

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-14629-01-00 according to DIN EN ISO/IEC 17025:2005

Period of validity: 20.11.2017 to 19.11.2022

Date of issue: 20.11.2017

Holder of certificate:

Eurofins GfA Lab Service GmbH
Neuländer Gewerbepark 4, 21079 Hamburg

Tests in the fields:

Determination of organic residues and contaminants by GC/MS, -MS/MS, -HRMS as well as LC-MS/MS in food, feed, water, soil, waste, sewage sludge, sludge, air samples, emission samples, immission samples, dust, biological environmental markers (biota), human sample material, consumer products and chemical products incl. sample preparation;
Analyses according to the legislative environmental modules water, soil and contaminated sites as well as waste;
Immission protection module

Abbreviations used: see last page

Within the given testing field marked with */), the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following:**

***) the free choice of standard or equivalent testing methods.**

****) the modification, development and refinement of testing methods.**

The listed testing methods are exemplary.

The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

1 Determination of organic pollutants using isotope dilution analysis and gas chromatography with mass spectrometric detection (MS, MS/MS und HRMS)

1.1 In food and animal feed-**

DIN EN 16215 2012-07	Animal feeding stuffs - Determination of dioxins and dioxin-like PCBs by GC/HRMS and of indicator PCBs by GC/HRMS
BVL F 0027 (EG) 2013-04	Animal feedings stuffs - Determination of polychlorinated dioxins (PCDD/PCDF) and dioxin-like PCB - Annex of directive (EU) No 278/2012 of the Commission of 28 March 2012 and repealing Regulation (EU) No 152/2009 regarding the determination of dioxins and polychlorinated biphenyls
GLS DF 110 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in food and feed as well as other samples by gas chromatography with mass spectrometric detection
GLS OC 200 2017-07	Determination of the mass concentration of polybrominated diphenylethers (PBDE) and polybrominated biphenyls (PBB) in diverse sample matrices by GC-MS (Scope here: <i>food and feed</i>)
GLS OC 300 2017-06	Determination of polycyclic aromatic hydrocarbons (PAH) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>food and feed</i>)
GLS OC 500 2017-06	Determination of organochloric pesticides (OCP) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>Food and feed</i>)
GLS OC 600 2017-07	Determination of organotin compounds (OTC) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>food, drinking water and feed</i>)
GLS OC 720 2017-07	Determination of alkyl phenoles in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>food and feed</i>)

1.2 In Water, soil, waste, sewage sludge, sludge, air/emissions, immissions, dust and biological environment markers (Biota) **

DIN ISO 12884 2000-12	Ambient air - Determination of total (gas and particle phase) polycyclic aromatic hydrocarbons - Collection on sorbent-backed filters with gas chromatographic/mass spectrometric analysis (modification: <i>no sampling</i>)
DIN ISO 16000-13 2010-03	Indoor air - Part 13: Determination of total (gas and particle-phase) polychlorinated dioxin-like biphenyls (PCBs) and polychlorinated dibenzo-p-dioxins/dibenzofurans (PCDDs/PCDFs) - Collection on sorbent-backed filters (modification: <i>no sampling</i>)
DIN ISO 16000-14 2012-03	Indoor air - Part 14: Determination of total (gas and particle-phase) polychlorinated dioxin-like biphenyls (PCBs) and polychlorinated dibenzo-p-dioxins/dibenzofurans (PCDDs/PCDFs) - Extraction, clean-up and analysis by high-resolution gas chromatography and mass spectrometry (modification: <i>no sampling</i>)
DIN EN 15549 2008-06	Air quality - Standard method for the measurement of the concentration of benzo[a]pyrene in ambient air (modification: <i>no sampling</i>)
VDI 3498 Blatt 2 2002-07	Ambient air measurement - Indoor air measurement - Measurement of polychlorinated dibenzo-p-dioxins and dibenzofurans; Method using small filters
VDI 3499 Blatt 1 2003-07	Emission measurement - Determination of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) - Dilution method; Example of application of DIN EN 1948 for the concentration range < 0,1 ng I-TEQ/m ³ and supplement to DIN EN 1948 for the concentration range > 0,1 ng I-TEQ/m ³ ; Determination in filter dust, ash and slag
BIA 6880 1993-06	BIA-testing method for the determination of concentration of polychlorinated dibenzofuranes and dibenzodioxins (PCDF/PCDD) and polybrominated dibenzofuranes and benzo-p-dioxins (PBDF/PBDD) at working areas
GLS DF 110 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in food and feed as well as other samples by gas chromatography with mass spectrometric detection (Scope here: <i>biota samples</i>)

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GLS DF 130 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in environmental samples, water, materials and chemicals by gas chromatography with mass spectrometric detection
GLS DF 140 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) in air samples by gas chromatography with mass spectrometric detection
GLS OC 110 2013-10	Determination of polychlorinated benzenes (PCBz) in solids, emissions, immissions and air samples by gas chromatography with mass spectrometric detection
GLS OC 130 2013-10	Determination of polychlorinated phenols (PCPh) in solids, emission, immission and air samples by gas chromatography with mass spectrometric detection
GLS OC 200 2017-07	Determination of polybrominated diphenyl ether (PBDE) and polybrominated biphenyles (PBB) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>soil, sediments, sludge, recycling material, fire debris, adsorption media for air analysis, biological environmental markers</i>)
GLS OC 220 2017-07	Determination of the mass concentration of Tetrabrombisphenol-A (TBBP-A) in diverse matrices by GC-MSD (Scope here: <i>water, soil, sludge, fire debris, air</i>)
GLS OC 230 2017-07	Determination of the mass concentration of short and middle chain C10-C17 Chlorparaffines (SCCP, MCCP) in diverse sample matrices by GC-MS (Scope here: <i>water, soil, sludge, fire debris, air</i>)
GLS OC 300 2017-06	Determination of polycyclic aromatic hydrocarbons (PAH) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>air samples, water, sludge, soil, sediments, eluates, activated carbon, ash, filter dust</i>)
GLS OC 310 2016-06	Determination of polycyclic aromatic hydrocarbons (PAH) in deposition samples by gas chromatography with mass spectrometric detection
GLS OC 320 2013-10	Determination of polycyclic aromatic hydrocarbons (PAH) in plant material by gas chromatography with mass spectrometric detection
GLS OC 330 2013-10	Determination of polycyclic aromatic hydrocarbons (PAH) in soil samples by gas chromatography with mass spectrometric detection

