the bridge in Chlewice for performance of the works). The Engineer approved the solution because there was no alternative access route to the construction site.

In the case of the measure specified as item 19 the measure implementation non-compliance reported for Jan 2018 - Jun 2018, Aug 2019 - Nov 2019, and Dec 2020 - Jul 2021 resulted from

road surface damage identified by the Engineer or reported by the road operator. Each time the Engineer requested the Contractor to repair the damaged surface or provide explanation. Before completion of the Contract all the road damage was repaired.

The measure specified as item 20 was partially implemented from Jul 2018 to Sep 2018 and from May 2019 to Nov 2019 because the municipal road operator did not approve the prepared report on road conditions in Chlevice. The original Contractor did not obtain the approval before terminating the Contract despite the Engineer's requests. The new Contractor agreed the report with the operator.

The measure specified as item 21 was partially implemented from Oct 2017 to Dec 2017, from Apr 2018 to Sep 2018, and in Nov 2020 because traffic organization plan was not completely agreed or road signage was not correct. Each time the Engineer requested the Contractor to provide the missing signage or to repair it.

The measure specified as item 23 was partially implemented from Oct 2017 to Feb 2018, from Jun 2018 to Sep 2018, from Aug 2019 to Nov 2019, and in Sep 2020 because of incorrect signage of temporary traffic organization. Whenever missing signage was reported, the Engineer requested the Contractor to provide the missing signage or to repair it.

The measure specified as item 24 was partially implemented from Oct 2017 to Mar 2018 and from Jun 2018 to Sep 2018 because some approvals were missing in the documentation submitted to CE. The Engineer requested the Contractor to supplement the documentation.

In the case of measure specified as item 27 the measure implementation non-compliance was reported in Oct 2017 - Dec 2017, Mar 2018 - Dec 2018, and Oct 2020 - Nov 2021 because of missing leak protection and sorbents in temporarily acquired areas. Each time the Engineer requested the Contractor to provide the missing material.

The measure specified as item 30 was partially implemented in May 2018 - Aug 2018 and May 2019 - Oct 2019 because of no acceptance of Chlevice site facilities (2018) and the need to localize temporary acquisition areas outside the embankments caused by limited space within the embankments. The Engineer permitted localizing site facilities on lot no. 79/4 that is outside the embankments, following such guidelines as the recommendation from the Environmental Decision to localize site facilities in areas of the smallest environmental impact. The contractor divided the site facilities into "special zone" for temporary service of the construction site (including storage of materials) located within the embankments and "office zone" located outside the embankments, at lot no. 121/11.

For the measures specified as item 32 non-compliances were reported in Oct 2017 - Dec 2017, Feb 2018 - Jul 2018, and Oct 2020 - Nov 2020 and they consisted in missing sorbents (or improper type of sorbent). Each time the Engineer requested the Contractor to provide the missing material.

For the measures specified as item 33 non-compliances were reported in Oct 2017 - Dec 2017, Feb 2018 - Jul 2018, Jul 2019 - Nov 2019, Nov 2020 - Jul 2021 and they consisted in missing sorbents (or improper type of sorbent). Each time the Engineer requested the Contractor to provide the missing material.

For the measure specified as item 37 non-compliance was reported in Feb 2018 - Jul 2018, May 2019 - Oct 2019, Jan 2021 - Feb 2021, May 2021 - Jun 2021, Sep 2021, Dec 2021 and they consisted in missing waste sorting procedures, lack of regular disposal (containers overfilled), missing proper containers. Every time the Engineer requested the Contractor to implement waste handling procedures as specified under the item.

For the measure specified as item 54 non-compliances were reported in Oct 2017 - Dec 2017, Feb 2018 - Jul 2017, Jul 2019, Oct 2020 - Dec 2020 and they consisted in improper storage of fuel and / or missing sorbents. Each time the Engineer requested the Contractor to store fuels properly and provide the missing material.

The measure specified as item 56 was partially implemented in Oct 2017 - Nov 2019, the Contractor also used public and existing roads, observing road regulations. The Engineer accepted the solution.

