

*Coat of
Arms of the
Republic of
Bulgaria*

THE REPUBLIC OF BULGARIA

MINISTRY OF ENVIRONMENT AND WATER

Ref. No. OBOC-33/05.06.2023

TO

MR. VLADIMIR MALINOV

EXECUTIVE DIRECTOR

BULGARTRANGAZ EAD

1336 Sofia, PB 3, residential area Lulin 2

66 Pancho Vladigerov Blvd.

COPY TO:

ExEA

RIEW-VRATSA

BD DANUBE REGION

VRATSA MUNICIPALITY

VILLAGE COUNCIL BANITSA VILLAGE

VILLAGE COUNCIL LILYACHE VILLAGE

VILLAGE COUNCIL CHIREN VILLAGE

KRIVODOL MUNICIPALITY

VILLAGE COUNCIL GALATIN VILLAGE

VILLAGE COUNCIL OSEN VILLAGE

In response to your letters Ref. No. БТГ 04-09-80/10.05.2023,

Ref. No. БТГ 04-09-80(2)/26.05.2023 and

Ref. No. БТГ 04-09-80(3)31.05.2023

Subject: Notice on Investment Proposal "*Design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to Expansion of Chiren UGS - Wells*"

DEAR MR. MALINOV,

Regarding the notice received by the Ministry of Environment and Water (MoEW) of the above Investment Proposal, Ref. No. OBOC-33/10.05.2023 and additional information submitted with Ref. No. OBOC-33/26.05.2023 and OBOC-33/ 01.06.2023 on the grounds of Article 5, para. 1 of the *Ordinance for the Conditions and the Order for Implementing Environmental Impact Assessment (EIA Ordinance)* SG, No. 25 of 18 March 2003 as amended and supplemented), we inform you as follows:

I. Regarding the requirements of Chapter Six of the Environmental Protection Act (EPA):

The Investment Proposal (IP) is related to the design, construction and commissioning of ten new exploitation and three observation wells, new gatherings connecting each of the exploitation wells with the Chiren Compressor Station and access roads. The IP implementation is related to the Expansion of Chiren UGS capacity - Wells. When implementing the intention to build ten new exploitation wells, it may be necessary

to relocate some of the previously identified wells. Therefore, an additional 5 wells have been requested for the purpose of the IP to back-up and replace, if necessary, an exploitation well that has been determined to be technologically infeasible to be drilled in terms of the geological structure.

The identified potential locations (contours) for the exploitation wells are located in the lands of the villages of Chiren, Banitsa and Lilyache, Vratsa Municipality, Galatin village, Osen village and the town of Krivodol, Krivodol Municipality, Vratsa District with the following coordinates of the characteristic points of the locations where the wells will be located - exploitation and observation:

Projection: WGS84 UTM Zone 34N			
No	Well	Longitude	Latitude
Exploitation			
1.	E74	710212	4 804 311
2.	E75	712 432	4 801 411
3.	E76	707 888	4 803 826
4.	E76-B	706 941	4 804 279
5.	E77	711 058	4 802 999
6.	E77-B	710 596	4 802 826
7.	E-78	709 746	4 802 776
8.	E78-B	709 250	4 803 037
9.	E79	711 009	4 803 827
10.	E80	712 721	4 802 740
1.1.	E81	711 747	4 802 302
12.	E82	710 825	4 802 282
13.	E82-B	710 069	4 803 233
14.	E83-B	709 432	4 803 608
15.	E83	709 002	4 803 959
Observation			
1.	01	705 547	4 807 604
2.	03	715 171	4 802 745
3.	02	704 674	4 804 446

In order to access the drilling sites, vehicles servicing the construction and installation works and the drilling process are planned to use the existing republican and municipal road network, existing agricultural roads and, if necessary, temporary access roads.

Establishment of underground gas pipeline gatherings (gas pipelines) is envisaged to connect the exploitation wells to the new site of CS Chiren, including laying in the trench of the gatherings of HDPE pipe with a combined fibre optic cable and copper conductors, respectively to ensure the transmission of technological information and to supply the equipment of the wells.

The construction of the connecting gas pipelines (gatherings) will be underground at a minimum depth of 0.8 m below ground level with steel pipes of DN150 nominal diameter with a wall thickness of 8 and 7 mm, depending on the category of the section and the design calculations for connecting the wells to the constructed individual separation section of Chiren UGS.

The Investment Proposal itself falls within the scope of Annex 2 (item 10, letter "d") of EPA and is subject to assessment of the need to carry out an Environmental Impact Assessment (EIA) on the basis of Article 93 para 1(1) of the EPA. Considering that the implementation of the IP is directly related to the expansion of the Chiren UGS capacity, on the basis of Article 93 para. 2(4) of the EIA, the competent authority for the ruling is the Minister of Environment and Water.

