

**REPUBLIC OF BULGARIA**  
**MINISTRY OF ENVIRONMENT AND WATER**

99-00-200

*05. January 2024, Sofia*

**Subject:** *Environment Impact Assessment Report and Appropriate Assessment Study for the project Neptun Deep, beneficiaries OMV Petrom S.A. and RomGaz Black Sea LTD*

**Dear Minister FECHET,**

*Hereby, I would like to acknowledge the receipt of your letter № DGEIECPSC/42576 dated 29<sup>th</sup> December 2023 (received by e-mail) informing us that you agree extend the deadline for responding on the Environment Impact Assessment Report (EIA Report) and Appropriate Assessment Study (AA) for the project Neptun Deep, with OMV Petrom S.A. and RomGaz Black Sea LTD as the contracting entities, until 05 January 2024.*

*We would like to express our appreciation for having granted our request for the extended deadline for the submission of the opinion of the Ministry of Environment and Water of Bulgaria, which was necessary for us to summarise all the written opinions received from the competent authorities and institutions in our country on the documentation for the Neptune Deep project, made available to the public.*

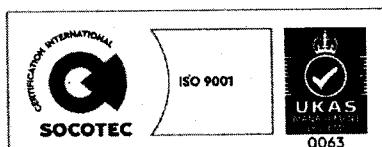
*With reference to your letter No. DGEICPSC/108472 dated 24 November 2023 (received by e-mail), providing us (via link) with the Environmental Impact Assessment Report (EIA Report), including Chapter 6.3 EIA in transboundary context and Appropriate Assessment Study (AA) for the Neptune Deep project with OMV Petrom S.A. and RomGaz Black Sea LTD as the contracting entities, we inform you of the following:*

**H.E. Mr. Mircea FECHET**

**Minister of Environment, Waters and Forests of Romania**

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As a result of the public access provided for a period of 30 days to the submitted EIA Report, incl. Chapter 6.3 Environmental Impact Assessment (in Bulgarian) and the AA Study, the Ministry of Environment and Water of the Republic of Bulgaria has not received any comments, opinions and/or suggestions and objections from the interested public

After a detailed examination of the submitted EIA report, incl. Chapter 6.3 Environmental Impact Assessment (in Bulgarian language) and the AA Study, and based on the written comments received from the competent authorities and institutions, including (potentially) affected municipalities in Bulgaria, we inform you that we have the following comments and suggestions:

**I. In regard to the EIA Report/Chapter 6.3. Environmental Impact Assessment:**

The Neptune Deep project envisages offshore production of natural gas from the Neptune Deep block (Domino and Pelican South reservoirs) located in the Romanian part of the Black Sea, the delivery of processed gas from the shallow water platform to the onshore gas metering station via a pipeline approximately 160 km long and the transmission of natural gas from the gas metering station to the Romanian National Transmission System (NTS) operated by Transgaz and including the following onshore and offshore facilities:

- Onshore facilities: construction of gas pipeline and communication cables; crossing of the beach, coast, roads and railway line; temporary crossing of the railway line; construction of natural gas metering station - NGMS, control centre - CCR, fence, lighting, parking, green areas, platforms and internal roads; organisation of civil works and utility connections, in the municipality of Tuzla, Constanta County, near the northern border of the administrative territory of the municipality of Costinessti;

- offshore facilities: Domino and Pelican South infrastructure (drilling centres, wells, manifolds, ropes, risers, flow lines, ancillary equipment); shallow water platform - SWP; gas pipeline; fibre optic cable; onshore crossing; utilities.

The development area of the Neptune Deep field is located in the Romanian Exclusive Economic Zone (EEZ).

**1. General comments:**

The submitted documentation is in English with the exception of Chapter 6.3 Environmental Impact Assessment in a transboundary context, indicating that the document has been translated by automated translation. Please note that the automatic translation is inaccurate with regard to the specific terminology related to the technological processes of the project as well as the negative impacts of accidental spills or accidents on the environment, the sea and marine biota in a transboundary context.

