

To the attention of The International Commission for the Protection of the Elbe River (IKSE/MKOL) and the Water Directors for Austria, Czech Republic, Germany and Poland

Brussels 22/10/2021

Dear Ms. Heide Jekel, President of the IKSE Dear Dr. rer. nat. Slavomír Vosika, Head of the Secretariat, IKSE. Dear Dr. Stefanie Hedtkamp, Head of the German Delegation Dear Mr Lukáš Záruba, Head of the Czech Delegation and Water Director, The Czech Republic Dear Mr Thomas Stratenwerth, Water Director, Germany Dear Mr Guenter Liebel, Water Director, Austria Dear Mr Przemysław Gruszecki, Water Director, Poland

The European Environmental Bureau (EEB) welcomes the opportunity to provide its comments in relation to the draft RBMP<sup>1</sup> (A- level) for the River Elbe/Labe.

The EEB is the largest network of environmental citizens' organisations in Europe. It currently consists of over 160 member organisations in more than 35 countries (all EU Member States plus some accession and neighbouring countries), including a growing number of European networks, and represents about 30 million individual members and supporters.

In our last submission<sup>2</sup> to the significant water management issues document published by the IKSE, we highlighted four areas, largely related to Lignite mining and lignite power plants, where more could be done in achieving good status for the Water bodies in Elbe River basin.

- The continuation of lignite mining activities and the operation of thermal power plants should be recognised as a main bottleneck to the achievement of the good status of the Elbe River.
- Require competent authorities to set stricter requirements to enable compliance promotion with relevant environmental quality standards (EQS). This includes appropriate source control measures to prevent / reduce emissions and other pressures to water – like the usage of IED BREF limits.
- 3. Include measures to account for the external damage including environmental resource costs. A specific reference was made the lack of appropriate water tariffs for industrial water services like cooling water for coal power plants and the groundwater abstraction by lignite mines.

<sup>&</sup>lt;sup>1</sup>https://www.ikse-mkol.org/fileadmin/media/user\_upload/D/05\_EU-

 $Richtlinien/Wasserrahmenrichtlinie/IBPFGE\_Entwurf\_2021/IKSE\_IntBewiPlanElbe\_Entwurf\_210421.pdf$ 

<sup>&</sup>lt;sup>2</sup> https://eeb.org/library/input-to-swmi-public-consultation-elbe-river-basin-briefing/



4. Inadequate reporting on water use/abstraction (levels), discharge related information (pollutants/temperature). Require an EU centralized level with real time-access.

While we understand that the submissions provided by the public for the Significant water management issues document published by the IKSE in October 2019 have not been fully evaluated by the IKSE <sup>3</sup>at the time of the publishing of the Draft River Basin Management plan in April 2021 due to the situations arising from the Covid-19 Pandemic, we would urge you to fully evaluate our earlier submissions and this submission and reconsider the measures taken in the Draft RBMP before its finalisation.

After examining the draft River Basin Management plan published by the IKSE we find that the IKSE has acknowledged the following facts in its draft River Basin Management Plans.

- a. Acknowledged that over 92% of the Surface water bodies in the Elbe River basin are in ecologically poor status. While almost all surface water bodies are in poor chemical status if ubiquitous priority hazardous substances (uPBT) like Mercury are involved.<sup>4</sup>
- b. That 92% of the surface water bodies with poor ecological status and 90% of Surface water bodies with poor chemical status will be provided time exemptions and, in many cases, it may be required beyond 2027<sup>5</sup>.
- c. Reason for SWB exemptions:<sup>6</sup> The 'extensive' measures taken do not reduce all the loads and many measures require long time for suitable planning like hydromorphological measures in Germany while the Czech Republic estimates that hundreds of millions or even billions of Czech crowns are needed, which are technically demanding and long-term investments.
- d. That Mercury and brominated diphenyl ethers are two uPBT chemicals that contributed to the exceedance for EQS limits across many surface water bodies in Germany<sup>7</sup> while it's difficult to arrive at similar conclusions the same in Czech Republic because the Czech methodology does not consider EQS exceedances in Mercury and BDE in biota as a failure for all linked surface water bodies<sup>8</sup>.
- e. That 52% of Ground water bodies in the Elbe River basin are in poor chemical status while 7% are in poor quantitative status<sup>9</sup> and it's expected that 49% of groundwater bodies with poor chemical status are given exemptions beyond 2027.
- f. That most of the exemption that are being considered are time extensions with the possibility of a further extension beyond 2027 while the exemptions for less stringent

