

Appendix IV

Verification Checklist for Certification

In principle, the standard on organic mineral water and organic spring water put forth by the Quality Association should be observed in their entirety. Companies and products certified according to the standard should not only meet the following requirements, but also share the ideology behind the standard and the corresponding concerns.

The following list classifies the criteria into "major" criteria, all of which must be met and "minor" criteria, of which at least 50 % must be fulfilled to obtain organic certification.

The analytical reports to be submitted are based on the analysis of bottled products. The reports must be prepared by accredited laboratories and must not be older than the previous calendar year, unless indicated otherwise.

No.	Requirement	Criteria	Fulfilled from the standpoint of the applicant		Proof	Fulfilled based on review of evidence submitted		Reason	Fulfilled from the standpoint of the auditor		Reason
			yes	no		yes	no		yes	no	
I.	Sustainability										
I.1	The company promotes systematic water protection through organic farming. Additionally, at the latest, one year after the initial certification as an organic mineral water producer, a survey of the farming practices in the catchment area of the recognized natural spring must be produced and the number of areas under organic cultivation is to be determined.	major			To be submitted: In the second year after initial certification according to this standard: a map with the catchment area of the water well marked accordingly along with the number of areas under organic cultivation.						
I.2	At the latest, three years after the initial certification, measures for promoting more organic farming of level "A" have to be done continuously. If this kind of program proves to be impossible measures for promoting of level "B" have to be done. If also this kind of program proves to be impossible measures for promoting of level "C" have to be done. The Quality Association determines what kind of measures will be part of the separate levels. Currently are: <ul style="list-style-type: none"> Level "A": On the initiative of the company accomplished and initiated conversions of whole farms or areas to organic farming in the catchment area of the natural spring. Level "B": On the initiative of the company accomplished and initiated conversions of whole farms or areas of specifically named farmers to organic farming outside of the catchment area. Furthermore these are realised measures from the programs the Quality Association developed - e.g. with the organic farming associations – for promoting organic farming and the improvement of soil to lead conventional farmers to organic farming. Level "C": Financial contributions to a foundation or to projects for promoting organic farming, named by the Quality Association. The QA determines the financial amounts, to secure an engagement	major			To be submitted: During the first three years after initial certification the company provides each year a declaration in which it declares the type of activities being done in order to prepare the program of promotional measures for organic agriculture in each respective level. In the fourth year after initial certification according to this standard: description of the already implemented and planned measures to increase the organically farmed area including the targets for each measures. In the following years: description of the measures newly initiated for each year as well as measures accomplished each year.						
I.3	Likewise, at the latest, one year after the initial certification, the company should create a program for communicating the significance of protecting water and of organic farming to its customers and the general public.	minor			To be submitted: In the second year after initial certification according to this standard: presentation of a program with measures to be implemented and a timeline to achieve the objectives.						

I.4	The company must produce a scientific study of the catchment area of the spring or a project plan for a study as precise as possible of the same, in order to optimize long-term protection of the spring.	minor			To be submitted: a relevant expert assessment or project plan						
I.5	The company is to put an environmental management system into practice, meaning it must become certified according to EMAS (EC-VO 1221/2009) or ISO 14001.	major			To be submitted: valid certificates						
I.6	An expansion of these certified environmental management processes provides the company with progressive, verifiable objectives for improving energy and resource efficiency (material and water usage). Evidence of these improvements must be submitted.	major			To be submitted: Within the first year after initial certification: information regarding the specified objective, e.g. those from the EMAS environmental management scheme. From the second year on: evidence of achieving these objectives.						
I.7	The mineral water supply is to be utilized sparingly, i.e. only the overflow of artesian or free-flowing wells is to be collected. Only less than 80 % of the water flowing naturally into the wells equipped with pumps is to be extracted from the well.	major			To be submitted: proof of the approved pumping volume such as copies of the relevant page(s) from permits issued by the legal authority or from a hydrogeological report authored by a recognized expert in this area (evaluation of pumping test) in addition to proof of actual pumping volume, such as data recorded by a continuous data logger during operations. This evidence will be checked during the on-site audit .						
I.8	The company must promote regional and/or international protection of water through established projects, e.g. through support of water projects in developing countries or through measures implemented regionally for protecting drinking water. Support of educational programs teaching about protection of water also represents an option.	minor			To be submitted: Upon initial certification according to this standard, at the very minimum, a list of suggested projects should be submitted. The measures to be taken must be commenced and documented the second year after the initial certification, at the latest. These will be checked during the on-site audit .						
I.9	Organic mineral water must be filled in ecologically optimal packaging. The following containers are permissible: returnable glass, beverage cartons, returnable or returnable-recyclable PET bottles (e.g. rPET, Petcycle) with a minimum of 60 % recycled material or a minimum of 30 % of the material from renewable raw materials in the bottles.	major			To be submitted: For recycled PET bottles: the specifications for bottle preforms with confirmation of the proportion of recycled material or renewable raw materials used in the bottles.						
I.10	The company has created a strategic climate protection program as defined in Appendix I, in which the minimum requirements must be fulfilled and verifiably implemented.	major			To be submitted: Evidence of a verified environmental report or confirmation of such a program by independent experts. The program should meet the criteria described in Appendix I.						

