

**Environmental permit**

Registry number of permit		KL-524863
Data of the permit holder	Business name / Name	Enefit Green AS
	Registry code / Personal identification code	11184032
Data of the place of business	Description	Enefit Green AS
	Address	Hiiu County
	Cadastral register number(s)	
	EHAK territorial code	0039
	The territory of the installation	Geometry: 2 separate plots Water bodies concerned: Glotov Shoal (VEE3219000), open part of the Baltic Sea (western part of western islands) (VEE3200100), Baltic Sea (Estonian sea area) (VEE3000000), Baltic Sea (western part of western islands) (VEE3200000).
Field of activity	Activities regulated under the permit	Special use of water
Data of the permit issuer	Name of the authority	Environmental Board
	Registry code	70008658
	Address	Roheline 64, 80010 Pärnu
Period of validity of the permit	Date of entry into force of the version of the permit	30.10.2025
	Expiration date	30.10.2040

## **Discharging of waste water, including hazardous substances, into public sewerage**

*Data are not provided because they are not relevant in the given context.*

### **Special use of water**

#### **V1. Permitted abstraction of water by surface water intakes**

*Data are not provided because they are not relevant in the given context.*

#### **V2. Permitted abstraction of water by groundwater intakes**

*Data are not provided because they are not relevant in the given context.*

#### **V3. Requirements for the amount and monitoring of water to be abstracted**

*Data are not provided because they are not relevant in the given context.*

#### **V4. Outlets and permitted quantities of pollutants by outlets and pollutants**

*Data are not provided because they are not relevant in the given context.*

##### **V4.1 Production of reclaimed water**

*Data are not provided because they are not relevant in the given context.*

#### **V5. Determination of the pollution load of the wastewater treatment plant**

*Data are not provided because they are not relevant in the given context.*

#### **V6. Evaluation of the cleaning efficiency of the wastewater treatment plant**

*Data are not provided because they are not relevant in the given context.*

#### **V7. Discharge monitoring requirements**

*Data are not provided because they are not relevant in the given context.*

#### **V8. Monitoring of a water body, including the recipient**

Sampling requirements	<p>1. A detailed monitoring plan must be prepared in cooperation with the developer, the Environmental Board and a competent expert and coordinated with the Environmental Board through the KOTKAS system half a year before the start of the monitoring work prior to the special use of water work. The monitoring plan should be based, inter alia, on chapter 11 of the EIA Report of the North West Estonia Wind Farm, the guideline prepared by TalTech in 2025 "Metoodika möju hindamiseks hüdrodünaamikale ja vee omadustele (sh. vee kvaliteedile) meretuleparkide rajamisel" [Methodology for the Assessment of the Impact on Hydrodynamics and Water Properties (including Water Quality) in the Construction of Offshore Wind Farms] and the corresponding HELCOM guidelines.</p> <p>2. The monitoring plan must cover all the areas of monitoring mentioned in the environmental permit: monitoring preceding, during and after the special use of water work, and both special use of water areas (TP1 and TP4).</p> <p>3. The monitoring plan must also set out the sampling or observation methods to be followed by the permit holder, specify the frequency and format in which monitoring results and reports must be submitted and how monitoring data should be taken into account when planning the works.</p> <p>4. The coordinated monitoring plan will be a part of the environmental permit and it must be adhered to in the monitoring.</p> <p>5. Monitoring (sampling and analysis of samples) carried out under an environmental permit must comply with (or be consistent with) the monitoring methodologies and quality requirements used in the marine monitoring sub-programme of the National Environmental Monitoring Programme and with the relevant regulations of the Minister of the Environment established under the Water Act.</p>
Analysis requirements	Upon analysing samples, requirements established by law must be complied with.