In fulfilment of the requirements of Article 4a of the *EIA Ordinance*, a verification has been carried out regarding the eligibility of the IP in relation to the regimes defined in the current River Basin Management

Plan (RBMP) and the Flood Risk Management Plan (FRMP). According to the opinion expressed by Basin Directorate Danube Region with Ref. No. IIY-01-390-(1)/19.05.2023 (a copy of which is enclosed for your consideration); the implementation of the IP is eligible in relation to the objectives and measures set out in the RBMP and FRMP Danube Region for the period 2016-2021 and is not expected to have a negative impact on water and aquatic ecosystems, subject to compliance with the measures set out in point 1 of the opinion and the legal requirements set out in point 2 of the opinion.

II. Regarding the requirements of Chapter Seven of the EPA:

1. Pursuant to the requirements of Article 5 para. 6 of the *Ordinance on the Prevention of Major Accidents with Hazardous Substances and the Limitation of their Consequences* (promulgated SG, No. 5/19 January 2016), MoEW with letter Ref. OBOC-33/01.06.2023 submitted the updated notice for the classification of Chiren UGS with Bulgartransgaz EAD as an operator as a high-risk potential facility and the notice under Article 4 of the EIA Ordinance to the Executive Environmental Agency (ExEA). For the above IP, an opinion of the Executive Director of the ExEA was received with MoEW Ref. No. OBOC-33/01.06.2023 according to which the facility Chiren UGS with operator Bulgartransgaz EAD, Sofia **preserves** the classification confirmed by the Executive Director of the ExEA with Ref. No. ПГА-302/28.01.2022 as a facility with high-risk potential. In view of this circumstance, there is no need of subsequent update of the safety report of the facility.

Please find enclosed an opinion from the competent authority ExEA with Ref. No. OBOC - 33/01.06.2023 of the MoEW for your consideration.

2. There is a Complex Permit (CP) 611-H0/2022 for the site of Chiren UGS, with Bulgartransgaz EAD as an operator, for the construction and operation of a Combustion Installation with a total installed thermal input capacity of 124.106 MW", falling within the scope of item 1.1 of Annex No. 4 of EPA. In this connection and on the basis of Article 123c (1) of EPA, the operator of the installation is obliged to inform the competent authority of any planned change in the nature of the production activity, operation or expansion of the installation, which may lead to environmental consequences.

III. Regarding the requirements of Article 31 of the Biodiversity Act (BDA):

According to the provisions of Article 31 of BDA and Article 2 para. 1(1) of the *Ordinance on the terms and procedure for assessing the compatibility of plans, programmes, projects and investment proposals with the subject and objectives of protected areas conservation* (CA Ordinance, SG No. 73/2007, as amended and supplemented), the IP shall be subject to an assessment of its compatibility with the subject and objectives of protected areas conservation. The compatibility assessment procedure shall be carried out through the EIA procedure pursuant to Article 1 of the BDA.

IP, including underground facilities - ten new exploitation and three observation wells, new gatherings and access roads, **does not fall** within the boundaries of protected areas within the meaning of the *Protected Areas Act*, nor within the boundaries of protected areas (Natura 2000 sites) within the meaning of the BDA.

Following a review of the submitted information and on the grounds of Article 40 para 3 of the *CA Ordinance*, based on the criteria under Article 16 thereof, an assessment of the likely degree of negative impact has been carried out, according to which the IP **is not likely** to have a significant negative impact on natural habitats, populations and habitats of species subject to conservation in the protected areas of Natura 2000 network.

IV. The next steps to be taken by the contracting authority under the procedure on assessing the need to carry out an EIA are:

1. On the basis of Article 6 para (1) of the *EIA Ordinance*, it is necessary to submit a written request as per a template to the MoEW in accordance with Annex 6 of the *EIA Ordinance*, enclosing detailed information on the **Investment Proposal in its entirety** (including information, including classification according to CLP Regulation, on the possible chemical substances - fuels, oils, etc., available during the construction and operation of the IP, as well as information on the chemical substances in the composition of the drilling fluid) in accordance with Annex 2 of the same Ordinance.

The information shall be submitted in one paper copy and one electronic copy, and shall be identical in accordance with Article 6 para.6 of the *EIA Ordinance*.

2. A fee of BGN 500 shall be paid for assessing the need to carry out an EIA based on Article 1, para. 5, item 1 of the *Tariff of the fees collected within the system of the MoEW*. Information on the date and method of payment of the amount due shall be enclosed to the request under point 1. Payment of the fee shall be made by bank transfer to:

IBAN: BG35 BNBG 9661 3000 1387 01

BIC: BNBGBGSD

We would like to inform you that on the grounds of Article 2a, para. 5, item 1 of the *EIA Ordinance*, the EIA procedure (including CA) for the above Investment Proposal, shall be terminated when the instructions given under Article 5 para.1 of the EIA Ordinance have not been fulfilled for more than 12 months by the Contracting Authority.

Enclosure:

1. Copy of a letter from BD Danube Region, Ref. No. IIY-01-390-(1)/19.05.2023
2. Copy of ExEA opinion, MoEW Ref. No. OBOC-33/01.06.2023.

