

# General environmental protection requirements for VWP suppliers and service provider

Volkswagen Poznań hereby announces that suppliers of products/services/processes to VWP premises shall be bound by the following regulations:

## 1. Basic principles

Environmental protection, in terms of both products manufactured on-site and their own manufacturing equipment, is of the essence to Volkswagen Poznań. Observance of environmental protection principles is also required from VWP's suppliers of products, services and processes.

To meet environmental protection requirements, contractors shall take into account, amongst other things, the following:

- Taking all necessary measures to prevent pollution, in particular through application of best available techniques as outlined by BAT reference documents (so-called BREFs),
- Ensuring that system operations do not result in significant environmental pollution,
- Taking actions and applying measures to prevent failures or limit their consequences,
- Describing and listing methods of emission monitoring, with a particular focus on metering of utilities and their visualisation.

The application of Best Available Techniques (BAT) lies in the introduction of technology that provides quantifiable economic and ecological benefits.

Therefore, contractors shall be liable for equipment being the subject of delivery in a manner consistent with the law (see point 2), and for the observance of all environmental requirements in the following areas:

- Air protection,
- Protection against noise,
- Protection of water and soil,
- Energy and material efficiency,
- Waste management,
- Nature conservation.

Proceeding in accordance with the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz - LkSG), which prioritises, i.a. environmental issues. The purpose of the above-mentioned regulations is to reduce i.a. negative impact on the natural environment, which may include, i.a.:

- Water, soil, air pollution or excessive water consumption,
- Mercury: violation of the Minamata Convention prohibition on mercury
- Persistent organic pollutants (POPs): violation of the prohibition on the production and/or use of substances covered by the Stockholm Convention (POPs), environmentally incompatible handling of POPs

- Hazardous waste: violation of the prohibition on the import and export of hazardous wastes under the Basel Convention

Any projects that could affect environmental protection shall first be agreed with the Environmental Representative, through the ordering party. When it is necessary to obtain the relevant permits/authorisations required under environmental protection law, the ordering party shall engage the Environmental Protection Department in the process. Contractors shall also participate in administrative processes leading to obtaining the required permits/authorisations by providing the data to the Environmental Protection Department required to get permits/environmental authorisations defined by the ordering party.

The environmental and energy policy and the environmental protection principles at VWP shall be known to contractors and their employees engaged in specific tasks.

Link to environmental protection principles and environmental and energy policy of Volkswagen Poznań:

<https://www.volkswagen-poznan.pl/zrownowazony-rozwoj/srodowisko>

These principles shall be observed.

Every new contractor before he starts the work at the VWP area must become familiar with and sign the document orga\_99 „Wymagania dla firm zewnętrznych dotyczące ochrony środowiska w Volkswagen Poznań” (“Requirements for the external companies concerning the environmental protection at Volkswagen Poznań”). The document orga\_99 contains contact information of the workers of the Environmental Protection Department of the ordering party.

Contractors shall provide the ordering party with reasons for the solutions adopted, based on product life-cycles and energy efficiency.

Contractors shall guarantee that, whilst performing activities at the ordering party's sites, they shall clearly regulate the issue of responsibility for, and procedures related to, environmental protection. In particular, contractors shall notify their employees working at the ordering party's sites of the workplace behaviour that is consistent with the principles of environmental protection.

Resources and materials provided by the ordering party (compressed air, electricity, water, heat, technological materials, consumables, etc.) shall be handled in a resource-efficient manner.

In the event of environmental hazards or damage, you should immediately inform the Monitoring and Surveillance Centre – phone +48 735 995 555.

## 2. Permits

During planning/performance of an order, the environmental protection regulations, provisions of EU, Polish law (national and local) shall be observed, with particular attention to BAT reference documents (BREFs).

Any contact with offices necessary for obtaining environmental permits/authorisations shall be conducted by the Environmental Protection Department of the ordering party. Any documents related to the applications and notifications, etc., shall be signed by the by personnel entitled by VWP management and addressed by them to the relevant offices. All required documents related to the aforementioned procedures shall be made available, in full, by contractors to the ordering party.

During the project acceptance procedure, contractors shall confirm that all conditions for environmental protection imposed by the law and relevant decisions have been met. Related necessary expenditure, e.g. for acceptance certificates from surveyors or for the conduct of measurements etc., shall be covered by contractors, unless it has been agreed otherwise in a contract.

### 3. Protection against noise

The following guidelines apply to the construction/expansion/reconstruction of the ordering party's noise emitting equipment/installations and processes, including transport and handling.

Equipment/installations shall cover all elements emitting noise, e.g. tubes, ducts, enclosures, auxiliary equipment, exhaust openings, air supply and exhaust systems, heating equipment, air conditioning equipment, cold rooms, heat pumps, power generators, electrical switchboards, fire protection systems, transport and handling.