**2. In regard to the health risk:**

It is clear from the text of Section 6.3 that the Neptune Deep project envisages the extraction of natural gas in the Black Sea in the exclusive economic zone of Romania through the construction of:

- subsea drilling centres (Domino and Pelican South);

*- the drilling of 10 subsea gas wells - 6 wells up to 3000 m deep in the Domino field at water depths of 800-1100 m and 4 wells at 3400 m deep in the Pelican Sud field at water depths of 120-130 m;*

*- offshore production platform Neptune Alfa with installation of gas processing facilities;*

*-subsea infrastructure and numerous ancillary offshore and onshore gas production facilities.*

*The drilling process of the gas production wells involves the use of water-based drilling fluid and drilling fluid mixed with water and chemicals, and the type of chemicals used for the same are not specified the type of chemicals used.*

*Detailed information on the production process and on the chemical elements and compounds involved and released from the process is not provided.*

*The documentation states that "produced water will be discharged through the on-site discharge caisson. The natural radioactivity of the tank water may contain low concentrations of naturally occurring radionuclides that are not harmful at the concentrations found in the tank water itself, as these concentrations are below detection limits".*

*However, the documentation does not indicate the natural radionuclides that may be present in the reservoir water and no assessment of the risk of radioactive contamination has been carried out to demonstrate the correctness of the conclusion drawn by the authors of the report, quoted above. Nor has any assessment been made of the possible consequences of the discharge of process waste water into the sea.*

*However, in the file in Bulgarian, which has been translated by automated translation, the modelling referred to has not been applied and it has not been made clear what chemical elements have been assessed.*

*The assessment of transboundary water impacts was only carried out from accidental oil spills during construction/emergencies for two seasons, summer (June-September) and winter (October-May) respectively.*

*Schematic diagrams of the hydrocarbon plume displacement, which is tracked over a 14-day period, and the probability of the water surface being impacted using mathematical models are attached in the "Modeling Results" section. According to the same, the fuel layer in the summer season reaches after one day the territory of Bulgaria and after 10 days to the Emona marine protected area, 12 days to Ropotamo and 13 days to Strandzha.*

*It is not clear from the diagrams and conclusions whether the bathing waters in the bathing areas in the Black Sea water area approved in the territory of the Burgas, Varna and Dobrich districts are affected.*

*No information is included on the dispersion of pollution from gas extraction and processing activities and all technological processes during operation, as well as measures to reduce the presumed impact on bathing waters.*

*The analysis team concluded that in a transboundary context only oil spills that could occur due to a major offshore accident should be considered.*

*It is important to clarify that the modelling has been carried out without taking into account measures to combat accidental pollution. It has been pointed out that the extent of damage caused by a hydrocarbon spill in seawater depends on the extent and area of the spill, the chemical composition of the spilled fuel, the climatic conditions, as well as the remedial measures and the response time.*

*Methods commonly used to respond to accidental pollution include: containment and mechanical recovery, in situ burning, use of absorbent materials, bioremediation and application of dispersants, as appropriate, which in turn pose other risks. The report does not discuss or propose the methods to be used to respond to accidental contamination, nor does it assess the risk of their use.*

*Based on the hydrodynamic data for the area, it is concluded that the likelihood of an impact concerns mainly Romanian territorial waters, but about 25% of the spill could reach Bulgarian territorial waters in winter and 21% in summer. It is calculated that in the winter season the pollution does not reach the area of the protected areas of the Republic of Bulgaria, but in the summer season the spilled fuel will reach the Bulgarian territorial waters after one day, and after 10 days will reach the protected area of Irakli, after 12 days to Ropotamo and 13 days to Strandzha, which proves the existence of the risk for the territory of the Republic of Bulgaria.*

*With the pattern of contaminant dispersion along the watercourse thus presented, from a health perspective it can be assumed that there is a likelihood of increased health risk in a transboundary context, including in the event of an emergency or disaster in the drilling (offshore) part of the Neptune Deep project, mainly related to chemical contamination and deterioration of bathing water quality along the Bulgarian coast and possible exposure to harmful chemicals through the food chain due to consumption of fish and fish products. The likelihood of negative impacts on human health and seawater purity will depend on the scale and chemical composition of the spill on a case-by-case basis and the effectiveness of preventive measures.*