For the measure specified as item 80 non-compliances were reported in Oct 2017 - Dec 2017, Apr 2018 - Jun 2018, Jan 2019, Jul 2019 - Aug 2019, Dec 2020 - Aug 2021, Dec 2021; the Contractor did not secure soil under fuel tanks used for operation of mobile generators or hand-held combustion equipment, there were also instances of leaks of the mixture used for construction of the filtration screen. Every time the Engineer requested the Contractor to implement solutions that would minimize the pollution of soil and water environment.

In the case of the measures specified as items 86 and 101 the non-compliance reported for Oct 2017 - Jul 2018 resulted from the need to set up a temporary crossing over the Myśla River (the District Starosty in Myślibórz denied use of the bridge in Chlewice for performance of the works). The Engineer approved the solution because there was no alternative access route to the construction site.

In the case of the measure specified as item 119 non-compliances were reported for Oct 2017 - Jul 2018 and Sep 2020; the Contractor didn't obtain the Engineer's approval for the Site Organization Plan. Having supplemented the Plan with the issues raised by the Engineer, the Contractor obtained approval of the document.

For the measure specified as item 125 non-compliances were reported in Oct 2017 - Dec 2017, Jul 2019 - Aug 2019, Apr 2020, Sep 2020 - Jan 2021, May 2021 - Jul 2021 and those consisted in incomplete signage and protective measures at the construction site. The Engineer requested the Contractor to provide proper signage and / or protective measures of the construction site.

In the case of the measure specified as item 126 non-compliances were reported for Oct 2017 - Jun 2018 and Sep 2020 - Dec 2020; the Contractor didn't set traffic routes. The Engineer requested the Contractor to set the traffic routes.

As for the measure specified as item 133 non-compliances were reported for Nov 2017 - Mar 2018, Jul 2019 - Nov 2019, Oct 2020; the Contractor didn't organize a campaign for the local community. The Engineer requested the Contractor to run the informative campaign.

As per the Final Acceptance Certificate there were no measures that should have been implemented but were not (for reasons in control or beyond control). All the recommendations from the Engineer were adopted.

6. IMPLEMENTATION PROGRESS OF THE MONITORING MEASURES FROM APPENDIX 2 TO EMP

According to Appendix 2 to EMP for Contract 1A.1, the party responsible for accomplishment of the 151 monitoring measures stipulated as items 1-151 of Appendix 2 to EMP is the Contractor, as items 1-151 of Appendix 2 to EMP is the Engineer, whereas in the case of item 148 of Appendix 2 to EMP it is the Employer. In total, EMP specifies implementation of 151 monitoring measures, all of which should be implemented throughout the implementation period.

6.1. CONTRACTOR'S ACTIVITIES

Throughout the implementation period, the Contractor monitored implementation of the mitigating measures specified in Appendix 2 to EMP.

The monitoring was carried out by:

- Verification of the requirements set out in EMP for the current stage of works;
 - Verification of the Contractor's documents regarding the implementation of EMP conditions;
 - Current inspections of construction sites; the measures specified in Appendix 2 to EMP, and
 - Current arrangements with representatives of the Engineer and the Employer;
- a) Throughout the implementation period, the Contractor implemented 151 (100%) monitoring measures, including:
- 151 measures (100%) implemented as required throughout the implementation period (items 1-151 in Appendix 2 to EMP);
 - no issues and / or non-compliance regarding implementation was reported for any of the measures.
- b) Throughout the implementation period, there were no instances of a failure to implement a monitoring measure assigned to the Contractor.

The monitoring measures were implemented by the Contractor with the specialists from the Contractor's Natural Environment Team.