Additional requirements for monitoring	<p>1. Monitoring preceding special use of water Water quality and hydrodynamics</p> <p>1.1. Measurements of water quality and hydrodynamics must be carried out within one year before the start of special use of water work. The objective is to clarify the situation of the aquatic environment before the start of the special use of water and to verify the results of the modelling carried out during the EIA.</p> <p>1.2. Studies of water quality and hydrodynamics must be carried out: (1) the area between the special use of water locations, at approximately equal distance from them; (2) outside the impact area of the special use of water work.</p> <p>1.3. The following must be measured at the indicated locations: vertical profiles of current speeds, waves, wind, temperature, salinity, density (calculated based on salinity and temperature), stratification strength (calculated based on salinity and temperature), mixed layer thickness (calculated based on salinity and temperature), oxygen and chlorophyll concentration, nutrients, including total nitrogen and total phosphorus in water. Temperature, salinity, nutrients, including total substances are measured from the departure of the ice to autumn on at least two horizons: the upper layer and the near-bottom layer. In winter, temperature and salinity can be measured on one horizon. Chlorophyll a measurements should be made in the upper layer from the time the ice retreats until autumn. Oxygen measurements should be made in the near-bottom layer from the time the ice retreats until autumn. Temperature, salinity, oxygen and chlorophyll a should be measured at intervals of at least 3 hours. Nutrients (including general substances) should be measured at intervals of at least two weeks. Measurements, sample collection and analyses must be carried out by certified samplers and using accredited methods that comply with the HELCOM guidance materials (if available, see <a href="https://helcom.fi/action-areas/monitoring-and-assessment/monitoring-guidelines/">https://helcom.fi/action-areas/monitoring-and-assessment/monitoring-guidelines/</a>).</p> <p><b>Seabed habitats</b></p> <p>1.4. The purpose of monitoring is to observe potential impacts of special use of water on seabed habitats throughout the project area.</p> <p>1.5. Before the start of special use of water work, an inventory of seabed habitats in the development area TP1, which is not covered by the previous inventory, must be carried out in accordance with the methodology of the inventories previously carried out within the framework of the EIA.</p>
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This would also provide an opportunity to make a quantitative assessment of habitat distribution.

1.6. At the special use of water locations and within a radius of 200 m from each special use of water location (site for the preparation of both potential foundations and cables), the structure and characteristics of the seabed habitat must be documented prior to special use of water work (sonar mapping of the bottom relief, underwater video observations, quantitative sampling, if possible, oxygen conditions, organic content of sediments) in order to map the state prior to the specific use of water.

#### Fish fauna

1.7. Monitoring preceding special use of water in the development area consists of documenting the exact baseline conditions in spring, summer, autumn and winter.

#### Marine mammals

1.8. Before the start of the special use of water, it is necessary to carry out studies on the marine use of seals (grey seal, ringed seal) in the northern part of the Väinameri and in the special use of water area TP1 and TP4 and to monitor the number of seals in the haul-out sites associated with the same area at all seasons, in addition to the national monitoring of the total number in spring. The objective of the study is to map the state prior to the special use of water and, if necessary, to specify mitigation measures in relation to marine mammals.

- In order to measure the marine use of grey seals (adult seals), a telemetric survey (5 to 10 individuals, captured at Selgrahu) must be carried out to identify the existing situation. If the animals are local, ie use marine areas clearly associated with Selgrahu, the study should be repeated during special use of water work.
- In order to measure the marine use of ringed seals, a telemetric survey (5 to 10 individuals, caught from the northern part of the Väinameri) must be carried out in order to identify the existing situation. If the animals move regularly in the northern part of Hiiumaa or migrate to Finland, the study must be repeated during special use of water work. The main method is flight counting, 4x2 flights in one year (over Selgrahu, Kadakalaaid, Vormsi and the northern part of Väinameri).

#### 2. Monitoring during special use of water

##### Distribution of suspended solids

2.1. In the special use of water area, suspended solids must be monitored. In accordance with the results of the monitoring, mitigation measures should be applied in relation to the distribution of suspended solids and the fish fauna.

##### Seabed biota and habitats

2.2. The purpose of the monitoring is to observe possible changes and to enable to respond quickly to undesirable changes in the state of seabed habitats and environments.

2.3. Immediately after the completion of dredging work in the preparation of bases for potential wind turbine foundations and the placement of solids in the construction of potential wind turbine foundations, document the condition of the seabed biota and habitat in the immediate vicinity of the special use of water locations (200 m radius) and the extent of possible damage (video observations).

2.4. During the preparatory work on potential cable lines, it is necessary to observe the possible effects on the entire area covered by the special use of water permit and in as varied environmental conditions (depths, bottom sediments) as possible.

2.5. In the immediate vicinity of special use of water work, monitor the status of the seabed biota (both on soft and hard bottoms) (reference area). The frequency of monitoring is once during the special use of water work and once after the special use of water work has been completed.

#### Fish fauna

2.6. During special use of water work, operational monitoring of fish fauna must be carried out in order to monitor changes in the species composition and abundance of the fish fauna on an ongoing basis. Suspended solids monitoring must be scheduled in parallel with fish monitoring (operational monitoring) in order to assess fish behaviour at the same time.

