

Report on the State of Conservation of the UNESCO World Heritage site

Tarnowskie Góry Lead-Silver-Zinc Mine and Its Underground Water Management System (Poland) (C 1539)

1. Summary of the report

This report was prepared in response to the decision of the World Heritage Committee taken at the 44th Session in Fuzhou, China (44 COM 7B.53) and presents the current state of conservation of Tarnowskie Góry Lead-Silver-Zinc Mine and its Underground Water Management System. It covers the period from the date of the previous report drawn up in 2019 to the beginning of November 2022. The answers were based on information received from the officially established Coordinator for the World Heritage site, the Regional Monuments Inspector and the Upper Silesian Water Supply Company.

As a State Party, Poland welcomes the fact that the Committee has taken note of its efforts to ensure the proper protection and management of the World Heritage property.

So far, an inventory of the underground areas has been carried out to the extent they are available and remain under the management of the Tarnowskie Góry Land Lovers' Association, the Coal Mining Museum in Zabrze and the Veolia Water Supply and Sewerage Company in Tarnowskie Góry.

The State Party takes measures to extend legal protection to all above-ground elements of the site. A number of entries in the register of monuments are currently being processed. After their completion, further proceedings will be initiated.

The Staszic Water Supply Station remains under the management of the Upper Silesian Water Supply Company in Katowice, which ensures the quality and regularity of water extraction necessary to preserve the underground chambers.

On the basis of ongoing research and observations, no negative impact on the environment and the state of the underground has been found to this day, and it has been determined that in the event a possible operation of the water intake in Staszic Shaft is resumed, it will not adversely affect the condition and will not violate the Outstanding Universal Value (OUV) of the property and its attributes, in particular the underground water chambers.

As part of its activities related to the management and understanding the heritage of Tarnowskie Góry Lead-Silver-Zinc Mine and Its Underground Water Management System, the Tarnowskie Góry Land Lovers' Association undertook a number of archaeological studies, with a particular focus on the underground elements of Phase I to the extent possible and Phase II, with a special focus on the mining landscape.

The issue of adjusting the boundaries of the property is considered both, in the context of ensuring adequate protection, as well as the ownership situation and the existing land development.

Due to the need to provide a permanent organisational framework for the cooperation of numerous stakeholders responsible for the protection of the OUV of the World Heritage property, in 2022 the

Local Tourist Organisation – Miasto Gwarków was formally established. The association is in the process of being organised. After cooperation with selected universities is established, a scientific committee will be set up, in compliance with the World Heritage Committee’s recommendation.

2. Response to the Decision of the World Heritage Committee

This report was prepared in response to the decision of the World Heritage Committee taken at the 44th Session in Fozzhou, China (44 COM 7B.53) and presents the current state of conservation of the Tarnowskie Góry Lead-Silver-Zinc Mine and its Underground Water Management System. It covers the period from the date of the previous report drawn up in 2019 to the beginning of November 2022. The answers were based on information received from the officially established Coordinator for the World Heritage site, the Silesian Regional Monuments Inspector and the Upper Silesian Water Supply Company, and are arranged in accordance with the recommendations and questions contained in the decision:

Decision 44 COM 7B.53

The World Heritage Committee,

3. *Takes note of the progress made by the State Party in implementing its recommendations;*

As a State Party, Poland welcomes the fact that the Committee has taken note of its efforts to ensure the proper protection and management of the World Heritage property.

4. *Welcomes the proposal for an inventory of the underground heritage elements of the property and invites the State Party to submit to the World Heritage Centre a plan and a timeframe for such an inventory;*

To date, an inventory of mining underground areas has been carried out in terms of their management by the following entities:

- The Tarnowskie Góry Land Lovers' Association carried out an inventory of mining underground areas, within the scope of the permit for the use of the Historic Silver Mine and the Black Trout Adit (fragment of the Fryderyk Deep Adit), i.e. to the extent to which the underground areas are open to tourist traffic.
- The Coal Mining Museum in Zabrze has performed an inventory of a fragment of the Fryderyk Deep Adit from Ewa Shaft (Lichtlocher 13) to the adit outlet.
- Veolia Water Supply and Sewerage Company in Tarnowskie Góry carried out an inventory of Kaehler Shaft.

The remaining part of the underground areas is owned by the State Treasury represented by the Marshal's Office. Due to their difficult accessibility and the extent of the excavations stretching under the town and the surrounding areas, the total length of which is estimated at about 100 km, it is impossible to determine the timeframe for such an inventory.

5. *Requests the State Party to finalize and implement the legal protection at the national level of all above-ground structures within the boundaries of the property and its buffer zone that support the Outstanding Universal Value (OUV), and to provide to the World Heritage Centre an inventory of those structures that are not yet protected;*

The State Party takes measures to extend legal protection to all above-ground elements of the site.

