



PROPOSAL for a NEW FIELD OF TECHNICAL ACTIVITY or NEW PROJECT COMMITTEE	
Date of circulation	CEN/TC / SC N (where appropriate)
Secretariat	CENELEC/TC / SC (Sec) (where appropriate)
Type of technical body proposed (TC / SC / PC / BTF)	CEN/PC

IMPORTANT NOTE: Incomplete proposals risk rejection or referral to originator.

The proposer has considered the guidance given in Annexes 1 and 2 during the preparation

Proposal (to be completed by the proposer)

<p>Title of the proposed new subject (The title shall indicate clearly and unambiguously, yet concisely, the new field of technical activity which the proposal is intended to cover.)</p> <p>Declaration and measurement of regulated substances in articles</p>
<p>Scope statement of the proposed new subject (The scope shall precisely define the limits of the new field of technical activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)</p> <p>Standardization in the field of declaration and/or measurement of the priority regulated substances in articles.</p>
<p>Purpose and justification for the proposal.</p> <p>There are a range of existing regulatory frameworks that oblige to declare, identify, control or notify substances in “articles”, for example, REACH regulations and the RoHS directive. Within the context of these regulatory instruments it is important to ensure the reliability of the results reported in terms of the presence/absence, of substances of high concern within “articles”. The consistent application of such regulatory frameworks varies from one country to the other within a global context. This is of significance as often the threshold values applied to substances (and/or articles) differ at a national level (for example China implemented RoHS but used different threshold values from Europe). The variation in threshold values makes it difficult to measure, compare and monitor the use and disposal of substances of high concern across the supply chain.</p> <p>Given the variation in regulation and how it is applied globally, it appears essential to develop a standardized metrological approach for measuring the concentrations of substances, whatever their nature, the matrix in which they are inserted; and concentration. Similarly, it is important to be able to assure the traceability of a substance of high concern through the life cycle of a product; and so to define the necessary Guidelines for communication, awareness, monitoring and control across the supply chain. A state of the art is therefore necessary which will identify, inform about and promote the requirements of policy and regulation.</p> <p>The substances concerned are numerous. For example, within the REACH framework, 161 substances have already been identified as SVHC (Substances of Very High Concern) and are present on the candidate list for authorization. Ultimately, the number of SVHCs could exceed 300 (a risk management option analysis will be applied to 440 substances by 2020).</p> <p>In order to evaluate the standardization needs on the Regulated substances of high concern in articles, the commitment of stakeholders to continue reflection; and to propose organisation and governance of future initiatives and projects, a workshop has been organized by CEN/SABE on 2nd July 2014.</p> <p>The proposal is an outcome of this workshop. It is structured around 4 main tasks presented in annex 3.</p> <p>This proposal aims to complement and support the existing regulatory instruments, concerning chemicals substances, to make it more efficient.</p> <p>Would CENELEC like to participate in the work, a CEN/CENELEC JWG would be the relevant structure to carry out this work.</p>

Is the proposed new subject actively, or probably, in support of European legislation or established public policy?

Yes No

If Yes, indicate if the proposal is

▪ in relation to EC mandate(s):(which one(s))

▪ in relation to EC Directive(s)/Regulation(s):

REACH, RoHs, Toys safety, biocidal products

▪ in relation to other legislation or established public policy:(give details)

Proposed initial programme of work

See Annex 3

Target date given in the annex will be updated according to the date of the creation of the PC. This could be done during the PC first meeting.

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing CEN, CENELEC, ISO and IEC deliverables.

The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization, or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

The works already done in technical committees (European or international levels) will be taken into account before developing any new documents. States of art of declaration sheet as well standardized analytical/chemical methods are scheduled as the first task to achieve.

A listing of relevant existing documents at the international, regional and national levels.

Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source, and should be accompanied by an indication of their significance.

See annex 3

Known patented items

Yes No If "Yes", see CEN-CENELEC Guide 8 and provide full information in an annex

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) in particular those who are immediately affected from the proposal (see Annexes 1 and 2) and how they will each benefit from or be impacted by the proposed deliverable(s)

Principal categories of market needs

- Consumer protection and welfare: the circular economy sees some waste become new materials, the project will assure the traceability or the measurement of substances of concerns
- Environment: the traceability or the measurement of substances of concerns
- Innovation: link with H2020 - Pre-normative R&D performed by metrologists experts to establish guidelines for harmonized references methods will be considered, as linking standardisation and research is an effective means to support the dissemination and transfer of research findings with positive benefits to standardisation.
- Support to:
 - o public policy: this proposal is an answer to the issue of the substances in the transition from product to waste and from waste to product and the implications for the circular economy and resource efficiency.
 - o European legislation/regulation: this proposal aims to complement and support the existing regulatory instruments, concerning chemicals substances, to make it more efficient
- Market access/barriers to trade, i.e. enhancing the free movement of:
 - o goods
 - o health/safety

Principal categories of stakeholders

- Industry and commerce: all organisation within the product value chain or commerce that has to declare or identify regulated substances
- Government: implementation of European regulation or directives on substances
- Academic and research bodies: research on analytical/chemical method
- Standards application business: testing laboratories

Liaisons:

A listing of relevant external European or international organizations or internal parties (other CEN, CENELEC, ETSI, ISO and/or IEC committees) to which a liaison should be established (in the case of ISO and IEC committees via the Vienna or Dresden Agreements).