### 3. Monitoring after special use of water

#### Water quality and hydrodynamics

3.1. The same measurements as in the phase preceding special use of water must be carried out two years after the end of the special use of water work. After two years of monitoring, it should be decided whether or not the monitoring should continue. With a frequency of once to twice a month, monitor the aquatic environment parameters and hydrodynamics.

#### Seabed biota and habitats

3.2. The purpose of the monitoring after the special use of water is to observe possible changes and to enable to respond quickly to undesirable changes in the state of seabed habitats and environment across various special use of water works.

#### 3.3. Special use of water in the preparation and construction of potential foundation bases:

- Follow-up monitoring must be carried out in at least three special use of water locations per development area for at least one year;
- After the end of the special use of water, the development of communities attached to at least three solids placement sites in each development area must be observed throughout the depth in the photic zone (layer where photosynthesis is still taking place) every meter of depth, deeper every 5 m (during the first two years with a frequency of 6 times a year, later with a frequency of once every two years);
- The colonisation of the solids placement site by seabed biota must be observed (quantitative sampling/assessment, once a year, for five years after the end of the special use of water, the entire depth range from bottom to surface, at three sites per area);
- The accumulation of organic matter in the vicinity of the special use of water location (sediment traps, over a period of five years, at three special use of water locations per development area) must be observed;
- The status of the seabed habitats in development areas must be observed (3 stations per area, underwater video surveillance, quantitative sampling, once a year);
- A mapping of the status of the seabed biota in the immediate vicinity of the development area and within the development area (20-30 stations for each development area) must be carried out with a frequency of once a year. The state of the biota of both hard and soft substrates must be assessed. In addition, at the end of the special use of water phase, a repeated sonar survey of seabed sediments must be carried out over a period of a few years to determine the impact of the activity on sediment relocation.

#### 3.4. Special use of water in the preparation of potential cable routes:

- Follow-up monitoring of the special use of water work must take place annually during the summer months (June to September) for a minimum of five years. Depending on the substrate, the technology is slightly different;
- Soft sediment: select three areas where cable embedding has occurred. In each selected area, video observations of the seabed will be conducted using an ROV, drop camera or diver. Each observation should include 10 repetitions, with each video covering a minimum area of 5 m<sup>2</sup>. Additionally, quantitative samples must be collected from the soft sediment in the immediate vicinity of the special use of water locations in at least three replicates in each area. A reference area, at least 500 metres away and with similar seabed characteristics, must be established for each monitoring area. Observations and sampling must be carried out in the reference area according to the same scheme (it is important that the reference area is definitely outside the area of impact of dredging);
- Hard substrate: select five areas where cable embedment or installation has taken place. These areas should be evenly distributed across the entire occupied depth gradient, covering both the photic and the aphotic zones. The shallowest area must be in the range of 2-5 m. In each area, video observations of the seabed must be conducted using an ROV, drop camera or diver. Each observation should include 10 repetitions, with each video covering a minimum area of 5 m<sup>2</sup>. Additionally, quantitative samples must be collected from the hard substrate in the immediate vicinity of the special use of water locations in at least three replicates in each area.

A reference area, at least 500 metres away and with similar seabed characteristics, must be established for each monitoring area. Observations and sampling must be carried out in the reference area according to the same scheme (it is important that the reference area is definitely outside the area of impact of the works);

**Fish fauna**

3.5. In order to monitor changes in the species composition and abundance of fish fauna during the period following the special use of water, monitoring must be carried out annually for the first five years after the end of the special use of water work.

