



Environment

Rules & Regulations Directive Group-wide



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02/15 dormakaba Guidelines Basic Elements

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A. General Information

A.1 Subject matter and objective

dormakaba is committed to fostering sustainable development along our entire value chain in line with our economic, environmental and social responsibilities. As stated in the dormakaba Code of Conduct, the environment builds the natural living conditions of all beings.

dormakaba recognizes that environmental responsibility is integral to producing world class products. In manufacturing operations, adverse effects on the community, environment and natural resources are to be minimized while safeguarding the health and safety of the public.

We focus on improving our management of environmentally related processes and on monitoring and reducing our energy consumption, carbon emissions, water consumption and increasing recycling rates. We practice good management and pollution control of hazardous materials, wastewater and waste, reducing these wherever possible.

Taking the life-cycle perspective, we continually aim at improving the environmental performance of our products and services while increasing material efficiency and adhering to materials restrictions regulations.

This Directive regulates the minimal business standards as regards the environment for product development and manufacturing and/or service processes at local level. Where local laws and local management systems are less stringent than this Directive, dormakaba is guided by the more stringent standard.

A.2 Scope of application

The provisions outlined in this Directive are applicable to all fully consolidated operations of dormakaba Holding AG worldwide, including those of direct and indirect subsidiaries.

A.3 Validity

This Directive comes into force from 1 September 2021 onwards and remains valid until further notice.

A.4 Implementation

The provisions in this Directive are focused on local, site-level management of environmental topics. In alignment with the requirements laid out in the dormakaba Sustainability Charter, local management is responsible for implementing the Directive into local (electronic) workflows and processes. Accountability for conformance and planning the required resources for conformance lies with the Site Head or equivalent function. Specific individuals or group of individuals must be formally appointed to manage all requested activity needed to ensure that dormakaba entities are always fully compliant with the Directive requirements.

Where a dormakaba entity is certified according to ISO9001:2015 and ISO14001:2015 (and/or ISO50001), the principles and procedures indicated in this Directive should be integrated within the related management system.

Further, local management should make reasonable efforts to ensure the involvement and participation of all personnel in order to fully share this Directive and the consequent business objectives, for the development of a culture oriented to the principles of this Directive.

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B. Principles

B.1 Environmental Regulations and Permits

Local management is to act responsibly, in compliance with environmental legislation. All required environmental permits (e.g., discharge monitoring), approvals and registrations are to be obtained, maintained and kept current and their operational and reporting requirements are to be followed. Specifically, required environmental permits, approvals registrations and licenses include those related to, e.g.

- Operating permit
- Air emissions
- Wastewater discharge
- Storm water exposure
- · Hazardous materials storage and use
- · Generation of waste (solid and hazardous)

Current copies of all hazardous waste vendor licenses and/or approvals must be kept on file. Environmental noise levels are to be within regulatory limits.

B.2 Pollution Prevention and Resource Efficiency

Emissions and discharges of pollutants and generation of waste are to be minimized or eliminated at the source or by practices such as adding pollution control equipment; modifying production, maintenance and facility processes; or by other means.

The use of natural resources, including water, fossil fuels, minerals and virgin forest products is to be conserved by practices such as modifying production, maintenance and facility processes, materials substitution, re-use, conservation, recycling or other means.

Engineering and administrative systems for improved resource efficiency should adhere to the **hierarchy of resource efficiency (see below)** when feasible, showing preference **(in order)** for the following functions:

- a) Prevention: Unnecessary consumptive processes are eliminated
- b) Minimization: Process efficiency is improved
- c) Substitution: Using a more environmentally benign or renewable resource
- d) Reuse, recycling, recovery: In that order, in order to maximize the benefit of resource consumption

Adequate and effective programs to identify, manage, minimize or eliminate at the source emissions and discharges of pollutants, generation of waste and conserve the use of natural resources must be in place including:

- Risk and impact assessment: identification of significant environmental aspects
- Programs for monitoring and control of these aspects
- Clear objectives and targets are set for each identified significant environmental aspect, demonstrating annual progress not entailing excessive cost that
 - o Reduce resource consumption
 - o Reduce waste and pollution generation
 - o Capture or reuse materials that would otherwise enter waste streams

B.3 Hazardous Substances

Chemical, waste and other materials posing a hazard to humans or to the environment are to be identified, labelled and managed to ensure their safe handling, movement, storage, and use.