ROSITSA KARAMFILOVA

Minister of Environment and Water

(Stamp, signature – illegible)

Coat of
Arms of the
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THE REPUBLIC OF BULGARIA
Ministry of Environment and Water
Basin Directorate Danube Region

Outgoing № ПЙ-01-390-{1}
Pleven, 19.05.2023

Mrs. MARIA BOYADZHIYSKA
DEPUTY MINISTER OF ENVIRONMENT AND WATER
№ 22 KN. MARIA LUIZA BLVD., 1000 SOFIA

To your letter Outgoing No. OBOC-33/17.05 2023

Subject: *Notice on Investment Proposal (IP) "Design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to Chiren UGS expansion - Wells*

DEAR MRS. BOYADZHIYSKA,

Basin Directorate Danube Region (BDDR) received a letter your Outgoing № OBOC-33/17.05.2023 and our Incoming № ПЙ-01-390/17.05.2023 with a request for preparation of an opinion on the above IP based on Art. 4a of the *Ordinance on the conditions and procedures for carrying out an environmental impact assessment*. Pursuant to the provisions of Art. 155, para 1, item 23 of the Water Act (WA), BDDR expresses the following opinion:

1. Assessment of the admissibility of the proposal in terms of the measures of achieving good water status defined in the river basin management plans:

Currently, activities are being carried out to update the River Basin Management Plan (RBMP) for the third management cycle and the Flood Risk Management Plan (FRMP) for the second management cycle, which will be valid for the period 2022 - 2027. Information and documents will be published periodically and are publicly available on BDDR website: www.bd-dunav.org, section Water Management.

According to §6 of the Transitional and Final Provisions to the Act amending the Water Act (WA) (promulgated SG No.20 of 11 March 2022), *the Rivers Basin Management Plans 2016 - 2021 and the Flood Risk Management Plans 2016 - 2021 shall apply until approval of the updated plans according to Art. 146o, para. 3 (New - SG, No. 20 of 2022, effective as of 01.01.2022) and Art. 159, para 3 (New - SG, No. 20/2022, effective as of 01.01.2022) of the Water Act.*

In this regard, this opinion on admissibility is issued in relation to the following management plans in BDDR:

- River Basin Management Plan (RBMP) 2016 - 2021, adopted by Decision No. 1110/29.12.2016 of the Council of Ministers:
- Flood Risk Management Plan (FRMP) 2016 - 2021, adopted by Decision No. 1104/29.12.2016 of the Council of Ministers.

According to the information provided:

Underground Gas Storage (UGS) Chiren is the only gas storage facility on the territory of the Republic of Bulgaria, established in 1974 on the basis of the depleted Chiren gas-condensate field discovered in 1963. Currently, 42 wells have been drilled for gas storage purposes, including 24 exploitation wells (20 vertical and 4 deviated), 14 observation wells and 4 other wells. The purpose of the UGS facility is to compensate seasonal fluctuations in domestic gas consumption and to store certain quantities of natural as an emergency reserve.

Considering that, Bulgartransgaz EAD has carried out studies on the possibilities of expanding the capacity of the Chiren UGS, which is of key importance for securing the security of natural gas supply for Bulgaria and for

encouraging competition and promoting gas trade throughout the region.

Based on studies and preparatory activities, the best option has been identified and a decision has been taken for expansion of the storage facility in stages.

The current IP of Bulgartransgaz EAD is related to design, construction and commissioning of ten new exploitation and three observation wells, new gatherings connecting each of the exploitation wells with the Chiren Compressor Station and access roads. The IP implementation is related to Chiren UGS expansion - Wells.

The location of the new wells is constrained by the original water-gas contact (WGC) and is bound by the features of the Chiren geological structure. In this context, the implementation of the intention to build ten new exploitation wells may require some of them to be relocated. In this regard, 5 additional wells will be considered for the purpose of the IP to back-up and replace, if necessary, an exploitation well that has been determined to be technologically infeasible to be drilled from a geological structure perspective.

The identification of the location of each of the wells was accompanied by geological, geophysical and 3D seismic studies which resulted in the identification of 18 potential perimeters (contours/outlines) for their location.

The exact location within a given contour including the location the provision of baseline data for each of the wells, i.e. the final coordinates of the wellhead and the target final depth, the desired trajectory and angle of entry into the target horizon, designated wells sites, the geological section and the lithological profile of the well, will be determined on the basis of the above studies and the 3D digital model update of the Chiren geological structure and the carrying out of modelling and simulation, taking into account the data and results of the new studies carried out in the period 2015-2021.

In order to access the drilling sites, vehicles servicing the construction and installation works and the drilling process are planned to use the existing republican and municipal road network, existing agricultural roads and, if necessary, temporary access roads.

If necessary, temporary access roads will be built: road alignment; levelling, backfilling and rolling; construction of an access road from existing municipal roads to the drilling site, estimated to be approximately 1 km long. For the construction of the access roads, it is necessary to remove the 0.30 m ($\pm 0,05$ m) depth of the humus layer. The removed humus will be stockpiled in humus landfills and returned upon site reclamation. After removal of the humus layer, the access roads will be backfilled (crushed stone 0-250mm and crushed sand) and rolled.