<sup>&</sup>lt;sup>3</sup> Section 9.2.2, page 126, Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>4</sup> Section 4.2, page 45 of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>5</sup> Table II 5.2.2-2 , page 93, Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>6</sup> page 98, Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>7</sup> page 99, paragraph 5, Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>8</sup> Section 5.2.3, page 98, paragraph 3 of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>9</sup> Table II-4.4-2, page 64, of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe



environmental goals were only provided for less than 5% in Germany and 1% in the Czech Republic.<sup>10</sup>

- g. Reason for Ground Waterbody exemptions in Germany are largely due to natural conditions or technical in-feasibilities while in the Czech Republic, technical infeasibilities as well as high cost over a long time.<sup>11</sup>
- h. The less stringent environmental standards exemption was also invoked in the Czech Republic as a general measure to tackle extensive anthropogenic activity.<sup>12</sup>
- i. Lignite mining in Germany and The Czech Republic does contribute to challenges in groundwater quantitative and qualitative status and pollution.<sup>13</sup>
- j. That the cost recovery for water services only covers public water supply, even though the average share of public water supply is only 20%<sup>14</sup> of the total water used.
- k. The water used by the Energy sector is about 56%<sup>15</sup> of the total share and yet there is no cost for this water use, environmental costs or damage costs that is levied on these users.

Before we go into the details of our submissions, we also would like to refer to the Convention of the International commission for the Protection of the Elbe<sup>16</sup> to highlight the fundamental responsibilities and duties of the IKSE from the legal document signed by the parties to the convention on the 8<sup>th</sup> October 1990.

From article 1: enforcing the contracting parties to cooperate in the following endeavours of the IKSE:

*Article 1 (b) : To achieve as natural an ecosystem as possible with a healthy diversity of species Article 1 (c): To reduce substantially the pollution of the North Sea from the Elbe area.* 

And specifically, the duties of the Commission (IKSE)

Article 1(a): Prepare surveys showing the major point sources of discharges of harmful materials, estimate water pollution from diffuse sources and extrapolate both of these. Article 2 (b) : to propose limit values for the discharge of the effluent. and

<sup>&</sup>lt;sup>10</sup> section 5.2.3, Table II-5.2.3-2, page 101 of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>11</sup> Section 5.2.3, page 102, paragraph 3 of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>12</sup> Section 5.2.3, Page 103, paragraph1 of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>13</sup> Section 6.1.1, page 116, Paragraph 2, of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>14</sup> Interpretation from Tables II-6.1-3 and Table II-6.1.1-1, page 109 and 111 respectively of the Internationaler Bewirtschaftungsplan Für Die Flussgebietseinheit Elbe

<sup>&</sup>lt;sup>15</sup> same as footnote 11

<sup>&</sup>lt;sup>16</sup> https://www.ikse-mkol.org/fileadmin/media//user\_upload/E/02\_ICPER/Convention%20on%20the%20ICPER.pdf



Article 2(f): To Propose **specific action for the reduction** of discharges of **harmful materials** from **the point sources** of both local authorities and industry and from **diffuse sources** and further measures including timetables and a cost assessment.