The level of noise emitted to the environment to the areas protected acoustically shall be kept as low as possible, in accordance with state-of-the-art technology making it possible to reduce noise, and shall not be higher than limit values applicable in the protected area; in the case of the ordering party's premises, this is 50 dB(A) or 55 dB(A) during the day and 40 dB(A) or 45 dB(A) at night dependent on the site. Before the contractor begins the work he is obligated to become familiar with the limit values which are valid in the environmental decisions of the ordering party (it concerns the site 1, 2 and 3). If there are no limit values for the noise, the contractor must determine the limit values on the basis of the MPZP and the real development of the site (site 4).

The replaced noise sources in terms of sound power cannot have values higher than the existing ones, the attenuation of the installed devices cannot be lower than the existing ones.

All newly installed/expanded/modernised noise sources shall not exceed a sound power level of 70 dB(A). If, due to technical reasons, the sources cannot operate at less than this level, their use shall first be agreed with the Environmental Protection Department through the ordering person on behalf of the ordering party.

If there are significant single sounds, impulses or low frequency sound components of noise emitted by a specific piece of equipment, the ordering party reserves the right to reduce the guaranteed value by the value of the individual components of the sound or impulse etc. (value of sounds, isolated impulses).

Actions limiting noise emissions that are necessary to keep the limit values on the areas protected from noise, which go beyond the possibilities of noise reduction techniques, shall be separately specified (e.g. acoustic baffles, silencers, acoustic protections).

After system start-up (if the planned construction/ reconstruction/ expansion affects the areas protected acoustically), control measurements of installed equipment shall be performed as well measurements in acoustically protected areas. The measurements are carried out by the contractor at his own expense by the accredited laboratory. A representative of ordering party takes part in those measurements.

Contractors shall demonstrate, at their own expense and as part of a acceptance procedure/ handover for use, that the values declared by them (e.g. from Operation and Maintenance Manual, technical documentation) are being observed (e.g. measurements results). The ordering party reserves the right to conduct its own acceptance tests at the expense of the contractor.

Between 8 pm and 7 am, noise-producing works can only be conducted in agreement with the Environmental Representative through the ordering party.

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Noise sources shall be specified using coordinates in the geographic coordinate system expressed as latitude and longitude (saving format: degrees, minutes and second hundredths [hdd,mm,ss.ss]). In addition to the coordinates, the ordinate shall be measured.

Contractors shall also be obliged to provide coordinates in a .dwg file, positioned in the system 2000 optionally in a .dgn file.

#### 4. Waste management

Waste management shall be performed in accordance with the rules of law and the principles included in the company's Waste Management Concept, with a particular focus on:

- Waste prevention,
- Preparation for reuse,
- Recycling,
- Other recovery methods,
- Ensuring proper waste treatment.

In the case of contaminated soil, contaminated construction materials or materials including asbestos/mineral fibre being encountered during the conducted works, the emergency exchange shall be notified immediately on internal telephone 35 5555, and from external lines, +48 735 995 555.

Unless a contract provides for otherwise, waste produced by contractors during the performance of any works related to the construction, demolition, repair of facilities, cleaning of tanks or equipment and cleaning, maintenance and repairs shall be handled in accordance with legal requirements and shall be the property of the contractors, except for scrap and non-ferrous metals. If the ordering party is to take over the waste produced by contractors, scrap shall be included in the offer and this fact shall be agreed at the stage of signing of a contract with the ordering party. The contractor is obligated to agree taking over of the waste by the ordering party with an ordering person on behalf on the ordering party.

**In accordance with the Act of 14 December 2012 on waste the contractor is obligated before starting the works during them the waste will be produced to present BDO registration number. The producer of the waste according to this Act means everyone whose activity or existence causes generation of waste (primary producer of waste) and everyone who carries out initial processing, mixing or any other activity that causes feature or composition change of the waste; the producer of the waste generated as a result of services related to building, disassembly, object repair, cleaning of tanks or devices and cleaning work, maintenance and repair is a subject that carries out the service, unless the contract for the service provides otherwise.**

**Before commencing operations in the scope referred to in Article 50(1) of the Waste Act, a foreign entrepreneur is obliged to submit an application and obtain an entry in the register constituting an integral part of the Database on Products, Packaging and Waste Management ("BDO") in accordance with the information provided on the website: [Rejestracja przedsiębiorców zagranicznych w BDO | BDO \(mos.gov.pl\)](https://mos.gov.pl)**

#### **A foreign entrepreneur with a branch in the territory of the Republic of Poland**

A foreign entrepreneur who has established a branch in the territory of the Republic of Poland ("RP") submits an application for entry in the register in the BDO system through a person authorized to represent it, to the marshal of the province competent for the seat of the branch.

### **A foreign entrepreneur without a branch in the territory of the Republic of Poland**

A foreign entrepreneur who has not established a branch in the territory of the Republic of Poland submits an application for entry in the BDO register directly to the Marshal of the Mazowieckie Voivodeship in writing, printed and signed by the entrepreneur or a person representing him.

