

The German Ecolabel

BLUE ANGEL



Low-Noise Waste Glass Containers

DE-UZ 21

Basic Award Criteria
Edition January 2026
Version 1

The Environmental Label is supported by the following four institutions:



Federal Ministry
for the Environment, Climate Action,
Nature Conservation and Nuclear Safety

The Federal Ministry for the Environment is the owner of the label, defines the fundamental guidelines for the award of the Blue Angel ecolabel and appoints the Environmental Label Jury.



The German Environment Agency with its specialist department for "Ecodesign, Eco-Labeling and Environmentally friendly Procurement" acts as the office of the Blue Angel ecolabel. It develops the technical criteria including the required compliance verifications in cooperation with relevant interest groups.



The Environmental Label Jury is the independent, decision-making body for the Blue Angel and includes representatives from environmental and consumer associations, trade unions, industry, the trade, crafts, local authorities, academia, churches, young people and the German federal states.



RAL gGmbH is the awarding body for the environmental label. It examines the applications submitted by companies for the use of the Blue Angel ecolabel and concludes the "Contracts on the Use of the Environmental Label". It also monitors correct use of the ecolabel.

Please use the following format when adding citations:

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This document is a translation of a German original. In case of dispute, the original document should be taken as authoritative.

1 Introduction

1.1 Preface

In cooperation with the Federal Ministry for the Environment, the German Environment Agency and considering the results of hearings held with relevant interest groups conducted by RAL gGmbH, the Environmental Label Jury has set up these criteria for the award of the ecolabel (Basic Award Criteria). RAL gGmbH has been tasked with awarding the ecolabel.

Upon application to RAL gGmbH and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH, the permission to use the ecolabel may be granted to all products, provided that they comply with the requirements as specified hereinafter. The product must comply with all the legal requirements in the country in which it is to be marketed. The applicant shall declare that the product meets these conditions.

1.2 Background

A nationwide collection system for container glass was already established in Germany in 1974. Collection container systems are generally used to collect white, brown and green glass separately.

In Germany, there is a clear government strategy for the collection and high-quality recycling of glass. This strategy is anchored in the German Packaging Act (VerpackG) and aims to keep the environmental impact as low as possible. The main objective is to increase the reuse and recycling of glass in order to conserve natural resources and reduce the volume of waste. Since 1 January 2022, the collection systems have been obligated to send at least 90 percent by mass of the collected waste glass for reuse or recycling on average every year (Section 16 VerpackG). In addition, the target reusability rate for beverage packaging is 70 percent by mass (Section 1 VerpackG). To ensure that any glass packaging that cannot (yet) be reused within a reusable packaging system is nevertheless recycled after use, it is especially important to establish well-organized and efficient collection systems for glass packaging. Well-structured and consumer-friendly collection points play a decisive role in ensuring a high return rate.

The collection rate increased from 78.8% (1996) to a maximum of 91.2% (2004), but then fell again to 82.5% (2009) (UBA 2012). In 2021, the collection rate was 80.3% (UBA 2024).

There are more than 250,000 waste glass containers across Germany.

The noise generated when depositing waste glass into these containers can cause a significant nuisance to people in the neighbourhood. A significant nuisance must be prevented according to the Federal Immission Control Act (BImSchG), or at least kept to a minimum using the best available techniques. In accordance with § 22 of the BImSchG, waste glass containers must be planned and operated in such a way that harmful effects on the environment which are avoidable are prevented with the use of the best available techniques. Harmful effects on the environment which are unavoidable should also be kept to a minimum with the use of the best available techniques. Directive 2002/49/EC on the assessment and management of environmental noise also includes an obligation to reduce noise pollution, as generated by waste glass containers, to a minimum in order to protect the quality of life of residents and avoid harmful effects on the environment.

In its "Environmental Noise Guidelines" from 2018, the World Health Organization (WHO) wrote the following: "Environmental noise is an important public health issue, featuring among the top environmental risks to health. It has negative impacts on human health and well-being and is a growing concern among both the general public and policy-makers in Europe" (WHO 2018).

