Water Monitoring Report for the Ada Tepe Prospect, Khan Krum Deposit
2024

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1. Introduction and description of the monitored site

This Report has been prepared as per the endorsed Environmental Monitoring Plan of Dundee Precious Metals Krumovgrad EAD and Condition No III.20 of EIA Resolution 18-8,11/2011 issued by the Minister of Environment and Water that signs off the "Mining and Processing of Auriferous Ores from the Ada Tepe Prospect, Khan Krum Deposit, Krumovgrad Municipality" Project. The purpose of this document is to analyze and report on results obtained from local monitoring points covering surface and ground water in the Ada Tepe area, Khan Krum deposit.

The Report also includes monitoring activities related to DPMK's mining operations within the framework of the "Mining and Processing of Auriferous Ores from the Ada Tepe Prospect, Khan Krum Deposit, Krumovgrad Municipality" Project. The main objective in 2024 was ongoing collection and interpretation of monitoring data on water quality during project execution.

The monitoring involved collection of samples at approved points. Testing results were then used to identify changes in waters in the area of the Ada Tepe prospect, Khan Krum deposit.

2. GENERAL

The Water Monitoring Report (the Report) of **Dundee Precious Metals Krumovgrad ("DPMK" or "the Company")** has been drafted to present environmental monitoring results for the Ada Tepe Prospect, Khan Krum Deposit, Krumovgrad Municipality, and to meet the Company's commitments set out in the Environmental Monitoring Plan, approved by the environmental authorities in 2014.

The Internal Monitoring Plan was updated to reflect the mine commissioning in 2019.

As evident from outgoing letter ПУ-03-14/03.06.2019, the East Aegean Basin Directorate - Plovdiv signed off the updated Plan, in particular the two sections on *Surface and Groundwater*s on the condition that the Company makes some additional amendments to the Plan and presents information from each monitoring point on chemical and quantitative groundwater monitoring. Pursuant to the Monitoring Plan update instructions regarding groundwater monitoring points set up in end 2019, the Company conducted due sampling and submitted results to the Plovdiv River Basin Directorate, together with data sheets for each monitoring point. All conditions listed in letter, ref. ПУ-03-14/03.06.2019 have been met and the required documentation has been submitted to the authorities.

The mine was commissioned in 2019.

In line with statutory requirements and in compliance with the conditions under EIA Resolution 18-8,11/2011, the Company has been issued the following permits:

- Permit #31530328/ 04.03.2013, amended by Resolution # PP-4330/20.07.2021 and Resolution #PP-4955/10.02.2023 on groundwater abstraction; valid till 04.03.2031;
- Water Body Use Permit #33140269/09.09.2021 for discharge of wastewater into surface waters to meet site operational demands, valid till 08.10.2027;
- Permit # 31190071/ 29.04.2020 for water abstraction from a surface water body (Arda River) for other purposes (exploration drills); its term has been with extended by subsequent Permit PP - 5343 / 26.09.2023, valid till 29.04.2033.

3. DESCRIPTION OF THE ENVIRONMENTAL, CHEMICAL AND QUANTITATIVE CONDITION OF THE WATER BODY RELEVANT TO THE INVESTMENT PROJECT

In terms of the Ada Tepe area, there is an effective River Basin Management Plan (RBMP) for the East-Aegean Region, covering the period 2022-2027 and endorsed with Council of Ministers Resolution #920/ 31.12.2024. The RBMP together with the national program for its execution is the primary water management tool. The characterization of surface and ground water bodies that may be affected by local mining operations takes into account findings and measures set out in the 2022-2027 RBMP.

The Company holds Permit #31530328/ 04.03.2013 amended by Resolution #PP 4330/20.07.2021 and Resolution # PP-4955/10.02.2023 for extending the validity term, for groundwater abstraction from a new abstraction facility – a tube well with infiltration lateral, issued by the Director of East Aegean Region River Basin Directorate in Plovdiv, with extended validity by 04.03.2031. The purpose of this water abstraction is to meet industrial, potable and domestic water needs, as well as water supply for other purposes. The water supply source is a Quaternary aquifer, BG3G000000Q010 Interstitial groundwater in the Quaternary deposits of the Arda River. Permitted average daily abstraction rate is Q_d = 4.83 L/s; $Q_{max.}$ = 5.0 L/s, the total permitted quantity is 152,250 m³ per annum, of which up to 127,000 m³ to meet industrial demands, up to 6,500 m³ to meet potable water/ domestic demands and up to 18,750 m³ for other needs.

Water volumes abstracted in 01.01.2024 - 31.12.2024 are as follows:

- 4 656 m^3 for drinking needs (digital water meter # D1T 500046 readings on 01.01.2024 - 189 518 m^3 and on 31.12.2024 - 194 174 m^3 at a permitted water volume of 6 500 m^3/per annum;
- 121 908 m³ for industrial needs (digital water meter #S51EOD19000 readings on 01.01.2024 - 9933 m3 and on 31.12.2024 - 163499 m3; 1658** m³ subtracted from water meter #S51EOB19000 and #24707287 as "other needs", at a permitted water volume of 127 000 m³/per annum.
- 1 658 m^3 for other needs (digital water meter #S51EOB19000 readings on 01.01.2024 - 8527 m3 and on 19.06.2024 – 8777 m3; commissioned new pipeline with new flow meter #24707287 - readings on 19.06.2024 - 1 m3 and on 31.12.2024 – 1409 m3, at a permitted water volume of 18 750m^3/ per annum.

*Note: Flow meter # S51EOB19000 was replaced by a new one # 24707287 after the new pipeline was commissioned and installed downstream of # S51EOD19000. It measures water consumption for "other needs". Hence the subtraction from the flow meter readings, to avoid duplication.

A Water Abstraction Declaration under art.194b of the Water Act was sent to the Plovdiv River Basin Directorate with outgoing letter # 0016/21.01.2025, and the due fees were paid by bank transfer to the same authority on 13.02.2025.

Surface Water Characteristics.

The Ada Tepe minesite is situated to the left of the mid-stream watershed of the Krumovitsa River, a right-bank tributary of the Arda River, between the Studen Kladenets and Ivailovgrad water reservoirs.

The river typology of the Arda River basin indicates that the entire watershed of Krumovitsa River - the main watercourse and its tributaries, belongs to a common water body.

The larger tributaries of the Krumovitsa River are the Virovitsa (Kessebir) River, Vetritsa (Elbassandere) River and Kaldzhikdere River.