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Required procedures

Adequate and effective procedures must be in place for their:

- · Reception and categorization
- Storage
- Dispensing
- · Use and Handling
- Disposal

Adequate and effective processes must be in place to inventory, track, review, and approve the use of all hazardous substances and obtain required governmental approvals for all new purchases of hazardous chemicals/materials prior to use. The selection processes for all new hazardous substances must include a thorough evaluation of less hazardous or nonhazardous alternatives.

Hazardous material information [labels and safety data sheet (SDS formally MSDS)] or characterization (in the case of hazardous waste) must be available at the points of use and storage in a language understood by the responsible employees. Training on safe use and handling is required for the employees working with or coming into close contact with these materials. All training needs to be properly documented and repeated at least once a year.

Inspection records of hazardous substances and their points of storage and use are maintained and available for review. Copies of hazardous substances inventory, manifests and shipping papers are maintained and available for review. These may be related to:

- Air emissions
- Process wastewater storage
- · Hazardous materials storage and use
- · Hazardous waste storage

Control and employee exposure

Access to hazardous substances is controlled such that only trained workers have access. Potential employee exposure methods are to be adequate and effective including through proper:

- Segregation
- Secondary containment
- Ventilation
- · Fire protection and
- Use of appropriate storage cabinets

Reporting

For locations with > 20 employees, there must be an adequate and effective process to track and report hazardous waste types and volumes as well as disposal methods per hazardous waste type. This must be reported into the Group-wide environmental reporting database timely at the established deadlines (On financial year basis, 6-month, 10-month and 12-month deadlines).

Reduction program

An adequate and effective hazardous substances reduction program must be in place to consist of:

- Annual objectives
- · Regular objective tracking
- Progress monitoring
- Adjustments made if off track

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Safe disposal and vendor assessment

Adequate and effective procedures must be in place for the safe return and disposal of hazardous waste. This includes a periodic vendor assessment and corrective action plan process to evaluate whether the vendor(s) (i.e., hazardous waste handler and transporter) is complying with contract terms and conditions must be in place. Assessments should occur at least every 3 years or when there is a significant change. The assessment must occur before a new vendor (hazardous waste handler or transporter) is selected. Only vendors approved and/or licensed by the local regulatory authorities for recycling, reuse, transporting and disposing of hazardous waste can be used.

B.4 Solid Waste

Local management shall implement a systematic approach to identify, manage, reduce and responsibly dispose of or recycle solid waste (non-hazardous). Refer to B.2 Hierarchy of resource efficiency.

Adequate and effective procedures must be in place for

- Storage
- Handling
- Transportation
- Disposal

Reporting

For locations with > 20 employees, there must be an adequate and effective process to track and report waste types and volumes as well as disposal methods per waste type. This must be reported into the Group-wide environmental reporting database timely at the established deadlines (On financial year basis, 6-month, 10-month and 12-month deadlines).

Reduction program

An adequate and effective hazardous substances reduction program must be in place to consist of:

- Annual objectives
- · Regular objective tracking
- Progress monitoring
- Adjustments made if off track

B.5 Air Emissions

Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting substances and combustion byproducts generated from operations are to be characterized, routinely monitored, controlled and treated as required prior to discharge.

Ozone depleting substances are to be effectively managed in accordance with the <u>Montreal Protocol</u> and applicable regulations. Ozone depleting substances are substances or materials containing Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFCs), Hydrobromoflurocarbons (HBFCs), Halons, Methyl bromide, Carbon tetrachloride and Methyl chloroform. They can mostly be found in refrigerants, foam blowing agents, components in electrical equipment, industrial solvents, solvents for cleaning (including dry cleaning, Aerosol spray propellants, fumigants).

Control systems

Local management shall conduct routine monitoring of the performance of its air emission control systems. Adequate and effective process to track, review, and approve the discharge of all air emissions must be in place. A specific individual or individuals within the facility organization who will be responsible for all aspects of process air emission treatment must be assigned.

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Emergency response actions must be defined by local management in case the on-site air emissions treatment system malfunctions.

Equipment

Appropriate process air emission treatment systems must be installed and maintained that minimize the pollutant contribution, including:

- A routine preventive maintenance program
- System efficiency monitoring program
- A program to evaluate the integrity of existing process air emission systems

The program to evaluate the integrity of existing process air emission treatment systems includes regular tests of the air emission system and immediate correction of any identified deficiencies.