**The requirement of BDO registration number concerns not only the contractor that are registered ex officio (e.g. because of the decision on the producing) but also subjects that are not obligated to have a permission for producing but produce waste as a result of the their activity and are obligated to register the waste. Because electronic registration of the waste in the BDO system has started in January 2020 – the waste registration is made via this system.**

### **Guidelines**

Contractors shall undertake to observe the rules of waste management at the ordering party's premises.

Unless the regulations of individual contracts or regulatory obligations provide for otherwise, the following guidelines shall be binding for contractors:

#### Cleaning and waste collection from work sites:

4.1. Contractors shall be obliged to remove impurities from work sites during and after completion of works (instructions issued by the site manager and the ordering party shall be binding).

Failure to comply with the aforementioned obligation shall result in the completion of these works by the ordering party or other companies and the deduction of the resulting costs from the contractor final invoice.

4.2. Contractors shall be obliged to remove and dispose of waste at their own expense in the manner stipulated by the relevant regulations of Polish law.

4.3. Waste containers shall be provided by contractors before commencement of an order's implementation. Contractors shall take care to maintain their waste storage and disposal processes in the manner stipulated by the relevant regulations of Polish law. Waste containers shall be marked with waste code and name of the company in a visible manner. Containers shall be covered/closed at the end of each working day.

4.4. During work, contractors shall be obliged to ensure the protection against damage or pollution of existing:

- Systems, with special focus on the rain water and sewage-industrial system,
- Technological equipment and,
- Construction elements,
- Soil and water environment.

4.5. Clean-up work (including the disposal and storage of waste) ordered by the ordering party shall be performed at the contractor's expense.

4.6. Upon completion of works, contractors shall be obliged to provide the ordering person on behalf of the ordering party with written confirmation of the transfer of waste to authorised companies (quantity, type and method of waste management). Only after submission of all written confirmation – if established in a contract – shall contractors receive remuneration.

## 5. Chemical management

### Substances that pose a threat to the environment

Chemical management must be carried out in accordance with the law principles and principles described below.

Materials which are used in VWP should be compliance with applicable national and UE legislation, including REACH and CLP.

The use of persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB) substances should be avoided.

Substances that pose a threat to the environment can only be used by contractors during the construction/installation and operation of equipment when it is absolutely necessary from the technical point of view. Relevant information on such substances shall be included in the technical documentation.

Use of materials containing asbestos, PCB (polychlorinated biphenyls), chlorinated hydrocarbon compounds, fluorochlorohydrocarbons, cadmium, mercury and substances listed in Annex XIV to the EU REACH regulation is prohibited.

The use of substances listed in Annex XVII of the EU REACH Regulation should be avoided- if necessary, the requirements described in the above annex shall be met.

All materials used in the Welding and Paint Shop shall be free of substances that have a negative impact on the lacquer crosslinking process. The contractor is obligated to give a sample of material for the quality tests in the Paint Shop to the ordering party before the work begins.

Following environmental pollution by substances in the course of any works by contractors, the emergency exchange shall be notified immediately on internal telephone 35 5555, and from external lines, +48 735 995 555. Costs of dealing with the consequences of environmental pollution, including cleaning buildings, soil, ground- and surface water, shall be borne by contractors.

### Guidelines

Contractors shall undertake to observe the following rules of chemicals management at the ordering party's premises:

5.1. The contractor guarantees the purchase of the chemical substances/mixtures for the process, that is for the machines and devices only from the supplier from the European Union or another supplier that has an exclusive representative in the EU to avoid the registration by VW Concern.

The purchase of parts, devices and equipment elements etc. that contain the chemical substances/mixtures from the supplier from outside the European Union will be possible under condition that he points out a supplier of chemical substance/mixture from the EU area or exclusive representative in the EU or chemical substance/mixture substitute produced at the EU area.

5.2. In case of introducing the new chemical substances/mixtures into the VWP area (especially into the process also in the devices) the contractor is obligated by the following regulations:

- If chemical products are to be delivered as part of the installation or operation of equipment, or for construction or use of a specific facility, they can only be used upon previous agreement with the ordering party, at the design stage. To enable the ordering party to assess the safe use

of a chemical material, contractors shall submit a safety data sheet, technical data sheet, and for process materials, a VW No. This shall also apply to chemical substances in equipment (e.g. systems containing oil, such as transformers and hydraulic equipment). The documents mentioned above shall be given in Polish.