The Krumovitsa River is the main surface water body, which may potentially receive treated wastewater generated by the mining operation. It originates from the southern border ridge (Maglenik) of the Eastern Rhodopes and flows northwards and north. Its total length is 58.5 km, and its watershed area is 670.8 km². At the Krumovgrad town gauge station (HMS 61550, which is the only one in the river watershed), the river parameters are:

- a length of 37.3 km
- a watershed area of 497.6 km²;
- an average gradient of 19‰;
- average elevation of 494 m;
- river network density of 1÷1.5 km/km²;
- average vegetation cover in the watershed of 35% reaching up to 90-100% in the upper parts and down to zero around Krumovgrad. .

The soils, which are mainly cinnamon low saline and sandy and clayey-sandy, stony in composition, have eroded severely in the conditions of deforestation, and their water regulation capacity is very poor. This causes rapid runoff from precipitation, which is predominantly rain in this climatic area of Southern Bulgaria.

The river is of the torrential type, with characteristic summer dry-ups in some parts, which categorize it as a Sub-Mediterranean river type (intermittent river), Code R14 (as per the RBMP).

The river typology of the Arda River basin indicates that the entire watershed of the Krumovitsa River and its tributaries belong to one water body - BG3AR200R009, of the same name - "Krumovitsa River and its tributaries". The river type of the water body is transitional between R14a, R14b and R14c.

- **R14a Sub-Mediterranean small intermittent semi-mountainous rivers and streams** – in the upper section of the Krumovitsa watershed.

- **R14b Sub-Mediterranean Intermittent Rivers** – the lower parts of the Krumovitsa watershed, from the town of Krumovgrad up to its confluence with the Arda River. The river forms broad gravels here (except some rocky parts with distinct ponding) and its current is very slow yet constant.

- **R14c Sub-Mediterranean temporary (intermittent) small and medium-sized rivers and streams –** mid part of the Krumovitsa watershed, up to the town of Krumovgrad. During the low water period, the river loses its flow in its mid part and is represented by isolated ponds formed by groundwaters.

General Characterization of the River Flows of Krumovitsa - watershed area 497.6 km2; mean flow quantities 7,320 m^3/s, maximum flow quantities 15,100 m^3/s, and minimum flow quantities 2,827 m^3/s.

Brief overview of significant types of pressure and impact resulting from human activity.

There are no municipal wastewater treatment plants along the river. A wastewater treatment plant was built in 2019 to treat effluent generated by Company employees working on the Ada Tepe site. Treated domestic effluent reports back to the mining operation and included in its return water cycle, i.e. there is no discharge into the environment. .

According to the 2022-2027 RBMP, the importance of impacts caused by climate changes along the Arda River and its tributaries in terms of the adopted climate change scenario RCP 8.5, which refers to a gradual rise of greenhouse gases throughout the century (the most pessimistic scenario), estimated river flow changes are most notable in the long term in the period 2071-2100. The surface water bodies in the Arda River basin are within the scope of the following areas of climate change:

- 9 Upper Arda and tributaries

- 10 Lower and Middle Arda and tributaries

The climate change intensity forecast for Uppermost Arda River and its upper tributaries is "moderate", reducing to "weak" for Middle and Lower Arda and its tributaries.

The 2071-2100 forecast regarding climate change impacts on the Krumovitsa River (BG3AR200R009) is for slight variation (Section 2 of the RBMP, Item 2.5.5.1).

Table 3-1 Status of Krumovitsa River and its tributaries according to the 2022-2027 RBMP (Section 2, Item 2.4.1.1)

River basin	Water body code	Water body name	Typology	Category	Biological indicators	Physical and chemical indicators	Environmental status/ potential	Chemical indicators
Arda River	BG3AR200R009	. Krumovitsa River and its tributaries	R14a/в/с	River	moderate	good	moderate	Less than good

Groundwater Characterization

Interstitial and fissure-flow groundwaters dominate the minesite area. Interstitial groundwater flows are typical of the open pit area and along the Krumovitsa river and some of its tributaries. .

Fissure-Flow Groundwaters

The project footprint partly overlaps the aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwaters, Krumovgrad-Kirkovo Zone. It is evident from data presented in Table IV.2.1-8 that the aquifer has the lowest water potential – its modulus is 0.5 L/s.km². Fissure-flow groundwaters are recharged by runoff and predominantly flow along the discontinuities in the metamorphic rocks away from Ada Tepe in the direction of the Krumovitsa river and Kaldzhikdere gully, which are the main drainages of these flows. Sourcing water from this aquifer is limited and usually used to serve local demands only. There are no resources in this aquifer to be used.

According to the 2023 Report on water quality within the East-Aegean Catchment Area (EACA), the chemical quality of BG3G000PtPg049 – Fissure-Flow Groundwaters, Krumovgrad-Kirkovo Zone in 2023 was classified as ‘poor’ due to the elevated levels of iron, gross alpha activity and natural uranium. Data from the same report shows good quantitative status of groundwater resources within the EACA. One aquifer (BG3G00000NQ018) had a water exploitation index (WEI) above 60% (resource status risk).

Pore Water

Of particular interest are the waters accumulated in the aquifer coded BG3G000000Q010 – Interstitial Groundwaters in the Quaternary Deposits of the Arda River, which includes the section of the Krumovitsa River terrace extending from Ovchari village to the Arda River. Water in the alluvial aquifers is recharged by precipitation and fissure flow water along the river valleys, by river floodplains and high water along the rivers. An unconfined groundwater flow has been formed in the alluvials, which generally flows in the direction of the hydraulic gradient of the river watershed.

Several water abstraction facilities are set up in the Krumovitsa gravels, which supply Krumovgrad and some other settlements.

The natural (dynamic) resources in the alluvial deposits in the Krumovitsa watershed are relatively low. Given an average transmissivity of 1,500 m^2/d, average hydraulic gradient of 0.002 and average floodplain width of 750 m, the dynamic groundwater draw is 26 L/s. 60 to 80% of the local abstraction resource comes from the Krumovitsa River recharge. Therefore,

the EIA Resolution for approval of the Ada Tepe mining operation has set a condition that the Company should treat any wastewater to drinking water quality before discharge to the Krumovitsa.

According to the 2022-2027 RBMP, BG3G000000Q010 Interstitial Groundwaters in the Quaternary Deposits of the Arda River achieved good water chemical status, which was similar to previous years.

General Description of Wastewaters

The water management design at the Krumovgrad Gold Project is driven by a sustainable approach towards "zero discharge".

