VEST MEDICAL IMPACT SRL

Tax identification number: 42158350, Order number in the trade register: J35/ 168/ 2020, (EESEIS) Approval No. 6 of 21.04.2023 duration 3 years

IMPACT ASSESSMENT STUDY

ON THE HEALTH AND COMFORT OF THE POPULATION IN RELATION WITH PROJECT "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY — P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANTA COUNTY"

CERCHEZU COMMUNE, CONSTANȚA COUNTY

MADE BY:

VEST MEDICAL IMPACT SRL

Dr. Muntean Călin Interdisciplinary board coordinator

Signed/stamped: /illegible signature, seal/

Revision: TIMIŞOARA Document classification:

version 00 No. 111 of 06.03.2024 Confidential Public summary

S.C. Vest Medical Impact SRL is certified according to the Order of the Ministry of Health no. 1524 of October 09, 2019 to carry out health impact assessments for both projects that are not subject to, and projects that are subject to, the environmental impact assessment procedure (- Authorization no. 6/21.04.2023 duration 3 years -) being registered at position 6 in the Record of developers of health impact assessment studies (EESEIS)

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Commission for the registration of developers of health impact assessment studies

Authorization for preparing impact assessments Authorization no. 6/21.04.2020

Name of the legal entity: SC VEST MEDICAL IMPACT SRL

Registered address: Timișoara

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Date of issue: 21.04.2023

Duration of validity of the authorization: three (3) years

The authorization is issued for the purpose of preparing health impact assessment studies for

- a) functional projects that are subject to the environmental impact assessment procedure according to the provisions of Article 9 para. (1) and (2) of Law No 292/2018 on the environmental impact assessment of certain public and private projects:
- b) functional projects not subject to the environmental impact assessment procedure.

Dr. Andra Neamtu President

/ilelgible signature, seal/

NOTE: The issuance of this authorization for the elaboration of impact studies does not constitute certification of the legality, correctness and quality of the way in which the health impact assessment studies have been carried out the entire legal responsibility lies with the author of the study, who is responsible before the law for any illegalities and non-compliances that may be found later.









Business location - Timişoara, Strada Paris, nr. 2, etaj 4, cam. 401, post code 300003, county Timiş contact@vmedicalimpact.ro, tel: 0726707113

VEST MEDICAL IMPACT SRL, Tax identification number: 42158350, Business number: J35/ 168/ 2020, contact@vmedicalimpact.ro, (EESEIS) Approval nr.6/21.04.2023 duration 3 years ISO SCS Page 2 of 105 This document is the property of VEST MEDICAL IMPACT SRL. Reproduction or dissemination in whole or in part is subject to copyright.

IMPACT ASSESSMENT STUDY

ON THE HEALTH AND COMFORT OF THE POPULATION IN RELATION WITH PROJECT "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY — P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANTA COUNTY"

CERCHEZU COMMUNE, CONSTANȚA COUNTY

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1. PURPOSE AND OBJECTIVES

The theoretical purpose of Health Impact Assessment (HIA) is to assess and predict the potential health effects on population of the implementation of a project, plan or policy before it becomes operational. The central aim of HIA is to protect people's health and prevent ill health by identifying and appropriately managing health risks related to the built environment and environmental factors. The theoretical objectives of HIA are:

- Assessment of potential health impacts: HIA aims to identify and assess the potential impacts
 on the health of the population following the implementation of a project or activities. This
 involves a detailed analysis of the environmental factors, how they may influence human
 health and the associated risks. Health impact assessment may include direct and indirect
 effects on physical and mental health as well as impacts on socio-economic factors and
 quality of life.
- 2. Identification and assessment of risks: Another objective of the HIA is to identify and assess the risks to the health of the population associated with the project or activity being assessed. This involves identifying the potential sources of environmental pollution or degradation, determining how they may affect human health, and assessing the likelihood and severity of the impact on the exposed population. The purpose of risk assessment is to inform decision-makers and guide decision-making to reduce and manage these risks.
- 3. Proposal of preventive and protective measures: The objective of the HIA is to propose preventive and protective measures to reduce the negative impact on the health of the population. These measures may include modifications to the project or activity in question, implementation of safer and cleaner technologies, adoption of specific policies and regulations, and promotion of preventive interventions and health education. The aim is to minimize health risks and promote a healthy and sustainable environment for the population.
- 4. Communication and public involvement: The HIA aims to involve and inform the public about potential health impacts and propose protective measures. Transparent and accessible communication with the community and all interested parties is essential to promote understanding and acceptance of the HIA results and to ensure active public participation in the decision-making process. Involving the public can contribute to more informed decision making and the identification of appropriate solutions to protect the health of the population. The central aim of HIA is to assess and protect the health of the population in the context of the implementation of projects and activities that may have an impact on the environment and human health. By identifying and assessing potential impacts and risks, proposing preventive and protective measures, and involving the public, HIA contributes to promoting sustainable development and ensuring a healthy and safe environment for the community. This approach can be applied in various economic sectors and uses quantitative, qualitative and participatory techniques. It issues recommendations for decision-makers and stakeholders with the aim of maximizing the positive health effects proposed by the project and minimizing its negative health effects. Factors that can be considered in a health and comfort impact assessment study

Air Quality: This may include levels of pollutants such as particulate matter, ozone, and nitrogen dioxide. These pollutants can have several health effects including respiratory problems, heart disease and cancer.

Water quality: This may include levels of contaminants such as bacteria, viruses and chemicals. These contaminants can cause various health problems, including gastrointestinal disorders, liver damage and cancer.

Noise pollution: This can include noise levels generated by traffic, construction and other sources. Noise pollution can cause a range of health problems including sleep disturbance, stress and hearing loss.

Land use: This can include the amount of available green space, density of development, and proximity to transportation routes. These factors can influence people's health and comfort.

Climate change: This can include the effects of rising temperatures, extreme weather events and rising sea levels. These effects can have several health impacts, including heat stress, respiratory problems and vector-borne diseases.

In addition to these factors, the impact assessment study should also take into account the specific population studied. For example, the health and comfort of children, the elderly and people with chronic conditions may be more sensitive to environmental factors.

The impact assessment study may use a variety of methods to collect data, including surveys, interviews and environmental monitoring. The data will then be analyzed to identify potential health and comfort impacts caused by the environmental factors studied.

The prospective impact assessment study will provide valuable information to decision-makers on the potential impacts on health and comfort of the population due to environmental factors. This information can then be used to develop policies and regulations to protect public health and comfort. Here are some specific examples of how these factors can affect health and comfort:

Air quality: In 2019, the World Health Organization estimated that 9 in 10 people worldwide breathe polluted air. Air pollution is caused by a variety of sources, including traffic emissions, industrial emissions and dust from construction sites. Poor air quality can lead to a range of health problems, including respiratory problems, heart disease and strokes.

Water quality: Contaminated water is a major issue in many parts of the world. According to the World Health Organization, 2 billion people lack access to safe drinking water. Contaminated water can cause a variety of health problems, including diarrhea, cholera and typhoid fever.

Noise pollution: Noise pollution is a growing problem in many urban areas. Exposure to excessive noise can lead to hearing loss, stress and sleep disturbance. According to the World Health Organization, 1.1 billion people are exposed to excessive noise levels at night.

Lack of green spaces: Green spaces are essential for human health. Studies have shown that people living in areas with more green spaces have lower rates of obesity, heart disease and stroke. They also tend to be happier and healthier overall.

Socio-economic factors: Socio-economic factors can have a significant impact on health. People living in poverty are more likely to have poor health than those who are not. This is because poverty can lead to a number of factors that can contribute to poor health, such as poor nutrition, lack of access to healthcare and exposure to environmental hazards.