Low-noise waste glass containers help to significantly reduce the noise emissions in glass recycling. Design solutions and sound damping materials can minimise the sound power level when glass bottles are deposited, which is especially advantageous in densely populated urban areas. These containers not only promote environmentally friendly waste disposal, but also actively help to protect health by reducing the negative impact of noise on people. Recent studies commissioned by the German Environment Agency on the assessment and reduction of noise at collection points and during recycling processes can be found in Eggers et al. (2025a, 2025b). The “Blue Angel” ecolabel defines the current standard for noise emissions from waste glass containers and thus helps reduce harmful effects on the environment.

Alongside noise protection, an important aspect of an environmentally friendly and resource-conserving strategy is for the waste glass containers to have a long service life. This approach complies with the principles of sustainable design, as enshrined in the Circular Economy Act (§ 23 KrWG). Accordingly, products should be designed and manufactured in such a way as to ensure a long service life, ease of repair, and reusability. Against this background, the Blue Angel ecolabel includes requirements for the ease of repair, availability of spare parts and the mandatory provision of a take-back service at the end of their use.

In addition, it excludes the use of certain chemicals with problematic environmental or health properties in the materials used to manufacture the waste glass containers.

People with limited mobility are often unable to use conventional, high-mounted deposit openings. Low-barrier containers – such as those with low deposit heights, ergonomic handles and tactile markings – promote the participation of all citizens in the glass recycling system and help remove barriers in public infrastructure (see also the Equal Opportunities for Persons with Disabilities Act – BGG). Therefore, the Blue Angel ecolabel supports requirements for the barrier-free (or accessible) design of waste glass containers in order to promote inclusive and environmentally friendly solutions and support their nationwide installation throughout Germany.

Finally, the Blue Angel ecolabel requires that relevant information on usage conditions, repair and disposal is provided directly on the waste glass container, as well as in the product documentation. This helps promote the responsible and environmentally friendly handling of waste glass containers across Germany.

1.3 Objectives of the Environmental Label

The collection of waste glass may generate noise pollution for those living near the sites of such containers. Low-noise waste glass containers can help to help to reduce noise emissions in e.g. residential areas. Their design must ensure that certain noise limits are not exceeded during their use.

The ecolabel aims to promote the widespread use of low-noise waste glass containers and motivate manufacturers to modernise their existing models and develop innovative solutions to reduce noise. The Basic Award Criteria guarantee a high level of protection for the health of consumers and for the environment by placing strict requirements on the sound power level of the containers.

In addition, the obligation to guarantee the provision of spare parts aims to ensure that the waste glass containers have a long service life. The obligation to offer a take-back service should also support the reuse of the waste glass containers or their high-quality disposal.

Therefore, the following benefits for the environment and health are stated in the explanatory box:



1.4 Definitions

Waste glass containers: Containers made of various materials that are designed for the collection of bottles and preserve jars. They must have at least one opening for depositing the glass bottles and jars and another opening for emptying the waste glass container. (Synonym: bottle banks, glass recycling containers)

Sound power: describes the acoustic strength of a sound source, i.e. how much acoustic energy is emitted by a sound source every second.

Guaranteed A-weighted sound power level LWA in decibels (dB): The logarithmic sound power ("level") of a sound source is determined under defined operating conditions for the source, adjusted to the spectral sensitivity of the human ear ("A-weighted"), and "guaranteed" in decibels (dB) by adding an uncertainty margin. The legal basis for this is EU Directive 2000/14/EC.

2 Scope

These Basic Award Criteria apply to waste glass containers of any form with special noise-reducing measures. This includes aboveground, underground and semi-underground waste glass containers.

3 Requirements

The ecolabel illustrated on the first page may be used for labelling waste glass containers, provided that the following requirements are complied with:

3.1 Product description

The following information must be provided for every waste glass container to be certified with the ecolabel:

- Type of container, e.g. aboveground/underground/semi-underground
- Type of variants, e.g. barrier-free or non-barrier-free
- The materials including the sound damping materials that are used to produce the container (including the proportions of recycled materials, if applicable)
- Coatings, e.g. paint and adhesive
- Noise reduction equipment
- Design of the container and the deposit opening

Compliance verification

The applicant shall submit a description of the waste glass container in Annex 1, including information on the materials added to the container, their uses and their proportions of the entire product in % by mass. Any components that account for a low proportion of the container (<0.1% by mass) can be omitted. The applicant shall also enclose a detailed description of the design of the waste glass container.