Excavation and foundation works including: site tracing; construction of soil landfills; construction of humus landfills; excavation and foundation work on borehole foundations; excavation and foundation work on the base of the working tanks, pipe rack and racks frame for winch, water tank, topping tank with nozzle chamber, mud pumps, fuel tank; construction of a sediment tank 1 and 2.

Two earth-bulk settling tanks will be constructed at the temporary drilling site, one for storage of the technical water and the other for storage of the drilling fluids and sludge.

Construction of temporary base. The construction of the site will require a temporary base, including a utility and administrative and laboratory unit, and a storage facility - consisting of containers adapted for the storage of materials and equipment.

Construction and installation works (CIW) including excavation and backfilling works. The excavation works will be carried out manually and mechanically, depending on the site conditions. Excavated soils will be deposited to the sides of the excavation. Manual excavation will be performed at the specific locations indicated on the project. Backfilling will be done evenly on both sides, in 20 cm layers, which will be compacted with a vibratory tamper, with each subsequent pass overlapping the previous one by 10-20 cm.

Drilling process using a drilling rig. Crossing the productive section of the well - the sediments of the Plinsbachian, Hettange-Sinemurian and Triassic according to the set indicators of the well profile and orienting the wellbore in the gas-bearing part of the geological section, revealing the top of the productive part, reaching the final depth of the well to an absolute elevation of about - 1500 m, depending on the elevation of the terrain and the location of the reservoir, in the individual case (well); The direction and technical casings are designed according to the well trajectory calculations, where the last technical casing shall be lowered to the respective depth following the establishment of 10 m of the Toarcian. In the composition of the operational casing, for the gas bearing part of the section (Pliensbachian - Hettangian-Sinemurian - Triassic), a filter is envisaged with 20 holes per linear meter and 12 mm diameter.

Underground gatherings

Establishment of underground gas pipeline gatherings (gas pipelines) is envisaged to connect the exploitation wells to the new site of CS Chiren, including laying in the trench of the gatherings of HOPE pipe with a combined fibre optic cable and copper conductors, respectively to ensure the transmission of technological information and

to supply the equipment of the wells.

The construction of the connecting gas pipelines (gatherings) will be underground at a minimum depth of 0.8 m below ground level with steel pipes of DN150 nominal diameter with a wall thickness of 8 and 7 mm, depending on the category of the section and the design calculations for connecting the wells to the constructed individual separation section of Chiren UGS.

In the construction of the new gatherings, it will be envisaged that, as far as possible, they will be located in existing easements of already constructed ones. Where necessary, an easement zone will be established around the newly constructed pipelines on both sides of the gathering, in accordance with Ordinance No. 16 of 9 June 2004 on energy sites easements.

The gatherings of the newly constructed exploitation wells will be routed along the easement area of the existing well gatherings to the maximum extent possible. In the sections where they do not coincide, they will be laid parallel to existing agricultural roads and a new easement zone will be established (according to the submitted design contours of the new exploitation wells in Chiren UGS, the length of the gatherings, where they are distant from the existing ones, shall not exceed 400-450 metres. A map showing the location of existing gatherings (green, solid line) and design gatherings that do not overlap to the existing ones (red, dashed line) is provided in Appendix 2.

Separators

The individual separation and the individual measuring units will be located at UGS central site. They will be of the same type (similar) to the existing individual units of the other exploitation wells on the same site. The individual separators of the exploitation wells and the individual measuring units are part of the Project for construction of new above-ground facilities – a compressor station with all auxiliary equipment to ensure reliable and continuous operation in gas injection and withdrawal mode and a new gas metering station (GMS).

A foundation will be built for the unit on site and separate basic infrastructure will be laid - a cable from the fence of the central site to the spot for construction and installation of the separation and measuring units of the individual wells, cable ducts, cable routes.

Integration of the technological data from the separation units in the system for monitoring and control of the technological processes of Chiren UGS is envisaged, as well as programming of the control logic of the separation units in the PLC controller, operating the existing separation units of the other exploitation wells in a similar way. All of these measuring instruments will be installed directly on the well and will be within the operating well site of 10 to 10 meter size. It will be protected by a fence to prevent access by unauthorized persons.

Wells telemetry

For current measurement of the parameters of each well and their transmission via telemetry to Chiren UGS, the operating site of each well should be equipped with the necessary instruments.

Current measurement shall be made of gas pressure parameters from the annulus (the space between the operational casing and Tubing Strings (TS) - pump-compressor pipes) and buffer (inside the TS and the under-packer zone), buffer gas temperature, as well as the pressure of the nitrogen bottle supplying the well control panel.

Access roads

The access routes fall into the lands of: the village of Chiren, village of Galatin, the town of Krivodol, Lilyache village, Osen village, Banitsa village.

The staged drilling of the new wells will increase the withdrawal capacity of the gas storage facility.

