



MINISTERUL MEDIULUI,  
APELOR ȘI PĂDURILOR

**MINISTER'S CABINET**

No. DGEICPSC/37558/ *12* .11.2024

**To: Ministry of Environmental Protection of the Republic of Serbia**

**In att.: Ms. Irena Vujović, Minister**

**Dear Minister Vujović,**

The Ministry of Environment, Waters and Forests of Romania sends cordial greetings to the Ministry of Environmental Protection of the Republic of Serbia and particularly appreciates the bilateral cooperation in the field of environmental protection.

We hereby acknowledge the receipt of your letter no. 002500932 2024 dated 09 October 2024 submitting the environmental impact assessment report for the project regarding the construction of a waste-to-energy facility on cadastral plots number 1420/1, 1420/4, 1491/1, 1541/1, 1541/2, 1552, 5824/1, 6513/1, 6513/2 Prahovo cadastral municipality and phased construction of a non-hazardous waste landfill within the Elixir PRAHOVO chemical industry complex on cadastral plots number 2300/1, 1491/1, 1541/1 Prahovo cadastral municipality. The environmental impact assessment report has been received on the 25<sup>th</sup> of September 2024 through electronic means from the Focal Point for the Espoo Convention.

In order to ensure compliance with the provisions of article 3(8) of the Espoo Convention, the Ministry of Environment, Waters and Forests has provided public access to the environmental impact assessment report by publishing it on the official website of the ministry. The period for public consultation has ended on the 31<sup>st</sup> of October 2024. The Ministry of Environment, Waters and Forests has not received comments, opinions, suggestions or objections from the public in the timeframe for public consultations.

The environmental impact assessment report has been submitted to the competent authorities and experts, for evaluation. I have the pleasure to forward several comments and proposals from our side related to the contents of the submitted environmental impact assessment report that have resulted from this evaluation.

The environmental impact assessment report includes the Dispersion Study of the pollutants emitted by the operation of the waste thermal treatment station with the solidification deposit and expansion of the phosphogypsum deposit on air quality in Serbia and Romania.

Within the chemical industry complex in Prahovo there are emitters of two companies, Elixir Prahovo and Phosphea and within the Dispersion Study all point and surface emitters of both companies were developed. Other sources, that do not belong to the chemical industry complex, were not included in the analysis and background pollution is not included in the presented modeling results. Modeling in this Study included an impact area of 50 km x 50 km, i.e. an area of 2500 km<sup>2</sup>.

The assessment of the impact of the facilities on air quality was made by comparing the results obtained through mathematical modeling with the appropriate air quality requirements provided for by European legislation (Directive 2008/50/EC for the pollutants: Dioxide of sulfur (SO<sub>2</sub>) Nitrogen Dioxide (NO<sub>2</sub>) Carbon monoxide (CO,) PM<sub>10</sub>, PM<sub>2.5</sub>) but also with the Serbian legislation.

The results presented in the Dispersion Study were obtained using a model that included particle emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) of SO<sub>2</sub>, NO<sub>2</sub>, CO, HF, HCl, NH<sub>3</sub>, Hg, PCDD/F, these pollutants, depending on scenario, being emitted from various point and surface sources, of both companies operating within the chemical industry in Prahovo, i.e. Elixir Prahovo and Phosphea Danube DOO, both for the current situation and after the construction of the plant in question, taking into consideration the three future point emitters of the waste-to-energy plant (boiler plant emitter, solidification filter system emitter and waste pretreatment filter system emitter and activated carbon filters).