Reduction program

An adequate and effective reduction program must be in place to consist of:

- Annual objectives
- · Regular objective tracking
- Progress monitoring
- · Adjustments made if off track

B.6 Materials Restrictions

Local management is to know and adhere to all applicable laws, regulations and contractual customer requirements going beyond regulatory obligations regarding prohibition or restriction of specific substances in products and manufacturing, including traceability labeling for recycling and disposal.

Key regulations are REACH, RoHS, California Proposition 65, WEEE, Hong Kong Ship Convention, US Frank Dodd Act Section 1502, and EU Conflict Minerals Directive.

For all entities maintaining a Quality Management System either certified or not to ISO 9000, the below stipulations must be integrated in the respective management system.

The **developer** of the product needs to ensure adequate and effective procedures for comparing legal and (internal) customer requirements to own specifications.

The **producer/manufacturer** of the product and procurement need to ensure adequate and effective procedures to measure and/or document the chemical composition of products including:

- A document process to ensure that the materials, packaging and components procured are in conformance with legal and customer requirements
- Information on and traceability of substances of concern throughout the life cycle of the manufactured products
- Provision of statements and/or certificates of conformance and analytical data to its (internal) customers upon request
- A formal process to address discovery of non-compliant materials or components and to track implementation of corrective actions.

B.7 Water Management

Local management shall implement a water management program that documents, characterizes, and monitors water sources, use and discharge; seeks opportunities to conserve water; and controls channels of contamination.

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Reporting

For locations with > 20 employees, there must be an adequate and effective process to track and report volumes of water consumption by withdrawal type (e.g., well versus municipal, etc.) and water discharge volumes. This must be reported into the Group-wide environmental reporting database timely at the established deadlines (On financial year basis, 6-month, 10-month and 12-month deadlines).

Water scarcity

A water risk assessment that considers competitive use, water quality, and scarcity must be conducted. This data source is used as reference for prioritization of top-down reduction targets. Currently, 7 supply chain sites have top-down water use reduction targets.

Wastewater - Control Systems

All wastewater is to be characterized, monitored, controlled, and treated as required **prior** to discharge or disposal. Further, adequate and effective processes to track, inventory, review, and approve the discharge of all wastewater must be in place.

Local management shall conduct routine monitoring of the performance of its wastewater treatment and containment systems to ensure optimal performance and regulatory compliance.

Adequate and effective procedures must be in place for the following as regards wastewater management:

- Storage
- Treatment
- Discharge

Potential contamination sources to water channels must be identified, and an adequate and effective emergency response plan to control water channel contamination must be in place. This should include investigation of past spills/water channel contamination and corrective/preventive action plans. Emergency response actions must also be defined in case the on-site wastewater treatment system exceeds its capacity or if it malfunctions.

A specific individual or individuals within the facility organization who will be responsible for all aspects of wastewater treatment must be assigned. Responsibilities are assigned for treatment, water channel contamination prevention and water-related emergency response and reporting activities.

Wastewater – Equipment

Appropriate emergency response equipment to control water channel contamination must be installed, inspected and maintained.

Appropriate process wastewater treatment systems must be installed and maintained that minimize the pollutant contribution, including:

- A routine preventive maintenance program
- System efficiency monitoring program
- A program to evaluate the integrity of existing process wastewater collection systems

The program to evaluate the integrity of existing process wastewater treatment systems includes regular tests of the wastewater treatment system and immediate correction of any identified deficiencies.

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B.8 Energy consumption and greenhouse gases

dormakaba has a Group-wide greenhouse gas reduction goal in line with the <u>Paris Agreement</u>. Energy consumption and all relevant Scopes 1 and 2 greenhouse gas emissions (e.g., carbon emissions from purchased electricity, heating fuels, vehicle fuels, refrigerants and other process emissions) are to be tracked, documented and publicly reported against the greenhouse gas reduction goal.

Reporting

For locations with > 20 employees, there must be an adequate and effective process to track and report purchased electricity, vehicle fuel, and heating fuel volumes. This must be reported into the Group-wide environmental reporting database timely at the established deadlines (On financial year basis, 6-month, 10-month and 12-month deadlines).

Reduction program

Local management must look for and implement cost-effective methods to improve energy efficiency and to minimize their energy consumption and greenhouse gas emissions.