The coordinates of the particular points of the locations where the exploitation and observation wells will be located-, are shown in the following table:

Projection: WGS84 UTM Zone 34N			
No	Well	Longitude	Latitude
Exploitation			
<u>1</u>	E74	710 212	4 804 311
<u>2</u>	E75	712 432	4 801 411
<u>3</u>	E76	707 888	4 803 826
<u>4</u>	E76-B	706 941	4 804 279
<u>5</u>	E77	711 058	4 802 999

<u>6</u>	E77-B	710 596	4 802 826
<u>7</u>	E78	709 746	4 802 776
<u>8</u>	E78B	709 250	4 803 037
<u>9</u>	E79	711 009	4 803 827
<u>10</u>	E80	712 721	4 802 740
<u>11</u>	E81	711 747	4 802 302
<u>12</u>	E82	710 825	4 802 282
<u>13</u>	E82-B	710 069	4 802 233
<u>14</u>	E83-B	709 432	4 803 608
<u>15</u>	E83	709 002	4 803 959
<i>Observation</i>			
<u>1</u>	01	705 547	4 807 604
<u>2</u>	03	715 171	4 802 745
<u>3</u>	02	704 674	4 804 446

Note: E – exploitation well; O – observation well. The additional 5 wells are marked with index "B" which, if necessary, will back-up and replace an exploitation well

The routes of the new gatherings are planned to pass, if possible, along the existing ones, using the already established easement zones. In the sections where they do not coincide, they will be laid parallel to existing agricultural roads and a new easement zone will be established. All gatherings planned for construction are located outside protected territories under Natura 2000, and are consistent with cultural and historical heritage sites and with the existing underground cadastre of the area - water and gas transmission pipelines, as well as with surface water bodies and forest massifs.

Based on the currently provided information and documentation, BDDR expresses the following opinion:

1.1 River Basin Management Plan (RBMP) 2016-2021

1.1.1 According to the RBMP in force at the moment 2016 – 2021, the IP falls into the following surface water bodies, underground water bodies and water protection zones:

1.1.1.1. Surface water bodies:

Code of surface water body	Water site	Geographical scope	Natural (HMWB) / (AWB)	Environmental condition/	Chemical condition
BGIOG400RH19	without name	tributary of Ribene River from water spring to inflow of Ribene at Lesura	Natural	unknown	unknown
BG30G400RI2I9	RIBENE	the river Ribene River from water spring to confluence of tributary at Lesura, including Tri kladentsi dam	HMWB	good and higher	unknown

Note: *HMWB - Heavily Modified Water Bodies; AWB - Artificial water body. Ecological potential is set for HMWB and AWB.

The established ecological objective of the surface water body with code BGIOG400R1119 until 2027 is: „Achieving good status according to all indicators.

The established ecological objective of the surface water body with code BG1OG400R1219 until 2027 is: *Preservation of good ecological potential and good chemical condition.*

According to the submitted information, the activities in the IP do not provide for water abstraction from surface waters and/or use of surface water bodies. In this regard, the implementation of the IP is not expected to have a negative impact on the quality elements determining the ecological potential/ecological status and chemical status of the surface water bodies and is not expected to lead to non-achievement of the set environmental objectives.

1.1.1.2. Groundwater

Code of groundwater	Name of the groundwater	Chemical condition	
BG10000NIBP036	Karst water in the Lomsko-Plevenemska depression	Good	Good
BG1G000KIAP043	Karst waters in Mramorenski massif	poor (indicators with deviation from Environmental quality standards according to the following indicators:	Good

The set objectives for the groundwater with code BG1G000N1BP036 until 2027 are, as follows: Preservation of good quantity and chemical condition

The set objectives for the groundwater with code BG1G0G0K1APO43 until 2027 are as follows: 1. „Preservation of good quantity; 2 *Achieving and preserving the good chemical condition* “. For the water body, an exception to achieving good condition is justified on the basis of Art. 156c of the Water Act, extension of the deadline for achieving the objectives until 2027.

According to the RBMP 2016-2021 in BDDR, the average thickness of the groundwater named "Karst waters in the Lomsko-Plevenska depression" and code BG1G000N1BP036 is 250 m (Table 2b "Additional characterization of groundwaters" to Appendix 1.3.2.1. Characterization of groundwater" to RBMP 2016-2021).

According to the RBMP 2010-2021 in BDDR, the average thickness of the groundwater named "Karst waters in the Marmorenski massif" and code BG1G000K1APO43 is 180 m (Table 2b "Additional characterization of groundwater" to Appendix 1.3.2.1 "Characterization of groundwater" to RBMP 2016-2021),

The realisation of the IP is **not** expected to negatively impact the quality elements determining the chemical condition of the groundwater, nor their quantity.

1.1.1.3. Water protection zones according to Art. 119(a)(1) of the WA

Water protection	Zone according to article 119a(1) of the WA	The IP does not fall within /Fall (name, code) a protection zone
Art. 119(1)(1) of the WA	Zone for protection of drinking water from surface water bodies	Does not fall within
	Zone for protection of drinking water from groundwater	Falls within (all underground water)
Art. 119a(1)(4) of the WA	Recreation and water sports area	Does not fall within
Art. 119a(1)(3) of the WA	Sensible zone	Falls within with code BGCSARI07
	Vulnerable area	Falls within zone with name Severna zona
Art. 119a(1)(4) of the WA	Area for commercially important fish species	Does not fall within
Art. 119a(1)(5) of the WA	Protected areas	Does not fall within
	Habitats area	Does not fall within
	Birds area	Does not fall within

1.1.1.4. Sanitary-protection zones according to 119(4)(2) of the WA and buffer zones close to the water abstraction equipment/systems where no sanitary-protection zones were determined:

Currently in the area of the IP **there is no** determined sanitary-protection zones according to the Ordinance No. 3/16.10.2000 (OJ 88/2000) concerning the conditions and the procedure for research, design, approval and operation of sanitary protection zones next to water supply bodies and equipment for clean and house water supply and close to water supply bodies of mineral water, used for medicinal, preventive, drinking and hygiene needs are present (Ordinance No.3/16.10.2000).