3.2 Noise emissions

The guaranteed A-weighted sound power level LWA pursuant to EU Directive 2000/14/EC for waste glass containers certified with the ecolabel may not exceed 86 dB.

The guidelines for calculating the guaranteed A-weighted sound power level LWA and for carrying out the underlying measurements can be found in Annex III Part B Number 22 of Directive 2000/14/EC.

Compliance verification

The applicant shall verify compliance with the requirements by submitting a test report (Annex 2 to the Basic Award Criteria for DE-UZ 21) from a testing institution accredited according to DIN 45688 "Specific requirements for the competence of testing laboratories for noise and vibration in the field of immission control".

3.3 Design

3.3.1 Noise-reducing elements

The waste glass containers must be equipped with design elements that minimise noise when depositing the glass bottles.

The design of the deposit openings and other noise-reducing elements of the waste glass containers must ensure the longest possible resistance to mechanical influences in order to minimise the risk of damage during operation. In the event of damage, it must also be possible to easily replace any faulty components on the deposit opening at the installation site.

The applicant must equip the bottom of the waste glass container that comes into contact with the floor, if it is made of metal, with noise dampening attachments (e.g. made of plastic, rubber or wood) or use another technical solution that is capable of reducing noise when returning the waste glass container to its installation site after emptying.

Compliance verification

The applicant shall verify compliance with the requirements in Annex 1 to the contract, describe in the product documentation the noise-reducing elements (also see Paragraph 3.1) and the design features that support stability and accessibility for repair and mark the corresponding sections of the documentation.

3.3.2 Ease of repair and availability of spare parts

The design of the containers for the collection of waste glass must allow for the replacement of the noise-reducing elements and housing elements of the design in order to restore the original technical properties.

In addition, a spare parts list and a description of how to order these parts must be made publicly accessible on the manufacturer's website. The spare parts must be made available for a period of at least 5 years after the last unit of the respective model was placed on the market.

The manufacturer is obligated to provide future owners of the containers with recommended maintenance instructions (including recommended maintenance intervals) for carrying out (visual) inspections so that they can identify potential defects and malfunctions at an early stage.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 to the contract and highlight the corresponding pages of the product documentation. The applicant shall also name the website where spare parts can be ordered.

3.3.3 Barrier-free designs

To improve accessibility for all user groups, manufacturers of aboveground waste glass containers must offer at least one variant in its product portfolio with a barrier-free design with respect to the deposit height (lower edge of the deposit opening between 85cm and 105cm) so that the container is easily accessible for people with restricted mobility. It must be possible to deposit the bottles using one hand and the deposit opening must be accessible on an external wall of the container.

The barrier-free containers and non-barrier-free containers must both comply with the requirements in these Basic Award Criteria in order to be certified with the Blue Angel ecolabel.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 to the contract and state whether the waste glass container is available in different models that differ with respect to their freedom from barriers. In addition, the applicant shall explain the differences in the design of the variants and submit verification of compliance with the requirements, in the event that the variants are expected to result in differences relevant to these requirements, although at least a measurement report for the guaranteed A-weighted sound power level.

3.4 Material requirements

3.4.1 Substances of very high concern (SVHC)

The primary plastics used in the housing and any coating and adhesives may not contain any substances with a concentration > 0.1% by mass (in semi-finished products or mixtures) which are identified as particularly alarming under the European Chemicals Regulation REACH (1907/2006/EC) and which have been incorporated into the list drawn up in accordance with

Article 59, Paragraph 1 of the REACH Regulation (so-called "SVHC list of candidates"¹) for substances of very high concern (SVHC).

In the case of other materials added to the container, the applicant must state whether the relevant semi-finished product contains SVHC (substances of very high concern) in concentrations of more than 0.1% by mass.

According to Article 33 of the Chemicals Regulation REACH, suppliers are legally required to provide information within the supply chain about any SVHC in concentrations > 0.1 by mass in (semi-finished) products. The regular updates to the list of candidates must be taken into account.

Compliance verification

The applicant shall declare compliance with the requirements at the time of application and, if relevant, name any SVHC present in the semi-finished products. In addition, the applicant shall submit the safety data sheets for any coating substances (such as paints and primers) and adhesives. The applicant shall regularly check the updates to the REACH list of candidates and inform RAL gGmbH if the materials used in the container are impacted by the new classification of substances so that a deadline for substituting the substances can be agreed if necessary.