## V9. Requirements for the damming of a water body and the use of hydropower

*Data are not provided because they are not relevant in the given context.*

## V10. Dredging

Name of water body	Open part of the Baltic Sea (western part of the western islands)								
Water body code	VEE3200100								
Name of the body of surface water	The northern basin of the open part of the Baltic Sea								
Code of the body of surface water	NBP								
Place of dredging	Sea								
Dredging place/area	Geometry: 1 separate plot. Water bodies concerned: Open part of the Baltic Sea (western part of western islands) (VEE3200100), Baltic Sea (Estonian sea area) (VEE3000000), Baltic Sea (western part of western islands) (VEE3200000).								
Areas of separate plots at the location of dredging works	No.	Area (km <sup>2</sup> )							
	1.	54.076							
Justification of the need for dredging	Dredging in the special use of water area TP1 with the aim of preparing the seabed under the gravity base foundation of 6 wind turbines and making preparations for the laying of potential cables inside the wind farm. The immediate loss of the seabed during dredging is 0.0053 km <sup>2</sup> . The exact special use of water locations will be established following further studies and may shift compared to the original plan (see Annex 1 to the permit). The shift must be consistent with Alternative 4 of the EIA report.								
Method of dredging	Dredging vessel, cable laying device (trench, plow, hydropawl, jetting, etc).								
Characterization of dredging spoils	A layer of sand and gravel, bedrock clay								
Physical properties and volume of dredging spoils	Type of soil	Comments	Volume, m <sup>3</sup>	Substances					
	Dredging spoils in the preparation of foundation bases		60,000	Name of the substance	Other substance				
	Dredging spoils in the laying of cables		24,250	Other	a layer of sand and gravel, bedrock clay				
					100				
					100				

Pollutant concentration in the soil to be dredged	Pollutant	Concentration, mg/kg	Load, t
	Cd	<0.4 mg/kg	
	Cu	3 mg/kg	
	Hg	0.003 mg/kg	
	Pb	3.34 mg/kg	
	Zn	13.7 mg/kg	
	hydrocarbons C10–C40	120 mg/kg	
Biological properties of dredging spoils	Properties and occurrence		
Requirements for dredging	The dumping of dredging spoils is prohibited.		
Monitoring	Substances to be monitored	Sampling frequency	Sample type

Name of water body	Open part of the Baltic Sea (western part of the western islands)				
Water body code	VEE3200100				
Name of the body of surface water	The northern basin of the open part of the Baltic Sea				
Code of the body of surface water	NBP				
Place of dredging	Sea				
Dredging place/area	Geometry: 1 separate plot. Water bodies concerned: Open part of the Baltic Sea (western part of western islands) (VEE3200100), Baltic Sea (Estonian sea area) (VEE3000000), Baltic Sea (western part of western islands) (VEE3200000).				
Areas of separate plots at the location of dredging works	No.	Area (km <sup>2</sup> )			
	1.	30.2116			
Justification of the need for dredging	Dredging in the special use of water area TP4 with the aim of preparing the seabed under the gravity base foundation of 17 wind turbines and making preparations for the laying of potential cables inside the wind farm. The immediate loss of the seabed during dredging is 0.15 km <sup>2</sup> . The exact special use of water locations will be established following further studies and may shift compared to the original plan (see Annex 2 to the permit). The shift must be consistent with Alternative 4 of the EIA report.				
Method of dredging	Dredging vessel, cable laying device (trench, plow, hydroplow, jetting, etc).				
Characterization of dredging spoils	Sand, cobbles, gravel				
Physical properties and volume of dredging spoils	Type of soil	Comments	Volume, m <sup>3</sup>	Substances	
	Dredging spoils in the preparation of foundation bases		170,000	Name of the substance	
	Dredging spoils in the laying of cables		70,500	Other	sand, cobbles, gravel

Pollutant concentration in the soil to be dredged	Pollutant	Concentration, mg/kg	Load, t
	Cd	< 0.4 mg/kg	
	Cu	10.03 mg/kg	
	Hg	0.0024 mg/kg	
	Pb	5.77 mg/kg	
	Zn	30.3 mg/kg	
	hydrocarbons C10–C40	79.66 mg/kg	
Biological properties of dredging spoils	Properties and occurrence		
Requirements for dredging	1. In the special use of water area TP4, special use of water is not permitted in the area of the Hiiu Shoal sand deposit overlapping with the existing Hiiu Shoal sand quarry mining claim. Special use of water is possible if approval or permit has been obtained under the Earth's Crust Act and there is an agreement with the AS Tallinna Sadam. 2. In the special use of water area TP 4, special use of water work must not hamper access to mineral resources and the extraction of mineral resources in the Hiiu Shoal sand quarry. In order to ensure this, it is necessary to cooperate with the holder of the mining permit (AS Tallinna Sadam). 3. The dumping of dredging spoils is prohibited.		
Monitoring	Substances to be monitored	Sampling frequency	Sample type