An adequate and effective reduction program must be in place on local level to consist of:

- Annual objectives
- · Regular objective tracking
- Progress monitoring
- Adjustments made if off track

Cost-effective methods to improve energy efficiency and to minimize their energy consumption and all relevant Scopes 1 and 2 greenhouse gas may include:

- Building automation technology, programmable thermostats, lighting controls, or energy-efficient heating, cooling, lighting, and ventilation technology
- Use of vehicles that are fuel efficient or use a less GHG-intensive source (natural gas, electric, cellulosic ethanol, etc).
- ${\boldsymbol \cdot}$ Route planning software and fuel-efficient driver training for service fleet
- Purchasing or installing on-site renewable energy
- Use of high-efficient collection/treatment systems to absorb/treat cleaning agents
- Use of refrigerants with low global warming potential (GWP) in Heating, Ventilation, and Air Conditioning (HVAC) systems

B.9 Product Circularity and EcoDesign

To ensure their long-term market viability, products must be designed to be environmentally sustainable in accordance with the stipulations of sections B.6 and B.9. The lower the total environmental impact over the entire product life cycle, the more environmentally sustainable the product. The life cycle approach covers the complete value chain from resources extraction, production and distribution, use and waste/recycling. The dormakaba sustainability commitment and life cycle approach are also integrated into the company's Product Design Manual.

Energy Efficiency

For **all** products that require energy during the use phase after installation, projected life cycle greenhouse gas (GHG) emissions from the researched technology, product or other solution must not undermine GHG mitigation objectives under the Paris Agreement or hinder the deployment of climate mitigation solutions.

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The following information must be provided to Group Strategy and Transformation (Corporate Sustainability) and kept up to date to determine the respective energy consumption and projected greenhouse gas emissions during the use phase:

- · Option 1
 - o Power consumption per mode [W]:
 - In operation [W]
 - Stand-by mode [W]
 - Idle [W]
 - Off [W]
 - o Hours in each mode:
 - In operation [hrs]
 - Stand-by mode [hrs]
 - Idle [hrs]
 - Off [hrs]
 - o Battery information:
 - Technology type
 - Weight [g or kg]
 - Number required for lifetime of product
 - o Lifetime of product [Y]
 - o Typical operating days per year [D]
 - o Sales volumes [units per country]
- Option 2 (based on use cycles)
 - o Power consumption per use cycle [W]
 - o Number of use cycles per day [number]
 - o Battery information
 - Technology type
 - Weight [g or kg]
 - Number required for lifetime of product
 - o Lifetime of product [Y]
 - o Typical operating days per year [D]
 - o Sales volumes [units per country]

For new products, energy efficiency should be higher than compared to the best performing alternative technology, product or solution available on the market. The same applies to new versions of existing dormakaba products, and at minimum must be substantially improved compared to the previous model.

The environmental sustainability of products can be further achieved by the following measures, binding for S1 and S2 products:

Materials selection

Clear efforts should be made to avoid the use of hazardous substances to ensure customer health and safety, reduce ecotoxicology and to comply with material compliance regulations.

In addition, product engineers, developer and/or product managers should conduct proactive research on the substitution of rare minerals, metals and other scarce resources used in dormakaba products. Preference must be given to responsibly sourced nature-based materials, such as paper, cardboard or wood paneling with a Forest Stewardship Council label.

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Preference must be given to recyclable and biodegradable packaging. Plastic materials such as polystyrene or PVC should be avoided

Circular Economy

Research and development activity must assess the availability of and, where feasible, adopt techniques that support:

- reuse and use of secondary raw materials and reused components in dormakaba products (i.e., increasing recycled content of products)
- design for high durability, recyclability, easy disassembly and adaptability of products manufactured

Any potential risks to circular economy objectives from the researched technology, product or other solution must be evaluated and addressed.

There should be awareness and strict observance of the local recycling regulations that impact product design (e.g., labelling, parameters that define how/where batteries can be mounted).

There should be awareness and strict observance of the relevant Right to Repair laws, especially those based on the EU Circular Economy Action Plan, which includes the electronics right to repair for EU citizens as this would allow device owners to replace only malfunctioning parts rather than replace the entire device, reducing electronics waste. This applies to local products developed in the EU but also to global products that could potentially be destined for the EU market.

C. Approval

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