The current state of work on finalising and implementing legal protection at the national level in the form of entries in the Silesian Voivodeship Register of Monuments is as follows.

The Silesian Regional Monuments Inspector initiated administrative proceedings regarding the entry onto the register of monuments of the areas at the outlets of major shafts:

- the area in the immediate vicinity of the outlet of Pomoc Szczęściu (Glückhilf) Shaft in Tarnowskie Góry in the area of Gliwicka Street, located within the boundaries of cadastral plots No. 495/78 and 496/79,
- the area in the immediate vicinity of the outlet of Heinitz Shaft in Tarnowskie Góry in the area of Parkowa Street, located within the boundaries of cadastral plot No. 975/308,
- and
- the area of the former Fryderyk Mine in Tarnowskie Góry-Bobrowniki in the area of Parkowa Street, located within the boundaries of cadastral plot No. 2501/305.

After the pending proceedings are completed, further proceedings will be initiated regarding the entry onto the register of monuments of the areas at the outlets of the former shafts: Pokój, Bohr, Reden, Fryderyka, as well as Adit Shaft No. 13 (Ewa), Adit Shaft No. 17 (Sylwester), and the operational Kaehler Shaft.

The former Tailings Pile in Tarnowskie Góry-Bobrowniki, which, together with the area in the immediate vicinity, forms a culture park, is also planned to be placed under heritage protection with an entry onto the register of monuments.

Regarding the issue of above-ground elements of the site within the boundaries of the property and its buffer zone, which support its Outstanding Universal Value, and which are not covered by national legal protection, the following must be mentioned:

- part of the A6 area – Srebrna Góra located outside the boundaries of the Segiet nature reserve (currently being expanded) and the Verona Mine ecological site,
- a post-mining landscape area associated with the activities carried out in the nineteenth century, located in the vicinity of the Staszic Water Supply Station.

For the last-mentioned area, conservation protection resulting from the provisions of local law has been established, and the entry of the surface onto the register of monuments has not yet been completed due to the inconvenience resulting from the fact that a significant number of land plots are still held by private owners (the Municipality of Tarnowskie Góry has started the purchase of the plots in order to enable the entry to be made).

6. Also requests the State Party to provide to the World Heritage Centre further information with regard to the mechanisms in place to ensure that water extraction at Adolph Shaft will not have negative impacts on the property, including by obtaining an explicit commitment from the Upper Silesian Water Supply Company not to harm the OUV of the property and its attributes, particularly the underground water chambers, in their operations;

The Staszic Water Supply Station remains under the management of the Upper Silesian Water Supply Company in Katowice, which ensures the quality and regularity of water extraction necessary to preserve the underground chambers.

Since 2005, there has been no water extraction from the intake located in Staszic Shaft.

The Silesian Voivode, by Decision No. ŚR-I-6811/63/02/04 of 11 January 2005, imposed on the Upper Silesian Water Supply Company in Katowice the obligation to retain and maintain the self-discharge of water from well No. 3 of the Staszic intake to Fryderyk Adit and to monitor the amount of water flowing out and its quality in terms of pollution with trichloroethene and tetrachloroethene, at quarterly intervals, as well as to submit once a year the results of analyses carried out as part of pollution monitoring (as noted above), to the Voivodeship Inspectorate for Environmental Protection in Katowice and the Department of Environment and Agriculture of the Silesian Voivodeship Office in Katowice.

During operation and as well as after its completion, no negative impact on the environment and the state of the underground has been found to this day. Despite the cessation of operation, the underground part of Staszic Shaft is monitored on an ongoing basis. The condition of the pumps and

the entire drainage system of Hall C at 70 m bgl is regularly checked. Underground electrical lighting systems and LV switchgear in Halls A and B at 50 m bgl are also subjected to visual inspection and periodic checks.

Based on ongoing research and observations it can be concluded that a possible resumption of operation of the water intake in Staszic Shaft will not have an adverse impact on the condition and will not harm the Outstanding Universal Value of the property and its attributes, in particular the underground water chambers.