## V11. Placement of solids in a water body, including dumping

### Placement of solids, incl dumping

Name of water body	Open part of the Baltic Sea (western part of the western islands)		
Water body code	VEE3200100		
Name of the body of surface water	The northern basin of the open part of the Baltic Sea		
Code of the body of surface water	NBP		
Place of placement of solids, including dumping	Sea		
Name of dumping area			
Coordinates of the special use of water area	L-EST coordinates		
Justification of the need to place solids in a water body, including dumping	Placement of solids in the special use of water area TP1 during the construction of the gravity base foundation of 6 potential wind turbines and the installation of potential cables inside the wind farm.		
Method of placing solids in a water body, including dumping	Sinking to the bottom of the sea		
Physical properties of substances to be placed in a water body	Type of soil or substances	Properties	Volume, m <sup>3</sup>
	Placement of solids	crushed stone, concrete foundation	48,000
	Placement of solids	cable	1,940
Chemical properties of substances to be placed in a water body	Pollutant	Concentration	Volume, m <sup>3</sup>
Biological properties of substances to be placed in a water body	Properties and occurrence		

Justification and legal basis for the application of the exemption for the dumping of environmentally hazardous substances and/or objects.	
Requirements for placing solids in a water body, including dumping	

Name of water body	Open part of the Baltic Sea (western part of the western islands)		
Water body code	VEE3200100		
Name of the body of surface water	The northern basin of the open part of the Baltic Sea		
Code of the body of surface water	NBP		
Place of placement of solids, including dumping	Sea		
Name of dumping area			
Coordinates of the special use of water area	L-EST coordinates		
Justification of the need to place solids in a water body, including dumping	Placement of solids in the special use of water area TP4 during the construction of the gravity base foundation of 17 potential wind turbines and the installation of potential cables inside the wind farm.		
Method of placing solids in a water body, including dumping	Sinking to the bottom of the sea		
Physical properties of substances to be placed in a water body	Type of soil or substances	Properties	Volume, m <sup>3</sup>
	Placement of solids	crushed stone, concrete foundation	136,000
	Placement of solids	cable	5,640
Chemical properties of substances to be placed in a water body	Pollutant	Concentration	Volume, m <sup>3</sup>
Biological properties of substances to be placed in a water body	Properties and occurrence		
Justification and legal basis for the application of the exemption for the dumping of environmentally hazardous substances and/or objects.			
Requirements for placing solids in a water body, including dumping	<ol style="list-style-type: none"> <li>1. In the special use of water area TP4, special use of water is not permitted in the area of the Hiiu Shoal sand deposit overlapping with the existing Hiiu Shoal sand quarry mining claim. Special use of water is possible if approval or permit has been obtained under the Earth's Crust Act and there is an agreement with the AS Tallinna Sadam.</li> <li>2. In the special use of water area TP 4, special use of water work must not hamper access to mineral resources and the extraction of mineral resources in the Hiiu Shoal sand quarry. In order to ensure this, it is necessary to cooperate with the holder of the mining permit (AS Tallinna Sadam).</li> </ol>		

Name of water body	Open part of the Baltic Sea (western part of the western islands)		
Water body code	VEE3200100		
Name of the body of surface water	The northern basin of the open part of the Baltic Sea		
Code of the body of surface water	NBP		
Place of placement of solids, including dumping	Sea		
Name of dumping area			

Coordinates of the special use of water area	L-EST coordinates		
Justification of the need to place solids in a water body, including dumping	Beneficial use of dredging spoils in the special use of water area TP1 for filling the gravity base foundation of 6 potential wind turbines and filling cable trenches. Beneficial placement of dredging spoils. According to the HELCOM dredging and dumping guidelines ( <a href="https://helcom.fi/wp-content/uploads/2024/03/HELCOM-Guidelines-for-Management - of-Dredged-Material-at-Sea.pdf">https://helcom.fi/wp-content/uploads/2024/03/HELCOM-Guidelines-for-Management - of-Dredged-Material-at-Sea.pdf</a> ), this is a special case of dumping where beneficial use of dredging spoils takes place (beneficial use, clause 8 and 11 of § 187 of the Water Act, p 8, clause 7.2.2 of the HELCOM dredging and dumping guidelines).		
Method of placing solids in a water body, including dumping	Technical use (construction/land reclamation). The dredged soil is stored on platforms specially built for the transport of material. If the construction design documentation of a particular foundation footing foresees materials of different strength, they are laid in layers in the foundation or mixed according to the recipe. The cable trench is filled with dredging spoils.		
Physical properties of substances to be placed in a water body	Type of soil or substances	Properties	Volume, m <sup>3</sup>
	dredging spoils obtained during the preparation of foundation bases	a layer of sand and gravel, bedrock clay	60,000
	dredging spoils obtained during the preparation of the cable trench	a layer of sand and gravel, bedrock clay	24,250
Chemical properties of substances to be placed in a water body	Pollutant	Concentration	Volume, m <sup>3</sup>
Biological properties of substances to be placed in a water body	Properties and occurrence		
Justification and legal basis for the application of the exemption for the dumping of environmentally hazardous substances and/or objects.			
Requirements for placing solids in a water body, including dumping			