Having stated this, we find the above list of acknowledgements from the IKSE quite shocking for the following reasons:

- 1. The IKSE has failed to improve the conditions of a large number of water bodies in the Elbe River basin
- 2. The IKSE tends to agree with the national authorities in allowing exemptions from achieving good chemical, ecological and quantitative status of water bodies in the Elbe and
- 3. The IKSE has not proposed any new or taken strict measures including specific legal action or a proposal for a stricter emission limit which could reduce the impacts of uPBT pollutants from entering the Elbe River basin, specifically in the case of Mercury, it just provides an update of the inventory of the situation at hand
- 4. And lastly, the IKSE, with the present status of the Draft RBMP is not in line with the objectives of the Water Framework Directive, which mandates the achievement of good status for water bodies by 2027.

Our submission henceforth:

- 1. Lignite mining in the Elbe River is blocking the achievement of the good status of water bodies:
- In our previous submission we highlighted the bad chemical status of water bodies in the areas under present or past lignite mines, a fact that FGG ELBE had already identified, and that less stringent environmental objectives were already set for 11 surface water bodies in for mining activities. These exemptions were provided in 2016. Other than these, the groundwater bodies SP 2-1 (Niesky), SP 3-1 (Lohsa-Nochten), SE 1-1 (Hoyerswerda), SE 4-1 (Schwarze Elster), HAV-MS-2 (Mittlere Spree), SAL GW 059 (Weißelsterbecken mit Bergbaueinfluss) and SAL GW 051 (Zeitz-Weißenfelser Platte), VM 1-1 (Lober-Leine) and VM 2-2 (Strengbach) which were all affected by the lignite mining were already provided exemptions under less stringent environmental objectives under Article 4(5) of the Water Framework Directive.
- Likewise in the Czech Republic has applied exemptions for sulphates, which are usually
  related to open pit lignite mining. The map below was plotted with the WISE data reported
  after the second cycle RBMP's in 2016. We have isolated the exemptions provided for
  Groundwater bodies specifically for Sulphates (CAS\_18785-72-3 Sulphate). We identified
  the pressures that could commonly be used for lignite mines and other anthropogenic
  sources but excluded the agricultural and urban wastewater related pressures from the
  GIS analysis. It is clear from the analysis that the water bodies with sulphate pressures are



located largely near the lignite mines and power plants on both the Czech and German parts of the Elbe River basin.

Interestingly the water bodies CZ11710, CZ21320, CZ21200, CZ46110, CZ45400, CZ51310, CZ62300 and CZ45100- all the ground water bodies in the Czech Republic which have sulphate exemptions have the same pressure 'P8 - Anthropogenic pressure – Unknown' identified. While ground water bodies which were give sulphate exemptions that are near the lignite mining areas in Germany identify the pressure as 'P2-8 - Diffuse – Mining'.



Image 1: GIS analysis of Groundwater bodies with sulphate pressures.

The IKSE in its draft RBMP identifies the impacts from lignite mining – qualitative and quantitative issues to the groundwater bodies in the Elbe River basin, admits the impact can last for decades but stops short of the measures that need to be proposed to remediate the water bodies. An acknowledgement of the water supply stresses and the exacerbation of this stress from climate change while providing more time exemptions for groundwater bodies does not provide a solution to water stress or restoration of good status to the water bodies.

We request the IKSE to recommend the earlier closure of lignite mines at least by 2027, an early start to the mine remediation processes and initiate a cost recovery from the lignite operators for the environmental damages starting from the third management cycle to cover the massive long-term costs involved in mine remediation.



Further enforcement measures with the above highlighted objectives in mind shall be further specified in the RBMP.

## 2. Require competent authorities to set stricter requirements (on point source emitters) to enable compliance promotion with relevant environmental quality standards (EQS).

In our submission to the SWMI document, we provided detailed analysis of the current average Mercury emissions of coal power plants in the Elbe River basin along with a projection of the total emissions of Mercury if the plants continue to operate till 2027.

A total of 17.457 kg (17 tonnes) additional mercury pollution (via the air) could be prevented from being released into the environment if the strict Best Available Techniques requirements set under the 2017 LCP BREF (as confirmed by the Minamata BAT/BEP guidance of max 1µg/Nm<sup>3</sup>) would be implemented.