I.11	At the latest, one year after the initial certification for organic mineral water, the company will develop and implement a program to train and educate its employees on environmental protection, nutrition and physical activity. Implementation of this educational program will be checked annually as part of subsequent certifications.	major			To be submitted: During the second year after certification: presentation of the program, e.g. from the EMAS scheme From the third year on: proof of implementation						
I.12	The company provides vocational education and reserves at least 5 % of the job positions for apprentices or reserves at least 10 % of its job positions for persons with limited access to the labor market.	major			Keep evidence of compliance on file to be checked during the on-site audit . Proof of actual employment or documentation of registration at the federal labor office						
I.13	The company produces an annual sustainability report to document its progress in this area. For companies which already issue an environmental report, appropriate additions will suffice.	major			To be submitted: a report which covers at least the requirements listed in I.						
I.14	The company promotes ecological and fair farming practices by ensuring that at least 50 % of the food it provides in-house (for employees and guests visiting the company) is certified organic.	minor			Keep evidence of compliance on file to be checked during the on-site audit . At the very minimum, organic products intended for use in production which have been purchased from other vendors should be certified to the requirements outlined in the EU organic directive, fair products according to the Trans-fair e.V. standard or of a comparable quality.						
II. A Natural Product											
II.1	The use of ozone for the removal of undesirable substances in organic mineral water is not permitted.	major			To be submitted: an excerpt from the application for the usage permit according to the German AVV, Anlage 4, part IV description of the operational functions or a similar form of permission granted by federal authorities according Directive 2009/54/EC Appendix II should be kept on file to be checked during the on-site audit .						
II.2	The removal of fluoride with activated aluminum oxide from organic water is not permitted.	major			To be submitted: an excerpt from the application for the usage permit according to the German AVV, Anlage 4, part IV description of the operational functions or a similar form of permission granted by federal authorities according Directive 2009/54/EC Appendix II should be kept on file to be checked during the on-site audit .						
II.3	Exposing the final product to any type of radioactivity, e.g. subjecting the product to x-rays or gamma rays, is not permitted with organic mineral water.	major			To be submitted: relevant statements or documentation from the manufacturer to be checked during the on-site audit (inspection of the filling process)						

II.4	Only certified, organically produced carbon dioxide generated through fermentation or carbon dioxide captured from a spring, captured from air or from food production can be added to organic mineral water.	major			To be submitted: Specifications for carbon dioxide gas to be checked during the on-site audit (delivery invoices). Carbon dioxide captured from air has to be extracted with renewable energy.						
II.5	To reduce any negative influences on the water, the degree to which it must move through piping should be minimized. Transport of the water through piping on-site from the spring or well to the filling line should not exceed 2 km.	minor			To be submitted: a map of the area identifying the location of the water wells and the production facility with information regarding the scale of the drawing; keep on file to be checked during the on-site audit .						
II.6	At the very least, comprehensive proof of the quality of organic mineral water must be provided, in order to express its life-giving, inner structure, which is superior to ordinary tap water. Proof is provided by an evaluation of the water crystal imagery. The rating of the water should at least be "good", i.e. ≤ 2.5 , or produce a correspondingly positive result for biophoton analysis, drip image methodology, sensory descriptive analysis, among others.	minor			To be submitted: a relevant analysis report, e.g. water crystal imagery (Hagalis), biophoton analysis (Kwalis), drip image methodology, sensory descriptive analysis (Institut für Strömungswissenschaften) Frequency: every five years						
II.7	Residues of pesticides, of the degradation products of pesticides (pesticide metabolites), of drugs and of perfluorinated surfactants (*) should not be present in the water. The effective concentration limits for these substances are listed in Appendix II. The scope of the analysis is subject to constant adjustment by the panel on quality. Refer to the current list in Appendix II. (* Any changes agreed upon by the Quality Association shall be documented through the respective analytical tests conducted subsequently.	major			To be submitted: analysis report (water well or bottled product), e.g. a report which encompasses most of the scope of the VDM (German Mineral Water Association) analysis for well water. Furthermore, the water must be tested for the presence of pesticides listed in Appendix II, screened for drug residues and perfluorinated surfactants (substances listed in Appendix II) and tested for anionic detergents. Frequency: every two years, except in the case of IV.5, then every five years thereafter						
II.8	Artificial sweeteners are not permitted. The concentration limits for acesulfame K, saccharin, cyclamate and sucralose are listed in Appendix II. The scope of the analysis is subject to constant adjustment by the panel on quality.	major			To be submitted: analysis report (water well or bottled product) to be presented every two years, except in the case of IV.5, then every five years thereafter						
II.9	Further pollutants may not exceed the values supplied for orientation, which serve as concentration limits according to the provisions outlined in the German AVV, Appendix 1a.	major			To be submitted: analysis report (water well or bottled product) to be presented every two years, except in the case of IV.5, then every five years thereafter						
II.10	The nitrate content must be ≤ 5.0 mg/l, since higher values indicate that it does not originate from a natural source.	major			To be submitted: analysis report, also refer to IV.6 (independent bottle analysis to be performed annually as stipulated Anlage 4 of the MTV or the scope of bottle analysis as required by VDM or Directive 2003/40/EC, Appendix I)						