3.4.2 Coatings (paints and primers)

For the priming and painting of the containers, the coating substances must not use any paint raw materials (fillers, pigments, drying agents) which contain any lead, chromium VI and cadmium compounds – except for impurities.

Compliance verification

If the waste glass container is painted, the applicant shall declare compliance with the requirement in Annex 1, state the name of the coatings (trade names) and submit the safety data sheets.

3.4.3 Polyurethane plastic foam

No halogenated organic compounds as physical blowing agents or auxiliary blowing agents may be used in the production of polyurethane foam.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and name the blowing agents used or submit a corresponding declaration from the supplier.

¹ List of candidates from the REACH Regulation (EC) No. 1907/2006: <https://www.echa.europa.eu/de/candidate-list-table>. Guidance on which SVHC are present in which materials is available from, for example, the "Netzwerk REACH@Baden-Württemberg": [Work aids: Determination of SVHC in products \(in German\)](#)

3.5 Take back and recycling

The applicant must offer a take back service for the waste glass containers certified with the ecolabel at the end of their service life and must provide corresponding information on its website. At the time of application, the applicant must submit information on the proportion of containers taken back in comparison to the number of containers supplied in the last calendar year.

The containers must be designed in such a way that they are easy to dismantle at the end of their life cycle.²

Finally, the applicant must state the extent to which secondary raw materials/recycled materials are contained in the material fractions used to manufacture new waste glass containers. The sources of the recycled materials should be named where possible.

If the applicant has a recycling concept designed to increase the proportion of materials fed back into circulation in the future, this should also be submitted and – if the concept has been published – the place where it is published should be stated.

Compliance verification

The applicant shall declare compliance with the requirements in Annex 1 and provide information on the take back service online, state the website where this information can be found and mark the corresponding sections of the product documentation.

The applicant shall provide information on the proportion of containers it has taken back, describe the disassembly of the container and state the proportion of recycled materials in the individual material fractions of a new container (Annex 3).

3.6 Information requirements

3.6.1 Information on the waste glass containers

The following information must be provided on the waste glass containers:

A type plate and markings that include the guaranteed A-weighted sound power level and other information for the CE marking (according to Article 11 of Directive 2000/14/EC relating to the noise emission in the environment by equipment for use outdoors).

The Blue Angel ecolabel may only be depicted on the container in combination with the above-mentioned markings. The ecolabel must not be larger than the type plate (maximum of 10 cm x 10 cm).

It should be supplemented with other useful information, such as the times when it is permitted to deposit waste glass at the planned installation site. However, this information should be discussed with the future owner of the container and for this reason there are no specific requirements in this context.

² Information on characterising the disassembly of the container can be found in ISO 14021: ... Section 7.4.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and confirm that the waste glass container has been fitted with a type plate and marked with the guaranteed A-weighted sound power level in accordance with Article 11 of Directive 2000/14/EC (e.g. by submitting a photo of the type plate/markings). The same applies to the labelling of the container with the ecolabel.

3.6.2 Information in the product documentation

Alongside a technical description, the product documentation for the waste glass container must contain information for procurement departments or commissioned disposal companies as users of the waste glass container. This information must also be available from the manufacturer on request via a contact address (attached to the container).

The following information must be provided in the operating instructions or the product documentation:

- Information on the ease of repair and availability of spare parts, as well as maintenance recommendations, including a website (manufacturer's website) where information on how to order spare parts can be found (see Paragraph 3.3.2).
- Information on the take back service for used waste glass containers.
- The higher the proportion of residential use (according to the German Land Use Ordinance (BauNVO)) in the area where the waste glass container is permanently installed, the further it should be placed from the nearest residential building.
- In noise-sensitive areas (e.g. residential areas, spa regions, hospitals, recreation areas), the operating times according to Section 7 of the 32nd BImSchV apply.
- A datasheet according to DIN EN 13071-1 "Stationary waste containers up to 5,000 l, top lifted and bottom emptied - Part 1: General requirements"

Further information for consumers and procurement departments can be found in Appendix B as background information. Appendix B also covers aspects that play an important role in reducing noise emissions but which cannot be addressed by the ecolabel.

Compliance verification

The applicant shall declare compliance with the requirement in Annex 1 and submit the corresponding pages of the product documentation. The applicant shall also submit the contact address.