Mercury and other priority hazardous substances defined under the WFD and the Environmental Quality Standards Directive (EQSD, 2008/105/EC as amended by the Priority Substances Directive 2013/39/EU) are under a phase out obligation, meaning that measures should be taken for "the cessation or phasing-out of discharges, emissions and losses" of these substances. There are also binding cross-references to the WFD's objectives in other EU policies. For example, Article 18 of the Industrial Emissions Directive (IED, 2010/75/EU) requires stricter (beyond the BAT) Emission Limit Values (ELVs) to be set in the case that environmental quality standards (EQS) are not met. The RBMP draft plan of measures does not even refer to this measure, despite the fact that mercury emissions to air is a global pollutant that needs to be tackled at all sources (see Minamata Convention commitments, both Germany and the Czech Republic are signatory parties)

Besides, the EQS exceedances of Mercury in biota in all surface water bodies in Germany is a major cause of concern in the Elbe River basin, as identified by the draft RBMP document in multiple instances. The situation would be similar in the Czech Republic if, as the draft RBMP admits, it applies the failure of EQS in biota to all the connected water bodies.

With no independent estimates of the cost of removing mercury from the water bodies affected, it appears the most logical step is to prevent further release of Mercury into the environment, starting from the largest contributor to the mercury emissions- thermal power plants. However, the IKSE, despite having the mandate to propose specific action for the reduction of harmful impacts from point and diffuse sources, refrains from even recommending a stricter emission control limit to the main contributors (e.g. lignite power plants) in the Elbe River basin. The IKSE, instead of taking specific action is proposing/ agreeing the extension of exemptions to almost 90% of the surface water bodies in the Elbe River basin.

We would request the IKSE to at the least provide recommendation to the contracting parties to the Elbe convention to update the permit conditions so to require, as from very latest 2025, the



compliance with the strict Best Available Techniques requirements set under the 2017 LCP BREF, namely 1µg/Nm<sup>3</sup> (for air emissions) to enable a cost-effective emission reduction at the source of this PBT save the future of the environment, fisheries and the people living in the Elbe River basin. This measure should be **c**omplemented by maximum load caps so to ensure a gradual phase out of any loss of mercury emissions, as prescribed to be achieved by the latest in 2027. The IKSE shall also establish a formal recommendation to enforcement authorities and governments to set legally binding measures at national and EU level (e.g. through the EU Minamata Regulation review).

We are also attaching additional submissions from our partner Grüne Liga, which were earlier submitted to the FGG Elbe for the national draft RBMP's in Germany.

## 3. Introduce appropriate water tariffs for industrial water services like cooling water for coal power plants and the groundwater abstraction by lignite mines.

The EEB had published a report in December 2020, Mind the Gap<sup>17</sup>, highlighting the lack of application of Article 9 of the Water Framework Directive in the three lignite mining countries, Germany, Poland and the Czech Republic. The report estimates the shortfall in revenues that could have been collected from the coal power plant and lignite mine operators if an appropriate price was fixed for the cost of cooling water and lignite mine drainage.

We would like to reproduce a table listing the costs of groundwater and surface water in these three countries below:

Table 1: Fees applied for groundwater abstraction (in $\ell/m^3$ ) <sup>18</sup>								
Location	Standard rate/Other uses	Lignite mine drainage	Industry	Cooling water	Public water	Agriculture (irrigation)		
Germany								
Brandenburg	0.115	0.00	0.115	not specified	0.1	Exempted		
North Rhine- Westphalia	0.05	0.05	0.05	0.035/0.0035	0.05	Exempted		
Saxony	0.076	0.00	0.076	0.076	0.015	0.025		
Saxony-Anhalt	0.07	0.00	0.07	0.02	0.05	0.02		
Poland	0.03	0.00	0.03	0.03	0.02	0.01		
Czech Republic	0.11	0.11	Not specified	Not specified <sup>2</sup>	0.07	Not specified		

<sup>&</sup>lt;sup>17</sup> EEB, <u>Mind the Gap</u> (December 2020)

<sup>&</sup>lt;sup>18</sup> All conversions from other currencies to euro are dated as of 25th September 2020



1) Once-through cooling, 2) mine drainage water can be used free of charge by the organisation, including for cooling water.