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GLS OC 340 2013-10	Determination of polycyclic aromatic hydrocarbons (PAH) in material of animal origin by gas chromatography with mass spectrometric detection
GLS OC 500 2017-06	Determination of organochloric pesticides (OCP) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>soil, sediment</i>)
GLS OC 510 2013-10	Chlorinated pestizides in deposition samples Determination by high resolution gas chromatograph with high resolution mass spectrometer (HRGC/HRMS)
GLS OC 520 2016-11	Chlorinated pestizides in immission samples Determination by high resolution gas chromatograph and mass spectrometer (HRGC/HRMS)
GLS OC 600 2017-07	Determination of organotin compounds (OTC) in diverse matrices by gas chromatography with mass spectrometric detection (Scope here: <i>soil, sediment, compost, sludge, water, biological environmental markers</i>)
GLS OC 720 2017-07	Determination of alkyl phenoles in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>water, soil, sludge, fire debris, air samples</i>)

1.3 In Human samples **

GLS DF 120 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in human sample material by gas chromatography with mass spectrometric detection
GLS OC 200 2017-07	Determination of the mass concentration of polybrominated diphenyl ether (PBDE) and polybrominated biphenyles (PBB) in diverse sample matrices by GC-MS (Scope here: <i>tissue samples</i>)
GLS OC 240 2013-10	Determination of polybrominated diphenyl ether (PBDE) in milk/human milk by gas chromatography with mass spectrometric detection

1.4 In consumer products and chemical products **

GLS DF 110 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in food and feed as well as other samples by gas chromatography with mass spectrometric detection
GLS DF 130 2017-06	Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in environmental samples, water, chemicals and materials by gas chromatography with mass spectrometric detection
GLS OC 110 2013-10	Determination of polychlorinated benzenes (PCBz) in solids, emissions, immissions and air samples by gas chromatography with mass spectrometric detection (Scope here: <i>consumer products and chemical products</i>)
GLS OC 130 2013-10	Determination of polychlorinated phenols (PCPh) in solids, emission, immission and air samples by gas chromatography with mass spectrometric detection (Scope here: <i>consumer products and chemical products</i>)
GLS OC 200 2017-07	Determination of the mass concentration of polybrominated diphenyl ether (PBDE) and polybrominated biphenyles (PBB) in diverse sample matrices by GC-MS (Scope here: <i>chemical products, textiles, consumer products</i>)
GLS OC 220 2017-07	Determination of the mass concentration of Tetrabrombisphenol-A (TBBP-A) in diverse matrices by GC-MSD (Scope here: <i>consumer products and chemical products</i>)
GLS OC 230 2017-07	Determination of the mass concentration of short and middle chain C10-C17 Chlorparaffines (SCCP, MCCP) in diverse sample matrices by GC-MS (Scope here: <i>consumer products and chemical products</i>)
GLS OC 300 2017-06	Determination of polycyclic aromatic hydrocarbons (PAH) in diverse sample matrices by gas chromatography with mass spectrometric detection (Scope here: <i>sealants, plastics, chemicals</i>)
GLS OC 600 2017-07	Determination of organotin compounds (OTC) in diverse matrices by gas chromatography with mass spectrometric detection (Scope here: <i>consumer products and chemical products</i>)

GLS OC 720
2017-07 Determination of alkyl phenoles in diverse sample matrices by gas chromatography with mass spectrometric detection
(Scope here: *consumer products and chemical products*)

2 Determination of organic pollutants using isotope dilution analysis and high performance liquid chromatography with mass spectrometric detection (LC-MS/MS)

2.1 In food and animal feed **

GLS OC 260 Determination of the mass concentration of hexabromocyclododecane (HBCD) in diverse sample matrices by LC-MS/MS
2017-07 (Scope here: *food, feed*)

GLS OC 400 Determination of per- and polyfluorinated compounds (PFAS) in diverse sample matrices by LC-MS/MS
2017-06 (Scope here: *food, feed*)

2.2 In water, soil, waste, sewage sludge, sludge, air/emissions, immissions, dust and biological environment markers (Biota) **

GLS OC 260 Determination of the mass concentration of hexabromocyclododecane (HBCD) in diverse sample matrices by LC-MS/MS
2017-07 (Scope here: *water, soil, waste, sludge, air/emissions, immissions, dust and biological environment markers*)

GLS OC 400 Determination of per- and polyfluorinated compounds (PFAS) in diverse sample matrices by LC-MS/MS
2017-06 (Scope here: *water, soil, waste, air, biological environment markers*)

3 Sample preparation for food, animal feed, solids and water using chemico-physical separation methods *

DIN 19747 Investigation of solids-pretreatment, preparation and processing of samples for chemical, biological and physical investigations
2009-07

DIN 38402-30 Pretreatment, homogenization and aliquotation of non-homogeneous water samples
1998-07

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Regulation (EG) No 1883/2006, Annex II 2006-12
Sample preparation and analyses for the official control of levels of dioxins, furans and dioxin-like PCBs in certain foodstuffs, Annex II: Sample preparation and requirements for methods of analysis used in official control of levels of dioxins (PCDD/PCDF) and dioxin-like PCBs in certain foodstuffs

Regulation (EG) No 152/2009, Annex II 2009-01
Methods of sampling and analysis for the official control of feeds, Annex II: General methods for the analysis of feeds

4 Determination of moisture content, volatile compounds content, dry residue and fat content in food, animal feed, soil, sludge and waste using gravimetry **

DIN EN ISO 662 2016-08
Animal and vegetable fats and oils - Determination of moisture and volatile matter content

DIN EN ISO 16720 2007-06
Soil quality - Pretreatment of samples by freeze-drying for subsequent analysis
(Modification: *Extension of the scope for sludges, sediments and food*)

