



REPUBLIC OF BULGARIA
MINISTRY OF ENVIRONMENT AND WATER

99-00-101
15 March 2024, Sofia

Subject: *Response by the Ministry of Environment, Water and Forestry of Romania to the comments and observations on the cross-border procedure for the project „Construction of a hall building, concrete drainage basin, concrete platforms, fencing, lighting system, execution of boreholes and internal water supply and sewerage, deployment of a wastewater pre-treatment plant, deployment of a hospital waste incinerator with associated installations“ with the contracting authority SC FRIENDLY WASTE ROMANIA SRL in Romania*

DEAR MINISTER FECHET,

This letter is to acknowledge the receipt of your letter with Ref. № DGEICPSC/44451 dated 12.02.2024, providing us a response to the comments and remarks made in letter Reg. No. 99-00-101, 04-00-1311 dated 27.11.2023 of the Ministry of Environment and Water of the Republic of Bulgaria for the project "Construction of a building hall, concrete drained basin, concrete platforms, fencing, lighting system, execution of boreholes and internal water supply and sewerage, deployment of a wastewater pre-treatment plant, deployment of a hospital waste incinerator with associated installations" on the territory of Romania.

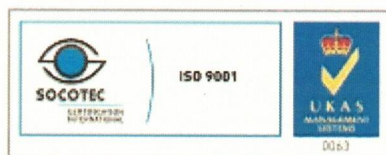
After considered the responses, and on the basis of the opinions submitted by the interested authorities and the provided public access to the documentation, I hereby express the following opinion:

Mircea FECHET

Minister of Environment, Waters and Forests of Romania

12 Libertatii Blvd.,

Sector 5, Bucharest, Romania



Sofia 1000, 22 Maria-Luisa Blvd



Phone: +359 2 940 6194, Fax: +359 2 986 25 33



After the information was made available to the public, negative opinions were again expressed by the Bulgarian public from the town of Ruse against the implementation of the investment proposal.

I. General comments on the responses submitted:

1. The main element of the investment proposal (IP) is the construction of a hall with a metal structure and the purchase, installation and operation of a rotary incinerator for the incineration of medical waste and animal waste. In addition, the infrastructure will include the construction of a concrete drainage basin, concrete platforms, fencing, lighting system, the implementation of boreholes and internal water supply and sewage network, the deployment of a wastewater pre-treatment plant.

2. The submitted answer to question III.1. on page 98 continues to confirm the information that the incinerator will not only accept hospital waste, as indicated in the name of the investment project (IP), but will also accept animal waste, food waste and other waste. We therefore again draw the attention to the fact that the title of the project should be corrected to include animal waste, and that the assessment carried out and the measures proposed in the report should be complete

3. The answers provided do not contain specifics and do not provide further clarification on the content of the corrected EIA Report for the project. The answers given contain mainly excerpts of texts from the EIA Report, but do not provide clarifying information to support the studies made.

4. The provision for the development of an odour plan in the course of issuing an environmental permit indicates that no thorough investigation and analysis of the potential substances to be emitted into the ambient air, their concentrations, respectively their impact and the perimeter of dispersion has been carried out at this time. Also, no specific preventive measures have been proposed to limit pollution of the environment.

5. Preventive measures to avoid and limit the risk of emergencies are not presented.



6. *In their entirety, both the EIA Report for the project and the responses to the comments made do not address in depth and in detail the various impacts on environmental components under possible adverse scenarios that may occur during the operation of the incinerator. The overall impact resulting from the normal operation of the facility is reviewed and is deemed to be within acceptable limits, even below the accepted emission limits to the atmosphere. In this respect, the risk of disruption of the normal operation of the incinerator, respectively of its equipment and elements, which may lead to disruption of the technological process and release of unregulated emissions, is determined to be minimal. Similarly, the risk of accepting waste with a different composition and quality than required, shortcomings in its temporary storage, etc., which may lead to deviations in the process and the type and quantity of air emissions, has not been thoroughly addressed.*

7. *No alternatives have been considered, no alternative solutions to the selected technology have been found that are reasoned on the basis of a satisfactory environmental analysis of the activity.*