The design, however, also includes the option to treat any excess water that might be present at the minesite at some point. A Storm Water Overflow Reservoir (SWOR) is constructed, which is able to handle short-term excess water volumes in the reclaim system resulting from a major rainfall event. The overflow from the main process water reservoir, i.e. the Raw and Process Water Reservoir (RPWR), reports to the SWOR. A pump station is set up to return water from the SWOR to the RPWR.

The second line of defense is a system of three evaporators, which can reduce the water levels in the SWOR in suitable weather conditions. Each evaporator comprises of a fan and a high-pressure suction pump. The evaporators take in SWOR water and then generate a mist above the reservoir to enhance evaporation.

If water levels of the SWOR continue to rise, the water will be diverted from the Process Plant water line to the water treatment facility situated north-west from the Paste Thickener Area (flotation tailings).

The purpose of this facility is to meet Condition I.4.2 of EIA Decision No 18-8,11/2011, i.e. to ensure that wastewater is treated to drinking quality level based on chemical indicators. The treated flow can then be discharged via an 8km pipeline into Krumovitsa River, in compliance with Condition I.4.3 of the EIA Decision.

The WWTP is the third line of defense if a rainfall event generates excess (surplus) water in the plant reclaim water system. This option will be used on an as-required basis determined by the needs of the actual operation.

The trigger that causes the WWTP to start is available free capacity of the SWOR.

No treated wastewater has been discharged into the Krumovitsa River in 2024.

ENVIRONMENTAL MONITORING/SAMPLING POINTS, INCLUDING THEIR PURPOSE, LOCATION SHOWN ON A SUITABLY SCALED MAP, COORDINATES, ELEVATION, DESIGN

The site water quality survey in 2024 covered 26 water sampling locations – 10 for surface waters and 16 for groundwaters.

The total number of water monitoring locations is 27, of which 10 for surface waters, 16 for groundwaters and 1 for wastewater after treatment (as needed). A map showing the locations of all the surface and groundwater monitoring points is included as Appendix 2. The selected locations are detailed in Table 4-1.1. The table gives a description of each individual point, including name, elevation, coordinates, water type (surface, ground or waste waters), sampling frequency, location and purpose.

Table 4-1.1: Water Monitoring Points							
#	**Name**	**Elevation (m)**	**Coordinates (WGS84)**	**Type**	**Quality Indicators**	**Sampling Frequency**	**Location, Description and Purpose**
1	ESW 01	236	E 387727 N 45 86 770	SW	as provided in Table 4-1-2	Quarterly	Krumovitsa River – at the point of origin (at confluence of Egrechka River and Kessebirdere) Indicates the surface water quality south of the minesite
2	ESW 02	249	E 253913.391 N 412745,461	SW	as provided in Table 4-1-2	Quarterly	Krumovitsa River upstream of Krumovgrad Indicates surface water quality upstream of town discharges.
3	ESW 03	233	E 38 69 38 N 45 86 342	SW	as provided in Table 4-1-2	Quarterly	Kessebirdere - upstream of confluence with the Egrechka River. Indicates the water quality upstream of confluence with the Egrechka River Egrechka River
4	ESW 04	235	E 38 76 08 N 45 86 646	SW	as provided in Table 4-1-2	Quarterly	Egrechka River – upstream of confluence with Kessebirdere Indicates the water quality upstream of confluence with Kessebirdere
5	ESW 05	222	E 39 03 67 N 45 88 680	SW	as provided in Table 4-1-2	Quarterly	Buyukdere - upstream of confluence with Krumovitsa River Indicates the water quality in Buyukdere upstream of its confluence with the Krumovitsa River. .
6	ESW 06	240	E 386225 N 4588202	SW	as provided in Table 4-1-2	Quarterly	Kaldzhikdere - upstream of the bridge at Pobeda hamlet, Ovchari village. It indicates the water quality in the upper portion of the gully upstream of the intersection with the site access road and the site itself.
7	ESW 07	220	E 38 77 91 N 45 89 777	SW	as provided in Table 4-1-2	Quarterly	Kaldzhikdere - upstream of confluence with the Krumovitsa Indicates the quality of the stream flowing west of the minesite
8	ESW 08	231	E 388364 N 4587708	SW	as provided in Table 4-1-2	Quarterly	. The Krumovitsa River, about 200 m downstream of the North Collection Sump of the IMWF
9	ESW 09	215	E 386952 N 4592512	SW	as provided in Table 4-1-2	Quarterly	. The Krumovitsa, about 100m upstream of discharge of untreated sewage from Krumovgrad Reference levels for point ESW 10. Indicates the water quality before discharge of untreated sewage
10	ESW 10	215	E 386822 N 4592681	SW	as provided in Table 4-1-2	Quarterly	. Krumovitsa River, approximately 100m upstream of the discharge point The purpose is to assess the impact of untreated sewage discharge from Krumovgrad on the surface waters.
11	EGW 01	n/a	E 388187.46	GW	Water level	Monthly	A borehole. The monitoring point is located NE of the site and covers the fissure-flow groundwater flowing

Table 4-1.1: Water Monitoring Points							
#	**Name**	**Elevation (m)**	**Coordinates (WGS84)**	**Type**	**Quality Indicators**	**Sampling Frequency**	**Location, Description and Purpose**
			N 4589517,6		as provided in Table 4-1-2	Quarterly	in the direction of the Krumovitsa from the entire SE sector of Ada Tepe. It is located in Eocene sandstones and conglomerates. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex
12	EGW 02	312	E 388103 N 4588506	GW	Water level	Monthly	A village well for irrigation. The point is a well, which is located E-NE of the open pit at the foot of the slope (in Chobanka hamlet), and covers groundwaters flowing in Palaeocene breccio-conglomerates and sandstones (Krumovgrad Group), draining to E-NE to the Krumovitsa. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex
					as provided in Table 4-1-2	Quarterly	
13	EGW 03	312	E 386986 N 4588201	GW	Water level	Monthly	An investigation borehole. The monitoring point is located in the metamorphic complex (metagranites and granite-gneiss) on the west slope of Ada Tepe and its purpose is to monitor groundwater flowing towards Kardzhikdere from the drainage area on the west slope of the deposit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex,
					as provided in Table 4-1-2	Quarterly	
14	EGW 04	229	E 387596 N 4586825	GW	Water level	Monthly	An investigation borehole. The monitoring point is set up in the metamorphic rocks slope descending to the Krumovitsa River terrace and covers groundwater flowing south below the mine waste facility. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.
					as provided in Table 4-1-2	Quarterly	
15	EGW 05	220	E 387957 N 4591016	GW	Water level	Monthly	Shaft well 2 - Krumovgrad drinking water abstraction, located in the in the alluvials of the Krumovitsa River. Identifies any negative changes in the quality of groundwater abstracted for domestic and potable needs. The purpose of monitoring is to indicate the water quality prior treatment in the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.
					as provided in Table 4-1-2	Quarterly	
16	EGW 06	218	E 387590 N 4590649	GW	as provided in Table 4-1-2	Quarterly	Shaft well 1 of Ovchari-Krumovgrad II drinking water abstraction constructed in the alluvials of the Krumovitsa River. It indicates any derogation of the quality of the groundwater for potable and domestic use. The purpose of monitoring is to indicate the water quality prior treatment in the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.
17	EGW 07	230	E 387521 N 4586750	GW	as provided in Table 4-1-2	Pursuant to the Water Abstraction Permit (quarterly as a minimum)	A tube well with infiltration lateral constructed in the alluvials of the Krumovitsa River. It indicates any derogation of the quality of the groundwater for potable and domestic use. The purpose of monitoring is to indicate the water quality of the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.
18	EGW 08	n/a	E 387367	GW	Water level	Monthly	A monitoring borehole (piezometer) high at Ada Tepe, a reference point upstream of the IMWF. It is set in a