DIN EN 12880 2001-02
Characterization of sludges - Determination of dry residue and water content
(Modification: *Extension of the scope for soil, sediments and residual material of plastic recycling*)

DIN EN 14346 2007-03
Characterization of waste - Calculation of dry matter by determination of dry residue or water content

BVL L 13.00-16 2001-07
Investigation of foods - fats and oils of animal and plant origin - determination of the content of moisture and volatile compounds

Verordnung (EG) Nr. 152/2009, Anhang III, A. 2009-01
Determination of moisture - Investigation of the composition of raw materials of feed and compound feed

GLS DF 110 2017-06
Determination of polychlorinated dibenzodioxins (PCDD), polychlorinated dibenzofuranes (PCDF) and polychlorinated biphenyls (PCB) incl. all 209 PCB-congeners in food and feed as well as other samples by gas chromatography with mass spectrometric detection
(Scope here: *gravimetric determination of dry mass and fat content*)

5 Test method for the pollution control module and annex A2 of VDI 4220

Test range / identification	Group I.1: Determination of emissions Field of activity Sp: Special sampling of substances that require special effort / activities during sampling or analysis				
Component	Standard / Directive / technical rule Title		SRM	QM-document	Comment Site
	Title	Designation			
PCDD/PCDF	Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 2: Extraction and clean-up of PCDDs/PCDFs Part 3: Identification and quantification of PCDDs/PCDFs	DIN EN 1948 Part 2-3 2006-06	☒	GLS DF 140	
PCDD/PCDF	Emission measurement - Determination of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) - Dilution method; Example of application of DIN EN 1948 for the concentration range < 0,1 ng I-TEQ/m ³ and supplement to DIN EN 1948 for the concentration range > 0,1 ng I-TEQ/m ³ ; Determination in filter dust, ash and slag	VDI 3499 sheet 1 2003-07		GLS DF 140	
PCDD/PCDF	Emission measurement - Determination of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) - Filter/condenser method; Example of application of DIN EN 1948 for the concentration range < 0,1 ng I-TEQ/m ³ and supplement to DIN EN 1948 for the concentration range > 0,1 ng I-TEQ/m ³	VDI 3499 sheet 2 2004-02		GLS DF 140	
PCDD/PCDF	Emission measurement - Determination of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) - Cooled probe method; Example of application of DIN EN 1948 for the concentration range < 0,1 ng I-TEQ/m ³ and supplement to DIN EN 1948 for the concentration range > 0,1 ng I-TEQ/m ³	VDI 3499 sheet 3 2004-02		GLS DF 140	

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Test range / identification	Group I.1: Determination of emissions				
	Field of activity Sp: Special sampling of substances that require special effort / activities during sampling or analysis				
Component	Standard / Directive / technical rule		SRM	QM-document	Comment Site
	Title	Designation			
dl-PCB	Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 4: Sampling and analysis of dioxin-like PCBs; German version EN 1948-4:2010	DIN EN 1948-4 2010-12		GLS DF 140	
PCDD/PCDF and PCB	Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 5: Long-term sampling of PCDDs/PCDFs and PCBs	DIN CEN/TS 1948-5 2015-06		GLS DF 140	
PAH	Stationary source emissions - Determination of gas and particle-phase polycyclic aromatic hydrocarbons - Part 2: Sample preparation, clean-up and determination	ISO 11338-2 2003-06		GLS OC 300	
PAH	Stationary source emissions - Determination of polycyclic aromatic hydrocarbons (PAH) - GC/MC method	VDI 3874 2006-12		GLS OC 300	
PCBz	Ambient air measurement - Indoor air measurement - Measurement of persistent organic pollutants (POPs) with GC/HRMS	VDI 2464 sheet 4 2015-06		GLS OC 110	

Testing area / Identifier	Group IV: Determination of immissions				
	Task area Sa: Special analysis of substances which require specific conditions in sampling or analysis				
Component	Standard / Directive / technical rule		SRM	QM-document	
	Title	Designation			
PCDD/PCDF	Ambient air measurement - Indoor air measurement - Measurement of polychlorinated dibenzo-p-dioxins and dibenzofurans; Method using large filters	VDI 3498 sheet 1 2002-07	<input checked="" type="checkbox"/>	GLS DF 140	
PCDD/PCDF	Ambient air measurement - Indoor air measurement - Measurement of polychlorinated dibenzo-p-dioxins and dibenzofurans; Method using small filters	VDI 3498 sheet 2 2002-07	<input checked="" type="checkbox"/>	GLS DF 140	

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Testing area / Identifier	Group IV: Determination of immissions			
	Task area Sa: Special analysis of substances which require specific conditions in sampling or analysis			
Component	Standard / Directive / technical rule		SRM	QM-document
	Title	Designation		
PCDD/PCDF	Ambient air measurement - Deposition measurement of low volatile organic compounds - Determination of PCDD/F deposition; Bergerhoff sampling device and GC/HRMS analysis	VDI 2090 sheet 1 2001-01	GLS DF 140	
PCDD/PCDF	Ambient air measurement - Deposition measurement of low volatile organic compounds - Determination of PCDD/F-deposition; Funnel adsorber sampling and GC/HRMS-analysis	VDI 2090 sheet 2 2002-12	GLS DF 140	
PCDD/PCDF	Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 2: Extraction and clean-up of PCDDs/PCDFs Part 3: Identification and quantification of PCDDs/PCDFs	DIN EN 1948 Part 2-3 2006-06	GLS DF 140	
PCB	Ambient air measurement - Indoor air measurement - Measurement of polychlorinated biphenyls (PCBs) - GC/MS method for PCB 28, 52, 101,138, 153, 180	VDI 2464 sheet 1 2009-09	GLS DF 140	
PCB	Ambient air measurement - Indoor air measurement - Measurement of polychlorinated biphenyls (PCBs) - HR-GC/HR-MS method for coplanar PCBs	VDI 2464 sheet 2 2009-09	GLS DF 140	
PAH	Ambient air - Determination of total (gas and particle phase) polycyclic aromatic hydrocarbons - Collection on sorbent-backed filters with gas chromatographic/mass spectrometric analysis	DIN ISO 12884 2000-12	GLS OC 300	
Benzo[a]pyrene	Air quality - Standard method for the measurement of the concentration of benzo[a]pyrene in ambient air	DIN EN 15549 2008-06	GLS OC 300	