III.	Microbiology and Product Safety									
	The company has a system in place for ensuring proper hygiene conditions in the production facility. In addition to the requirements stipulated by law, this system must include the criteria listed below:									
III.1	In order to ensure the appropriate levels of hygiene are present, step-wise microbiological analyses must be performed at every relevant point in the production process at least once a year. There should be no critical results found from these microbiological tests. In addition to the company's own routine monitoring program, an independent laboratory must perform a step-wise microbiological analysis at all relevant process steps starting at the opening of the spring or well at the facility and extending to the filled bottles. A sufficient number of swab samples should also be collected from the filler and the surrounding production areas for analysis as well.	major			<p>To be submitted: report of analysis results from the step-wise microbiological analysis program. Records of in-house tests conducted by the company are to be presented and checked during the on-site audit.</p> <p>Approximately 20 swab samples is considered sufficient.</p>					
III.2	In order to ensure the appropriate levels of hygiene are present, all areas located in close proximity to production must be tested on an annual basis. There should be no critical results found from these microbiological tests. As part of this review, a walkthrough of the relevant areas should be carried out and documented by someone who possesses the necessary training and expertise in hygiene problems related specifically to facilities that produce and fill mineral water products.	major			<p>To be submitted: report regarding the walkthrough to observe hygiene conditions in the production facility (if a report doesn't exist, the walkthrough can be performed during the on-site audit and documented at that time)</p>					
III.3	The routine microbiological testing of the water exiting the well and of bottled products bottles as mandated by Article 5 of the Directive 2009/54/EC should yield no grounds for complaint. Independent microbiological testing of the water at the point it leaves the well must be performed at least once per year, while the filled products must be tested on a quarterly basis.	major			<p>To be submitted: analysis reports collected over the year since requesting certification; analyses performed according to accredited methods</p>					
III.4	Routine microbiological analysis of bottled water products performed by the company laboratory should yield no grounds for complaint with respect to colony counts and <i>E. coli</i> /coliforms. These tests should be conducted for each filling run and a minimum of once per week for facilities with continuous production.	major			<p>Keep evidence of compliance on file to be checked during the on-site audit.</p>					
III.5	Since <i>Staph. aureus</i> is a microbe of relevance in terms of hygiene, there should be zero cells detected per 250 ml of product. This analysis should be conducted on a quarterly basis as mandated by Article 5 of the Directive 2009/54/EC (refer to III.3).	major			<p>To be submitted: report of analysis results for bottled water samples</p>					
IV.	Chemicals and Product Safety									
	In general, the legal limit values for antimony, barium, lead, cadmium, total chromium, nickel, mercury and selenium are considered sufficient for organic mineral water.									