Table 4-1.1: Water Monitoring Points							
#	**Name**	**Elevation (m)**	**Coordinates (WGS84)**	**Type**	**Quality Indicators**	**Sampling Frequency**	**Location, Description and Purpose**
			N 4587549		as provided in Table 4-1-2	Quarterly	metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater source is fissure-flow type, with draining direction towards Krumovitsa River. The point provides the background characteristics of groundwater which flows towards the IMWF.
19	EGW 09	n/a	E 388302 N 4587478	GW	Water level as provided in Table 4-1-2	Monthly Quarterly	Monitoring drill hole (piezometer), at the toe of the north Collection Sump before the Krumovitsa River. It is set in a metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater is fissure-flow type, draining in the direction of the Krumovitsa River. The purpose of monitoring is to indicate the quality of the groundwater that flows downstream of the IMWF.
20	EGW 10	n/a	E 388392 N 4587262	GW	Water level as provided in Table 4-1-2	Monthly Quarterly	Monitoring drill hole (piezometer), at the toe of the southern Collection Sump before the Krumovitsa River. It is set in a metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater is fissure-flow type, draining in the direction of the Krumovitsa River. The purpose of monitoring is to indicate the quality of the groundwater flow downstream of the IMWF.
21	EGW 11	325	E 385053 N 4589103	GW	as provided in Table 4-1-2	Quarterly	Zvanarka village water abstraction. The wells abstract waters from sources outside of the Krumovitsa gravels. They drain the flows in the Paleogene sediments. The purpose of monitoring is to indicate the drinking water quality.
22	EGW 12	220	E 389417 N 4589599	GW	as provided in Table 4-1-2	Quarterly	A shaft well of the pump station at Guliika village. It is constructed in the alluvial deposits of the Krumovitsa River. The purpose of monitoring is to indicate the drinking water quality.
23	EGW 13		E 387011 N 4588460	GW	as provided in Table 4-1-2	Quarterly	It is set up in the metamorphic rocks to the NW of the open pit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.
24	EGW 14		E 387874 N 4587860	GW	as provided in Table 4-1-2	Quarterly	The point is set up to the east of the ROM Pad. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.
25	EGW 15		E 387360 N 4588393	GW	as provided in Table 4-1-2	Quarterly	The monitoring point is set up to the west of the open pit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.
26	EGW 16		E 387355 N 4588170	GW	as provided in Table 4-1-2	Quarterly	The monitoring point is set up to the west of the open pit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.
27	EWW 02	n/a	E 253839.570 N 412836.999	WW	Quantity as indicated in Table 2-2.1. in the Waters Section, EMP	Continuous Every month (upon actual discharge)	At discharge of the Wastewater Treatment Plant (for mixed wastewater types). The purpose of monitoring is to indicate the quality of the treated effluent before discharge to the Krumovitsa River (as needed).

Table 4-1.2: Surface and groundwater testing parameters		
Monitoring Point (MP)	Assays	**Frequency**
All groundwater points (ESW 01 то 10)	Cu, As, Fe, Mn, Zn, Al, dissolved oxygen, pH, electrical conductivity, N-NH4, N-NO2, N-NO3, total N, P-ortho-PO4, total P, BOD5, Cr (VI), Cr(III), petroleum products, Ni, SO4, Ca, Mg, Cd, Cl, calcium carbonate hardness, Pb, Co, cyanides (free), cyanides (total), chromium (total)*, COD*.	Quarterly by an accredited laboratory
ESW 08, 09, 10 – surface waters	Apart from the envisaged physical and chemical profile listed above, the monitoring should also cover the following the biological elements for quality: Macrozoobenthos-based biotic index (*Methods for Monitoring of Macrozoobenthos in Rivers as a Biological Element (Biotic and Trophic Index*)) and IPS index for phytobenthos – diatom algae (*Methods for Monitoring of Phytobenthos in Rivers as a Biological Element (IPS Index)*) – *Order #РД-412/15.06.2012 of the Minister of Environment and Waters*.	Once per annum
All groundwater points (EGW 01 to 16)	As per *Appendix 1 of Regulation 1/10.10.2007 on Groundwater Exploration, Use and Protection.*	Quarterly by an accredited laboratory
EGW 7 (Fresh water abstraction well supplying the mine site) after treatment (chlorination)	Pursuant to *Regulation 9 on Drinking Water Quality** Amended and supplemented SG 43/ 16.05.2023 of Regulation 9/ 16.03.2001 on Drinking Water Quality	Four times per annum, covering the parameters indicated in *Regulation 9*; Abstracted water volume

Surface and groundwater samples were taken in January, May, July and November 2024, in line with the adopted Monitoring Plan. Samples were taken from all the monitoring points provided that they were wet. Appendix 2 presents maps of surface and groundwater monitoring points sampled for quality analysis in 2024. These points were selected to ensure collection of sufficient data for the proper monitoring of background water quality in the Ada Tepe minesite area and along the Krumovitsa River and its tributaries. Sampling and testing certificates are presented in Appendix 3 (digital copy). Static water levels were also measured and indicated.

The tests were conducted for water-soluble forms of the elements, as indicated in the test certificate issued by an accredited laboratory. The samples were tested in compliance with the laboratory's accreditation for water sample testing.