Testing area / Identifier	Group IV: Determination of immissions Task area Sa: Special analysis of substances which require specific conditions in sampling or analysis			
Component	Standard / Directive / technical rule		SRM	QM-document
	Title	Designation		
PCBz	Ambient air measurement - Indoor air measurement - Measurement of persistent organic pollutants (POPs) with GC/HRMS	VDI 2464 sheet 4 2015-06	GLS OC 110	

The methods listed comply with the requirements of the
"Verification of technical competence for determinations in the area of pollution control"
("Module Pollution Control") in the version of 15.09.2011.

The competence of this testing laboratory with regard to the testing and specialized task areas of air pollution control activity regulated by immission control legislation is hereby confirmed.

Group I no. 1: Sa; Group IV: Sa

Allowance to sign documents for the above mentioned legislative areas:

1) Technical responsibility:	Areas:
Dr. Dieter Stegemann	Group 1 no. 1 [Sa], Group IV [Sa]
Deputies for 1):	Areas:
Wolfgang Steeg	Group 1 no. 1 [Sa], Group IV [Sa]
Heike Henjes	Group 1 no. 1 [Sa], Group IV [Sa]
Dr. Michael Ambrosius	Group 1 no. 1 [Sa], Group IV [Sa]

6 List of test methods for the WATER module

(Status: LAWA dated 13.11.2015)

Descriptions:

Abw.: Relevant for waste water (incl. landfill leakage water)

Ofw.: Relevant for surface water

Grw: Relevant for raw and ground water (test methods acc. **AbwV** printed in **bold**)

Section 1: Sampling and general characteristics

not used

Section 2: Photometry, ion chromatography, dimensional analysis

not used

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Section 3: Elemental analysis

not used

Sections 4/5: Group and sum parameters

not used

Section 6: Gas chromatography method

Parameter	Verfahren	Abw	Ofw	Grw
Volatile halogenated hydrocarbons (LHKW)	DIN EN ISO 10301: 1997-08 (F 4)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 43: 2014-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN EN ISO 15680: 2004-04 (F 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benzene and derivates (BTEX)	DIN 38407-F 9: 1991-05*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 43: 2014-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN EN ISO 15680: 2004-04 (F 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organochloric insecticides (OCP)	DIN 38407-F 2: 1993-02*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN EN ISO 6468: 1997-02 (F 1)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN EN 38407-F 37: 2013-11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Polychlorinated biphenyles (PCB)	DIN EN ISO 6468: 1997-02 (F 1)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 2: 1993-02*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 3: 1998-07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mono- and dichloric benzenes	DIN EN ISO 15680: 2004-04 (F 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 43: 2014-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tri- to hexachloric benzenes	DIN EN ISO 6468: 1997-02 (F 1)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 2: 1993-02*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN 38407-F 43: 2014-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN EN 38407-F 37: 2013-11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chlorphenoles	DIN EN 12673: 1999-05 (F 15)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organophosphoric- and organonitrogen compounds	DIN EN ISO 10695: 2000-11 (F 6) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Polycyclic aromatic hydrocarbons (PAK)**	DIN 38407-F 39: 2011-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DIN ISO 28540: 2014-05 (F 40)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydrocarbon-Index	DIN EN ISO 9377-2: 2001-07 (H 53)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* mass spectrometric detection permitted

** section 6 is also completely met with PAH analyzed by a reference test method of section 7

Section 7: HPLC methods

not used

Section 8: Microbiological methods

not used

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Section 9.1: Biological methods biotests (Part 1)

not used

Section 9.2: Biological methods biotests (Part 2)

not used

7 List of test methods for the SOIL AND INHERITED WASTE module

(Status: LABO, dated 16.08.2012)

Examination area 1: Solids

Section 1.1 sampling and on-site examination

not used

Section 1.2 laboratory analysis of inorganic parameters

not used

Section 1.3 laboratory analysis of organic parameters

Basic parameters and preparation of samples			
Examination parameters	Methods/Notes	Method	
Preparation and treatment of samples		DIN 19747: 2009	<input checked="" type="checkbox"/>
Dry matter		DIN ISO 11465: 1996	<input type="checkbox"/>
		DIN EN 14346: 2007	<input checked="" type="checkbox"/>
Organic carbon and total carbon after dry combustion (TOC)	Air-dried soil samples	DIN ISO 10694: 1996	<input type="checkbox"/>
		DIN EN 13137: 2001	<input type="checkbox"/>
		DIN EN 15936: 2012	<input type="checkbox"/>
pH (CaCl ₂)		DIN ISO 10390: 2005	<input type="checkbox"/>
Raw density - optional		DIN ISO 11272: 2001	<input type="checkbox"/>
Grain size distribution - optional	Pipette analysis	DIN ISO 11277: 2002	<input type="checkbox"/>
	Areometer method	DIN 18123: 2011 with LAGA PN98	<input type="checkbox"/>

Analysis of organic parameters			
Examination parameters	Methods/Notes	Method	
Polycyclic aromatic hydrocarbons (PAH)	GC - MS	DIN ISO 18287: 2006	<input type="checkbox"/>
	HPLC - UV/F	DIN ISO 13877: 2000	<input type="checkbox"/>
16 PAH (EPA)	Acenaphthylene cannot be determined by means of fluorescence detectors	DIN 38414-23: 2002	<input type="checkbox"/>