IV.1	<p>The limit values given in Appendix II for arsenic, boron, chromium VI, cyanide, fluoride, copper, manganese, nitrite, inorganic nitrogen, TOC, radium 226, radium 228 and uranium are to be observed for organic water.</p>	major			<p>To be submitted: analysis report, also refer to IV.6 (annual bottle analysis by an independent institution as described in Anlage 4 of the German MTV or Directive 2003/40/EC, Appendix I); radium and uranium, for example, are measured as part of the VDM bottle analysis for infant formula, or when organic mineral water is used as an ingredient in a beverage: proof of fulfillment after admissible processing.</p>					
IV.2	<p>In rare cases of high radon content at the well or spring, i.e. over 50 Bq/l, for further protection against exposure to radiation, tests for Pb 210 and Po 210 should be carried out. As a means for evaluating the effects of water on human health, a total indicative dose of 0.1 mSv/a has been set as a reference value for infants and should not be exceeded.</p>	major			<p>To be submitted: analysis report regarding the amount of radon measured at the water source, for levels above 50 Bq/l, the total indicative dose must also be determined. To be submitted one time at initial certification.</p>					
IV.3	<p>The packaging into which the organic mineral water is filled must be inert to the greatest extent and should not influence the mineral water. In particular, the packaging should not have an impact on the water's sensory attributes. Glass is the preferred packaging material for organic mineral water, since the various materials comprising packaging can easily taint water.</p> <p>PVC/PVDC/chlorinated plastics in cap liners are not permitted. Bisphenol A free lacquer of caps has to be used. BHT (butylated hydroxytoluene) and bisphenol A may not be present in organic mineral water. Methods of determination and concentration limits can be found in Appendices II and IV.</p>	major			<p>To be submitted: Specifications for the packaging materials (bottles and closures) according to the applicable laws such as VO (EC) 1935/2004, EU/10/2011 and amendments governing the use of materials made of plastic which come into contact with foodstuffs. Confirmation of legal compliance must be supplied by the manufacturer. Proof of the absence of a sensory impact of the packaging material (bottle and closure) on the product must be provided at time this material is first used in the filling of mineral water products.</p> <p>Verification of BPA-free lacquer by specification of closures of the producer. The analysis reports regarding the closures (Beilstein test), BHT $\leq 2 \mu\text{g/l}$ and bisphenol A $\leq 0.05 \mu\text{g/l}$ are to be submitted annually as well as when changes are made to a product.</p>					

IV.4	For PET containers, the acetaldehyde content in mineral water should be less than 10 µg/l. Acetaldehyde is an indicator for the migration of substances from the PET container. The benzene content in mineral water should be less than 0,3 µg/l.	major			<p>To be submitted: an annual analysis report regarding the acetaldehyde (AA) and the benzene content in bottled mineral water after storage or when a product is changed. If the test results indicate that the limit value could be exceeded, at least four additional samples must be analyzed to ensure that the maximum limit has not been exceeded.</p> <p>Preforms should be tested every quarter and when new preforms are introduced. The preforms are not allowed to exceed an AA content of 1 ppm according to the Fraunhofer IVV test method.</p>						
IV.5	In order to increase consumer safety, organic mineral water must be at least 50 years old or it must be tested at more frequent intervals for environmental contaminants. The instructions for conducting the relevant analyses are provided in Appendix II.	major			<p>To be submitted: a relevant analysis report documenting the age of the water (sample collected from the well or bottled product, to be submitted one time only). The analysis should have been conducted within the last five years.</p>						
IV.6	A chemical analysis of the packaged mineral water for characteristic minerals must be carried out by an independent laboratory at least once per year, according to Directive 2003/40/EC, Appendix I. Grounds for complaint cannot be present.	major			<p>To be submitted: the annual analysis report for bottle analysis performed by an independent institute; the report should contain characteristic elements required for bottle testing (within the scope of the VDM bottle test) and according to Anlage 4 MTV or Directive 2003/40/EC, Appendix I.</p>						
IV.7	Every two years, a chemical analysis of the water at the outlet of the spring or well must be performed, in order to provide evidence of its so-called "original purity" according to the provisions outlined in the German AVV. Grounds for complaint cannot be present.	major			<p>To be submitted: analysis report regarding the analysis results from an independent institution to determine the "original purity" (within the scope of the VDM analysis for well water)</p>						