8. *Our previous letter requested information on the likelihood and situations associated with the release and spread of odours with the potential to provoke olfactory discomfort, the type of potentially odorous substances, and the conditions that could be conducive to their spread, including under emergency conditions, proposing a plan with additional measures to ensure their resolution as soon as possible. The Contractor declares that these issues have been addressed in the report, again referring only to the information contained therein. The latter refers to an inventory of the entire procedure for the reception, unloading, temporary storage, treatment and incineration of the waste (non-hazardous, non-hazardous animal, medical waste and its packaging), but not to an analysis of the potential sources of odors from it. The requirement is set on odours in the air emitted from both organized and unorganized sources. An odour management plan will, according to the Contracting Authority, be prepared at the start of the activity. For the purpose of this assessment, it is necessary to identify and analyze the most appropriate odour abatement and mitigation techniques that the Contracting Authority will apply to the specific activity at the site, and to distinguish their sources (point/diffuse), furthermore - the Contracting Authority states that „excessive odorous“ will not be generated by the activity, and it is not clear how these have been assessed as such.*

9. *The submitted additional information on hazardous chemicals and mixtures only answers the question on the use and storage of diesel fuel, but does not provide information*



on the composition of the disinfectant to be used for the company's needs. Biclosol disinfectant will be used to disinfect the medical waste packaging that needs to be disinfected and will be stored in a dedicated area for this process. The disinfection will be carried out with a prepared solution and hot water washing equipment. A Material Safety Data Sheet should be attached. Supplies of hazardous chemical substances and mixtures (fuels and disinfectant) need to be accompanied by up-to-date Safety Data Sheets as required by Regulation (EC) 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals and its subsequent amendments. In view of the fact that hazardous chemical substances and mixtures falling within the scope of Part 1 and Part 2 of Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances and amending and subsequently repealing Council Directive 96/82/EC will be stored on the site and in relation to the requirements of Article 7 of the same Directive, it is necessary for the operator to prepare a notification. The notification needs to address possible emergency situations that may arise in the event of an installation failure, leakage of tanks or spillage.

10. The Contracting Authority has not indicated how it reached the conclusion that is made on page 221 of the submitted EIA - "The project proposed by Friendly Waste Romania SRL does not fall under the provisions of the SEVESO Directive, transposed into national law by Law No 59/2016 on the control of major-accident hazards involving dangerous substances" - there is no specific justification and it is not clear on what basis the conclusion was made. Justification for this conclusion should be provided and quantitative parameters should be presented.

11. It is not clear which installations, activities and machinery on the site would emit noise into the environment. It is stated that the sources would be transport vehicles, machinery and an incinerator, lacking specificity as to what this includes. No estimate of the expected construction and operational sound power from the installation has been provided. A value is given for the expected noise at the „Impact Location“ (Drumul Cthunului Street with a distance of 535m from the site) and during operation of the incinerator, but no methodologies, formulae and/or calculation paths are provided to arrive at the determined values of equivalent noise level. It is not clear whether and how noise emissions to the environment will be controlled during normal operation of the installation. In the responses referred to in the inter-ministerial correspondence, it is stated that 'we can estimate that the



noise level will not exceed at the boundary of the property the maximum value permitted by Order No 119/2014 of the Minister of Health', a statement which is not supported by measurable, real and demonstrable data.

12. In accordance with the provisions of Article 50, § 3 of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) - the Directive, each combustion chamber of the waste incineration plant shall be equipped with at least one additional burner. In the section 'Main characteristics of the operational phase of the project', on page 47, it is described that each combustion chamber has one burner, type P 61, for LPG and on page 51 that each combustion chamber is equipped with a burner that is switched on automatically when the flue gas temperature drops below 850°C or 1100°C after the last injection of combustion air. From the information thus provided, it is not clear whether each combustion chamber is equipped with an additional burner in order to comply with the requirement of Article 50(3) of the Directive.

13. Pursuant to Article 50, § 4 of the Directive, waste incineration plants and waste co-incineration plants shall use an automatic system that prevents the feeding of waste in the following cases:

- during start-up operations, until the temperature referred to in paragraph 2 of that Article or the temperature determined in accordance with Article 51(1) has been reached;
- whenever the temperature referred to in paragraph 2 of that Article or the temperature specified in accordance with Article 51(1) is not maintained;
- whenever continuous measurements show that any of the emission limit values is exceeded due to a malfunction or failure of the waste gas treatment systems.