These are just some of the ways in which people's health and comfort can be affected. It is important to consider all these factors when carrying out an impact assessment study.

Several common challenges may arise during the health impact assessment process. These challenges may vary depending on the specific context and project being analyzed, but some of the most common include:

- 1. Underestimating the level of effort required: Conducting a comprehensive health impact assessment requires significant time, resources, and expertise. Underestimating the effort required can lead to incomplete or inadequate assessments.
- 2. Political changes during the HIA process: Political changes, such as changes in leadership or changes in priorities, can influence the HIA process. This can lead to delays, changes in objectives or difficulties in implementing recommendations.
- 3. Accessing relevant data and information: Gathering accurate and up-to-date data and information is crucial for a robust health impact assessment. However, accessing relevant data sources and obtaining the necessary information can be challenging, especially when working with sensitive or proprietary data.
- 4. Lack of stakeholder involvement: Stakeholder involvement throughout the assessment process is essential to ensure the relevance and effectiveness of the HIA. However, challenges can arise in engaging various stakeholders, maintaining their involvement, and addressing conflicting perspectives.
- 5. Limited resources: Conducting a HIA requires financial, human and technical resources. Limited resources can be a challenge in conducting comprehensive assessments, accessing specialized expertise and implementing recommended actions.
- 6. Lack of awareness and understanding: Some decision-makers and stakeholders may have limited awareness or understanding of the concept and value of health impact assessment. This can make it difficult to integrate HIA into decision-making processes and limits its effectiveness.
- 7. Lack of standardized methods and tools: Despite the existence of a framework and guidelines for conducting health impact assessments, there are sometimes variations in the way these assessments are carried out. The lack of standardized methods and tools can make it difficult to compare and evaluate different HIAs.

Overall, Health Impact Assessment can be a valuable tool for policy development and to assist decision-makers in various fields, including public health and healthcare management.

The specific purpose of the health and comfort impact assessment study in relation to the project "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY – P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANȚA COUNTY", proposed to be located in the administrative unit of Cerchezu, outside built-up area, nr. FN, identified by the real estate register certificates according to the Urban Planning Certificate no. 129 of 28.11.2022 issued by the County Council of Constanta, is to assess and anticipate the potential impacts on the health and comfort of the population before the implementation of this complex project.

The specific objectives of the study are as follows:

 Assessment of the potential impact on the health and comfort of the population: The main aim is to identify and assess the potential impact of the project on the health and comfort of the inhabitants of Cerchezu Commune, Constanta County. This assessment will consider both direct effects, such as air pollution and noise, and indirect effects, such as changes in quality of life and access to green spaces.

- 2. Identification, and evaluation of health risks: The study will identify and evaluate the specific risks to the health of population posed by the proposed project. These risks may include exposure to air pollution and chemicals, as well as effects on mental health and sleep quality due to construction noise and disturbance.
- 3. Proposed preventive and protective measures: The study will propose clear preventive and protective measures to minimize the negative impact on the health and comfort of the population. These measures may include cleaner and safer construction technologies, noise and air pollution management plans, as well as improvements to green spaces and infrastructure to compensate for disturbances caused by the project.
- 4. Communication and public involvement: The study will promote transparent communication and active involvement of the local community and stakeholders in the assessment process. This will ensure that residents are informed about potential health impacts and have the opportunity to voice their concerns and contribute to the definition of protective measures.

The assessment study may use a variety of data collection methods, such as field research, environmental monitoring, surveys and interviews with residents and experts in the field. The data obtained will be analyzed to assess the risks and impacts on the health and comfort of the population associated with the project "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANTA COUNTY - P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANȚA COUNTY", proposed to be located in the Cerchezu TAU, outside built-up area, nr. FN, identified by the Real estate register certificates according to the Urban Planning Certificate no. 129 of 28.11.2022 issued by the Constanta County Council. The results of the study will be used to issue recommendations for local decision makers and all stakeholders to ensure that the project has a positive impact on the health and comfort of the population and that risks are adequately managed.