IV.8	<p>No contaminants originating from operational conditions may appear in mineral water. The company must possess a corresponding risk analysis, i.e. a HACCP concept, consistent with legal requirements and the Codex Alimentarius.</p> <p>In mineral water the limit value of chlorate and perchlorate of 1µg/l has to be observed.</p>	major			<p>To be submitted: current overview of the CCPs from the HACCP concept, which call for testing for the presence of residues after the bottles are cleaned and disinfected or regular checks for nitrites in the gravel filter. These are items to be checked during the on-site audit (risk analysis and ongoing monitoring of CCPs)</p> <p>Analysis report of the bottled mineral water of chlorate and perchlorate, every second year if detergents and disinfectants containing chlorine are used in the bottling plant. If not an analysis every five years is sufficient.</p>							
IV.9	A quality management system must be in place, meaning that the company must be certified according to ISO 9001, the IFS standard or comparable standards.	major			<p>To be submitted: valid certificates</p>							
V. Good Food												
V.1	<p>The sensory characteristics of the bottled products are flawless. This means that the bottled mineral water should be refreshing, not exhibit any atypical odors or flavors or have a musty or stale character.</p>	major			<p>To be submitted: report on the sensory analysis of the water by a trained tasting panel (from an independent institute, DLG or similar). e.g. as part of the annual, independent analysis of the bottled products (see criterion IV.1) Alternatively, samples can be submitted to the certification agency to be forwarded to a relevant institute.</p>							
V.2	<p>Redox potential, rH2 value ≤ 28</p> <p>Mineral water or spring water should possess a low redox potential so that it can catch free radicals in the body.</p>	minor			<p>To be submitted: analysis report regarding the redox potential and water temperature of the sample collected from the well, the analysis should be performed within the scope of the VDM analysis for well water (every two years), conversion of the results will take place when the documents are evaluated.</p>							
V.3	<p>The pH value of the water at the source ≥ 6.0.</p> <p>For health reasons, the water at the source or immediately after deacidification should only be slightly acidic or alkaline.</p>	minor			<p>To be submitted: analysis report on the pH value of the water as the sample is collected from the well, including the analysis performed within the scope of the VDM analysis for well water (every two years)</p>							
V.4	The mineral water should possess at least one characteristic proven to be beneficial to human health. The options for supplying evidence of this are provided in Appendix II.	major			<p>To be submitted: relevant reports authored by experts including the testing and analysis results</p>							

VI.	Transparency in Declarations and Labelling										
VI.1	All results from the testing of organic mineral water criteria are to be published on the internet.	major			To be submitted: the link to the company website where the current certificate and the latest inspection report can be viewed						
VI.2	The summary of the analysis results contains comprehensive information for consumers. This means that the declaration is valid and acceptable according to current legislation. In addition to the six minerals (Na, Ca, Mg, Cl, SO ₄ , HCO ₃), the analysis summary must contain further information helpful to consumers; at the very minimum, the content of fluoride, nitrate and carbonic acid should be provided as well as the name of the institution that performed the analysis.	major			To be submitted: labels or drafts of labels All quantities are to be expressed in mg/l.						
VI.3	The analysis results provided in the declaration are current. The date of the previous analysis to determine the quality of the mineral water, which preceded the current print run of the labels, is to be included on the label.	major			To be submitted: labels or drafts of labels The analysis values may fluctuate by +/- 20 % according to the consistency rules laid down by law. Changes in excess of this value will require the labels to be revised.						
VI.4	The provenance of the mineral water must be easily recognizable. A clear brand declaration according to consumer-friendly specifications is to be provided (refer to Appendix I).	major			To be submitted: labels or drafts of labels						
VI.5	When referring to certificated organic mineral water, the private standard according to which it was certified and the agency responsible for it, must be cited.	major			To be submitted: labels or drafts of labels for example: "certified according to the <i>Qualitätsgemeinschaft Bio-Mineralwasser e.V.</i> standard permitted under private law through the inspection agency Kiwa BCS Öko-Garantie GmbH"						
VI.6	The company is responsible for ensuring transparency and that consumer information is available. The company must therefore offer tours of their facility at regular intervals. The requirements of consumer organizations for direct consumer information are to be met by maintaining an information hotline.	major			To be submitted: the measures are to be defined by the company and checked during the on-site audit .						
Appendix											
1	Organic beverages which are to be brought onto the market bearing the organic mineral water seal, must be produced using 100 % organic mineral water for the ingredient "water".	major			To be submitted: designation of the products to be listed on the organic mineral water certificate along with the ingredient lists, the percentage of organic mineral water used in these products and the corresponding labels. To be checked during the on-site audit: Is the exclusive use of organic mineral water guaranteed?						

2	<p>If organic beverages are produced using organic mineral water and advertised with the organic mineral water quality seal, or if this is intended, the organic integrity of the water must be ensured at all stages of processing. This may include, if applicable, the spatial or temporal separation of other water or products/production processes which do not incorporate organic mineral water to avoid any contamination.</p>	major		<p>To be submitted: a list of all products which are produced using organic mineral water, a list of all products made by the company which contain water. A production flow diagram for the products containing organic mineral water including information regarding the separation of the supply lines (if applicable).</p>						
3	<p>The declaration for organic beverages produced using organic mineral water must be clearly differentiated between the certification according to public law and that subject to private law.</p>	major		<p>To be submitted: labels or drafts of labels which denote: "Organic mineral water certified according to the Qualitätsgemeinschaft Bio-Mineralwasser e.V. standard permitted under private law " or similar formulations.</p>						