Name of water body	Open part of the Baltic Sea (western part of the western islands)		
Water body code	VEE3200100		
Name of the body of surface water	The northern basin of the open part of the Baltic Sea		
Code of the body of surface water	NBP		
Place of placement of solids, including dumping	Sea		
Name of dumping area			
Coordinates of the special use of water area	L-EST coordinates		
Justification of the need to place solids in a water body, including dumping	Beneficial use of dredging spoils in the special use of water area TP4 for filling the gravity base foundation of 17 potential wind turbines and filling potential cable trenches. According to the HELCOM dredging and dumping guidelines ( <a href="https://helcom.fi/wp-content/uploads/2024/03/HELCOM-Guidelines-for-Management-of-Dredged-Material-at-Sea.pdf">https://helcom.fi/wp-content/uploads/2024/03/HELCOM-Guidelines-for-Management-of-Dredged-Material-at-Sea.pdf</a> ), this is a special case of dumping where beneficial use of dredging spoils takes place (beneficial use, clause 8 and 11 of § 187 of the Water Act, p 8, clause 7.2.2 of the HELCOM dredging and dumping guidelines).		
Method of placing solids in a water body, including dumping	Technical use (construction/land reclamation). The dredged soil is stored on platforms specially built for the transport of material. If the construction design documentation of a particular foundation footing foresees materials of different strength, they are laid in layers in the foundation or mixed according to the recipe. The cable trench is filled with dredging spoils.		
Physical properties of substances to be placed in a water body	Type of soil or substances	Properties	Volume, m <sup>3</sup>
	dredging spoils obtained during the preparation of foundation bases	sand, cobbles, gravel	170,000
	dredging spoils obtained during the preparation of the cable trench	sand, cobbles, gravel	70,500

Chemical properties of substances to be placed in a water body	Pollutant	Concentration	Volume, m <sup>3</sup>
Biological properties of substances to be placed in a water body	Properties and occurrence		
Justification and legal basis for the application of the exemption for the dumping of environmentally hazardous substances and/or objects.			
Requirements for placing solids in a water body, including dumping	<ol style="list-style-type: none"> <li>1. In the special use of water area TP4, special use of water is not permitted in the area of the Hiiu Shoal sand deposit overlapping with the existing Hiiu Shoal sand quarry mining claim. Special use of water is possible if approval or permit has been obtained under the Earth's Crust Act and there is an agreement with the AS Tallinna Sadam.</li> <li>2. In the special use of water area TP 4, special use of water work must not hamper access to mineral resources and the extraction of mineral resources in the Hiiu Shoal sand quarry. In order to ensure this, it is necessary to cooperate with the holder of the mining permit (AS Tallinna Sadam).</li> </ol>		

## **V12. Establishment, expansion, decommissioning of water body and activities related to the wetland and shoreline and changes to important physical or chemical properties of water, biological properties of the water body or water regime**