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CERCHEZU COMMUNE, CONSTANȚA COUNTY

Revision: TIMIŞOARA Document classification:

version 00 No. 111 of 06.03.2024 Public summary

Project name: "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY — P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANȚA COUNTY, proposed to be located in Cerchezu municipality, outside built-up area, nr. FN, identified by the real estate register certificates according to the Urban Planning Certificate no. 129 of 28.11.2022 issued by the County Council of Constanta;

Holder of the activity: SC. SOUTH WIND SRL, TIN: 26501455;

- postal address: Bucharest, 1st District, Str. Turda nr. 122, camera 300, Modul C, bloc 39, scara B, etaj 2, ap.54, Romania;

Design Engineer: SC ARHICO CONSULTING SRL, Constanta; Project No: 3/2022;

The Zonal Urban Development Plan was initiated in order to establish the conditions of location, sizing, technological compliance and urban regulation for the "Wind energy park 48 wind power stations approx. 316,8MW, transformer stations, electrical connection networks, construction and modernization of communication and access roads".

The studied land is located in a favorable area for the development of the wind energy power generation function, both in terms of the presence of wind potential, topography and infrastructure - electricity grids, and in terms of the availability of the local community and investors. The only development potential with significant economic impact for the area is the almost permanent presence of wind. Together with this potential, the area can be exploited for agricultural purposes.

SITE CHARACTERISTICS

The land on which it is intended to carry out the investment proposed by the PUZ (regional urban planning) is private property of individuals / legal entities with which the beneficiary of the investment SOUTH WIND SRL, has concluded contracts of assignment and surface.

The area of the plots that generated the PUZ is 280.00 ha, and the total studied area is 3,027.77 ha. The area studied for the implementation of the project includes agricultural land with arable land destination and land with special purpose - exploitation roads in the public domain of the territorial administrative unit of Cerchezu commune, managed by the Local Council of Cerchezu commune and public domain of county interest.

NEIGHBORING AREAS AND ACCESSES

The studied area is delimited as follows:

- to the north Independenta commune boundary privately owned agricultural land;
- to the east the boundary of Chirnogeni commune and Negru Voda town privately owned agricultural land;
- to the west boundary of com. Independenta and com. Dumbraveni agricultural land private property;
- to the south border with Bulgaria.

The lands on which the investment to be developed are represented by the plots:

		received a / sine proses
Investments		Plots
	- power station T1 - A 439/2/15	- power station T14 - A 174/11
	- power station T15 - A 208/1/20	- power station T28 - A 363/2/30;
Wind power stations (Turbines)	- power stations T2 - A 411/1/10	- power station T29 - A 367/49
	- power station T16 - A 208/1/13	- power station T30 - A 72/34;
	- power station T3 - A 439/1/16	- power station T31 - A 367/12/2

Investments		Plots
Investments	 power station T17 - A 78/22+A 78/23 power station T4 - A 439/3/3 station T18 - A 177/23 station T5 - A 208/2/3 station T6 - A 430/2/15 station T6 - A 430/2/15 station T7 - A 98/2/4/2 station T7 - A 98/2/4/2 station T21 - A 359/12 station T22 - A 359/3 station T22 - A 359/3 station T23 - A 359/25 station T03 - A 98/1/8 station T10 - A 207/7 station T24 - A 363/2/9 station T11 - A 195/25 station T12 - A 208/2/21/21 power station T12 - A 208/2/21/21 power station T26 - A 72/4 power station T13 - A 179/10/1 	 power station T32- A 9/12 lot1,A9/12 lot3 power station T33 - A 78/10; power station T34 - A 1/20/1, A 1/20/2 power station T35 - A 277/2/11 power station T43 - A 338/2/6 power station T36 - A 277/2/3 power station T44 - A 338/3/5; power station T45 - A 335/1/3; power station T45 - A 335/1/3; power station T38 - A 250/26 power station T39 - A 251/28/1 power station T47 - A 314/1/12 power station T40 - A 250/10 power station T48 - A 411/2/4; power station T41 - A 338/1/21 power station T42 - A 379/7/5
Transformer stations	 station T27 - A 90/9 SS01 - A5/28 SS02 - A251/1/26, 	 -SS03 - A177/16, -SS04 - A207/11
Site organization (temporary)	 OS1 - A251/1/20, OS2 - A367/15, OS3 - A250/9 	- 5501 N20//11
Landscaped access roads	 A163/18/2, A277/4/7 A251/31 	
Site organization	 A 251/1/31, A 367/15, A 250/9 	