The response received indicated that the automation system independently monitors (records and prints) the following parameters: 1. oxygen and 2. temperature. Regarding the "Continuous and Automatic Waste Feed System", on page 53 it is described that the waste to be incinerated is expected to be collected and brought to the incineration facility in containers. They are placed in the loading hopper where they are conveyed by a hydraulic loading system to the feed chute where a hydraulic piston transfers them to the primary chamber of the incinerator, thus ensuring a feed rate to the incinerator of 300 kg/h. The waste is fed continuously, provided that health and safety regulations are strictly observed.



We do not consider that the provisions of Article 50(4) of the Directive would be complied with in this way. For one thing, the automatic system should report exceedances of the emission limit values (ELVs) and not only measure the parameters oxygen and temperature. On the other hand, the description of the 'Continuous and automatic waste feed system' states that waste is fed automatically, but does not address the hypothesis of stopping the waste feed before the required temperature is reached, when the required temperature is reduced and when the NEL is exceeded (oxygen and temperature cannot be attributed to the NEL) or the connection of the automatic system to the waste gas treatment systems (in case of a failure, for example).

14. *It is described that "when faults occur in the incinerator, they are reported in advance by the automatic monitoring system, in which case the procedural steps below apply: 1. the waste feed to the primary chamber is stopped (continuous feed system)". It cannot be concluded from the text that the waste feed is automatically prevented, but rather mechanically prevented. In the manner in which the automatic system is thus described, we consider that the requirements of Article 50(4) of the Directive have not been complied with.*

II. Remarks on components and environmental factors

Remarks on the "waste" factor:

1. *The waste accepted will be of different types and supplied by different generators. The Contracting Authority indicates that it envisages the possibility of determining the characteristics of the waste suitable for incineration on the basis of the documents submitted alone, without requiring sampling, inspection and analysis of the waste prior to its acceptance for incineration at the plant. According to BAT 11 of Implementing Decision (EU) 2019/2010 the following is required upon acceptance of waste for incineration: Detection of radioactivity for all waste and periodic sampling and analysis of the main properties/matter (e.g. calorific value, halogen and metal/metalloid content) of the non-hazardous waste. Partial monitoring of waste deliveries as part of the overall waste acceptance procedure does not demonstrate confirmation of BAT use against the applicable conclusions of the reference document. The Contracting Authority does not foresee the detection of radioactivity for the waste and periodic sampling of the deliveries, which creates the preconditions and risk of radioactive contamination, combustion process risk and potential damage to environmental components.*



2. Again, the information does not clarify whether the facility can accept waste from other countries and whether it anticipates adding other types of hazardous and/or non-hazardous waste for incineration in the future, concerns for which the risk of obtaining incorrect information about the type of waste, its suitability for incineration or the integrity of the packaging remain questionable.

3. A diagram of the production site with the location and capacity of the combustion plant is presented, but the areas designated for the pre-storage of the different types of waste accepted are not distinguished, nor is the maximum current capacity of the site for the pre-storage of all types of waste.

Remarks on the „air” component:

1. From the results of the mathematical modelling presented on page 13-15, it is noticeable that for pollutants with the same emission limit values (ELV) and similar deposition rates, different maximum concentrations are obtained at the distance Bulgaria/Ruse, and the same concentrations are obtained for pollutants with different ELVs, e.g.:

- for total carbon (C) and hydrogen chloride (HCl) at an NDE determined for 24 hours of 10 mg/Nm³, the resulting concentrations amount to 0.001 µg/m³ and 0.003 µg/m³, respectively;
- for sulphur dioxide (SO₂) and carbon monoxide (CO) at the 24-hour NDE of 50 mg/Nm³, the resulting concentrations are 0,001 and 0,03 µg/m³ respectively;
- an equal concentration of 0,03 µg/m³ was obtained for the emissions of nitrogen oxides (NO_x) and CO at the 24-hour NECs of 200 mg/Nm³ and 50 mg/Nm³;
- a uniform concentration of 0,03 µg/m³ was obtained for total C and HCl emissions at 30-minute NECs of 20 mg/Nm³ and 60 mg/Nm³.