Table 2: Cooling water fees compared to standard or other use rates ( $\notin/m^3$ surface water abstracted)								
Location	Standard rate/ Other uses	Industry	Cooling water	Public water	Agriculture (irrigation)			
Germany								
North Rhine-			0,035/					
Westphalia	0,05	0,05	0.0035 <sup>1</sup>	0,05	Exempted			
Brandenburg		0,023	0,0058	Not specified	Exempted			
Saxony	0,02	0,020	0,005	0,015	0,005			
Saxony-Anhalt	0,04	0,04	0,01	0,05	0,005			
Poland <sup>19</sup>	0,013	0,013	0,013 <sup>2</sup>	0,009	Not specified			
Czech Republic <sup>20</sup>								
Elbe	0,17		0,03 <sup>1</sup>					
Ohre	0,18		0.18 <sup>3</sup>					
Vltava	0,14		0,05 <sup>1</sup>					
Oder	0,17		0,17 <sup>3</sup>					

1) Once-through cooling, 2) Only applied to the volume of water consumed by the plant, 3) No plants use once-through cooling in administrative region of Ohre or Oder River Boards

In summary, from the above tables it's clear that cooling water required for lignite power plants and mine drainage vital for the lignite mining industry are not priced at all or are priced at the lowest when compared to even other industry.

The draft RBMP document states that both in Germany and the Czech Republic water services as defined in the Article 9 of the Water Framework Directive is interpreted to mean drinking water supply and wastewater treatment.

We compiled the total volumes of water utilised in the Elbe River basin based on the numbers provided in the draft RBMP. We find that the public water supply shares a volume of 27% in the Czech Republic as compared to the energy sector which uses 33%. Likewise in Germany, the public

 $<sup>^{19}</sup>$  Polish Water Law (Ustawa Prawo Wodne) Art. 279 states that discharge of cooling water <26°C or where the  $\Delta T$  <11°C is exempt from fees. Ordinance on water fees (Rozporzadzenie 2502/2017) §5.1

<sup>&</sup>lt;sup>20</sup> Ministry of Agriculture of the Czech Republic, State of the Water Management Report 2018, 2019



water supply share is at 15% while the energy sector is a huge 51% of the total volume of water used in the Elbe River basin.

And yet, the costs levied on public water supply and the wastewater treatment are at around 2.89€/m3 in the Czech Republic, 4.18 €/m3 in Germany *while the tariff of water use or treatment for lignite mine drainage is 0 €/ m3 in both Czech Republic and Germany* (in Saxony, Saxony Anhalt and Brandenburg).

Table 3: Water use by various sectors and their share in the Czech Republic and Germany							
Water use- Sector	Czech (1000m3/year), 2018	share of total (Czech Rep.) in percentage	Germany (1000m3/year), 2016	share of total (Germany) in percentage			
Public water supply	398000	27.36	1051150	14.94			
treated waste water	323502	22.24	902671	12.83			
Agriculture and forestry	29223	2.01	117939	1.68			
Manufacturing- excluding energy supply	210000	14.44	1309878	18.62			
Energy supply <sup>21</sup>	494000	33.96	3625515	51.55			
Service sector	-		26385	0.38			

While correcting the national interpretations of the Water Framework Directive may be beyond the mandate of the IKSE, we can't fail to notice the apparent contradiction in the draft RBMP when the reasons for time extensions for achieving good status of water bodies include the disproportionate cost of hundreds of millions of Czech Koruna's in the case of the Czech Republic.

As stated earlier, the cost of lignite mine remediation and the restoration of good status to groundwater bodies affected is massive and requires investments over long periods. If cost recovery from coal, lignite power plants and lignite mining companies cannot be implemented in the third management cycle then restoring the water bodies to good status remains elusive, primarily for one reason- lack of sufficient finances.