BQE monitoring: phytobenthos (IPS) and macrozoobenthos (BI) - twice in 2024:

- Period 1 - May;
- Period 2 - when the river was low, but not dry yet, e.g. in early July.

4. MONITORING DURATION AND FREQUENCY

Four sampling campaigns were conducted by an accredited laboratory in 2024 and the water assays for each monitoring point are shown in Table 4-1.2. The monitoring points that were dry at the time of sampling were marked as ‘dry’ in the sampling log. All current test results on water quality were reviewed against the regulated limits and are provided in addition in Appendix 3 (in digital format) for better clarity.

Surface water test results were compared to the values provisioned in *Regulation № H-4/ 14.09.2012 for Surface Water Characterization* (SG 67 /04.08.2023) and the *Regulation on*

Environmental Quality Standards for Priority Substances and Some Other Pollutants. (amended and supplemented in SG 97/11.12.2015).

Results from groundwater tests were reviewed against the groundwater quality standards under *Regulation № 1/10.10.2007 on Groundwater Exploration, Use and Protection*. Appendix 3 shows test results for surface and groundwater monitoring points.

5. TERMS OF USE OF THE MONITORING SYSTEM

The terms of use of the monitoring system are related to the operating cycle of the mine. The open pit and crusher operations are based on two 8-hour shifts a day, 7 days a week. The processing of crushed ore is a continuous operation based on three 8-hour shifts a day, 7 days a week.

The internal monitoring will go in parallel with the mine operations for the entire period from the approval date of the monitoring plan through mine operation and closure.

6. MONITORING DATA ANALYSIS AND REPORTING FORMAT

- The Company submits the internal monitoring results to the Director of the East Aegean Catchment Area Directorate by March 31 in compliance with art. 174 of the Waters Act, and to the Regional Environment and Waters Inspectorate within the deadlines specified in the respective permits issued under the Waters Act;
- Details of the internal monitoring system including the description of the Internal Monitoring Plan (locations, parameters and sampling frequency) and the monitoring results are published on the Company website (in Bulgarian and English).
- One per annum - a Report (in Bulgarian and English) is submitted to the MoEW every year by March 31. Following receipt, the MoEW forwards an English version of the Report to the Greek Ministry of Environment, Energy and Climate Change. Water Quality Monitoring Plan results are presented in this report. The report includes a full description of the points from which samples are taken (location, etc.), tested parameters, analytical methods and comparison of these data against the emission limit values.

The analysis of water monitoring data includes a comparison of the water sample assays against the standards for surface, waste and groundwater quality, which are regulated by the by-laws to the Waters Act, and the permit limits under the current water use/discharge permits.

7. CRITERIA FOR TIMELY NOTIFICATION

The criteria for timely notification are:

- upon scheduled shutdowns of the wastewater treatment facility;
- upon emergency shutdowns of the wastewater treatment facility;
- upon unavoidable discharge of wastewaters in an emergency without prior treatment;
- in an emergency leading to unavoidable pollution of surface and ground waters.

If one or more of the above emergencies endangering surface and groundwater quality occurs, notifications and details about the emergency response must be sent to:

- the East Aegean Catchment Area Directorate,
- the Haskovo REWI,
- the Kardzhali Regional Health Inspectorate;
- Krumovgrad Municipality;
- the Kardzhali District Governor;
- other authorities, as indicated in the Site Emergency Response Plans drafted in line with the provisions of art 35 of the Disaster Protection Act.

8. FUNCTIONAL LINES FOR PROVISION OF MONITORING INFORMATION

Water monitoring data is kept in DPMK's Environmental Protection Department, covering: records (sampling and assay results), database of assay results, info maps.

Annual Monitoring Reports are prepared for each calendar year Copies of the annual monitoring reports are available in Bulgarian and in English on the corporate website at

https://www.dundeeprecious.com/English/Operating-Regions/Current-Operations/Ada-Tepe/Documents/default.aspx

9. OTHER REQUIREMENTS REGARDING THE CONTENTS OF THE PLAN

To date, there are no other requirements except those already outlined.

10. Results from the implementation of the MONITORING PLAN

Water sampling and assays were performed by the Eurotest Control accredited laboratory four times in January, May, July and November 2024. Samples were taken from surface waters from the Krumovitsa River and its tributaries, as well as from groundwaters, including drinking water abstractions post-treatment. The accumulation of data on water quality and quantity will enable a more precise impact assessment of the mining and processing operations in the future.

Assay results including a spreadsheet for all monitoring locations are are presented in Appendix 3.

Surface Water

The water quality of the Krumovitsa River and its tributaries was tested at 10 points in 2024. Surface waters were tested in all four quarters of the year under the parameters set out in Table 4-1.2 of this Report.

According to Regulation № H-4, the river water status falls within four river categories - mountain rivers (R1, R2, R3), semi-mountain rivers (R4, R5) + conditional spring-type rivers(R15), plain rivers (R7, R8, R12, R13), intermittent and Black sea type of rivers (R9, R10, R11, R14). The Krumovitsa River and its tributaries belong to the intermittent type, code R14a, R14b, R14c. The environmental assessment of any water body (provided that there are at least 4 assays per year – one for each season) is based on the **average annual values (AAV)**. **Maximum allowable concentrations (MAC)** are taken into consideration when a monitoring point is sampled less than 4 times.

The observations at the surface water monitoring locations are as follows:

- MP #1 (ESW 01 – Krumovitsa River, first section (the point of confluence of Krumovitsa, Egrechka and Kessibirdere) This point is situated 200m south from the minesite and indicates background levels. It indicates the water quality of the waters of the Upper Krumovitsa upstream of the mine site but close to its the southern part.

Four water samples were assayed in the reporting year. Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation).

Copper concentrations were above the established threshold (AAV-EQS).

Cadmium levels were also elevated compared to the AAV-EQS set out in the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Assay certificates are provided in Appendix 3.

- MP #2 (ESW 02) – Krumovitsa River upstream of Krumovgrad. It indicates water quality upstream of Krumovgrad. The MP is located downstream of the minesite and is indicative of water quality along the Krumovitsa River.

Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation).

Test results were compliant with the MAC under the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

The MP has been selected to monitor surface water quality in Upper Krumovitsa, upstream of Krumovgrad, and was included in the Water Monitoring Plan drafted in 2019. Sample taking was carried out twice in 2024. The MP was dry in July and November 2024 and hence no third and fourth sample was taken (records attached in Appendix 3).

- MP #3 (ESW 03) – Kessibirdere, upstream of confluence with Egrechka River.