According to the information available in the BDDR, the terrain intended for the realization of the IP **does not**

fall into a buffer zone with a radius of 1,000 m around water abstraction facilities for drinking and domestic water supply without a specified SPZ. In a buffer zone, it is necessary to observe the restrictions in buffer zones according to Appendix 1 to the National Catalogue of Measures to RBMP (http://www5.moew.government.bg/?wpfb_dl=17375)

1.1.2. Measures laid down in RBMP 2016-2021 that must be considered at the time of realisation of the IP
A. Prohibitions and Restrictions related to the activities under the IP.

Code of measure	Name of measure	Actions for the implementation of the measures	Code of action
GD_1	Protection of the chemical state of groundwaters from pollution and deterioration	Prohibition or restriction of activities that increase the risk of direct or indirect discharge of priority and hazardous substances or other pollutants into groundwater, including the discovery of groundwater at the surface, through the removal of sediments and soils covering the water body	GD_1_2
PM_2	Protection of the chemical state of groundwater from pollution and deterioration	2. Prohibition of carrying out activities leading to discharge of hazardous substances into groundwater	PM_2_2
PM_9	Prevention of the deterioration of water state by projects and activities at the stage investment proposals	2. Prohibition to implement investment proposals resulting in negative change in the condition of water bodies	PM_9_2

According to the submitted information, the activities provided for in the IP are not in violation of the above-mentioned measures, and do not fall under the prohibitions and restrictions of measures with codes GD_1 and PM_2 "Protection of the chemical state of groundwater from pollution and deterioration" and action codes GD_1_2 and PM_2_2, since the IP does not envisage activities related to the separation and/or removal of priority and dangerous substances or other pollutants in the groundwater.

B. Other measures that must be considered at the time of the realisation of the IP

Code of Measure	Name of measure	Actions for the implementation of the measures	Code of action
DP_11	Application of environmental practices or the best available techniques to limit discharges to groundwater of polluting substances	1. Application of environmental practices and the best available techniques to limit discharges to groundwater of polluting substances	DP_11_1
DP_14	Reduction of diffuse pollution from waste from populated areas	Disposal of household waste in accordance with the requirements for the treatment of waste	DP_14_2
DP_2	Reduction of diffuse pollution from industrial activities	3. Disposal of production waste in accordance with the requirements for the treatment of	DP_2_3

At the time of the implementation of the investment proposal, the applicable measures according to the Opinion to Environmental Assessment No.7-3/2016 of the draft RBMP to RBMP 2016 - 2021 in BDDR must also be considered (Appendix 7.2.10 and Appendix 7.2.11.).

Conclusion: The IP is **eligible** in terms of the measures for attaining a good waters condition as laid down in the RBMP 2016 - 2021 and no significant impact is **expected** on the waters in accordance with the measures laid down

in item 1.1.2 of this Opinion.

1.2 Flood Risk Management Plan 2016 - 2021 in the Danube Region

1.2.1 According to the currently effective BRMP 2016-2021 and the information provided, the land intended for the realization of the IP **does not fall into** any regions running high potential risk of floods, as well as in the RRSPRN, determined in the process of updating the BRMP 2022-2027 and approved by the *Minister of the Environment and Water with Order P/Д-804/10.08.2021*

1.2.2 Measures laid down in the RBMP 2016 - 2021 that must be taken into consideration when realising the envisaged activities – there are no specific set measures regarding the activities under the IP.

RBMP 2016 - 2021 does not provide for any prohibitions nor limitations against the realisation of the planned activities.

Conclusion: The implementation of the IP is **admissible** in relation to the RBMP 2016-2021. The planned activities in the IP do not conflict with the measures provided for in the Programme of measures to reduce the risk of floods and the adverse consequences in terms of human health, economic activity, the environment and cultural heritage according to the RBMP 2016-2021.

2. Prohibitions and restrictions provided for in the Water Act regarding this type of investment proposals and/or impacts as a result of their implementation:

The activities provided for in the IP must be carried out in accordance with the requirements of the Water Act and the related by-laws.

Concerning the drilling of ten new exploitation and three observation wells

According to the submitted information the IP envisages the *Design, construction and commissioning of underground facilities – ten new exploitation and three observation wells*. In this regard, the activities related to project wells are subject to a permit according to the requirements of article 46(1)(8) of the WA.

According to article 52(1)(1)(c), subletter "cc" of the WA, the permit for injection of carbon dioxide, natural gas or liquefied petroleum gas into the underground water bodies must be issued by the Minister of the Environment and Waters or an official authorised by him.