The 2019 fitness-check of the Water Framework Directive pointed out inter alia insufficient funding as a key constraint for the preservation and restoration of Europe's water bodies. As a recent special report by the European Court of Auditors points out, far too often the public have to bear

<sup>&</sup>lt;sup>21</sup> This includes hydro power plants of 1460MW generating about 2060GWh/ year in the Czech Republic and a generation of 858 kWh/ year in Germany



the cost that polluters should have paid.<sup>22</sup> The Elbe draft RBMP in its present form fails to implement the polluters pay principle and recover environmental and resource costs from economic sectors such as lignite mining, energy and agriculture.

We request the IKSE to provide a recommendation to implement the recovery of environment damage costs under the Article 9 of the Water Framework Directive from the large users of water resources in the Elbe River basin, to ensure that sufficient finances are collected during the third management cycle to finance future restoration costs.

## 4. Inadequate reporting on water use/abstraction (levels), discharge related information (pollutants/temperature). Require an EU centralized level with real time-access.

The EEB has been analysing the status of water monitoring across the member states in the EU for the last one year. The EEB sent out access to information requests to 22 Member States (including the Elbe River basin countries) regarding abstraction and consumption volumes, emissions to water and other relevant parameters on coal/lignite mines and Large Combustion Plants. Unfortunately, our experience on accessing data for the purpose of this investigation has been greatly disappointing. Out of 22 requests sent out to Member States, only 5 provided us (mainly in part) with requested information. In most cases, the authorities were not able to extract the relevant water data in user friendly electronic formats (e.g. Excel). There is a systematic failure in ensuring public access to key environmental information.

The IKSE should establish a forward-looking reporting and access to information portal, in relation to dissemination of information of water relevant issues. This is primarily a responsibility of national governments, but it could also be part of the recommendations for the RBMP regarding access to information and transparency, benchmarking progress and compliance promotion. Monitoring results on water release, abstraction, and quality monitoring shall be tele-reported to a centralised EU database, e.g. the WISE/IED Registry / Revised PRTR, and shall be made actively available online within one month after the information has been generated. The information shall contain at least:

- ID code of the installation (IED Registry ID code)/mine.
- Water consumption per type of water body and type of purpose.
- Water release information per type of receiving body for the pollutants subject to
- monitoring, E-PRTR reporting<sup>23</sup>, and other monitoring obligations in the format of
- concentration and loads, including annual average of pH and min/max temperature at
- release point, flow rates
- Other information that may affect water quality status e.g. waste disposal related

<sup>&</sup>lt;sup>22</sup> European Court of Auditors, <u>Special Report 12/2021: The Polluter Pays Principle: Inconsistent application across EU</u> <u>environmental policies and actions</u> (July 2021)

<sup>&</sup>lt;sup>23</sup> https://industry.eea.europa.eu/#/home



- Permit levels set on the above and annual compliance reports information (e.g. Art 14 of
- the IED to be included in the reporting under the IED<sup>24</sup>)

Other evidence on the correct implementation of the WFD e.g. application on the exemptions, impact quantification and methods/calculations for cost recovery principle shall also be made publicly available in the data-reporting. The benefits of a centralised EU 'one stop reporting' portal is to overcome language barriers, enabling comparison of progress and benchmarking of economic actors on those pressures, better sharing of good practices and tracking of progress so to mitigate those to achieve the WFD goals. This proposal will also promote a sound application of the Aarhus framework.

See further and more specific requests on access to information in Section 6 of EEB publication<sup>25</sup>

Thank you in advance for defending the interests of better water protection.

Kind regards, European Environmental Bureau

<sup>&</sup>lt;sup>24</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018D1135&qid=1590744583053

 $<sup>^{25}\</sup> https://eeb.org/library/an-eu-industrial-strategy-for-achieving-the-zero-pollution-ambition-set-in-the-european-green-deal/$