The location of this MP is 600 m to the east of Sinap village. It collects data on any background pollution in Kessebirdere's water catchment area, upstream of the minesite.

Four water samples were assayed in the reporting year. Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). Copper concentrations were above the established threshold (AAV-EQS).

Cadmium levels were also elevated compared to the AAV-EQS set out in the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants .

Assay certificates are provided in Appendix 3.

- MP #4 (ESW 04 – Egrechka River – upstream the confluence with Kessebirdere

The location of this MP is 500 m to the south, upstream the Process Plant. Its purpose is to gather data он any pollution in the water catchment area of the Egrechka River. This is another background monitoring point, since it is located upstream the mine site.

Four water samples were assayed in the reporting year. Results for physical and chemical indicators show predominantly excellent quality of the water body, as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation. Copper concentrations were above the established threshold (AAV-EQS).

Cadmium levels were also elevated compared to the AAV-EQS set out in the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants .

Assay certificates are provided in Appendix 3.

- MP #5 (ESW 05) – Buyukdere, upstream of confluence with Krumovitsa River.

The purpose of this point is to gather data about any pollution generated by the hamlets in the watershed and ultimately reporting to the Krumovitsa River. Buyukdere is a right-bank tributary of the Krumovitsa River, and its confluence is downstream of the minesite. Only one sample was taken in 2024 since the MP was dry in May, July and November. Assay results indicate no levels above the MAC limits set out in Regulation № H-4 /14.09.2012 and the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants. The quality of the water body is assessed as predominantly excellent based on the quoted physical and chemical indicators.

Assay certificates are provided in Appendix 3.

- MP #6 (ESW 06) – Kaldzhikdere upstream of the bridge at Pobeda hamlet of Ovchari village.

It indicates the water quality in the upper portion of the gully upstream of the intersection with the site access road and the site itself.

Two water samples were assayed in the reporting period. The MP could not be sampled in the summer and winter season since it was dry.

Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). No elevated levels were established as per the MAC in Regulation H-4/14.9.2012 and the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Assay certificates are provided in Appendix 3.

- MP #7 (ESW 07) – Kaldzhikdere upstream of confluence with Krumovitsa

This MP is located N-NW, 300 m from the point of confluence of Kaldzhikdere and the Krumovitsa River. The waters in this gully are directly associated with the runoff from the Ada Tepe hill. The purpose of this point is to gather data on waters generated by the mine site and residential areas in the watershed that ultimately report to the Krumovitsa River.

The MP was sampled twice during the reporting period, a third and fourth sample were not taken since it was dry.

Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). No elevated levels were established as per the MAC in Regulation H-4/14.9.2012 and the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Assay certificates are provided in Appendix 3.

- MP #8 (ESW 08) – Krumovitsa River, downstream of the IMWF's North Sump and ESW01.

The MP was sampled twice during the reporting period, a third and fourth sample were not taken since it was dry.

Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). No elevated levels were established as per the MAC in Regulation H-4/14.9.2012 and the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Assay certificates are provided in Appendix 3.

- MP #9 (ESW 09) – Krumovitsa River, upstream of the wastewater discharge point.

The location of this MP is approximately 100m upstream of the discharge point. ESW 09 provides the reference levels for ESW 10. It indicates the quality of the Krumovitsa waters upstream of the discharge point of the site wastewater treatment facility.

The MP was sampled 4 times in 2024. Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). Aluminum and copper levels were, however, elevated (compared to the established AAV - EQS).

The assays were compliant with the AAV-EQS under the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Assay certificates are provided in Appendix 3.

- MP #10 (ESW 10) – Krumovitsa River, downstream of the minesite wastewater discharge point.

This MP is located about 100m downstream of the wastewater discharge point. The purpose of monitoring is to assess the impact of any treated water discharge on the river water quality. The point was sampled 4 times during the reporting period.

Results for physical and chemical indicators show predominantly excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation). Manganese and copper levels were, however, elevated (compared to the established AAV - EQS).

The assays were compliant with the MAC under the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants.

Analysis of BQE monitoring data for phytobenthos (IPS) and macrozoobenthos (BI) was done twice in 2024 in 5 internal monitoring points, when the river was low (ESW00, ESW01, ESW08, ESW09 и ESW10). Results are presented in Appendix 5.

Groundwater

The monitoring at these points enables the company to track changes in static water levels and chemical composition of groundwaters. This allows collection of data, which can be used for comparison and assessment of possible indirect impacts of the mine operations on the groundwaters.

Groundwater sampling was conducted in line with the monitoring schedule.

Data on static groundwater levels continued to be collected in 2024 (see Appendix 3). The monitoring at these points enables the company to track the dynamics of the static water levels and the chemical composition of groundwaters. This allows collection of data, which can be used for comparison and assessment of possible indirect impacts of the mine operations on the groundwaters. The static groundwater levels variances are dictated by the recharge conditions and seasonal climatic conditions. The analysis shows no direct correlation between the water levels measured by various piesometers. However, all of them are directly dependent on recharge from precipitation.

The following groundwater monitoring points were sampled and assayed:

- Borehole MP #11 (EGW 01) – Newly set up in end 2019.

It is located NE of the minesite and covers fissured groundwaters draining towards the

Krumovitsa River from Ada Tepe's NE slope. It is in Eocene sandstones and conglomerates. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.

2024 water sample assays show certain deviations for the following indicators: One for sodium, four for ammonia ion, one for iron, two for arsenic and four for manganese as per Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Well MP 12 (EGW 02).

Located E-NE of the open pit at the foot of the slope (in Chobanka hamlet), and covers groundwaters flowing in Palaeocene breccio-conglomerates and sandstones (Krumovgrad Group), draining E-NE to the Krumovitsa River. It was set up to monitor the water quality of aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwaters, Krumovgrad-Kirkovo Zone.

In 2024 there was only one slight deviation of arsenic levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole MP #13 (EGW 03) – Newly set up in end 2019.

Located in the metamorphic complex (metagranites and granite-gneiss) on the west slope of Ada Tepe and its purpose is to monitor groundwater flowing towards Kardzhikdere from the drainage area on the west slope of the deposit. It was set up to monitor the water quality of aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwater, Krumovgrad-Kirkovo Zone.

The following elements displayed elevated groundwater levels in 2024 - manganese (twice), arsenic (once) and sulphate ions (twice), as per the limits set out in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole MP #14 (EGW 04) – Newly set up in end 2019.