2. These modelling results, although significantly lower than the specified air quality standards, raise questions about the accuracy with which the modelling was performed.

3. Given that the installation is new, it is necessary to comply with all requirements, including the emission levels of pollutants set out in Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the conclusions on the best available techniques (BAT) for the incineration of waste pursuant to Directive 2010/75/EU of the European Parliament and of the Council.



4. *For the pollutant dioxins, no clear and specific information has been provided on the capability of the system to meet the stringent technical requirements for lowering the gas temperature exiting the secondary chamber from 110°C to 200°C in the shortest possible time.*
5. *For the pollutant nitrogen oxides, it is not possible to make a declaratory assumption of compliance with the NO_x standards based on data with a large uncertainty due to the different composition of the waste incinerated in the incinerator. The required analysis is missing. No nitrogen oxide treatment plant is envisaged.*
6. *The dry acid gas abatement system that is intended to be used for treatment must be continuously overdosed with an alkaline reagent to compensate for occasional peak levels of HCl from wastes with high chlorine content (e.g. plastics). Otherwise, it is impossible to delay the dosing of a larger amount of alkaline reagent in response to an increase in the concentration of HCl in the flue gas and the occurrence of peak concentrations of HCl that lead to a violation of the NDE.*
7. *It is noted that no further examination and analysis has been conducted of the injection devices, the relevant temperature at which the injection takes place and its control.*

Remarks on the „water” component:

1. *The information presented does not sufficiently analyse the presence, distribution and impact of substances and pollutants identified by Directive 2008/105/EC and Directive 2013/39/EU, as well as other specific pollutants identified under Directive 2000/60/EEC, as point and diffuse sources of water and soil pollution, both directly and through airborne transport. It is necessary to implement the above actions and to provide for measures to prevent impacts.*
2. *The risk to the environment and human health in the event of emergency or unregulated situations for these substances has not been sufficiently addressed. The above actions need to be implemented and measures need to be foreseen to prevent impacts.*
3. *Consideration should be given to all pollutants, their cumulative effect when entering surface water and the associated groundwater that may also be affected, and thus the water uses in the river terrace Danube, and if necessary to prevent the discharge of waste water from the site into the river Danube.*



4. *It is necessary to consider the substances and elements that will be deposited on the walls of the incinerator, which will subsequently enter the water when the facility is washed, and their impact accordingly.*

5. *Modern wastewater treatment facilities should be provided to treat all expected pollutants in wastewater*

6. *A sufficient distance from the border with Bulgaria should be ensured to limit the impact to the territory of the Republic of Romania, given the possible transboundary impact of the international river basin. Danube, water, soil and the health of the citizens of Bulgaria.*

III. Regarding the impact of the IP on humans and the possible health risk of the implementation of the investment proposal:

1. *The active stationary emission sources in the nearby industrial areas - Romanian and Bulgarian enterprises - have not been identified and are not presented. The emissions of air pollutants generated by them and their distribution are not presented, and their cumulative emission potential and immission contribution to air pollution in the cities of Ruse and Giurgiu is not calculated. The projected emissions from the present IP are also included.*

2. *The response to Question III.3 on page 99 states that the emissions resulting from the IP" are so low that they would not be able to causing a cumulative effect with any other emission source if it operated within legal parameters." The above is only a hypothesis of the authors of the ELA, which is not evidentially supported by a predictive model.*

3. *No specific health risk assessment has been carried out on the basis of which adequate measures for prevention of negative impact during the implementation of the IP have been justified, but scientific data regarding the overall impact of the respective pollutant on human health, regardless of the activity from which it is generated, have been considered. The supplementary information only states as a measure that, if the technological process is followed, no risk should be expected, which in practice is a conclusion or recommendation but not a substantive health risk assessment.*

4. *The remarks in our previous opinion No. 99-00-101, 04-00-1311/27.11.2023 have not been addressed and taken into account, and due to the lack of an adequate health risk assessment, the insufficient, in quantitative and qualitative terms, measures to prevent the negative impact in the implementation of the IP, the lack of assessment of the cumulative*



effect and considering that the protection of the health of citizens is a national priority that stands above the interests of individual citizens and/or business entities.