The conclusions of the analysis regarding the future situation denote the following :

- SO<sub>2</sub> concentration values obtained: the values obtained for the future state, i.e. the operating state of the waste-to-energy plant, over an average period of one hour, are almost identical to the current ones, indicating that the existing emitters have a dominant influence;
- NO<sub>2</sub> concentration values obtained: same as in the SO<sub>2</sub> case, the existing emitters have a dominant influence;
- PM 10 concentration values: first maximum for an average period of a day in the current situation is greater than first maximum for the future situation involving the non-hazardous (solidified nonreactive) landfill and other three dust emission points (boiler plant emitter, emitter of the solidification filter system and emitter of the waste pretreatment filtration system and carbon filters active) including a significant extension of the phosphogypsum deposit. In this case we believe it is necessary to offer additional explanations.
- HCl concentration values obtained: HCl will be issued from the existing transmitter of the Final Scrubber as well as from the transmitter boiler plant (future treatment facility thermal waste)
- HF concentration values obtained: exceeding the daily values can occur in extremely unfavorable weather conditions.
- NH<sub>3</sub> concentration values: ammonia will be emitted from the existing Final Scrubber emitter as well as from the boiler plant emitter (future thermal waste treatment plant)
- Hg concentration values obtained: Currently, mercury is not emitted from the existing emitters of the chemical industry complex in Prahovo, but after the construction of the

thermal waste treatment plant, it will potentially be emitted only from the emitters of the boiler plant.

- PCDD/F concentrations values and dioxin as PCB: Currently, PCDD/F is not emitted from the existing emitters of the chemical industry complex in Prahovo, but after the construction of the thermal waste treatment plant, it will potentially be emitted only from the emitters of the boiler plant.

In conclusion :

- in the case of the components that are currently emitted (CO, SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, HF, HCl, NH<sub>3</sub>) and that will also be emitted from the future emitters of the thermal treatment plant with solidification deposit, the dominant influence is on existing broadcasters;
- in the case of some components (SO<sub>2</sub>, PM<sub>10</sub>, and HF) there is the possibility of episodic high concentrations in the case of extremely unfavorable meteorological conditions, from the point of view of dispersion;
- for the current situation and the future situation, the cause of these potential high concentration episodes are existing SO<sub>2</sub> and HF emitters, i.e. the phosphogypsum storage pits in the case of PM<sub>10</sub>;
- for components that are currently not emitted and will only be emitted from thermal waste treatment plant emitters (Hg and PCDD/F) in the future, the modeling results indicate that concentrations below the prescribed limit values are expected.

In order to reduce the loss of polluting substances in the watercourse, it is necessary to monitor with increased frequency the discharge points in the Danube River, in order to reach the quality standards.

Upon commissioning, in order to identify priority substances/priority hazardous substances, the project developer has to carry out a qualitative screening at the first discharge of the treated water into the receptor. For those substances identified in quantifiable concentrations, further monitoring is required, both in the treated discharged wastewater and in the receiving surface water body.

Depending on the type of waste deposited on the platform, it is necessary to renew the qualitative screening for the priority substances/priority hazardous substances in order to expand the spectrum of substances/groups of substances analyzed.

Since the site referred to in the environmental impact assessment report is affected by historical pollution (as shown in the document), ecotoxicological determinations are needed to be carried out both before the start of the activity and during the implementation of this project.

The groundwater monitoring is carried out according to the presentation made in the material, through a small number of wells. We believe that in order to have an overview of the pollution of the underground water body (data necessary for the evaluation of the level of diffuse water pollution) and to estimate the influence of the quality of the groundwater bodies on the quality of the water body designated on the Danube River, it is necessary to extend the monitoring through at least 3 boreholes (2 on the banks of Danube River and one downstream of the investment).

The report briefly presents the impact of the activities carried out through this project on the aquatic biodiversity of the Danube River, not taking into account all the biological quality elements

necessary to establish the quality/ecological potential of surface water bodies (only general information related to macroinvertebrates and fish is given).

The information on surface waters should also include aspects on water body status/potential and possible impacts.

Information on the complete leachate circuit from the landfill of non-hazardous waste (collection, storage, treatment, etc.) that could potentially have an impact on groundwater is presented separately. A schematic representation of the entire flow should be included for easier analysis and monitoring of the flow of pollutants.