The distance to the nearest residential areas from the wind turbines (named T1 to T48) is:

- 1052.78 m in the S direction from turbine T5 to the residential area in Cerchezu village;
- 1622.33 m in the SW direction from turbine T12 to the residential area of Cerchezu village;
- 1277.11 m in the NW direction from turbine T48 to the residential area in the village of Cerchezu;
- 1302.72 m from turbine T27 in WSW direction to the residential area of Căscioarele village;
- 1447.88 m in the NE direction from T34 turbine to the residential area of Viroaga village;
- 1245.30 m in ESE direction from turbine T31 to the residential area of Viroaga village;
- 1077.34 m in the S direction from turbine T35 to the residential area in the village of Magura;
- 1306.11 m in the NE direction from turbine T35 to the residential area of Magura village.

Access to the site is from the national road (DN), communal roads (DC) and exploitation roads (De) roads listed below:

Type of road	Site access
National road	DN 38 Constanta - Negru Voda
Existing municipal roads	Dc 16 and Dc 17 (Chirnogeni), Dc 13, Dc 18, Dc 19
Existing exploitation roads	De 2011, De 376/1, De 366, De 357, De 64, De 77, De 75/20, De 87, De 78/3, De 78/1, De 94/1, De 181, De 168, De 173, De169/1, De 172, De 198, De 195/16, De 391, De 204, De 208/2/1, De 208/1/1, De 98/1/1, De 98/2/1, De 430/1/1, De 430/2/1, De 432, De 440, De 439/2/1, De 411/1/1, De 439/1/1, De 439/1/1, De 251/1, De 130/1, De 250/1, De 271, De 258/10, De 379/2/1, De 361, De 356/1, De 356, De 356/2, De 339/1, De 339, De 337, De 336, De 314/1/1/1, De 315, De 129, De 125, De 128, De 277/8, De 277/7
Developed access roads	A163/18/2, A277/4/7 and A251/31.

The main function of the studied area is agriculture, the agricultural land with current arable function has an area of 2.908,24 ha, representing 96,05% of the total studied area. Location rules according to Order 239/2019:

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- The protection zone of the wind power station is delimited on the ground by the contour of the foundation of the supporting pillars, plus 0.2 m around the perimeter.
- wind farms shall be located at least at the height of the pylon plus the length of the blade (>150 m) from the electricity grids;
- wind turbines shall be positioned in relation to the national highway at least the distance represented by the elements of the wind turbine (height of the pylon + length of the blade)
 + 3 m for safety; the distance to the road should be less than 50 m;
- wind power stations shall be positioned in front of public communal roads, at a distance equal to one blade length, but not less than 30 m;
- the safety zone of the power station is 7 x the diameter of the rotor of the largest aggregate, when they are arranged in the direction of the prevailing wind, or 4 x the diameter of the rotor of the largest aggregate, when they are arranged perpendicular to the direction of the prevailing wind the protection zone of the transformer station is delimited by the fencing of the installations, equipment and their technological annexes.

Functional zoning of the studied site

The functional zoning of the study site has determined the following regulations:

- respect of the boundaries of the plots according to the parcel plans approved by the OCPI;
- the siting of the wind power stations in compliance with the provisions of the Local Urban Planning Regulation related to the PUZ;
- Strict compliance with the routes of the existing exploitation roads and modernization of the access roads to the site.