5. The team of experts that prepared the report should have distinguished between the AQA (ambient air quality), respectively the impact of the IP on the AQA and the assessment of the impact of emissions on human health when assessing the impacts

6. The EIA does not analyse the potential emergency situations that may occur, including the potential environmental consequences. No measures are proposed that would prevent severe environmental pollution. It is not clear how a potential accident would be remedied - how to proceed if air pollution were to occur.

7. The measures for avoidance, prevention and reduction of negative impacts in case of accidents, which are included in the EIA, are derived from regulatory requirements for all projects and are of a general and declarative nature. The measures thus presented do not include any measures for ensuring the continuous, correct and trouble-free operation of the flue gas treatment facilities. It is essential that all treatment plants comply with the emission limit values for the entire period of their operation.

8. No mathematical modelling has been presented for the spread of emissions under cumulative effect conditions with other sources of organised emissions, which we consider to be a significant omission in the EIA report. Not all air pollutants on both sides of the Danube are comprehensively addressed, making the report incomplete and not providing reliable data on the overall magnitude and coefficient of transboundary pollution. Considering that Ruse is home to industries mainly in the chemical, metals, oil refining, automotive and ceramics industries, the conclusions drawn are unsound and unacceptable. All mathematical predictions are based on some database, but in practice it cannot be guaranteed that there will be no pollution.

There is a potential for the operation of the incinerator to directly or indirectly affect public health, but the circumstances described above do not allow an assessment of the degree of significance of the health risk that this IP would generate for the population on the territory of the municipality of Ruse.

In view of the above, we consider that the additional information submitted does not demonstrate a reasonable minimum risk of emissions to ambient air in a transboundary context.



The information in the comments from the Contracting Authority of the IP is considered to be unsatisfactory with regard to the issues raised in our previous opinion, and as a result a positive opinion cannot be expressed in the EIA procedure in a transboundary context.

Civil society of the town of Ruse continues to be extremely sensitive and resistant the project. Protests against the project have been organized, petitions and negative opinions against its implementation have been submitted. All this is caused by the population's concern for the protection of the purity of the ambient air and the opposition to the implementation of projects associated with the potential release of harmful emissions and impacts on environmental components and endangering the health of people.

By this letter I would also like to inform you that Resolution №. 1445, adopted by Protocol №51/11.09.2023 of the Municipal Council of Ruse, adopted a declaration regarding the construction of an incinerator for the incineration of hospital waste in the Municipality of Giurgiu. With this Resolution, the Municipal Council - Ruse expresses its categorical disagreement with the implementation of the project: „Construction of a building hall, concrete drained basin, concrete platforms, fencing, lighting system, implementation of boreholes and internal water supply and sewerage, location of a wastewater pre-treatment station, location of an incinerator for hospital waste with associated installations“ in the Municipality of Giurgiu. The Municipal Council declares that the opinion of the local population is of priority importance for solving issues concerning local security and health care in Ruse Municipality. It is necessary the information to be revised and supplemented in order to comply with European legislation. It should be accompanied not only by a response to the questions and comments set out in this letter, but also by the revised EIA Report, in both English and Bulgarian.

In conclusion and taking into account all the above, the Republic of Bulgaria expresses a negative opinion on the information presented in the report due to the lack of adequate assessment of the health risk, the insufficient quantitative and qualitative measures to prevent the negative impact of the implementation of the IP, considering that the protection of the health of citizens is the most important and national priority. We confirm the opinion of the Republic of Bulgaria, expressed in the previous opinion, that it is essential to monitor possible transboundary impacts at each stage of the project implementation - from construction to the implementation of the activity, including the lawful operation of the installation in accordance with its technical parameters and the provisions of the investment proposal.



Considering the sensitivity of the investment proposal, a broad and open public discussion is required, therefore I insist on a public consultation on the investment proposal also being organised in the territory of the Republic of Bulgaria.

Please accept, Honourable Minister, my highest regards and readiness for successful future cooperation.

Yours sincerely,

Julian Popov
Minister of Environment and Water