*Experts have stressed that the experimental critical concentrations will be lower when immediate clean-up actions are implemented in the affected area, according to the intervention procedures established by the "Emergency Contamination Intervention Plan". However, these measures have not been considered and proposed, nor has the plan been implemented. In this respect, it is necessary to describe in more detail the measures to neutralize and contain oil spills in terms of the response time in an emergency situation.*

*In the onshore area of the project two groundwater bodies have been identified which extend into Bulgarian territory, namely RODL04 - Kobadin - Mangalia and RODL06 - Vlachka platform. As a result of mathematical modelling with the DREAM system, it was concluded that the project does not affect the quality of surface water and groundwater in general. No clarity has been provided as to whether water is abstracted from these groundwater bodies for drinking purposes and, in this regard, the potential impact on drinking water supply facilities and their sanitary protection zones has not been considered and assessed.*

*It is evident from the above that in a transboundary context, attention should be paid to the part of the project concerning the construction of drilling platforms in the Black Sea for the extraction of natural gas located about 35 km by water from the exclusive economic zone of the Republic of Bulgaria. The potential health risk for the Republic of Bulgaria from the implementation of the project is related to the possible pollution of Bulgarian territorial waters, including bathing waters and the adjacent coastline with chemical substances from waste production waters, pollution of marine waters with fuels and oils from construction and transport vessels, pollution from accidental leakages of reagent storage tanks located on the drilling platforms, etc.*

*On the other hand, the information submitted in connection with the implementation of the investment proposal contains facts and data that give grounds to conclude that the same is likely to have an adverse impact on the living environment and health of people on Bulgarian territory, with the following arguments:*

*The potentially affected territories, the distances to them, the potentially affected population have not been identified; the risk factors that would have a potential negative effect on the health of the affected population have not been identified; a characterization of the likely degree and duration of exposure for each risk factor and their comparison with the national standards or international recommendations in force has not been prepared; and a characterization based on the toxicological characteristics of the individual risk factors concerning their impact on human health has not been prepared. The activities and measures foreseen by the investors in the submitted documentation do not ensure guaranteed protection of the quality of marine waters used for bathing in neighboring countries and drinking waters, if such are affected.*

*The documentation indicates that the facilities will be decommissioned/abandoned upon project completion. We consider that abandonment of the facilities is not acceptable and the facilities should be decommissioned subject to a series of measures and requirements to ensure the cleanliness of the seawater and prevent further incidents and pollution.*

*Given the complex nature of the potential impact on the quality and ecological status of marine waters, on which the health risk to the public will directly depend, we consider that the report should be complemented in accordance with all of the above.*

### **3. With regard to climate (greenhouse gases) and air:**

*On page 157 of chapter 6 of the EIA report, item 6.2.6.1.1 and on page 159, item 6.2.6.1.2, as well as on page 30 and 31, item 6.3.7 of chapter 6.3, greenhouse gases are categorized as pollutants.*

*Please note that greenhouse gases are not pollutants and are not categorized as air pollutants.*

### **4. In regard to the biodiversity:**

*Section 6.3.5.2 discusses potential impacts on biodiversity in a transboundary context.*

*We note that there is no in-depth analysis for species at risk such as the Mediterranean Storm-Petrel (*Puffinus yelkouan*) and transboundary impacts on avifauna are only cursorily addressed.*

*Mitigation measures are provided for cetaceans, including a marine mammal exclusion zone. Work to repair the platform will only commence if no dolphins are present after a 30-minute observation period. Noise mitigation measures during construction and/or operation are also provided, as well as standard process control and mitigation measures (including marine mammal/MMO observers and soft start techniques).*

*We inform you that we have no specific suggestions or comments on the proposed measures in relation to biodiversity conservation in a transboundary context. We consider that the best available guidance and protocols of work being applied by the gas and oil industry (e.g. those available from the Joint Nature Conservation Committee/ JNCC) regarding mitigation measures for potential impacts of noise pollution on marine mammals) should be used.*

*Based on all of the above, we inform you that the information in the EIA Report/Chapter 6.3. Transboundary Impacts should be revised and supplemented according to the comments described above and resubmitted to us for forwarding to the competent authorities and institutions in Bulgaria and the interested public.*