If, after the implementation of the project and the application of the water protection measures (generally presented in chapter 8.3.2.5 *Measures for the protection of waters and solutions*), the monitoring results indicate that the chemical status/ecological potential of the Danube waters and the chemical status of the groundwater are not good and/or their deterioration is observed, it is necessary to plan additional measures to reduce the emissions of chemical substances into the water resource and to adapt the environmental impact monitoring program (monitoring). In this context, references should be made in the study on environmental impact assessment (i.e. in chapter 8.4 *Other measures that may affect the prevention or reduction of harmful effects on the environment*).

We believe that a more rigorous monitoring of emissions, especially of POPs, should be included in the EIA report considering the amendments to the IED Directive in 2023, if the IED Directive has been transposed in national legislation (<https://zerowasteurope.eu/press-release/long-awaited-revamp-of-industrial-emissions-directive-improves-dioxin-monitoring-in-incinerators/>).

In the "*Report on early consultations conducted with the local community regarding the implementation of the Waste-to-Energy Plant Project in Prahovo*" only the benefits of making this investment were presented, namely: alternative to waste storage, job creation and its importance in the circular economy. The concerns of the European Union in relation to the biomonitoring studies of emissions of persistent organic products (dioxin, furan) found near two waste incinerators in Slovakia and the Kingdom of the Netherlands were not presented (<https://zerowasteurope.eu/press-release/new-zwe-biomonitoring-report-alerts-of-a-high-level-of-dioxins-around-3-european-incinerators/>).

The environmental impact assessment report contains in chapter 6, subsection 6.2.2. the summary of the impact study on the health of the Serbian population Negotin. In this summary, we did not find data on the impact that the proposed objective will have on the health of the population in the areas near the border, with references to the population of Romania, located in the area of influence of the objective.

Taking into consideration that due to the location of the proposed objective within the industrial complex in Prahovo, a potential cross-border pollution effect cannot be excluded, we request the transmission of the impact study on the health of the population that was the basis of the environmental impact assessment report in which the data on the potential risk are highlighted to which the Romanian population is exposed.

In addition to the population of the villages of Izvoarele and Gruia, other localities located on the banks of the Danube that are supplied with drinking water from the Danube river (Calafat, Maglavit, Cetate) must also be taken into account. Considering that the Danube river is at a

distance of about 500m in the north direction from the location of the proposed objective, it is estimated that following the construction/operation of the project, for the population of the riverine areas, located downstream of the objective, which are supplied with water drinking water from the Danube, there may be a potential health risk.

Taking into account the fact that the Elixir Prahovo industrial platform through its existence and operation can cause air pollution in the vicinity, the construction and operation of the proposed objective will have a synergistic effect of increasing air pollution in the area with a potential risk to the health of the population in the vicinity. Given the existence of the phosphogypsum deposit Phosphea Danube DOO, belonging to the Elixir Prahovo complex, 900m west of the lot boundary of the future waste-to-energy plant and non-hazardous waste repository (solidification), there may be a synergistic effect of substance emissions odors in the air surrounding the vicinity.

In the documentation received, we did not find references to the impact determined by the ionizing radiation emitted by the dust from the phosphogypsum composition (given that the industrial unit for the production of phosphogypsum is already operating on the industrial platform of the Elixir complex), which in certain climatic conditions can generate polluting emissions and no references of the impact from the perspective of the operation of the objective proposed within the Elixir energy complex.

We inform you that upon receipt of the environmental impact assessment report revised with the information specified above, the impact study on human health and the translation in Romanian of the Non-technical summary, we will contact the Serbian Focal Point of the Espoo Convention regarding the practical arrangements for the organizing of the public debates on the territory of Romania.

Please accept, Ms. Minister, the assurance of my highest consideration.

**Mircea FECHET**  
**Minister of Environment, Waters and Forests**