- The chemical substances/mixtures can be used in the production and auxiliary works at VWP after they have been checked and approved.
- The chemical substances/mixtures and carrying out the test at the work place can be done after laboratory test on functioning the substance/mixture in the paint shop which is carried out by the Quality Management Department.
- The approval of the substance/mixture and carrying out the quality test can be done after giving to VWP the safety data sheet or information about substance based on the art. 32 REACH, technical data sheet.
- Safety data sheet or information about the substance based on the art. 32 REACH, technical data sheet and the label as well must be in Polish.
- The supplier is obligated to inform VWP, if the use declared by Volkswagen is identified use which is/will be used by the supplier according to the REACH.
- The supplier is obligated to give the registration numbers of the delivered substances/substances that are contained in the mixtures according to the REACH.
- If the chemical substances/mixtures are applied at the VWP area, the standard VW 50156 is binding. According to the standard mentioned above the chemical substances/mixtures that are applied at VWP must be checked for safety of human health and environment. Because of that fact please become familiar with the standard

5.3. Contractors shall notify the ordering party in writing of the presence and use of all chemical substances and mixtures and the method of their security for the duration of works conducted on VWP premises, together with their names, hazard class, quantity and type of container in which they are stored. The ordering party shall be notified in writing of the presence of any chemical substances/mixtures, in accordance with the applicable material pass.

5.4. Contractors bringing chemical substances and mixtures onto the premises of VWP sites shall be obliged to observe the legal regulations concerning safe storage and use of chemical substances and mixtures. Contractors shall organise the storage and use of chemical substances and mixtures specified by the ordering party in accordance with the safety data sheet and the label, in a manner protecting against any possible penetration of chemicals into the environment (e.g. protection of the soil, sewage system, floors).

5.5. Contractors shall be obliged to possess relevant equipment and to use measures protecting against spillage of substances into the environment, e.g. containment bunds, sorbents, etc.

Particular attention shall be paid to the storage and use of substances hazardous to water (marked with pictograms or phrases H concerning hazard to aquatic environment), and to all oils and petroleum derivatives.

The Service Recipient is obliged to pay special attention to Persistent Organic Pollutants (POPs) referred to in Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

Current legal requirements prohibit in principle the use of substances having a POP nature on its own, in mixtures or in articles. Where waste containing POPs is treated, it should be ensured that those processes guarantee the destruction or irreversible transformation of persistent organic pollutant.

Suppliers of electrical and electronic equipment shall meet requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment and regulation The Minister of Development and Finance from 21 December 2016 on essential restriction of the use of certain hazardous substances in equipment electrical and electronic devices. The supplier is required to provide a declaration to confirm compliance with the above requirements. The supplied electrical and electronic equipment should be marked with the CE mark placed directly on the equipment, and if this is not possible – on the packaging or document attached to the equipment. And if this is not possible – on the packaging or document attached to the equipment.

The supplier is obliged to meet the requirements described in Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury and repealing Regulation (EC) No. 1102/2008.

The supplier is obliged to meet the requirements described in the Act of 9 October 2015 on biocidal products and the Regulation (EU) No. 528/2012 of the European Parliament and of the Council of 22 May 2012 on the making available on the market and use of biocidal products.

## 6. Air conditioning units

Before introducing **machines, installations, stationary refrigeration and air conditioning equipment** into the project, including control cabinets, chillers, split devices/systems, heat pumps, devices that are medium and high voltage switchgears, fire protection systems, fire extinguishers or devices containing solvents, including in their circuits containing refrigerant, contractor is obliged to approve the refrigerant by the Environmental Representative. The cooling medium is to be agreed with the Environmental Representative during planning through an ordering person on behalf of the ordering party.

The agreements are carried out according to the VWP regulations – confirmation is to be gotten within a form delivered by the ordering party. The same rules are valid for the contractor as in case of intervention in the existing device, for example the cooling medium exchange.

**The use of equipment/installations containing ozone-depleting substances - ODS (CFCs and HCFCs) shall be prohibited.**

**Preference is given to refrigerants with an ODP = 0 and at the same time the lowest possible GWP.**

The use of environmentally friendly refrigerants with an ODP value = 0 and a GWP value below 10 should be considered first. If the analysis shows that environmentally friendly refrigerants cannot be used, F-gases with the lowest possible GWP for the application can exceptionally be used. Maximum permissible GWP value depending on the equipment/installation in accordance with Annex IV to Regulation (EU) 2024/573 of the European Parliament and of the Council of 7 February 2024 on fluorinated greenhouse gases, amending Directive (EU) 2019/1937 and repealing Regulation (EU) No. 517/2014. If another refrigerant is used, its choice should be justified in the application to the Representative - the price is not an admission criterion.

The application of large central cooling/air-conditioning units shall be preferred instead of multiple smaller ones.

For refrigerant-containing appliances, the details of the installation, such as where they are installed, the cooling capacity, the electrical power, and the type and quantity of refrigerant, should be documented on an ongoing basis.



## Guidelines

Contractors shall undertake to observe the following rules of air-conditioning units at the ordering party's premises:

6.1 The use of substances that deplete the ozone layer (ODS) is prohibited by law in new products/devices due to their negative impact on the environment. The ban also covers their possible admixtures with other refrigerants.

6.2 Purchase of a stand-alone appliance only after the manufacturer has presented a certificate or a contract with a certified installer.

6.3 Before purchasing/placing equipment on the VWP premises, check whether the need for cooling during production or in rooms is indeed necessary. Check whether the required cooling can be provided by already installed equipment (e.g. recirculation in existing installations, reuse).