*When submitted for reconsideration, the same should be translated into Bulgarian, given the specificity of the investment proposal, noting that in the case of automatic translation, the same is inaccurate with regard to the specific terminology related to the technological processes of the project, as well as the negative impacts in case of accidental spills or accidents on the environment, the sea and marine biota in transboundary aspect.*

### **II. In regard to the AA Study:**

*The depth in the area affected by the project is in the order of 700-1100 m. It should be noted that hydrogen sulphide is present at depths below 150-200 m in the Black Sea, which is the reason for the scarcity of biodiversity below this depth. Therefore, impacts on biodiversity and habitats below this depth (to the extent that they are present) are unlikely.*

**III. For inclusion/compliance in the decision to be issued following the completion of the EIA process for the Neptune Deep Project:**

1. In relation to Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (Directive 2004/35/EC), transposed into Bulgarian law by the Environmental Liability Act (ELLRA), the following should be taken into account:

In the event of an imminent threat of environmental damage or in the event of environmental damage caused on the territory of the Republic of Bulgaria by activities carried out on the territory of a Member State of the European Union, the Minister of Environment and Water or an official authorized by him:

- request from the competent authority of that State information relating to the environmental damage and information on the relevant national procedures of that State;
- send to the competent authority of that State an opinion on the information referred to in paragraph 1, including recommendations for the adoption of preventive and remedial measures;
- order the implementation of preventive and remedial measures in the territory of the Republic of Bulgaria in accordance with the procedures laid down by law;
- may take the necessary action in respect of that State to recover the costs incurred in implementing preventive or remedial measures in the territory of the Republic of Bulgaria.

The environmental damages referred to above are those, if any, to protected species and natural habitats which cause a significant negative impact on the attainment or maintenance of their favorable conservation status, and those damages which cause a significant negative impact on the environmental status of marine waters.

Where an imminent threat of environmental damage is identified or where environmental damage is caused on the territory of the Republic of Bulgaria by activities carried out on the territory of a Member State of the European Union, the Minister for the Environment and Water or an official authorized by him shall provide the European Commission with the relevant information.

The environmental damage cited above is the potential damage to protected species and natural habitats that causes significant negative impacts on the attainment or maintenance of their favourable conservation status, and damage that causes significant negative impacts on the environmental status of marine waters.

Where an imminent threat of environmental damage is identified or where environmental damage is caused on the territory of the Republic of Bulgaria by activities carried out on the territory of a Member State of the European Union, the Minister for the Environment and Water or an official authorised by him shall provide the European Commission with the relevant information,

Based on the above, we propose to include the following condition in the decision to be taken as a result of the EIA procedure for the Neptune Deep project:

1. *"In case of imminent threat of environmental damage or in case of environmental damage caused on the territory of the Republic of Bulgaria by the activity(ies) of the Neptune Deep project for the extraction of natural gas in the Black Sea, carried out in the exclusive economic zone of Romania, the competent authority of the Republic of Romania under Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage shall provide the Minister of Environment and Water of the Republic of Bulgaria*

2. *To impose specific requirements on the contractors of the Neptune Deep project to ensure that all necessary measures are taken to limit and minimise fugitive dust emissions into the ambient air from construction and installation activities on the project site and to limit fugitive and organised emissions during subsequent operation of the project.*

3. *In order to monitor the potential impact of the project implementation on the status of the marine waters of the Republic of Bulgaria through relevant monitoring, it is necessary to notify the Ministry of Environment and Water:*

*- the commencement and duration of drilling activities and construction of the associated infrastructure;*

*- in case of incidents/pollution events during drilling, construction and operation of the technical infrastructure.*

*We inform you that upon receipt of the revised EIA report, incl. Chapter 6.3. Transboundary Impact Assessment, the documentation will be made publicly available to the interested public and written comments will be requested from the competent authorities and institutions.*

*After reviewing the supplemented EIA report, we will also inform you whether it will be necessary to organize a public discussion on the Neptune Deep project on the territory of the Republic of Bulgaria.*

*Please accept, Mr. Minister, the expression of my highest consideration and readiness for successful future cooperation.*

*Yours sincerely,*

*Julian Popov  
Minister of Environment and Water*