On the basis of the proposals made in the PUZ, the functional unit ZA resulted.

The functional sub-zones were established taking into account the following criteria:

- dominant function;
- cadastral boundaries of the related land.

The resulting functional sub-units are:

- ce sub-area related to wind turbines + complementary constructions;
- a sub-area related to agricultural arable land;
- st transformer substation sub-area;
- cn irrigation canal sub-area;
- ps grassland sub-area;
- np non-productive land sub-area;
- da developed farm roads sub-area;
- cm major circulation sub-area Dj+Dc (county road + village road);
- de the sub-area of farm roads.

The territorial balance is:

Functional zone ZA	Existing		Proposed	
	ha	%	ha	%
Wind power stations sub-area/ancillary constructions	-	-	280.00	9.25
Agricultural land sub-area	2.908.24	96.05	2.624.90	86.69
Transformer station sub-area	-	-	3.34	0.11
Pasture sub-area	64.00	2.11	64.00	2.11
Unproductive land sub-area	1.87	0.06	1.87	0.06
Irrigation canals sub-area	11.77	0.40	11.77	0.40
Sub-area of developed farm roads	-	-	26.00	0.86
Major traffic sub-area DN+Dc	5.24	0.17	5.24	0.17
Sub-area of service roads	36.65	1.21	10.65	0.35

Functional zone ZA	Existing		Proposed	
	ha	%	ha	%
Total studied area	3027.77	100	3027.77	100

Proposed urban indexes:

POTmin. = 8,00%, POTmax. = 50,00% CUTmin. = 0,08, CUTmax. = 0,50

MANDATORY CONDITIONS

The following mandatory conditions are imposed for the realization and operation of the project "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY – P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANTA COUNTY":

- 1. Compliance with the legislation and regulations in force: all activities related to construction, siting, operation and maintenance must comply with the rules and regulations in force in the fields of renewable energy, environmental protection, occupational health and safety, urban planning and any other specific provisions.
- 2. Safety and health of the population: Safety standards and rules for the protection of workers and the population in the project area must be respected. Measures to prevent accidents and manage risks associated with the construction and operation of the wind farm will be implemented.
- 3. Landscape implementation: Landscaping works may be carried out around the wind farm to mitigate the visual impact of the structures.
- 4. The health impacts in relation to noise from the operation of wind turbines may be considered speculative, depending on the distance of their location from populated areas. It is necessary to monitor noise levels and implement mitigation measures to minimize potential negative impacts.
- 5. The shadowing effect of moving turbine rotors can affect the illumination and visual comfort of people in neighboring areas. It is important to assess and minimize this effect to reduce nuisance and potential associated health problems.
- 6. In order to avoid potential accidents, it is essential that the construction team strictly comply with work protection rules and procedures. Workers will be properly trained and provided with the appropriate equipment to carry out their work safely.
- 7. As the wind farm becomes operational, public access to certain areas around the wind farm may pose a risk. In order to prevent potential accidents, clear signage and appropriate fencing and marking of hazardous areas is necessary to discourage unauthorized access and to ensure the protection of bystanders over the estimated distances of potential danger in the event of an accident.
- 8. Maintenance and operation of the wind farm involves workers exposed to specific risks. From the danger of electrocution, to falls from height or mechanical incidents, safety measures need to be well in place. Regular staff training and the use of personal protective equipment are essential to minimize risks and ensure worker safety.
- 9. In addition, there are rare situations where wind turbines may be subject to the risk of fire. To effectively respond in such unforeseen situations, the wind farm must be equipped with adequate fire detection and extinguishing systems. Staff training on emergency actions in

- the event of a fire it can be vital to prevent the fire from spreading and to protect both staff and the community.
- 10. Environmental rehabilitation and restoration: At the end of the wind farm's lifecycle, or if the wind farm is no longer operational, measures for the rehabilitation and restoration of the affected environment shall be implemented in accordance with applicable practices and standards.