According to article 46(2) of the Water Act, the construction of structures, engineering and construction facilities, buildings and others, where contact with groundwater takes place or is possible is carried out under the conditions and according to the order of the Spatial Planning Act in compliance with the requirements for the protection of groundwater according to Chapter Eight of the Water Act.

In order to protect groundwater from pollution, it is necessary to observe the prohibitions of article 118a of the WA.

Concerning the new gatherings and access roads

In the event that water bodies are affected by the planned activities (linear infrastructure crossing water bodies - aqueducts, bridges, transmission networks and wires), within the meaning of Art. 46(1)(1), letter "b" of the WA, a Permit for the use of a water body must be issued for which the BDDR is the competent authority according to Art. 52(1)(4) of the Water Act.

In case aerial passage of facilities over surface water bodies is required, without affecting them, or underground crossing across a surface water body without affecting the natural state of the bottom and the shores, according to the provisions of article 58(1) of the Water Act, a permit is not required, but only a 30-day prior written notification to the Basin Directorate with the submission of the information under article 58(2) of the WA is necessary.

In order to protect surface and groundwater from pollution, it is necessary to observe/apply the provisions of Chapter Eight of the WA, including Art. 118(2)(3) and item 6 and article 134 of the same law.

To protect against the harmful effects of water, it is necessary to comply with the requirements of Chapter Nine of the Water Act, including the prohibitions of Art. 143 and Art. 144 of the same law.

According to §11(1) of the Additional provisions to the Water Act:

"water site" is constant or temporary concentration of waters with corresponding boundaries, volume and water regime in the subsoil and in naturally or artificially created landforms together with the lands belonging to them;

"river floodplains" are the lands that flood: a) within the limits of river corrections in populated areas and between the river and dikes; - in the presence of dikes; during the course of the average multi-year maximum water quantities with a guarantee of 5 percent or recurrence once every 20 years - river sections with unbuilt corrections and protective facilities.

In case of emergencies, creating prerequisites for water pollution, the requirements of article 131(1) of WA must be met.

The potential impacts as a result of the realisation of the IP are described and taken into account in the conclusions made about the admissibility of the IP in item 1. of this Opinion.

3. Information on existing or permitted impacts on the water body in the area, which must be taken into account in a subsequent procedure under Chapter Six of the EPA.

According to the Register of issued permits by the Director of BDDR, in a buffer of 1000 m around the terrain intended for realisation of the IP, there are no issued permits for water abstraction from groundwater.

Based on the requirements of Art. 26 of Ordinance 1 on exploration, use and protection of groundwater, as "IP region" is defined the land of the settlement where IP is planned to be implemented, falling into the underground water body, from which water abstraction is planned.

Current information on existing or permitted impacts is available in Registers of issued permits, published on the BDDR website – <http://www.bd-dunav.bg/content/registri/razreshitelni-i-resheniia/>.

4. Information on free water resources in the part of an groundwater body from which water abstraction is planned (through existing or through new facilities), the risk of groundwater pollution in the process of drilling new tube (borehole) wells and requirements to prevent pollution.

The IP does not provide for water extraction from groundwater bodies.

5. Reasoned assessment of the significant impact on water and aquatic ecosystems.

The implementation of IP *Design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to the implementation of Chiren UGS expansion - Wells* is eligible in relation to the objectives and measures set out in the RBMP and FRMP Danube Region for the period 2016-2021 and is not expected to have a negative impact on water and aquatic ecosystems, subject to compliance with the measures set out in item 1 and the legal requirements in item 2 of this opinion.

6. Conclusion on the applicability of article 93(9)(3) of the EPA

The provisions of article 93(9)(3) of the EPA are **not applicable** to IP *“Design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to Chiren UGS expansion - Wells.*

This opinion does not repeal the obligations of the Contracting authority of the IP to comply with the requirements of the Water act and the other acts and regulations in the Republic of Bulgaria, and cannot serve as grounds for discharge of the liability under the current regulatory framework.

Sincerely.

TSVETOMIRA HRISTOVA

Director Danube region Basin Directorate

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*Coat of
Arms of the
Republic of
Bulgaria*

THE REPUBLIC OF BULGARIA
Ministry of Environment and Water
Executive Environment Agency

Ref. No. YK-1679/01.06.2023

Sofia

TO

Mrs. MARIA BOYADZHIYSKA
DEPUTY MINISTER OF ENVIRONMENT AND WATER

To your Ref. No. OBOC-33/01.06.2023

To our Ref. No. 6081/01.06.2023

Subject: *Submitted updated notice for classification under Article 103, para. 5 of the Environmental Protection Act (EPA), (last amended SG, No. 102 of 23 December 2022 effective as of 1 January 2023) by the operator Bulgartransgaz EAD, Sofia for a facility with high-risk potential - Chiren Underground Gas Storage*

DEAR MRS. BOYADZHIYSKA,

Regarding the updated classification notice (CN) you have submitted under Article 103, para. 5 of the EPA for the above-mentioned facility, we would like to inform you that after a review of the documentation the following has been established:

1. The updated CN for the above facility has been submitted in connection with an Investment Proposal (IP): *Design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to the implementation of Expansion of Chiren UGS - Wells.* The implementation of the new IP provides for design, construction and commissioning of underground facilities - ten new exploitation and three observation wells, new gatherings and access roads related to the implementation of Expansion of Chiren UGS Capacity- Wells, thus increasing the total number of exploitation wells to 34 and observation wells to 17. The facilities envisaged by the IP, as well as the existing exploitation wells and gatherings, will be located outside the site of Chiren UGS. According to the information submitted by the operator, the implementation of the IP will not lead to any change in the type and quantity of hazardous substances from Annex 3 of the EPA, nor to any change in the facilities intended for their storage.