*Data are not provided because they are not relevant in the given context.*

## **V13. Maintaining the surface water body with chemicals**

*Data are not provided because they are not relevant in the given context.*

## **V14. Aquaculture**

*Data are not provided because they are not relevant in the given context.*

## **V15. Loading, unloading, repair of ship**

*Data are not provided because they are not relevant in the given context.*

## **V16. Measures to reduce the impact of special uses of water and the deadlines for their implementation**

No	Measure	Description of the measure	Implementation of the measure due date
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1.	Other relevant measures	<p>Secondary conditions:</p> <ol style="list-style-type: none"> <li>1. The Environmental Board has the right to amend or revoke the environmental permit if, on the basis of the spatial plan and/or the superficies licence, the locations of the offshore wind farms change or the offshore wind farm is not allowed to be built in the area indicated in the environmental permit.</li> <li>2. Upon establishing nature conservation areas in Western Hiiumaa, Northern Hiiumaa and/or Northern Shoal, it is permitted to amend or revoke an environmental permit in accordance with the protection rules to be established.</li> <li>3. An environmental permit grants the right to the special use of water (dredging, placement of solids to the seabed below average water level, placement of dredging spoils at the bottom of the sea) and does not replace other necessary permits necessary for encumbering the seabed with an offshore wind farm and/or the construction of wind turbines and/or cables within the wind farm. Special use of water may not be commenced before the relevant permits have been obtained.</li> <li>4. The detailed monitoring plan must be submitted to the Environmental Board for coordination half a year before the start of the monitoring work prior to the special use of water, the approved monitoring plan will become a part of the environmental permit and must be used as a basis for monitoring and the submission of monitoring results. If new and additional information is added during the monitoring, it is possible to revise the conditions of the environmental permit and, if necessary, amend the environmental permit based on the results of the monitoring.</li> <li>5. In the development area TP4, special use of water is not permitted in the area of the Hiiu Shoal sand deposit overlapping with the Hiiu Shoal sand quarry mining claim. Special use of water is possible provided that a permit for activities affecting the condition and use of the earth's crust has been obtained on the basis of the Earth's Crust Act or the extraction permit granted in an area overlapping with a mining claim has expired and an approval and permit has been obtained for the construction of a renewable energy construction on the mineral deposit area in accordance with clause 3 of subsection 2<sup>1</sup> of § 14 of the Earth's Crust Act.</li> </ol>	Continuous
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2. Measures to reduce the potential negative environmental impact caused by special use of water	<p>Seabed habitats</p> <ol style="list-style-type: none"> <li>The determination of special use of water locations must be based on maps of habitat types. Dredging in the preparation of places for the placement of potential wind turbines is not allowed in reef habitats. If possible, special use of water work should not be performed or should be performed to a lesser extent in the area of reefs during the preparatory work of potential cable routes.</li> <li>Dredging in the preparation of the seabed should be used in case of extreme necessity.</li> <li>Upon special use of water, damaging the surrounding seabed must be avoided.</li> <li>When placing solids when installing potential wind foundations, it is necessary to choose materials the outer layer of which is as similar to the natural seabed (rocky, stony, non-toxic, the surface structure allows for the attachment of species) as possible.</li> <li>Upon placing solids in the manufacture of potential erosion barriers, natural, land-based material must be used.</li> <li>Upon placing solids to cover potential cables, it is necessary to choose a material with properties similar to the natural material of the seabed in the corresponding location. Upon dredging, it is covered with material from the dredging. The material used for covering should be as similar as possible to the bottom substrate (with the same properties).</li> </ol> <p>Spreading of suspended solids</p> <ol style="list-style-type: none"> <li>Special use of water work must be suspended until the situation of currents changes, if the monitoring of the suspended solids shows the distribution of suspended solids (concentrations clearly differ from the natural distribution) in the Apollo seabed nature conservation area, the Hiiu Shoal, the Väinamere Conservation Area or in the areas proposed for the formation of the nature conservation area (Western Hiiumaa, Northern Shoal). An increase in the concentration of suspended solids significantly higher than the natural concentration is considered to be approximately 6-7 mg l-1. As mitigating measures, for example, a reduction in the intensity of work or the use of a barrier hampering the spread of suspended solids can be applied.</li> </ol> <p>Fish fauna</p> <ol style="list-style-type: none"> <li>Upon placing solids when installing potential wind turbine foundations, non-toxic materials must be used.</li> <li>In the placement of solids while placing potential cables it must be taken into account that the cables must be embedded or covered.</li> <li>Special use of water work in areas located on soft substrate (except rock and stones) must be carried out outside the spawning season of fish species spawning in spring - special use of water in April, May and June should be avoided.</li> <li>When carrying out special use of water work, methods and techniques must be used that produce as little noise as possible.</li> <li>Noise-generating activities in special use of water must be started 'softly' (quietly) so that the fish can escape the area by the time the louder sound is produced.</li> <li>Special use of water work must be suspended if the concentration of suspended solids exceeds the limit value of 6.7 mg/l as a result of the monitoring of suspended solids (the spatial extent of the condition must be specified when drawing up the monitoring plan). Works must be suspended until the situation changes.</li> </ol> <p>Marine mammals</p> <ol style="list-style-type: none"> <li>To mitigate underwater noise, solutions that impede or reduce the spread of noise (eg bubble curtain, acoustic sealing pads) must be used. The impact of noisy works is reduced from February to May, when the animals are not actively feeding or migrating. The results of monitoring before and during special use of water work may clarify the possibility of special use of water during these periods.</li> <li>It is advisable to plan special use of water work based on the marine use of seals: for example, the impact of underwater noise in marine areas adjacent to haul-out sites is less during periods when seals are out of the water for longer periods (February to May). The results of continuous monitoring before and during special use of water work may clarify the possibility of special use of water during these periods.</li> <li>Scheduling of vessel traffic from June to August (including) to disperse loads is advisable where simultaneous movement of several vessels in development areas is foreseen and cumulatively high noise levels can be expected.</li> <li>Indicative planning of noisy activities in area TP1 from December to May (inclusive).</li> </ol> <p>Avifauna</p> <ol style="list-style-type: none"> <li>The determination of the locations for special use of water work must be based on the fact that work is not allowed closer than 5 km to the Apollo and Hiiu Shoals. In addition, the final determination and repositioning of special use of water work must comply with sub-chapter 10.5 of the EIA report.</li> <li>The organisation of the movement of ships or aircraft on a defined route of movement that overlaps as much as possible with the fairways already in use.</li> </ol>	Continuous
3. Measures to prevent environmental hazards and reduce environmental risks	<p>Preventing the occurrence and spreading of oil spills</p> <ol style="list-style-type: none"> <li>Before the start of special use of water work, a pollution control plan must be developed taking into account all protected and conservation areas in the area.</li> <li>When carrying out work, it is necessary to observe safety rules that exclude the occurrence of oil spills.</li> <li>When carrying out special use of water work, measures must be taken to prevent the oil spillage to the sea or keep it minimum. Upon the occurrence of oil spillage, it must be eliminated in an appropriate and expeditious manner.</li> <li>It is necessary to ensure that staff are trained to respond quickly in the event of pollution and to eliminate pollution appropriately.</li> </ol>	Continuous