These mandatory conditions are essential to ensure the sustainable and responsible development and operation of the Cerchezu Wind Farm, Constanţa County, minimizing negative environmental impacts and protecting the health and safety of the local population. The implementation and compliance with these conditions are the responsibility of the developer and will be supervised by the competent authorities to ensure compliance with the legislation in force.

CONCLUSIONS

Conclusions drawn on the basis of the data presented during the evaluation of the project 48CE "WIND ENERGY PARK 48CE, WIND POWER TRANSFORMER STATIONS, ELECTRICAL CONNECTION NETWORKS, CONSTRUCTION AND MODERNIZATION OF COMMUNICATION AND ACCESS ROADS, OUTSIDE BUILT-UP AREA, CERCHEZU COMMUNE, CONSTANȚA COUNTY – P.U.Z. (REGIONAL URBAN PLANNING) + D.T.A.C. (TECHNICAL DOCUMENTATION DRAFTED TO OBTAIN THE BUILDING PERMIT) - CERCHEZU COMMUNE, CONSTANȚA COUNTY, proposed to be located in the Cerchezu TAU, outside built-up area, nr. FN, identified by the Real estate register certificates according to the Urban Planning Certificate no. 129 of 28.11.2022 issued by the Constanța County Council, are as follows:

- 1. Environmental Factors: The analysis of the environmental factors reveals that the project complies with the applicable legislative and regulatory requirements in terms of air, water, soil, noise and vibration. However, continuous monitoring of these factors is required during project implementation and operation to ensure continued compliance and minimize any potential adverse environmental impacts.
- 2. Health Protection Zone: As defined in the updated WHO 119/2014, the Health Protection Zone is the land surrounding the objective where activities that could lead to contamination or pollution of environmental factors are prohibited due to potential health repercussions on the resident population living in the immediate vicinity of the project. It is important that this area is respected and maintained in accordance with applicable regulations.
- 3. Nuisance Factors: The assessment of nuisance factors, such as accident hazards, public safety, environmental aesthetics and access to public services, may be subjective and cannot be quantified in a mathematical form that would allow a risk assessment and prediction of long-term health impacts under urban pollution conditions. Nevertheless, it is important to implement appropriate measures to minimize any discomfort and to ensure public safety.

The conclusions drawn are based on the data provided in this paper and should be considered in the specific context of the project and site.

The health and comfort impact assessment study in relation to the analyzed project emphasizes the need to balance the benefits of the development of this project with its potential negative consequences. In this regard, a strategic and responsible approach to the planning and implementation of this project is required to ensure both the protection of the health and amenity of the local population and the achievement of the proposed development objectives.

According to the checklist of health and social impact factors specific to the objective, the operation of the objective is NOT likely to generate significant risks to the health status of the population in the study area under the analyzed conditions.

The conclusions drawn relate strictly to the situation described and assessed and are valid for the current site. Any change of any nature in the characteristics of the objective may lead to changes in the exposure, risk and implicitly the associated impact.

The responsibility for the calculations, data and information incorporated in the technical memorandum and presentation memorandum, the drawn parts, rests entirely with the authors of these documentations, as well as for the veracity of the data provided.

Modification of the provisions of the technical documentation presented or failure to comply with the conditions for the elimination of potential sources of risk or discomfort for the exposed population, leads to the annulment of the conclusions of this study.

Any complaints from neighbors will be resolved by the beneficiary. VEST MEDICAL IMPACT SRL does not assume responsibility for resolving these conflicts. At the same time we would like to mention that Population Health Impact Assessment (HIA) studies are a support for local authorities to make the best decisions for the population they represent and to establish strategies for the development and planning of areas in order to improve the quality of life of the population in social, administrative and health terms.

Dr. Muntean Călin Interdisciplinary board coordinator

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