Analysis of organic parameters			
Examination parameters	Methods/Notes	Method	
Hexachlorobenzene	GC - ECD, GC - MS	DIN ISO 10382: 2006	<input type="checkbox"/>
Pentachlorophenol	GC - ECD, GC - MS	DIN ISO 14154: 2005	<input type="checkbox"/>
Aldrin, DDT, HCH mixture	GC - ECD, GC - MS	DIN ISO 10382: 2003	<input type="checkbox"/>
		DIN EN 15308: 2008	<input type="checkbox"/>
Polychlorinated biphenyls (PCB)	GC - ECD, GC - MS Extraction using acetone / petroleum ether or Soxhlet extraction The method for sum calculation must be stated (PCB6/PCB7)	DIN ISO 10382: 2003	<input type="checkbox"/>
		DIN EN 15308: 2008	<input type="checkbox"/>
		DIN 38414-20: 1996	<input checked="" type="checkbox"/>
Compounds typical for explosives (HPLC) - optional	Extraction using methanol or acetonitrile and quantification by means of HPLC-UV/DAD	E DIN ISO 11916-1: 2011	<input type="checkbox"/>
Compounds typical for explosives (GC) - optional	Extraction using methanol; recrystallisation in toluene and quantification using GC- ECD or GC-MS	E DIN ISO 11916-2: 2011	<input type="checkbox"/>
Mineral oil hydrocarbons (C ₁₀ -C _{40 FS}) - optional	GC-FID	DIN ISO 16703: 2005	<input type="checkbox"/>
		LAGA KW/04: 2009	<input type="checkbox"/>
BTEX aromatic compounds, LHKW - optional	Headspace, GC	DIN ISO 22155: 2006	<input type="checkbox"/>

Examination area 1.4: Analysis - dioxins and furanes

Basic parameters and preparation of samples			
Examination parameters	Methods/Notes	Method	
Preparation and treatment of samples		DIN 19747: 2009	<input checked="" type="checkbox"/>
Dry matter		DIN ISO 11465: 1996	<input type="checkbox"/>
		DIN EN 14346: 2007	<input checked="" type="checkbox"/>
Organic carbon and total carbon after dry combustion (TOC)	Air-dried soil samples	DIN ISO 10694: 1996	<input type="checkbox"/>
		DIN EN 13137: 2001	<input type="checkbox"/>
		DIN EN 15936: 2012	<input type="checkbox"/>
pH (CaCl ₂)		DIN ISO 10390: 2005	<input type="checkbox"/>
Raw density - optional		DIN ISO 11272: 2001	<input type="checkbox"/>

Basic parameters and preparation of samples			
Examination parameters	Methods/Notes	Method	
Grain size distribution - optional	Pipette analysis	DIN ISO 11277: 2002	<input type="checkbox"/>
	Areometer method	DIN 18123: 2011 with LAGA PN98	<input type="checkbox"/>

Analysis - PCDD, PCDF and dioxin-like PCB			
Examination parameters	Methods/Notes	Method	
PCDD / PCDF, dl-PCB	GC-MS, assessment according to internal standard method using the respective standard of a congener respectively marked 13C12.	DIN 38414-24: 2000 dl-PCB in compliance with DIN 38407-3: 1998	<input checked="" type="checkbox"/>

Examination area 2: Eluates and percolates, aqueous media

Section 2.1 sampling and on-site examination

not used

Section 2.2 laboratory analysis of eluates / percolates for inorganic parameters

not used

Section 2.3 laboratory analysis of eluates / percolates for organic parameters

Eluates / percolates			
Examination parameters	Methods/Notes	Method	
Shaking method - elution of inorganic substances		DIN 19529: 2009	<input type="checkbox"/>
Shaking method - elution of organic substances		DIN 19527: 2012	<input type="checkbox"/>
Shaking method - elution of inorganic substances – optional		DIN EN 12457-4: 2003	<input type="checkbox"/>
Percolation method for organic and inorganic substances – optional		DIN 19528: 2009	<input type="checkbox"/>
Examination for resorption availability - optional		DIN 19738: 2004	<input type="checkbox"/>

Analysis of organic parameters			
Examination parameters	Methods/Notes	Method	
Aromatic compounds (BTEX)	Purge+Trap/ Desorption, GC-MS	DIN EN ISO 15680: 2004	<input type="checkbox"/>
	Liquid extraction or headspace, GC	DIN 38407-9: 1991	<input type="checkbox"/>
	Headspace SPME, GC-MS	DIN 38407-41: 2011	<input type="checkbox"/>
Highly volatile halogenated hydrocarbons (LHKW)	Purge+Trap/ Desorption, GC-MS	DIN EN ISO 15680: 2004	<input type="checkbox"/>
	Liquid extraction or headspace, GC	DIN EN ISO 10301: 1997	<input type="checkbox"/>
	Headspace SPME, GC-MS	DIN 38407-41: 2011	<input type="checkbox"/>
Aldrin	GC - ECD, GC - MS	DIN EN ISO 6468: 1997	<input type="checkbox"/>
		DIN 38407-2: 1993	<input type="checkbox"/>
Dichlorodiphenyltrichloroethane (DDT)	GC - ECD, GC - MS	DIN EN ISO 6468: 1997	<input type="checkbox"/>
		DIN 38407-2: 1993	<input type="checkbox"/>
Chlorophenols	GC - ECD, GC - MS	DIN EN 12673: 1999	<input type="checkbox"/>
Chlorobenzenes (Cl3-Cl6)	GC - ECD, GC - MS	DIN 38407-2: 1993	<input type="checkbox"/>
	Liquid extraction, GC - ECD, GC - MS	DIN EN ISO 6468: 1997	<input type="checkbox"/>
Chlorobenzenes (Cl1-Cl3)	Liquid extraction or headspace, GC-ECD, MS if required	DIN EN ISO 10301: 1997	<input type="checkbox"/>
Polychlorinated biphenyls (PCB)	GC - ECD, GC - MS Method of sum calculation (PCB6/PCB7) must be specified	DIN 38407-2: 1993	<input checked="" type="checkbox"/>
		DIN 38407-3: 1998	<input checked="" type="checkbox"/>
16 PAH (EPA)	HPLC - F	DIN EN ISO 17993: 2004	<input type="checkbox"/>
	GC-MS	DIN 38407-39: 2011	<input type="checkbox"/>
Naphthalene	GC - FID, GC - MS	DIN EN ISO 15680: 2004	<input type="checkbox"/>
		DIN 38407-9: 1991	<input type="checkbox"/>
Mineral oil hydrocarbons (MKW, C ₁₀ -C ₄₀)	GC-FID	DIN EN ISO 9377-2: 2001	<input type="checkbox"/>
Compounds typical for explosives (HPLC) - optional	HPLC / UV-detection	DIN EN ISO 22478: 2006	<input type="checkbox"/>