6.2. ENGINEER'S ACTIVITIES

Throughout the implementation period, the Engineer monitored implementation of the mitigating measures specified in Appendix 2 to EMP. The monitoring was carried out by:

- Verification of the requirements set out in EMP for the current stage of works;
 - Verification of the Contractor's and Employer's documents regarding the implementation of EMP conditions;
 - Current inspections of the construction sites;
 - Measures specified in Appendix 2 to EMP;
 - Current arrangements with representatives of the Contractor and the Employer.
- c) Throughout the implementation period, the Engineer implemented 151 (100%) monitoring measures, including:
- 151 measures (100%) implemented as required throughout the implementation period (items 1-151 in Appendix 2 to EMP);
 - no issues and / or non-compliance regarding implementation was reported for any of the measures.
- d) Throughout the implementation period, there were no instances of a failure to implement a monitoring measure assigned to the Engineer.

The monitoring measures were implemented by the Engineer with the specialists from the natural environment team, including the environment management experts and the Resident Engineer.

6.3. EMPLOYER'S ACTIVITIES

Throughout the implementation period, the Employer monitored implementation of the mitigating measures specified in Appendix 2 to EMP. The monitoring was carried out by:

- Verification of the requirements set out in EMP for the current stage of works;
 - Verification of the Contractor's and Engineer's documents regarding the implementation of EMP conditions;
 - Current inspections of the construction sites;
 - Measures specified in Appendix 2 to EMP;
 - Current arrangements with representatives of the Contractor and the Engineer.
- e) Throughout the implementation period, the Employer implemented 1 (0,7%) monitoring measure, including:
- 1 measure (0,7%) implemented as required throughout the implementation period (items 148 in Appendix 2 to EMP);
 - no issues and / or non-compliance regarding implementation was reported for any of the measures.
- f) Throughout the implementation period, there were no instances of a failure to implement a monitoring measure assigned to the Employer.

Furthermore, throughout the implementation period, the Employer supervised implementation of 151 monitoring measures assigned, as specified in Appendix 2 to EMP, to the Contractor and the Engineer.

The supervision and monitoring measures related to EMP were implemented by the Employer with the technical and environmental matters specialist in PIU.

6.4. MATTERS RELATED TO IMPLEMENTATION OF THE MONITORING MEASURES FROM APPENDIX 2 TO EMP

As specified in the monthly reports on progress of implementing the measures specified in EMP, no problems were identified regarding implementation of the monitoring measures specified in Appendix 2 to EMP for Contract 1A.1 throughout the implementation period.

7. OTHER ACTIVITIES AND INCIDENTS CONCERNING THE ENVIRONMENT, LOCAL COMMUNITY, HEALTH AND SAFETY

Throughout the implementation period, the Contractor conducted preparatory works and construction works under Contract 1A.1, including implementation of specific measures covered by the Environmental Management Plan in the scope assigned to the Contractor.

Furthermore, throughout the implementation period, the Contractor performed other activities concerning the environment, local community, health, and safety and related to delivery of Contract 1A.1, such as:

- Due to the risk of COVID-19 spreading, in quarters one to four of 2020 the Contractor provided the Engineer with weekly reports on the current pandemic situation in delivery of Contract of 1A.1.

Preventive actions, including obligatory monitoring of infections and taking relevant actions for new infections, were taken also by the Contract Engineer and the Employer.

7.1. EXTRAORDINARY EVENTS, NEAR MISSES AND DISASTERS

No extraordinary events, near misses, nor disasters were reported in execution of the Contract. During works on construction of the filtration screen performed around km 711+180-711+280, Marwice - Krajnik section (02 Feb 2020), an uncontrolled loss of the grout in the gap took place.

No leak of solidifying grout was identified beyond the embankment outline to the Odra River or to the nearby drainage ditch. A geological survey performed suggested the reason was a liquid layer of hydrated peat and sand mix about 5.0÷5.2 m BGL (i.e. about -3.0÷3.2 mamsl). On the basis of the data collected and composition of the grout it was assessed that it had no adverse impact on the environment. The screen at the section was made after impact compaction of the soil using “overpour” of the grout. The works did not require changing the Environmental Decision or provisions of the Environmental Management Plan.