6.4 Designs of central installations have advantages over the use of individual devices.

6.5 Installation and commissioning of the device/installation, including leak testing, can only be commissioned to companies that can prove the legally required authorizations - a certificate for a person performing work in a system with refrigerant and a certificate for entrepreneurs or VWP employees with a certificate. If the unit needs to be installed in the VWP, the amount of F-gas originally in the unit and the amount added during installation must be documented.

6.6 Refrigerant equipment/installations must have the following when put into service:

- a. orga\_112 form approved by the Environmental Representative,
- b. confirmation that the installation and commissioning of the device has been performed by persons and companies with the authorizations required by law (certificate)
- c. documents required by law (e.g. Device Card, Fire Protection System Card, Leak Test Report),
- d. marking in Polish, required by law (label).

6.7 The label must contain the following information:

- a. information that the product or device contains or is dependent on F-gases;
- b. the accepted industrial labelling for F-gases or, in the absence of such labelling, the chemical name;
- c. the amount of F-gases contained in the product or equipment or the amount of F-gases for which the equipment is designed and the GWP of those gases, expressed by weight and CO<sub>2</sub> equivalent;
- d. from 01.01.2027 it must additionally include:
  - for the electrical switchboard, it shall be indicated that the leakage level tested is less than 0,1 % per year, in accordance with the manufacturer's technical specification
  - information about the hermetically sealed device
  - for containers containing regenerated or recycled F-gases, information that the substance has been regenerated or recycled; in the case of regeneration, information about the batch number and the name and address of the plant located in the EU where the reprocessing was carried out should be provided.

6.8 Registration is mandatory for all legally required refrigerant equipment from Annex I of the F-Gas Regulation in the CRO system and on the network drive <X:\Public\PPP\System Zarzadzania Środowiskowego i Energią\Stacjonarne urządzenia zawierające czynnik chłodniczy> (≥ 5 Mg

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CO<sub>2</sub> equivalent or  $\geq 10$  Mg CO<sub>2</sub> equivalent if the unit is hermetically sealed) by designated employees from the PWP/4 or PG-2/2 department. Registration must be completed no later than 15 working days after filling the device or putting it into use if the device was factory-filled by the manufacturer.

6.9 Registration is mandatory for all legally required refrigerant equipment from Section 1 of Annex II of the F-Gas Regulation in the CRO system and on the network drive <X:\Public\PPP\System Zarzadzania Środowiskowego i Energią\Stacjonarne urządzenia zawierające czynnik chłodniczy> ( $\geq 1$  kg or  $\geq 2$  kg if the unit is hermetically sealed – F-gases) by designated employees from the PWP/4, PG-2/2 department. Registration must be completed no later than 15 working days after filling the device or putting it into use if the device was factory-filled by the manufacturer.

6.10 Changes (e.g. extensions, conversions, repairs) in equipment containing ozone-depleting substances (ODS - CFCs and HCFCs) as refrigerant and in equipment where the refrigerant has a GWP of  $\geq 2 500$  are unacceptable.

6.11 Planning of equipment according to existing demand, without taking into account large reserves.

6.12 For new equipment/installations or refrigerant replacement, the use of environmentally friendly refrigerants should be considered first. Environmentally friendly refrigerants have an ODP=0 value and at the same time a GWP value below 10.

6.13 If the analysis shows that environmentally friendly refrigerants cannot be used, F-gas may exceptionally be used, except SF<sub>6</sub>.

For SF<sub>6</sub>, the exception is high-voltage switchgear, if the system is hermetically sealed.

6.14 The purchase and placing on the premises of the VWP of F-gas products/equipment, including parts thereof, shall comply with Annex IV to Regulation (EU) 2024/573 of the European Parliament and of the Council of 7 February 2024 on fluorinated greenhouse gases, amending Directive (EU) 2019/1937 and repealing Regulation (EU) No 517/2014.

6.15 The selected refrigerant together with the device/installation must be presented for approval to the Environmental Representative through the commissioning person on behalf of the ordering party.

Note: If you are analysing different refrigerant units for the same application, choose the unit that has the least impact on the environment.

6.16 The location of refrigerant equipment/installations shall be given in latitude and longitude coordinates (format: degrees, minutes and hundredths seconds [hdd,mm,ss.ss]). In addition to the coordinates, the elevation will be measured.

Contractor will also be obliged to provide coordinates in the dwg file positioned in the 2000 system, optionally dgn (the requirement does not apply to the Foundry).

