



Za Zemiata
Friends of the Earth Bulgaria



To: Ms Antoaneta Rizova-Kalapish
Legal and Policy Officer,
Directorate-General for the Environment
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From:
Greenpeace Bulgaria
Environmental Association Za Zemiata
ClientEarth

Regarding: Additional information on Bulgaria's systemic and persistent violation of the limit values for SO₂ and case C-730/19 CJEU (Commission v. Bulgaria)

Dear Ms Rizova-Kalapish,

We would like to inform you of several regulatory failures which contribute to the SO₂ pollution in the regions of Galabovo and Pernik, Bulgaria, and could be the reason for continuing violations of the limit values in the future. We hope this information would be of use for the Commission's position in the case C-730/19 CJEU or for separate actions aimed to secure Bulgaria's compliance with Directive 2008/50/EC and Directive 2010/75/EU.

1. Increased number of exceedances of the limit values in 2019 and 2020

Bulgaria's position in case C-730/19 CJEU of 13 January 2020 provides air quality data only until 2018. Since then, the exceedances in both Galabovo (zone BG0006) and Pernik (BG0005) continue.

- Despite the temporary compliance that was achieved in **Pernik** in 2017, the hourly limit value was violated for three consecutive years after that. In 2018, the hourly limit value in station Pernik Centre was exceeded 11 times, and in 2019, it was exceeded 9 times (Annex No. 1). For the first three quarters of 2020, 19 exceedances of the hourly limit value were registered and the alarm threshold was violated once. Although case C-730/19 does not include violations in Pernik zone BG0005, this data demonstrates Bulgaria's failure to comply with SO₂ limits not only in the Galabovo region.
- In **Galabovo**, the daily and hourly limit values have been consistently exceeded after 2017 as well. In 2018, 72 exceedances of the hourly limit value were recorded and, in 2019 - 95. In 2018, 7 exceedances of the daily limit value were recorded, and in 2019 -10. In 2019, the alarm threshold was violated three times. For the first three quarters of 2020, the alarm threshold was

violated twice. Modelling performed for the purposes of the Air Quality Plan of Galabovo Municipality for the period 2019 – 2023 (AQP Galabovo 2019-2023) shows that the villages nearby the town of Galabovo are exposed to even higher levels of SO₂ than the ones recorded in the town of Galabovo.¹ The villages Goritsa, Madrets, Glavan and Pomoshtnik are exposed to hourly concentrations exceeding the alarm limit value of 500 µg/m³ and the maximum hourly concentration may reach 3432 µg/m³. The villages Glavan and Pomoshtnik may be exposed to daily concentrations exceeding the limit value of 125 µg/m³, with a maximum daily concentration of 581 µg/m³.

The above data shows that the measures adopted are not sufficient to curb emissions from industry and domestic heating. Bulgaria claims that the exceedance of the limit values for SO₂ in the Galabovo region is the result of placing four of the largest coal power plants of the country in that area. Bulgaria, however, is failing to apply the relevant air quality and industrial emissions legislation with respect to these installations, as seen from the arguments below.

2. The permits of the power plants violate the Air Quality Plan of Galabovo (2019 – 2023) and the industrial emissions legislation.

According to Directive 2008/50/EC, the air quality plans shall specify the measures to achieve the related limit values. When the deadline to achieve the limit value has already expired, as in the case of Galabovo, the air quality plans shall set out appropriate measures, so that the exceedance period can be kept as short as possible. The measures in the AQPs are mandatory and shall be complied with in order to keep pollution below the limit values.

The Air Quality Plan of Galabovo Municipality for the period 2019 – 2023 (AQP Galabovo 2019-2023) envisages two key measures to limit SO₂ emissions from industry:

- 1) all power plants in the region shall apply a desulphurisation rate of at least 98%, and
- 2) the boilers of all plants shall not be exploited without desulphurisation systems.²

Bulgarian authorities are already failing to apply both measures.

(i) Derogations from the BAT-AEL for SO₂ allow desulphurisation rates lower than 98%

All four power plants near Galabovo, namely TPP Maritsa East 2 EAD, TPP ContourGlobal Maritsa East 3 AD, AES Maritsa East 1 EOOD and TPP Brikel EAD, submitted applications for derogation from the emission levels associated with the Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU (BAT-AELs).

In January 2019, the largest power plant in Bulgaria, TPP Maritsa East 2 EAD (1602 MW e) was granted a permit to operate for an indefinite period of time applying a desulphurisation rate of 97% for 10 out of

¹ p. 174-179 AQP Galabovo 2019-2023; The AQP Galabovo 2019-2023 in Bulgarian is available here: http://galabovo.org/sites/default/files/PROGRAMA_%D0%9A%D0%90V_GALABOVO_2018_Ok_Final.pdf

² Measure No. Gl_Lt_Pr_t_4 and Measure No. Gl_Lt_Pr_t_5, p. 282 of AQP Galabovo 2019-2023.

its 12 boilers and a desulphurisation rate of 97,5% for two boilers only (Annex No. 2).³ According to the permit documentation, a desulphurisation rate of 97% equals 570 mg/Nm³. For comparison, the BAT-AEL for power plants using local lignite (BAT 21) is 320 mg/Nm³. The court of first instance upheld the derogation of TPP Maritsa East 2 EAD and ruled that national authorities are not obliged to observe the relevant AQP when issuing integrated permits (p. 21 of Annex No. 3).