4.	Research before activities	Monitoring of underwater archaeological monuments  1. Before the final determination of the special use of water locations, an underwater archaeological survey must be carried out. An underwater archaeological survey consists of a high-resolution sonar survey and documentation of identified man-made anomalies (3D video or photo documentation).  2. For the purpose of recording and condition assessment, video or photo documentation must be assembled using photogrammetry or other technology or a method with an equivalent result, and in the case of a wooden wreck, dendrochronological study if the age of the wreck cannot be confirmed by other methods.  3. The underwater archaeological investigation may be carried out by a company which employs a person with competency certificates in the respective area and who has submitted a notice of economic activity regarding operating in the heritage conservation field (pursuant to Sections 68-69 of the Heritage Conservation Act). Before carrying out the study, the competent person must submit to the National Heritage Board a research plan and notice, and after carrying out the research, a research report (sections 46-48 of the Heritage Conservation Act).	Before the start of the special use of water
5.	Other relevant measures	Underwater archaeological monuments  1. The results of underwater archaeological surveys must be used as a basis for the organisation of works. The special use of water locations and the locations of historic shipwrecks and monuments and their protection zones must not overlap. 2. If there is a need for blasting operations, if cultural monuments remain in the danger zone of the explosion, cooperation with the National Heritage Board must be undertaken in the preparation of the blasting project. If necessary, mitigation measures must be implemented to protect cultural monuments, which will be developed in cooperation with the National Heritage Board.	When the situation arises

## V17. Requirements for the submission of information to the issuer of the permit

No. No.	Type of information	A more detailed description of the information	Frequency of submission of information
1.	Annual report on water use	The annual water use report must be submitted in accordance with the valid procedure. The annual report must also be submitted if no actual special use of water activity has taken place.	Once every year
2.	Monitoring data	A detailed monitoring plan must be prepared in cooperation with the developer, the Environmental Board and a competent expert and coordinated with the Environmental Board through the KOTKAS system.	Half a year before the start of the monitoring work prior to the special use of water work
3.	Other necessary information	1. At least three days before the start of works related to the special use of water, notify the Environmental Board in writing. 2. Inform the Environmental Board immediately about any changes occurring during the works.	According to the established information

## V18. Activities of a temporary nature

*Data are not provided because they are not relevant in the given context.*

## Annexes to the permit

Description	Attachment
Special use of water area TP1 and initial special use of water locations	Annex 1: TP1.JPG
Special use of water area TP4 and initial special use of water locations	Annex 2: TP4.JPG
EIA Report of the North West Estonia Wind Farm	Annex 3: Loode-Eesti-meretuulepargi_KMHA.pdf