6.17 Before putting the device/installation into use, contractor is obliged to:

- Leak check and document it by persons holding the legally required certificate and certificate for the company.
- Mark (label) in accordance with the legal requirements of equipment/installations containing refrigerant.  
Factory or installation marking (label) made by a person with the required certificate.
- Insert and complete in the electronic CRO system of the device card for devices/installations with refrigerant from Annex I of the F-Gas Regulation, if it was agreed at the stage of the order with

the representative of the ordering party. Applies to equipment/installations that have  $\geq 5$  tons of CO<sub>2</sub> equivalent or  $\geq 10$  tons of CO<sub>2</sub> equivalent in the case of hermetically sealed equipment/installations. The deadline for setting up and completing the card - no later than 15 working days from the date of delivery of the device to the place of its operation, and if the device requires installation - no later than 15 working days from the date of completion of the installation and charging with refrigerant.

- Creation and completion in the electronic CRO system of the device card for devices/installations with refrigerant from section 1 of Annex II of the F-Gas Regulation, which have  $\geq 1$  kg of refrigerant or  $\geq 2$  kg of refrigerant in the case of hermetically sealed equipment/installations, if it has been agreed at the stage of the order with the representative of the ordering party. Deadline for creating and completing the card - no later than 15 working days from the date of delivery of the device to the place of its operation, and if the device requires installation - no later than 15 working days from the date of completion of installation and charging with refrigerant.
- Provide the Operation and Maintenance Manual or other documents of the device/installation in which the cooling system and the refrigerant are described.
- All documents must be submitted in Polish.

## 7. Energy saving

During the design, engineering and construction of systems and equipment, the expected costs of energy consumption during the equipment/system's operation shall be taken into account. Usually, such costs constitute a significant part of operating cycle costs, and may therefore be a determining factor in deciding on awarding a contract during the purchase process!

At the stage of planning/selecting equipment/technologies/lines, an assessment of the energy and material efficiency of the proposed solutions shall be taken into account.

The basis for such framework conditions are the principles of environmental protection applicable in the company, particularly those governing energy savings. As such, offerors/suppliers shall pay particular attention to the following issues:

- As part of the offer/specification, data concerning energy consumption shall be specified in a binding manner.
- As part of the offer/requirements, a so-called Total Cost of Ownership (TCO) or Total Cost of Production (TCP) shall be specified as part of the specification of operating costs for a system/piece of equipment. This will make it possible to specify the total cost of use, including, amongst other things: the purchase cost, implementation cost and current operating costs for a specific period of time.
- The inspection of energy consumption is a component of the equipment/system acceptance procedure upon the equipment/system's start-up.
- In the case of purchase of replacement components and new components, asynchronous three-phase motors with EFF 1 efficiency class in accordance with IEC 60034-2 shall be used immediately.
- The use of energy-efficient systems and machines shall be preferred, or offered as an alternative.
- Frequency-controlled drive systems shall be provided for or offered as an alternative for the operation of systems with variable loads, or the possibility of turning on air-conditioning systems at intervals.
- In the case of receivers with the following rated power:
  - electricity > 100 kVA
  - heat > 500 kW,
 stationary measuring devices shall be installed.

- Measurement points for the temporary measurement of consumption or use of electric power and energy shall also be planned for.
- When possible, use of compressed air shall be avoided.
- Compressed air receivers shall be planned for a max. 5 bar of overpressure, or 6 bar of absolute pressure; higher pressures shall be generated only in exceptional situations, outside the central system.
- Heat shall be generated by electricity only in exceptional cases. Particular attention shall be paid to this in offers.
- Waste heat shall be utilised.
- During the engineering of a system, use of energy-saving devices shall be taken into account, e.g. during equipment stoppages, or such solutions shall be offered as an alternative.
- If it is technically justified, equipment/systems returning energy to the grid shall be utilised.
- If it is technically feasible, free cooling shall take priority over refrigeration.
- Peak energy consumption should be avoided.
- If it is technically justified, the use of frequency converters shall be planned for.
- The equipment used shall comply with electromagnetic compatibility (EMC) requirements. Alternatively, equipment that is the source of EMC disturbances shall be properly protected, to limit the disturbances with respect to other participants of the power network.

## 8. Water and sewage management

Emission of substances into the environment shall be maintained at the lowest possible level, taking into account relevant BAT (so called BREFs).

First of all, solutions shall be employed that guarantee a reduction in the consumption of water and/or efficient use of raw materials, as well as limitations on sewage emission by the application of techniques to reduce the amount of water and the noxiousness of produced sewage, the maximisation of internal recycling, and where not feasible technically and not justified economically, devices to reduce emissions shall be used.

The contractor is obligated during the planning to agree with the Environmental Protection Department of the ordering party through an ordering person on behalf of the ordering party all the processes that influence the quality and quantity of sewage resulting from contracts and permits.

Contractors shall undertake to observe the following rules of water and sewage management at the ordering party's premises:

- Sewage generation shall be avoided.
- Where technically and economically feasible, sewage shall be subject to such processing as to make it possible to re-use the water (recycling).
- Separation of sewage disposal, based on individual types of sewage adjusted to the company infrastructure.
- Substances are restricted which are particularly harmful to the aquatic environment in accordance with Polish law, in order to maintain acceptable sewage quality parameters at the site's outlet.
- Before undertaking any activities on VWP premises, as a result of which sewage may be produced, works shall be consulted upon with the Environmental Protection Department through an ordering person on behalf of the ordering party in order to agree upon the method and location of sewage disposal.
- It is prohibited to introduce sewage produced during conducted works into the storm water system via VWP premises.