Analysis of organic parameters			
Examination parameters	Methods/Notes	Method	
Compounds typical for explosives (GC) - optional	Determination of selected nitroaromatic compounds by GC	DIN 38407-17: 1999	<input type="checkbox"/>
Phenols - optional	GC - ECD, GC - MS	ISO 8165-2: 1999	<input type="checkbox"/>
		DIN EN 12673: 1999	<input type="checkbox"/>

Examination area 3: Soil air, landfill gas

Section 3.1 sampling and on-site examination

not used

Section 3.2 laboratory analysis of soil air, landfill gas

not used

8 List of test methods for the WASTE module

(Status: LAGA, dated August 2012)

Examination area 1: Sewage sludge

	Sections / Parameter	Basis / Method	
		AbfKlärV (German Sewage Sludge Ordinance)	
1.1	Sampling	Annex 1 AbfKlärV	<input type="checkbox"/>
1.2	Heavy metals	§ 3 Item 5 AbfKlärV	
	Aqua regia digestion	DIN 38414-7 (01.83)	<input type="checkbox"/>
		DIN EN 13346 (04.01)	<input type="checkbox"/>
		DIN EN 13657 (01.03)	<input type="checkbox"/>
	Lead (from aqua regia digestion)	DIN 38406-6 (05.81)	<input type="checkbox"/>
		DIN 38406-22 (03.88)	<input type="checkbox"/>
		DIN 38406-E 6 (07.98)	<input type="checkbox"/>
		DIN ISO 11047 (05.03)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>

Sections / Parameter	Basis / Method	
Cadmium (from aqua regia digestion)	DIN 38406-19 (07.80)	<input type="checkbox"/>
	DIN 38406-22 (03.88)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	DIN EN ISO 5961 (E 19) (05.95)	<input type="checkbox"/>
Chromium (from aqua regia digestion)	DIN 38406-10 (06.85)	<input type="checkbox"/>
	DIN 38406-22 (03.88)	<input type="checkbox"/>
	DIN EN 1233 (E 10) (08.96)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Copper (from aqua regia digestion)	DIN 38406-22 (03.88)	<input type="checkbox"/>
	DIN 38406-E 7 (09.91)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Nickel (from aqua regia digestion)	DIN 38406-22 (03.88)	<input type="checkbox"/>
	DIN 38406-E 11 (09.91)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Mercury (from aqua regia digestion)	DIN 38406-12 (07.80)	<input type="checkbox"/>
	DIN EN 1483 (E 12) (07.07)	<input type="checkbox"/>
	DIN EN ISO 17852 (E 35) (04.08)	<input type="checkbox"/>
Zinc (from aqua regia digestion)	DIN 38406-8 (10.80)	<input type="checkbox"/>
	DIN 38406-22 (03.88)	<input type="checkbox"/>
	DIN 38406-E 8 (10.04)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
1.3 Adsorbable organically bound halogens		
AOX (from dry residue)	DIN 38414-S 18 (11.89)	<input type="checkbox"/>
1.4 Physical parameters, nutrients	§ 3 Abs. 5 AbfklärV	
Dry residue	DIN 38414-S 2 (11.85)	<input type="checkbox"/>
	DIN EN 12880 (S 2a) (02.01)	<input checked="" type="checkbox"/>
Organic substances as ignition loss (from dry residue)	DIN 38414-S 3 (11.85)	<input type="checkbox"/>
	DIN EN 12879 (S 3a) (02.01)	<input type="checkbox"/>

	Sections / Parameter	Basis / Method	
	pH	DIN 38414-5 (09.81)	<input type="checkbox"/>
		DIN 38414-5 (07.09)	<input type="checkbox"/>
		DIN EN 12176 (S 5) (06.98)	<input type="checkbox"/>
	Aqua regia digestion	DIN 38414-7 (01.83)	<input type="checkbox"/>
		DIN EN 13346 (04.01)	<input type="checkbox"/>
		DIN EN 13657 (01.03)	<input type="checkbox"/>
	Substance with alkaline effect, as CaO	Annex 1 AbfklärV	<input type="checkbox"/>
		Calculation ¹ according to $\% \text{ CaO} = (50-x-2y) \cdot 1,402$	<input type="checkbox"/>
	Ammonium nitrogen (NH ₄ -N)	DIN 38406-E 5 (10.83)	<input type="checkbox"/>
	Total nitrogen (N _{ges.})	DIN 19684-4 (02.77) distillation method	<input type="checkbox"/>
		DIN ISO 11261 (05.97)	<input type="checkbox"/>
		DIN EN 13342 (01.01)	<input type="checkbox"/>
	Phosphorus pentoxide (from aqua regia digestion)	DIN 38414-S 12 (11.86)	<input type="checkbox"/>
		DIN 38406-22 (03.88)	<input type="checkbox"/>
		DIN EN ISO 6878 (D 11) (09.04)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Potassium oxide (from aqua regia digestion)	DEV E13 (5. Lfg 68)	<input type="checkbox"/>
		DIN 38406- 22 (03.88)	<input type="checkbox"/>
		DIN 38406-E 13 (07.92)	<input type="checkbox"/>
		DIN ISO 9964-3 (E 27) (08.96)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Magnesium (from aqua regia digestion)	DIN 38406-3 (09.82)	<input type="checkbox"/>
		DIN 38406-22 (03.88)	<input type="checkbox"/>
		DIN 38406-E 3 (03.02)	<input type="checkbox"/>
		DIN EN ISO 7980 (E 3a) (07.00)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Persistent organic hazardous substances	§ 3 Item 6 AbfklärV	
1.5	Polychlorinated biphenyls (PCB)	Annex 1, Nr. 1.3.3.1 AbfklärV	<input checked="" type="checkbox"/>
		DIN 38414-S 20 (01.96)	<input checked="" type="checkbox"/>
1.6	Polychlorinated dibenzodioxins / dibenzofurans (PCDD/PCDF)	Annex 1 Nr. 1.3.3.2 AbfklärV	<input checked="" type="checkbox"/>
		DIN 38414-S 24 (10.00)	<input checked="" type="checkbox"/>

¹ Corrigendum of AbfklärV, Annex 1 Item 1.3.2, Number VI; This source includes an incorrect calculation formula.