3.7 Outlook

The following environmental aspects will be examined for the development of new requirements in future revisions of these Basic Award Criteria:

Requirements relating to the source and manufacture of materials (e.g. proportion of recycled materials, use of renewable energy sources)

Requirements relating to VOC in coatings and printing

4 Applicants and Parties Involved

Manufacturers, suppliers and installers of waste glass containers shall be eligible for application.

Parties involved in the award process are:

- RAL gGmbH to award the Blue Angel Environmental Label,
- the federal state being home to the applicant's production site,
- Umweltbundesamt (German Environmental Agency) which after the signing of the contract receives all data and documents submitted in applications for the Blue Angel in order to be able to further develop the Basic Award Criteria.

5 Use of the Environmental Label

The use of the Environmental Label by the applicant is governed by a contract on the use of the Environmental Label concluded with RAL gGmbH.

Within the scope of such contract, the applicant undertakes to comply with the requirements under Paragraph 3 while using the Environmental Label.

Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under Paragraph 2. Such contracts shall run until December 31, 2030.

They shall be extended by periods of one year each, unless terminated in writing by March 31, 2030 or March 31 of the respective year of extension.

After the expiry of the contract, the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.

The applicant (manufacturer) shall be entitled to apply to RAL gGmbH for an extension of the right to use the ecolabel on the product entitled to the label if it is to be marketed under another brand/trade name and/or other marketing organisations.

The Contract on the Use of the Environmental Label shall specify:

- Applicant (manufacturers, suppliers and installers of waste glass containers)
- Brand/trade name, product description
- Distributor (label user), i.e. the above-mentioned marketing organisations.

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Appendix A Quoted laws and standards, literature

German Land Use Ordinance (Baunutzungsverordnung – BauNVO): Ordinance on the utilisation of land

DIN 45688:2014-07 Specific requirements for the competence of testing laboratories for noise and vibration in the field of immission control.

DIN EN 13071-1 Stationary waste containers up to 5 000 l, top lifted and bottom emptied - Part 1: General requirements; German version EN 13071-1:2019.

Sebastian Eggers, Frank Heidebrunn, Sebastian Köper, Oliver Riek (2025a): Beurteilung und Minderung des Lärms an Sammelplätzen für recyclingfähige Abfälle (Assessment and reduction of noise at collection points for recyclable waste). LÄRMKONTOR GmbH, Hamburg. Publisher: German Environment Agency, Dessau

Sebastian Eggers, Frank Heidebrunn, Sebastian Köper, Oliver Riek (2025b): Beurteilung und Minderung des Lärms bei Recyclingvorgängen (Assessment and reduction of noise in recycling processes). LÄRMKONTOR GmbH, Hamburg. Publisher: German Environment Agency.

Law for the sale, return and high-quality recycling of packaging (German Packaging Act (VerpackG))

Act on the Prevention of Harmful Effects on the Environment Caused by Air Pollution, Noise, Vibration and Similar Phenomena (Federal Immission Control Act- BImSchG).

Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Bewirtschaftung von Abfällen (Act to Promote the Circular Economy and Safeguard the Environmentally-Compatible Management of Waste) (Circular Economy Act – Kreislaufwirtschaftsgesetz – KrWG).

Act on Equal Opportunities of Persons with Disabilities (Disability Equality Act - BGG) Article 4 Barrier-free access.

ISO 3744:2010-10 Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane

Ria Müller, Andreas Hermann, revised by Thomas Schneider, Anett Fischer (2023): Umweltfreundliche Beschaffung - Schulungsskript 3: Einführung in die Verwendung von Produktkriterien aus Umweltzeichen (Environmentally friendly procurement – Training script 3: Introduction to the use of product criteria from ecolabels). Publisher: German Environment Agency, Dessau.

Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise.

German Environment Agency (Publisher): Leitfaden zur umweltfreundlichen öffentlichen Beschaffung: Kommunalfahrzeuge.

Umweltbundesamt (2024), Glas und Altglas (Guidelines for environmentally friendly public procurement: municipal vehicles. German Environment Agency, Glass and waste glass)

<https://www.umweltbundesamt.de/daten/ressourcen-abfall/verwertung-entsorgung-aus-gewaehlter-abfallarten/glas-altglas#altglassammlung-mit-tradition>

last accessed: 23/06/2025 08:28 UTC+02:00

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No. 2024/1208 of the European Parliament and of the Council of 16 November 2023 amending Directive 2000/14/EC of the European Parliament and of the Council as regards the methods to measure airborne noise emitted by equipment for use outdoors.