2. Bulgartransgaz EAD, Sofia is a combined operator with a subject of business activity: storage, transmission and transit transmission of natural gas; maintenance, operation, management and development of gas transmission networks; maintenance, operation, management and development of gas storage facilities; development of programmes and activities for compliance of natural gas transmission and storage activities with the requirements of the European energy legislation; development of pricing policy for access to and transport of gas transmission networks, storage of natural gas and connection to gas transmission networks; administrating natural gas transactions and organizing the balancing of the natural gas market in accordance with the requirements of the current legislation; engineering, investment, production and service activity; import of goods, machinery and equipment related to the subject of the business activity of the company: centralized operational management, coordination and control over the mode of operation of the gas transmission networks.

3. There is no change in the hazardous substances from Annex 3 of the EPA that are available on the territory of the storage facility, as well as in the facilities intended for their storage. Hazardous substances (including in the form of waste) listed in Annex 3 of the EPA are stored and are expected to be stored on the territory of the Chiren Underground Gas Storage in the following facilities:

3.1 Methanol Storage Facilities: 1 tank of 250 m³ (**197.5 tonnes**), 1 tank of 2 m³ (**1.58 tonnes**), feed pipe 1/2 of 0.45 m³ (**0.36 tonnes**) and 1 tank of 30 m³ (**23.7 tonnes**) or a total design capacity of **223.1 tonnes**;

3.2 Fuel storage facilities at a company's service station: for diesel - 1 underground tank with a volume of 5.2 m³ (**4.4 tonnes**), for gasoline 1 underground tank with a volume of 17.4 m³ (**13.3 tonnes**);

3.3 Condensate Gas Storage Facilities: storage for flammable liquids (FL)- 1 tank with a volume of 525.5 m³ (**413.7 tonnes**) and an underground pipeline from the existing site to the FL storage - 1.9 m³ (**1.5 tonnes**).

3.4 Natural gas - Underground gas storage and installation 1.752 billion Nm³ (**1,226,400 tonnes**), of which 1 billion Nm³ active volume (700,000 tonnes)

3.5 Hazardous substances and mixtures in a fuel and lubricating materials storage facility (to an existing company's gas station:

- The sealing grease for installation pipes - **0.2 tons**:

- Winter liquid for car windows - **0.007 tons**

3.6 Hazardous waste (with code and name): **13 02 05*** - Mineral-based non-chlorinated engine, lubricating and gear oils (**18 tons**); **15 02 02*** *Absorbents, filter materials (including oil filters not specified elsewhere), wiping cloths and protective clothing contaminated with hazardous substances (0.6 tonnes)*, **16 06 01*** - Lead-acid batteries (**1.35 tonnes**), **16 06 02*** - Ni -Cd batteries (**0.015 tonnes**), **16 07 08*** *Waste containing oils and petroleum products (16 tonnes)* and **20 01 21*** - *Fluorescent tubes and other waste containing mercury (0.000004 tonnes)*.

4. We would like to inform you that the classification notice shall be updated in the cases described in item 1.5 of Article 103, para. 5 of the EPA. No change has been identified in any of the points listed above from the information submitted in this classification notice.

In view of the above, the facility Underground gas storage (UGS) Chiren with operator Bulgartransgaz EAD, Sofia **preserves** the classification confirmed by the Executive Director of Executive Environmental Agency (ExEA) with Ref. No. ПГА-302/28.01.2022 as a facility of high-risk potential. Considering this circumstance, there is no need of subsequent update of the facility's safety report.

In the event that there is a change in the classification of the establishment/facility, pursuant to Article 103 para. 5 of the EPA, the operator is obliged to submit to the Executive Director of the ExEA an updated notice for classification.

Notwithstanding the foregoing, we would like to inform you that the submitted updated classification notice does not comply in form with Annex 1 to Article 5, para. 2 of the *Ordinance on the Prevention of Major Accidents with Hazardous Substances and the Limitation of their Consequences* (the Ordinance adopted by Decree No. 2 of 11 January 2016, last amended and supplemented SG, No. 62 of **5 August 2022**). In this regard, the operator should be reminded that in case of subsequent updating of the CN it is necessary to adhere to the format and content specified in Annex 1 to Article 5 para. 2 of the Ordinance.

Sincerely,

ROSALINA INDZHIEVA
ACTING EXECUTIVE DIRECTOR

(Stamp, signature - illegible)