Set up in the metamorphic rocks of the slope descending to the Krumovitsa River terrace. Covers groundwater flowing south, downstream of the IMWF. It was set up to monitor the water quality of aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwater, Krumovgrad-Kirkovo Zone.

In 2024 there was only one slight deviation of arsenic levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Pump Station MP 15 (EGW 05) for drinking and domestic water supply of the town of Krumovgrad.

Located in the alluvial sediments of the Krumovitsa River. It indicates any derogation of the quality of the groundwater for potable and domestic use prior to treatment. The purpose of monitoring is to indicate the water quality of the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.

Lab assays in 2024 showed no elevated levels as per the limits set out in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Pump Station MP 16 (EGW 06) for drinking and domestic water supply “Ovchari” - Krumovgrad– II

Located in the alluvial sediments of the Krumovitsa River. It indicates any derogation of the quality of the groundwater for potable and domestic use prior to treatment. The purpose of monitoring is to indicate the water quality of the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.

In 2024 there was only one slight deviation of arsenic levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Well MP 17 (EGW 07) for minesite water supply

Located in the alluvial sediments of the Krumovitsa River. It indicates any derogation of the quality of the groundwater for potable and domestic use prior to treatment. The purpose of monitoring is to indicate the water quality of the Quaternary aquifer of BG3G000000Q010 Interstitial Groundwaters in the Arda River Quaternary Deposits.

In 2024 there was only one deviation of arsenic and iron levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

A water supply system with a chlorination system and a UV sterilizer was commissioned in 2019.

The indicators assayed downstream of the chlorination system and UV sterilizer (4 times in 2024) do not exceed the quality standards as per Regulation 9/16.03.2001, amended and supplemented in SG 43/16.05.2023.

Note: Tap water is not used for drinking purposes onsite Company premises. The Company provides bottled water instead.

- Borehole #18 (EGW 08) – newly set up in end 2019.

Located in the Ada Tepe area, at a high altitude. This is a reference point upstream the IMWF. It is set in a metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater is fissure-flow type, draining in the direction of the Krumovitsa River. The purpose of monitoring is to indicate the background levels in the groundwater flowing towards the IMWF.

The four samples taken in 2024 showed elevated manganese levels, as well as one-off elevation of iron, as per Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole #19 (EGW 09) – newly set up in end 2019.

It is located at the toe of the IMWF North Valley between the North Sump and the Krumovitsa River. It is set in a metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater is fissure-flow type, draining in the direction of the Krumovitsa River. The purpose of this MP is to monitor groundwater quality downstream of the IMWF.

In 2024 elevated levels were established for calcium, manganese, sulphate ions and total hardness, as per Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole #20 (EGW 10) – newly set up in end 2019.

It is located at the toe of the IMWF South Valley between the South Sump and the Krumovitsa River. It is set in a metamorphic complex – metagranites and gneisses with rare interfingering with schists. The groundwater is fissure-flow type, draining in the direction of the Krumovitsa River. The purpose of this MP is to monitor groundwater quality downstream

of the IMWF.

Assays showed compliance with the quality standards under Regulation 1/2010 on Groundwater Exploration, Use and Protection, except those for manganese and a single elevated concentration of iron.

- Pump station MP 21 (EGW 11) for drinking and domestic water supply of the village of Zvanarka.

The wells abstract waters from sources outside of the Krumovitsa gravels. They drain the flows in the Paleogene sediments. The purpose of this monitoring point is to indicate the quality of the water for potable and domestic use prior to treatment.

Assays of samples taken from the pump station in 2024 confirm compliance with the provisions of Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Pump Station MP 22 (EGW 12) for drinking and domestic water supply of Guliika village.

Set up in the alluvial deposits of the Krumovitsa River. . The purpose of this monitoring point is to indicate the quality of the water for potable and domestic use prior to treatment.

In 2024 there was only one slight deviation of arsenic levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole #23 (EGW 13) – newly set up in end 2019.

Located in metamorphic rocks to the NW of the open pit. It was set up to monitor the water quality of aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwater, Krumovgrad - Kirkovo Zone.

Assays confirmed compliance with the quality standards set out in Regulation 1/2010 on Groundwater Exploration, Use and Protection, except for one single slightly elevated arsenic concentration in the Q1 sample and three elevated concentrations of manganese in 2024.

- Borehole #24 (EGW 14) – newly set up in end 2019.

Located east of the ROM Pad. It was set up to monitor the water quality of aquifer identified as BG3G000PtPg049 – Fissure-Flow Groundwater, Krumovgrad - Kirkovo Zone.

In 2024 only manganese concentrations were above the threshold set out in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole #25 (EGW 15) – newly set up in end 2019.

Located west of the open pit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.

In 2024 there was only one deviation of arsenic levels in the first quarter of the year from those stipulated in Regulation 1/2010 on Groundwater Exploration, Use and Protection.

- Borehole #26 (EGW 16) – newly set up in end 2019.

Located west of the open pit. The purpose of monitoring is to indicate the water quality of BG3G000PtPg049 – Fissure-Flow Groundwater, East Rohodope complex.

In 2024 there were two deviations of manganese levels and one of arsenic, as per Regulation 1/2010 on Groundwater Exploration, Use and Protection.

Wastewater

- Wastewater Treatment Plant MP 27 (EWW 02) for the discharge of mixed wastewater.

Monitoring concerns the quantity and quality of treated wastewater prior to discharge into the Krumovitsa River.

No treated wastewater has been discharged into the Krumovitsa River in 2024. The Company has not been subject of any environmental sanctions or found non-compliant under the terms of issued Permits.

11. ASSESSMENT OF THE EFFICIENCY OF THE MONITORING NETWORK IN 2024

The current site monitoring design proves to be a good tool for characterisation of the surface waters and groundwaters in the area of the Ada Tepe deposit and gives a good indication of any potential changes in the hydrodynamic and hydro chemical conditions.

The review of the monitoring data brings the following conclusions about the efficiency of the monitoring system in 2024:

- The location of the listed monitoring points enables the assessment of waters' condition and potential impacts from the Krumovgrad operations.
- In addition, the physico-chemical parameters for surface water, the following BQEs are also monitored at ESW00, ESW 01, ESW 08, ESW 09 and ESW 10: Macrozoobenthos-based biotic index (Methods for Monitoring of Macrozoobenthos in Rivers as a Biological Element (Biotic and Trophic Index)) and IPS index for phytobenthos – diatom algae (Methods for Monitoring of Phytobenthos in Rivers as a Biological Element (IPS Index)). 2024 results are presented in Appendix 5 to this Report;
- Data on static water levels is collected on a quarterly basis.