- The introduction into the soil of any substances that may cause soil degradation or groundwater pollution is prohibited. Contractors shall protect the soil and water environment against the penetration of substances hazardous to the environment.
- Environmentally hazardous chemicals should be replaced by less environmentally hazardous chemicals as far as possible (see chapter "Chemical management").
- Should the soil or groundwater become contaminated, or should such contamination be identified, the Monitoring and Surveillance Centre shall be notified immediately – phone +48 735 995 555.

When planning:

- a. new equipment/installations and their decommissioning that contain or depend on substances/waste hazardous to the environment or places of use/storage of these substances/waste,
- b. new places for storing chemical materials in original packaging / waste hazardous to the environment,

the following rules must be observed:

1. Planning, operation and decommissioning:
  - Substances/waste must not escape ('zero emission').
  - Leaks in the system components must be detected quickly and reliably (e.g. with sight glasses and/or suitable probes).
  - Possible spills of substances/waste must be collected quickly and reliably and disposed of properly – even in the event of a breakdown!
  - systems must be tight, stable and resistant to expected loads (mechanical, thermal, chemical).
  - prohibition on the design of single-wall underground tanks and pipelines.
  - when disposing of/scraping, the substances/waste must be properly disposed of.
2. "Rule of 2 barriers" – In addition to the basic requirements covered in these requirements, the principle of two barriers is the basis for safety and must be followed in order to prevent the ingress of pollutants into the environment m.in. water, soil in the event of an incident/failure.
  - tightness of the system (1st barrier) - the first barrier is the wall of the system, which during the intended operation has direct contact with the substance/waste polluting the environment. These can be, for example, the tank wall or piping, flange connections, pumps, etc. The former barrier must be tight, media-resistant, stable, etc.
  - tightness of the collection space (2nd barrier) – the second barrier is the wall that comes into contact with the substance/waste polluting the environment in the event of failure of the first barrier (e.g. collection room, trough, double-walled systems, spill tray, chemically resistant floor, etc.). The design should take into account how to supervise the case of damage to 1st leak barrier, e.g. leak detection system.

## 9. Air protection

The following guidelines shall apply to the construction/expansion/reconstruction of the ordering party's equipment emitting substances into the air, as well as all processes, including transport and handling.

The installation of equipment causing air emissions must be consulted upon with the Environmental Protection Department of the ordering party through an ordering person on behalf of the ordering party at the planning stage, in order to verify compliance with emission permissions.

Substances or mixtures that are classified as carcinogenic, mutagenic or toxic for reproduction due to their VOC content (assigned terms H340, H350, H350i, H360D or H360F) may only be introduced if no

General environmental protection requirements for VWP suppliers and service provider, class 6.1: 7 years, confidentiality class: public, date of update: 22.11.2024, publisher: PW-1/5.

other materials are available on the market for technological and quality reasons. The introduction of the above-mentioned substances/mixtures into the VWP must be agreed with the Environmental Representative each time before they are introduced.

The emission of substances into the environment shall be maintained at the lowest possible level which does not exceed the emission values for protected areas, taking into account the best available BAT techniques (described in the reference documents, so called BREFs). First of all, solutions making use of low-emission technologies shall be applied, and where this is not feasible technically and not justified economically, devices to reduce the emissions shall be used, as agreed with the Environmental Protection Department of the ordering party through an ordering person on behalf of the ordering party.

The contractor is obliged to document the efficiency of device for emission reduction with e.g. Operation and Maintenance Manual, producer declaration (the documents shall be provided in Polish) **and efficiency measurements after installing the device.**

Central systems for air extraction and scrubbing shall be preferred, instead of decentralised systems.

Attention shall be paid so that the quantity of used air (volumetric air flow) is as low as possible, and constant. Equipment that can produce substances harmful to the air shall be isolated via individual extraction units, if technically justified.

In the case of equipment used for air cleaning, deviations from its intended operation (e.g. damaged or completely blocked filters) shall be described and included in the design. In special cases, in consultation with the ordering party, automatic messages displayed in the control room/central dispatch office shall be provided for.

In the case of failure of the equipment for used air cleaning, if there is a risk of exceeding limit values, forced cut-off of the equipment generating the pollution shall be provided for, unless otherwise agreed with the ordering party.

The concept of equipment maintenance and pollution reduction shall guarantee that substances stopped in the reduction equipment (e.g. dust or volatile organic compounds) will not get into the working area or into the natural environment during maintenance or disposal.

Unless it has been specified otherwise, all systems for flue gas discharge (stacks) shall be provided with inspection hatches.