7.2. ACCIDENTS

No accident-related events occurred during delivery of the Contract, including accidents involving personnel of the Contractor, the Engineer, or the Employer.

7.3. ENSURING WORK CONDITIONS

Throughout the implementation period, the Contractor ensured proper work conditions meeting the requirements of the labor law in force in Poland.

During the monitoring measures, the Engineer didn't get any notifications or identified any non-compliances in the respect.

7.4. PREVENTING SEXUAL HARASSMENT AND MOBBING;

There were no incidents related to sexual harassment or mobbing throughout the implementation period. The Engineer did not identify any report or non-compliance in the respect.

8. SUMMARY

This report presents execution of the measures specified in the Environmental Management Plan (EMP) for the following undertaking: *1A.1 Chlewice - Porzecze. Backwater embankment of the Odra River at the Myśla River. Modernization of the Marwicki Polder Stages I and II (since Sep 2020: 1A.4 Completion of Chlewice, Marwice - Krajnik, and Mniszki - Gryfino flood protection embankments under Odra - Vistula Flood Management Project (OVFMP).*

The Report covers the implementation period of the measures specified in the Environmental Management Plan limited by the following dates:

- Notice to proceed with the Construction Works under Contract 1A.1 (i.e. from 30 May 2017);
- completion of works considered fundamental, time-based (i.e. to 26 Jan 2022).

In the whole implementation period the Contractor performed construction works in the scope covered by the Contract (see the description in chapter 1), including implementation of 151 mitigating measures specified in EMP, monitored 151 items resultant from the EMP measures, and took part in other events relating the environment, local community, health, and safety.

Throughout the implementation period, the Engineer supervised construction works under Contract 1A.1, including implementation of specific measures covered by the Environmental Management Plan in the scope assigned to the Engineer, monitored implementation of 85

mitigating measures specified in EMP, and took part in other events relating to the environment, local community, health, and safety.

In the whole implementation period, the Employer performed actions assigned to the Employer under Contract 1A.1, including implementation of the measures specified in the Environmental Management Plan in the scope assigned to the Employer, monitored implementation of the mitigating measures specified in EMP, and took part in other events relating to the environment, local community, health, and safety.

Monitoring measures undertaken by the Contractor, the Engineer, and the Employer throughout the implementation period showed:

- implementation of 151 out of the 151 mitigating measures specified in Appendix 1 to EMP, including:
- 97 mitigating measures specified in Appendix 1 to EMP implemented throughout the implementation period with no recurrent problems in the implementation process,
- 54 mitigating measures specified in Appendix 1 to EMP implemented throughout the implementation period with no temporarily recurrent problems in the implementation process.
- 151 out of the 151 monitoring measures specified in Appendix 2 to EMP were implemented.

9. SOURCE MATERIALS

Decision No. 23/2012 by the Regional Director for Environmental Protection in Szczecin dated 30 Oct 2012 determining the conditions performing the works under the following undertaking: "Chlewice - Porzeczce flood protection embankment: backwater embankment of the Odra River at the Myśla River"

Decision No. 8/2012 by the Regional Director for Environmental Protection in Szczecin dated 27 Feb 2012 on the environmental constraints for the following undertaking: "Chlewice - Porzeczce flood protection embankment: backwater embankment of the Odra River at the Myśla River"

Decision No. 11/2013 by the Regional Director for Environmental Protection in Szczecin dated 27 Aug 2013 on the environmental constraints for the undertaking called "Reconstruction of flood embankments along the Odra River in Gryfino powiat"

Environmental Management Plan for Contract 1A.1

Monthly Reports and Quarterly Reports by the Contract Engineer on implementation progress of the Environmental Management Plan for subsequent months and quarters.

Monthly Reports by the Contractor on implementation progress of the Environmental Management Plan

The Contractor's environmental supervision position statements

Minutes from Environmental Management Plan implementation meetings

10. APPENDIX LIST

Appendix 1: Check-list for implementation of the measures specified in Appendix s 1 and 2 to EMP for Contract 1A.1.

Appendix 2: Photo documentation