Annex to the accreditation certificate D-PL-14629-01-00

Examination area 2: Soil

not used

Examination area 3: Biowaste

not used

Examination area 4: Used oil, insulation liquid

	Sections / Parameter	Basis / Method	
		§ 5 AltöIV	
4.1	Sampling	§ 5 Item 2 AltöIV	<input type="checkbox"/>
		DIN 51750-1 (03.83)	<input type="checkbox"/>
		DIN 51750-1 (12.90)	<input type="checkbox"/>
		DIN 51750-2 (03.84)	<input type="checkbox"/>
		DIN 51750-2 (12.90)	<input type="checkbox"/>
4.2	PCB and halogen (only according to AltöIV)	§ 5 Item 2 AltöIV	
	PCB	DIN EN 12766-1 (11.00) in connection with DIN EN 12766-2 (12.01), methode B	<input checked="" type="checkbox"/>
	Total halogen (only according to AltöIV)	Annex 2, No. 3 AltöIV	<input type="checkbox"/>

Examination area 5: Waste for disposal

	Sections / Parameter	Basis / Method	
		§ 8 Abs. 1, 3 and 5 DepV	
5.1	Sampling, sample preparation	Annex 4 No. 2 and No. 3.1.1 DepV	<input type="checkbox"/>
5.2	Sample treatment, general parameters	Annex 4 No. 3 DepV	
	Digestion method (aqua regia)	DIN EN 13657 (01.03)	<input type="checkbox"/>
	Production of eluates / percolates	Annex 4 No. 3.2.1 and 3.2.2 DepV	<input type="checkbox"/>
	pH of the eluate	DIN 38404-5 (07.09)	<input type="checkbox"/>
	Conductivity of the eluate	DIN EN 27888 (C 8) (11.93)	<input type="checkbox"/>
	Total content of dissolved solids	DIN EN 15216 (01.08)	<input type="checkbox"/>
		DIN 38409-H 1 (01.87)	<input type="checkbox"/>
		DIN 38409-H 2 (03.87)	<input type="checkbox"/>
	Ignition loss	DIN EN 15169 (05.07)	<input type="checkbox"/>

Sections / Parameter	Basis / Method	
Cyanide, easily liberated (from eluate)	DIN 38405-14 (12.88)	<input type="checkbox"/>
	DIN 38405-D 13 (04.11)	<input type="checkbox"/>
	with sulphide-containing waste: DIN ISO 17380 (05.06)	<input type="checkbox"/>
	DIN EN ISO 14403 (D 6) (07.02)	<input type="checkbox"/>
Fluopride (from eluate)	DIN 38405-D 4 (07.85)	<input type="checkbox"/>
	DIN EN ISO 10304-1 (D 20) (07.09)	<input type="checkbox"/>
Chloride (from eluate)	DIN EN ISO 10304-1 (D 20) (07.09)	<input type="checkbox"/>
	DIN 38405-D 1 (12.85)	<input type="checkbox"/>
	DIN EN ISO 15682 (D 31) (01.02)	<input type="checkbox"/>
Sulphate (from eluate)	DIN EN ISO 10304-1 (D 20) (07.09)	<input type="checkbox"/>
	DIN 38405-D 5 (01.85)	<input type="checkbox"/>
Density	DIN 18125-2 (08.99)	<input type="checkbox"/>
	DIN 18125-2 (03.11)	<input type="checkbox"/>
Calorific value	DIN EN 15170 (05.09)	<input type="checkbox"/>
5.3 Elements	Annex 4, No. 3 DepV	
Cadmium, chromium, copper, nickel, lead and zinc	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 22036 (06.09)	<input type="checkbox"/>
Mercury	DIN EN 1483 (E 12) (07.07)	<input type="checkbox"/>
	DIN EN 12338 (E 31) (10.98)	<input type="checkbox"/>
	DIN EN ISO 17852 (E 35) (04.08)	<input type="checkbox"/>
Arsenic (from eluate)	DIN EN ISO 11969 (D 18) (11.96)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 22036 (06.09)	<input type="checkbox"/>
	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) 02.05)	<input type="checkbox"/>
Lead (from eluate)	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 22036 (06.09)	<input type="checkbox"/>
Cadmium (from eluate)	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 22036 (06.09)	<input type="checkbox"/>
Copper (from eluate)	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 22036 (06.09)	<input type="checkbox"/>

	Sections / Parameter	Basis / Method	
	Nickel (from eluate)	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN ISO 22036 (06.09)	<input type="checkbox"/>
	Mercury (from eluate)	DIN EN 1483 (E 12) (07.07)	<input type="checkbox"/>
		DIN EN ISO 17852 (E 35) (04.08)	<input type="checkbox"/>
	Zinc (from eluate)	DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN ISO 22036 (06.09)	<input type="checkbox"/>
	Barium (from eluate)	DIN ISO 22036 (06.09)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Total chromium (from eluate)	DIN ISO 22036 (06.09)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Molybdenum (from eluate)	DIN ISO 22036 (06.09)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Antimony (from eluate)	DIN ISO 22036 (06.09)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 15586 (E 4) (02.04)	<input type="checkbox"/>
		DIN 38405-E 32 (05.00)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Selenium (from eluate)	DIN ISO 22036 (06.09)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
5.4	Group and sum parameters	Annex 4, No. 3 DepV	
	Total carbon (TOC)	DIN EN 13137 (12.01)	<input type="checkbox"/>
	Total carbon (DOC)	DIN EN 1484 (H 3) (08.97)	<input type="checkbox"/>
	Extractable lipophilic substances in the original substance	LAGA KW/04 (12.09)	<input type="checkbox"/>
	Phenols (from eluate)	DIN 38409-H 16 (06.84)	<input type="checkbox"/>
		DIN EN ISO 14402 (H 37) (12.99)	<input type="checkbox"/>
	Mineral oil hydrocarbons	DIN EN 14039 (01.05) i.V. in connection with LAGA KW/04 (12.09)	<input type="checkbox"/>