For example: After establishing elevated levels of petroleum products in the newly set up groundwater piesometers and conducted source analysis by a hydrologist in 2020, the Company developed measures and took steps to double clean the piesometers with dedicated equipment. Cleaning campaign results indicated that the petroleum product levels dropped significantly and confirmed that the method was successful. This was also confirmed by 2021-2024 results showing that after establishing elevated levels and organizing a follow-up cleaning campaign of petroleum products with dedicated equipment, these levels have gone down and are now within the thresholds set out in *Regulation 1/2010 on Groundwater Exploration, Use and Protection.*

12. CONCLUSION

After summarizing 2024 analyses and comparing them against the allowable values of indicators stipulated in *Regulation No H-4/ 14.09.2012 on Surface Water Characterization,* the Regulation on Environmental Quality Standards for Priority Substances and Some Other Pollutants and Regulation 1/2010 on Groundwater Exploration, Use and Protection, we can draw the following conclusions:

Surface waters:

Surface water physical and chemical indicators monitored and reported herein correspond to an excellent quality for intermittent river types, such as the Krumovitsa River (as per Regulation H-4/ 14.09.2012 on Surface Water Characterisation).

Elevated copper and cadmium levels, as per the AAV-EQS set out in REGULATION H-4/ 14.09.2012 on Surface Water Characterisation and the Regulation for Environmental Quality Standards for Priority Substances and Some Other Pollutants were observed in monitoring points ESW01, ESW03 and ESW04. These higher values of the indicators could be considered as background levels. They are not affected by minesite operations, since the monitoring points along the Egrechka and Kessibirdere Rivers are upstream of the minesite;

Monitoring point ESW07 (Kaldzhikdere - upstream of the point of confluence with Krumovitsa River) is to the north of the Ada Tepe minesite. No elevated concentrations have been established there compared to the MAC-EQS listed in the quoted Regulations.

No elevated concentrations as per the MAC-EQS listed in the quoted Regulations have been observed in monitoring points ESW08 and ESW02 downstream of the minesite, along the Krumovitsa River, up to MP ESW09. This proves that the Ada Tepe mine has no negative impact on the quality of Krumovitsa's waters.

Elevated copper and aluminum concentrations were recorded in ESW09, and in ESW10 - of copper and manganese respectively. These monitoring points are located away from the open pit and downstream of Krumovgrad's main sewerage collector. Since DPMK has not discharged any wastewater since 2021, these elevated concentrations cannot be attributed to minesite operations.

In 2022 Dundee Precious Metals Krumovgrad EAD voluntarily initiated a survey to establish any sources of pollution along , the upper stream of the Krumovitsa River, upstream DPM's minesite. The Company assigned the survey to a team of experts and the survey itself was titled "Identifying the source of established elevated levels of certain elements (aluminum, manganese and iron) in surface waters in Upper Krumovitsa".

The survey was a snapshot of the environmental quality in an area with specific characteristics, affected by past anthropogenic impacts from historic mining operations. Historic minesites (at the villages of Gorno Kameniane and Avren) established during the survey are probably not the only sources of elevated metal concentrations identified by the Company's internal monitoring of the Avrenska River (Krumovitsa) and its tributaries (Egrechka, Kessebirdere, Kaldzhikdere and Buyukdere). At the same time, there are certain natural factors (serpentine areas) that might lead to higher concentrations of these elements and changes in the biological parameters. (Appendix 4)

Dundee Precious Metals Krumovgrad EAD cannot and should not be held responsible for historic minesites operated in the past by other legal persons.

DPMK has set up an industrial wastewater treatment plant applying the reverse osmosis method. Treated industrial wastewater is discharged only in extreme weather events and continuous rainfall. No treated industrial wastewater was discharged into the environment in 2024. Onsite generated sewage is treated in a second domestic effluent treatment plant. Treated effluent then reports back to the mining operation and is re-used, i.e. there is no discharge into the environment.

BQE monitoring data for phytobenthos (IPS) and macrozoobenthos (BI) was analyzed twice in 2024 - in May by the Environmental Executive Agency, Smolyan Regional Lab and in August by the Plovdiv Institute of Fisheries and Aquatic Sciences.

The Plovdiv Institute of Fisheries and Aquatic Sciences has prepared a Report on the "Sampling and determining the biotic and IPS index for phytobenthos in 5 internal monitoring points of the Krumovitsa River (low waters)".

Internal monitoring and ecological status assessment in the surveyed monitoring points within the Krumovitsa watershed established no significant impact on river water quality from DPMK's mining operations.

Data is presented in Appendix 5.

Groundwater, as follows:

▪ A total of 16 monitoring boreholes, which are described in the approved Site Water Monitoring Plan, have been set up in the Ada Tepe area to assess the chemical status of the groundwaters there. All non-dry monitoring points were monitored in 2024.

▪ Groundwater quality in these monitoring locations is associated with their specific mineralogy. As evident from the information in this Report, elevated concentrations established with certain metals might be the combined result of the local mineralogy of the different rock layers. Elevated concentrations were most frequently established for iron (Fe), Manganese (Mn) and arsenic (As);

▪ Continuous long-term monitoring of local groundwaters both before and after the minesite's commissioning has shown elevated concentrations of iron (Fe), aluminum (Al), manganese (Mg) ion and less often of arsenic (As) in different monitoring points, which is related to the background characteristics of the groundwater flow;

▪ The levels of certain elements such as Fe, Mn and As are expected to be naturally higher due to the fissure-flow type of the local groundwaters, and the infilling of fractures in the upper part of the metamorphic complex is naturally dominated by manganese and iron hydroxides. Elevated arsenic concentrations can be attributed to the pyritization of carbon lenses in local Palaeogene sediments and subsequent oxidation processes that may elevate pyrite associated micro-elements;

▪ Elevated sodium and ammonium levels in EGW01 are due to the fact that the monitoring point is located in close proximity to farmland. Elevated levels are explained by the use of mineral fertilizers.

▪ Collected data on local geochemistry and its relatedness to the chemical composition of local groundwaters confirms current conclusions that certain groundwater elements have higher concentrations due to local rock mineralogy. The official statement of the conducted research is attached to this document (Appendix 4);

▪ No elevated concentrations were recorded in water used for domestic purposes, as per *Regulation 9 /16.03.2001 on Drinking and Household Water Quality;*

▪ These conclusions confirm that DPMK operations have no negative impact on the groundwater quality.

Wastewaters, as follows:

No treated wastewater has been discharged into the Krumovitsa River in 2024.