In the end of 2020, the Executive Environmental Agency opened public consultations on the draft permits of AES Maritsa East 1 EOOD and TPP ContourGlobal Maritsa East 3 AD. The draft permit of AES Maritsa East 1 EOOD grants a derogation from BAT-AEL for an indefinite period and allows the installation to apply a desulphurisation rate of 97,5% (p. 6 and 7 of Annex No. 4). The draft permit of TPP ContourGlobal Maritsa East 3 AD stipulates even lower desulphurisation rate - 97% (p. 7 of Annex No. 5). The derogation decisions for these two plants are still to be issued.

So far, three of the largest power plants (3.1 GWe) contributing to the SO₂ pollution in Galabovo are allowed to operate for indefinite periods applying a desulphurisation rate that would compromise the attainment of the limit values for SO₂. The Bulgarian Government has publicly expressed willingness that derogations from the BAT-AELs will be granted to all power plants in the region, including Brikel EAD.⁴ Information on the emission levels requested by TPP Brikel EAD has not been announced yet.

(ii) The boilers of all plants are regularly exploited without desulphurisation systems.

According to the AQP Galabovo, the exceedance of SO₂ levels in Galabovo are often caused when the power plants operate without desulphurisation devices or with malfunctioning desulphurisation devices.

According to the annual reports of TPP Maritsa East 2 EAD, in the period 2014—2018, around 30% of the SO₂ emissions of the plant were emitted when the desulphurisation devices were off (Annex No. 6). The poor technical condition of TPP Brikel EAD often contributes to the air pollution in Galabovo. We have attached a couple of screenshots from media reports to illustrate the disorganised clouds of dust that come from the power plant both at times when it is operating in normal conditions and during a period of breakdown.

On 24 August 2019, citizens of Galabovo shared to media a picture of thick black smoke coming from the whole building of the plant and from the high stack of the plants, which is not equipped with desulphurisation devices. The screenshot from the [website of Free Europe](#) is attached as picture No. 1 to Annex No. 7.

A [report by the Bulgarian National Television](#) from 11 September 2019 illustrated the dust and fumes coming out of the building of the plant during its regular operations. A screenshot is attached as picture No. 2 to Annex No. 7.

³ Desulphurisation rate of 97% is applied to Boilers No. 1, 2, 3, 4, 5, 6, 7, 8, 11 and 12 and desulphurization rate of 97,5% for Boilers No. 9 and 10.

⁴ Transcript from a Session of the Council of Ministers where the Minister of Environment states that Bulgaria will use all the possibilities to receive a derogation, 10.01.2018
http://pris.government.bg/prin/document_view.aspx?DocumentID=3G3SlaqAwUzgOQCTS7Z2Ew==

Based on the above, it may be expected that the SO₂ limit values in the town of Galabovo will not be met by 2023, as envisaged in the AQP Galabovo 2019-2023, because a desulphurisation rate of 98% will not be set in the permits of all power plants and insufficient measures to limit the operation without desulphurisation devices are taken.

3. No short-term action plan

Despite the regular exceedances of the alert threshold for SO₂ (500 µg/m³), the town of Galabovo has not adopted a short-term action plan as required under Article 24 of Directive 2008/50/EC. The Mayor of Galabovo has adopted an Operational Action Plan to limit the damage on people's health upon exceedance of the alert threshold for SO₂ (Annex No. 8). This document contains only instructions on informing the population, but no measures to be taken in the short term in order to reduce the risk or duration of such an exceedance. Considering that the alarm threshold in the town of Galabovo is usually exceeded by the emissions of the nearby power plants, such a plan should contain measures to temporarily reduce the work of the installation causing the exceedance or on all installations in the region.

Lack of a plan under Article 24 of Directive 2008/50/EC prevents local authorities from taking timely measures to reduce emissions from industry upon a risk of pollution and is yet another failure that increases the risk of continuing violations of the limit values for SO₂.

Annexes:

- **Annex No. 1:** Air quality data for 2018-2020
- **Annex No. 2:** Decision No. 50- H 0- И 0- A 5/2018 of the Executive Environmental Agency
- **Annex No. 3:** Decision No. 358 of 28.08.2020 on court case No. 225/2019
- **Annex No. 4:** Draft decision for AES Maritsa East 1 EOOD, published on 10 November 2020
- **Annex No. 5:** Draft decision for TPP ContourGlobal Maritsa East 3 AD, published on 15 December 2020
- **Annex No. 6:** Maritsa East 2 emissions without abatement devices
- **Annex No. 7:** Screenshots from media publications
- **Annex No. 8:** Operational Action Plan of Galabovo to limit the damage on people's health upon exceedance of the alert threshold for SO₂

AQP Galabovo 2019-2023 in Bulgarian is available here:

http://galabovo.org/sites/default/files/PROGRAMA_%D0%9A%D0%90V_GALABOVO_2018_Ok_Final.pdf

Upon your request, we will be glad to provide more information and documents to support the statements in this letter.

Respectfully,

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