	Sections / Parameter	Basis / Method	
5.5	Individual organic substances	Annex 4, No. 3 DepV	
	Polycyclic aromatic hydrocarbons (PAH)	DIN ISO 18287 (05.06)	<input type="checkbox"/>
	Benzene and derivatives (BTEX)	DIN 38407-F 9 (05.91)	<input type="checkbox"/>
		Handbook on contaminated sites HLUG, volume 7, part 4 (08.00)	<input type="checkbox"/>
	Polychlorinated biphenyls (PCB)	DIN EN 15308 (05.08)	<input checked="" type="checkbox"/>
5.6	Biodegradability	Annex 4, No. 3 DepV	
	Breathing activity over 4 days (AT ₄)	Annex 4 No. 3.3.1 DepV	<input type="checkbox"/>
	Aerogenesis rate in fermentation test over 21 days (GB ₂₁)	Annex 4 No. 3.3.2 DepV	<input type="checkbox"/>

Examination area 6: Waste wood

	Sections / Parameter	Basis / Method	
		§ 6 Item 6 AltholzV	
6.1	Sampling, sample treatment	Annex IV No. 1.1-1.3, 1.4.1 AltholzV	
	<i>Sampling</i>	Annex IV Nr. 1.1 AltholzV	<input type="checkbox"/>
	<i>Production of the laboratory sample</i>	Annex IV Nr. 1.2 AltholzV in combination with DIN 51701-3 (08.85)	<input type="checkbox"/>
	<i>Sample preparation</i>	Annex IV No. 1.3	<input type="checkbox"/>
	<i>Moisture content</i>	DIN 52183 (11.77)	<input type="checkbox"/>
6.2	Metals	Annex IV No. 1.4.3 AltholzV	
	Aqua regia digestion	E DIN EN 13657 (10.99)	<input type="checkbox"/>
		DIN EN 13657 (01.03)	<input type="checkbox"/>
	Arsenic (from aqua regia digestion)	DIN EN ISO 11969 (D 18) (11.96)	<input type="checkbox"/>
		DIN ISO 11047 (05.03)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
	Lead (from aqua regia digestion)	DIN 38406-E 6 (07.98)	<input type="checkbox"/>
		DIN EN ISO 11885 (04.98)	<input type="checkbox"/>
		DIN ISO 11047 (05.98)	<input type="checkbox"/>
		DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
		DIN ISO 11047 (05.03)	<input type="checkbox"/>
		DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>

Sections / Parameter	Basis / Method	
Cadmium (from aqua regia digestion)	DIN EN ISO 5961 (E 19) (05.95)	<input type="checkbox"/>
	DIN EN ISO 11885 (04.98)	<input type="checkbox"/>
	DIN ISO 11047 (06.95)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Chromium (from aqua regia digestion)	DIN EN 1233 (E 10) (08.96)	<input type="checkbox"/>
	DIN EN ISO 11885 (04.98)	<input type="checkbox"/>
	DIN ISO 11047 (06.95)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Copper (from aqua regia digestion)	DIN 38406-E 7 (09.91)	<input type="checkbox"/>
	DIN EN ISO 11885 (04.98)	<input type="checkbox"/>
	DIN ISO 11047 (06.95)	<input type="checkbox"/>
	DIN EN ISO 11885 (E 22) (09.09)	<input type="checkbox"/>
	DIN ISO 11047 (05.03)	<input type="checkbox"/>
	DIN EN ISO 17294-2 (E 29) (02.05)	<input type="checkbox"/>
Mercury (from aqua regia digestion)	DIN EN 1483 (E 12) (08.97)	<input type="checkbox"/>
	DIN EN 12338 (E 31) (10.98)	<input type="checkbox"/>
	DIN EN ISO 17852 (E 35) (04.08)	<input type="checkbox"/>
	DIN EN 1483 (E 12) (07.07)	<input type="checkbox"/>
6.3 Halogen	Annex IV No. 1.4.2 AltholzV	
Fluorine	DIN 51727 (06.01) together with DIN EN ISO 10304-1 (04.95)	<input type="checkbox"/>
	DIN 51727 (11.11) together with DIN EN ISO 10304-1 (D 20) (07.09)	<input type="checkbox"/>
Chlorine	DIN 51727 (06.01) together with DIN EN ISO 10304-1 (04.95)	<input type="checkbox"/>
	DIN 51727 (11.11) mit DIN EN ISO 10304-1 (D 20) (07.09)	<input type="checkbox"/>
6.4 Organic parameters	Annex IV No. 1.4.4 and 1.4.5 AltholzV	
Pentachlorophenol (PCP)	Annex IV No. 1.4.4 AltholzV	<input type="checkbox"/>
Polychlorinated biphenyls (PCB)	Annex IV No. 1.4.5 AltholzV together with DIN 38414-S 20 (01.96)	<input checked="" type="checkbox"/>

verwendete Abkürzungen:

AbfklärV	Klärschlamm-Verordnung
CEN	Comité Européen de Normalisation
DIN	Deutsches Institut für Normung e. V.
EN	European Standard
FDA	Food and Drug Administration
GLS DF xxx	SOP der Eurofins GfA Lab Service GmbH aus der PCDD/F-Analytik
GLS OC xxx	SOP der Eurofins GfA Lab Service GmbH aus der Organischen Chemie
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
SOP	Standard Operating Procedure
SRM	Standardreferenzmethode
TS	Technical Specification
U.S. EPA	United States Environmental Protection Agency
VDI	Verein Deutscher Ingenieure