In the case of all systems causing emission of substances regulated under law, contractors shall be obliged to plan and install measurement ports on emitters, in accordance with Polish Norm PN-Z-04030-7 of 1994 "Tests on dust content" (to be taken into account at the stage of planning/execution/handover for use). After start-up of the installation the contractor is obligated to carry out control measurements of the emission in the air by an accredited laboratory and in case of installing the devices to reduce pollution also to test the device efficiency. Installation of measurement ports and control measurements are carried out within the project and must be included in the evaluation by the contractor.

A representative of VW takes part in the measurements. The ordering party reserves the right to carry out his own tests at the expense of the contractor.

For projects related to PM 2.5 dust emission, highly efficient devices to reduce dust, with efficiency over 99%, shall be applied in order to meet air quality standards.

**During planning the contractor is obliged to agree with the Environmental Protection Department of the ordering party through an ordering person on behalf of the ordering party all processes with the use of VOC in order to determine the method of discharging emissions from these processes (the method**

**organized for processes subject to emission standards – a dedicated chimney) and to meet the emission standards.**

Emission sources shall be specified using coordinates in the geographic coordinate system expressed as latitude and longitude (saving format: degrees, minutes and second hundredths [hdd,mm,ss.ss]). In addition to the coordinates, the ordinate shall be measured.

Contractors shall also be obliged to provide coordinates in a .dwg file, positioned in the system 2000 optionally in a .dgn file (the requirement shall not apply to the Foundry).

## 10. Nature conservation

The following guidelines shall apply to the construction/expansion/reconstruction/demolition of civil structures or other investment projects conducted in green areas containing trees and bushes, the plans for which involve both the removal of trees and the encroachment of works on the remaining trees.

Contractors shall specify the places where plants interfere with the project and the green areas most at risk from having the works in their vicinity, and shall provide this information to the person ordering the works on behalf of the ordering party.

The removal of trees or bushes shall be performed upon obtaining a legally required permit, for which the persons entitled by the VWP management shall apply and pass them to the right offices. Contractors are obliged to deliver:

- Site development plan with drawn in trees and bushes in pdf format (stocktaking),
- Site development plan with clearly pointed out collision of the project with the green area and description in the plan in form of a legend – all trees and bushes must be described with numbers in accordance with the stocktaking,
- In the plan there must be included not only trees that have collision directly with the project but also trees that can collide during the building works. The agreed site development plan must be confirmed by the ordering party and signed and sealed by an entitled designer.

Damage or destruction of trees and bushes caused by improper performance of a service shall be immediately notified to the person ordering the works on behalf of the ordering party.

Contractors performing works shall be liable for any damage. The costs of penalties for damaging or improperly removing trees and bushes shall be borne by contractors.

Contractor undertakes to comply with the following rules for the maintenance of green areas:

- Tree and shrub felling may be carried out outside the breeding season (from 16 October to the end of February), during the breeding season it requires the supervision of an ornithologist and must be preceded by obtaining a special permit to disturb and destroy nesting sites. In both cases, the work should be consulted with the Environmental Protection Department of the ordering party through the person commissioning on behalf of the ordering party.
- A permit is not required for maintenance treatments, but work on the crown of the tree must not lead to the removal of branches exceeding 30% of the crown that has developed throughout the development of the tree, unless it is aimed at: removing dead or broken branches or maintaining the formed shape of the tree crown. A report on the treatments is drawn up by the contractor, signed by a person with qualifications, e.g. a greenery supervision inspector, together with photographic documentation made and stored in accordance with the provisions of the Nature Conservation Act.

- A ban on the use of plant protection products, e.g. pesticides, herbicides, fungicides, insecticides, animal and insect repellent products, etc., is introduced in connection with the Zero Impact Factory program. Each time before performing work in the green area, the contractor is obliged to agree the applied measures with the ordering party's Environmental Protection through the commissioning person on behalf of the ordering party.
- A ban on the use of invasive species for planting on the factory premises is introduced. In the case of planting works, the contractor is obliged to use native species (specific to a given area), which must be agreed with the ordering party's Environmental Protection through the commissioning person on behalf of the ordering party.

In addition, guidelines are introduced to protect and reduce the risk against collision of birds with glass surfaces. It is recommended to use:

- on the windows of "Bird Screen" blinds, which on the one hand make the obstacle in the form of a window visible, and on the other hand cushion the bird in the event of a possible event;
- on the glazed infrastructure of solutions based on marking glazed surfaces in the form of graphic markers and window films: stripes, dots, decorative stickers of any pattern and colour.

## Abbreviations

Ordering party	Volkswagen Poznań
Contractor	Entity performing an ordered service, or a supplier of manufacturing equipment, systems and components
BAT	Best Available Techniques – BAT – The best available techniques described in reference documents (BREFs), prepared by the IPPC Office of the European Union in Seville
BREF	Reference documents of the European Union, BREFs are prepared by Technical Working Groups established at the European IPPC Office in Seville. BREFs describe BAT guidelines for individual industries, including information and technical material specifying emission limit values and other parameters characterising BAT for a specific system.