7. Reiterates its request to the State Party to develop an archaeological investigation programme with a focus on the underground element of phase I, to the extent possible, and of phase II, with a particular focus on the mining landscape;

As part of its activities related to the management and understanding of the heritage of the property Tarnowskie Góry Lead-Silver-Zinc Mine and Its Underground Water Management System, the Tarnowskie Góry Land Lovers' Association undertook a number of studies, namely:

1. Searching for traces of the foundations of this part of Europe's first steam engine in the surroundings of Kunszt Park in Tarnowskie Góry. GPR research – Institute of Earth Sciences of the University of Silesia
2. Analysis of the structure of sediments in five post-mining shafts – Institute of Earth Sciences of the University of Silesia
3. Analysis of the structure of sediments in five remains of charcoal piles – Institute of Earth Sciences of the University of Silesia
4. Determination of the species composition of tree species for charcoal firing based on the analysis of the charcoal anatomy – Institute of Earth Sciences of the University of Silesia
5. Analysis of 65 samples of palaeobotanical macro remains dispersed in river sediments – Institute of Earth Sciences of the University of Silesia
6. Traces of historical mining recorded in the landform and sediments - the northern part of the Silesian Upland – Institute of Earth Sciences of the University of Silesia
7. An attempt to date the year of establishment of Kunszt Park based on the analysis of the age of small-leaved linden – Faculty of Earth Sciences of the University of Silesia
8. Research on old mining and metallurgy remains on the boundary of Bytom and Tarnowskie Góry and on the Mała Panew - forms of land relief and their age – Faculty of Earth Sciences of the University of Silesia
9. Development of a multi-layer map system based on GIS technologies – University of Silesia.

Further research will be conducted subject to the availability of resources, facilities and obtaining the necessary permits.

In addition, archaeological and architectural research of the Ruins of the Building of Adit Shaft No. 22 (Karlik Skylight), located at Witosa Street in Tarnowskie Góry and in the area in the immediate vicinity, which is the property of the Tarnowskie Góry Municipality, will be conducted as part of the implementation of this section of the Committee's Decision. The Mayor of Tarnowskie Góry was obliged to carry out the research, in fulfilling the audit follow-up recommendations recorded in Report K-PT.5183.3.2022.AS of 7 October 2022, with a completion deadline of 31 December 2023. Completing the task will open the possibility for carrying out the restoration and conservation of the historic structure.

8. Further requests the State Party to finalize expeditiously and submit all necessary documentation for the addition to the property of the historic water tower immediately adjacent to Kaehler Shaft, and to conclude the feasibility analysis considering the extension of area A5 to join area A4;

The issue of adjusting the boundaries of the property is the subject of discussion by the stakeholders (the issue of expanding area A5 – a former mining area with forms showing traces of former ore mining shafts and places of open-pit ironstone mining, in order to join it to the A4 area – the area and facilities of the Staszic Water Supply Station in Tarnowskie Góry must be considered in the context of ensuring adequate protection, as well as the ownership situation and the existing land development). A proposal for a possible modification of the boundaries of the entry on the World Heritage List will be submitted after it has been developed by consensus.

9. Encourages the State Party to set up expeditiously the multidisciplinary scientific Committee as an advisory body to the Steering Committee, to assist in scientific research programmes;

Due to the need to provide a permanent organisational framework for the cooperation of numerous stakeholders responsible for the protection of the Outstanding Universal Value of the World Heritage property, a decision was taken, following a number of discussions and analyses, to establish a local tourist organisation. The Local Tourist Organisation – Miasto Gwarków was formally established in 2022. The association is in the process of being organised. The next step will be to establish cooperation with selected universities and, in line with the recommendation, to set up a scientific committee.

Please also be informed that prior the establishment of the LTO, the Tarnowskie Góry Land Lovers' Association had signed a number of agreements aimed at strengthening the scientific management of the World Heritage property:

- with the Silesian University of Technology – Cooperation Agreement 425/RDS/RR4/2018 of 20 June 2018
- with the Institute of Ecology of Industrial Areas – Framework Agreement of 9 October 2020
- with the University of Silesia – Agreement no. DN.385.28.2021
- with the Silesian University of Technology, International Centre for Interdisciplinary Research – Partnership Agreement for the implementation of the Dialog 0012/2019 project
- Tripartite Cooperation Agreement 447/R15/RR4/2022 of 13 July 2022 between the Silesian University of Technology, the Water Supply and Sewerage Company, and SMZT.

In addition, the Municipality of Tarnowskie Góry signed a Cooperation Agreement with the University of Silesia in Katowice.

Until the scientific committee is established, the Tarnowskie Góry Land Lovers' Association will be performing research under the above-mentioned agreements.

3. Other current issues related to the state of preservation and identified by the State Party (State Parties) that may affect the Outstanding Universal Value of the property.

Not identified.

4. In accordance with Section 172 of the Operational Guidelines, any potential major restoration, modification and/or new construction planned within the boundaries of the property, the buffer zone(s) and/or corridors or other areas, should be described if such changes may affect the Outstanding Universal Value of the property, including its authenticity and integrity.

Not identified.

5. Public access to the state of conservation report

The State Party hereby consents to the publication of the full version of the report on the World Heritage Centre website.

6. Signature of the Authority

dr Jarosław Sellin

MINISTRY OF CULTURE AND NATIONAL
HERITAGE
SECRETARY OF STATE
GENERAL CONSERVATOR OF MONUMENTS