31st Ordinance for the implementation of the Federal Immission Protection Act (ordinance for limiting the emission of volatile organic compounds due to the use of organic solvents in certain installations – 31st Federal Immission Control Act (BImSchV).

WHO – World Health Organization (2018): Environmental noise guidelines for the European Region: executive summary.

Appendix B Notes for consumers and procurement departments (for information purposes)

Information on the generation of noise at the installation site

The noise emissions stated in these Basic Award Criteria refer to the test conditions for the defined and standardised measurement setup.

Deviating values may occur during use at a real installation site, e.g. depending on the surrounding buildings.

Information for procurement departments

These Basic Award Criteria can place requirements on the waste glass container at the time of delivery and other requirements on the spare parts, take back of the container and information to be provided by the manufacturer.

The following additional points can also be included when issuing an invitation to tender:

- Specification of the type of waste glass container
- Description of the installation sites
- Maintenance and repair agreements
- If relevant, a scale of desired noise values depending on the installation site
- Emptying cycle for the waste glass container
- Vehicles for emptying the containers

A comprehensive package of measures is required to reduce noise emissions during the disposal of waste glass. The manufacturer of the container is not always directly responsible for these measures, but they play a crucial role in effectively protecting against noise and gaining social acceptance.

Local authorities play an active role in the implementation of these measures and are also responsible for commissioning waste disposal companies to collect the waste glass. Therefore, the following recommendations are primarily directed at these actors.

In order for companies to comply with the technical specifications for the waste glass containers, public procurement bodies can require that they hold a particular quality mark/label, e.g. the Blue Angel ecolabel. However, public procurement bodies must also accept other quality marks/labels and alternative individual verifications that demonstrate compliance with comparable requirements with respect to performance. If the performance specifications do not include all of the requirements for the award of the label, the public procurement body must also state the relevant requirements for the label. Please refer to Müller et al. (2023) for information on the use of product criteria from ecolabels in the procurement process.

As noise reduction requires a systematic approach and the sound power level when emptying the containers and transporting the waste away from the site of the container makes a significant contribution to the total noise pollution, the following measures should be taken into account when procuring special vehicles:

- Only those vehicles with a particularly low noise level should be selected.
- The "Leitfaden zur umweltfreundlichen öffentlichen Beschaffung Kommunalfahrzeuge" (Guidelines for environmentally friendly public procurement: municipal vehicles) can

be used for the invitation to tender (UBA 2, which is based on the Blue Angel ecolabel for municipal vehicles (DE-UZ 59a, www.blauer-engel.de/uz59a).

The installation site for the container must comply with the requirements in Section 22 BImSchG. This includes in particular:

- harmful effects on the environment which are avoidable are prevented with the use of the best available techniques
- harmful effects on the environment which are unavoidable are kept to a minimum with the use of the best available techniques

Based on DIN 13071-1 and the associated recommendations for how manufacturers should carry out visual inspections, the owners of the container must organise (or ensure) continuous monitoring of the condition of the container during use.

In accordance with Section 32 BImSchV, users of the container must be informed about the operating times. A notice sign containing this information must be attached directly to the container in a clearly visible place or, if necessary, in the immediate vicinity of the container to ensure the best possible visibility and accessibility for all users.

The responsible departments in the local authority should recommend the following measures to companies commissioned to carry out the waste disposal process:

- Regular training of personnel
- The creation of waste removal plans, taking into account noise sensitive areas

It is recommended that the (recently published) study "Beurteilung und Minderung des Lärms an Sammelplätzen für recyclingfähige Abfälle" (Assessment and reduction of noise at collection points for recyclable waste) from Eggers et al. (2025a) is taken into account and the associated recommendations in this study are integrated into the subsequent planning and implementation process.

Appendix C Version history

The following changes were made to ecolabel DE-UZ 21 " Low-Noise Waste Glass Containers, Edition January 2026, Version 1" and required the issuing of an updated version in each case. The version at the time of application is valid. If the changes were required for the implementation of new legal regulations, they apply to all certified products.