- CEN/TC 52 Safety of toys
- CEN/TC 351 Construction Products - Assessment of release of dangerous substances
- CENELEC/TC 111X environment
- IEC /TC 111x environment

Joint/parallel work:

Possible joint/parallel work with:

- CEN (please specify committee ID)
- CENELEC (please specify committee ID)
- ISO (please specify committee ID)
- IEC (please specify committee ID)
- Other (please specify)

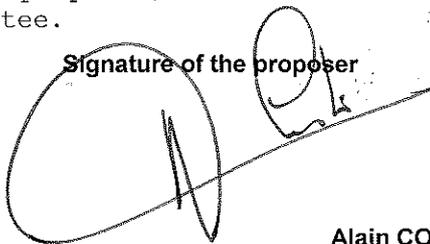
Name of the Proposer
(include contact details)

AFNOR
11 Rue Francis de Pressensé
F-93571 La Plaine Saint-Denis

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

In case of acceptance of the proposal, AFNOR is willing to undertake the secretariat of the Project committee.

Signature of the proposer



Alain COSTES
AFNOR Standardization Director

Annex(es) are included with this proposal (give details)

- Annex 3 - CEN/SABE Proposal for an EU standardization roadmap on Measurement and declaration of regulated substances

Informative Annex 1 "Principal categories of market needs"

- Consumer protection and welfare
- Environment
- Innovation
- Support to:
 - public policy
 - European legislation/regulation
- Market access/barriers to trade, i.e. enhancing the free movement of:
 - services
 - goods
 - people
- Interoperability
- Health/Safety
- Terminology

Informative Annex 2 "Principal categories of stakeholders"

- Industry and commerce,
 - where particularly appropriate, to be identified separately as
 - Large enterprises (those employing 250 staff or more)
 - Small and medium sized enterprises (SME), (those employing 250 staff or fewer)
- Government
- Consumers
 - including those organizations representing interests of specific societal groups, e.g. people with disabilities or those needing other particular consideration)
- Labour
- Academic and research bodies
- Non-governmental organisations (NGO),
 - including organizations representing broad or specific environmental interests
- Standards application business (e.g. testing laboratories, certification bodies)

Sometimes it is valuable also identify the immediate affected stakeholders from industry and commerce in terms of their position in a product value chain, as follows:

- Supplier
- Manufacturer
- Intermediary (e.g. warehousing, transport, sales)
- Service provider
- User of the product or service
- Maintenance / disposal

NOTE: 'Immediately affected stakeholders' are considered to be those who, within the context of the proposal, would be in a position to implement the provisions of the intended standard(s) into their products, services or management practices.

Proposal for an EU standardization roadmap on Measurement and declaration of Regulated substances

Framework and context

Background

There are a range of existing regulatory frameworks that oblige to declare, identify, control or notify substances in “articles”, for example, REACH regulations and the RoHS directive. Within the context of these regulatory instruments it is important to ensure the reliability of the results reported in terms of the presence/absence, of substances of high concern within “articles”. The consistent application of such regulatory frameworks varies from one country to the other within a global context. This is of significance as often the threshold values applied to substances (and/or articles) differ at a national level (for example China implemented RoHS but used different threshold values from Europe). The variation in threshold values makes it difficult to measure, compare and monitor the use and disposal of substances of high concern across the supply chain.

Given the variation in regulation and how it is applied globally, it appears essential to develop a standardized metrological approach for measuring the concentrations of substances, whatever their nature; the matrix in which they are inserted; and concentration. Similarly, it is important to be able to assure the traceability of a substance of high concern through the life cycle of a product; and so to define the necessary Guidelines for communication, awareness, monitoring and control across the supply chain. A state of the art is therefore necessary which will identify, inform about and promote the requirements of policy and regulation.

The substances concerned are numerous. For example, within the REACH framework, 161 substances have already been identified as SVHC (Substances of Very High Concern) and are present on the candidate list for authorization. Ultimately, the number of SVHCs could exceed 300 (a risk management option analysis will be applied to 440 substances by 2020).

In order to evaluate the standardization needs on the Regulated substances of high concern in articles; the commitment of stakeholders to continue reflection; and to propose organisation and governance of future initiatives and projects, a workshop has been organized by CEN/SABE on 2nd July 2014.

The workshop

The workshop was well attended with around 50 delegates from different organizations, which included representatives of the European commission, industries, European federation, national federations, consumer and environmental associations...

A brief overview of the challenges of identifying, monitoring and regulating SVHCs in articles was made before running three parallel discussions on various aspects of SVHCs:

- The existing legislation related to substances, how they interact, and the consistency in their implementation as well as consequences for implementers;
- Analysis and characterisation of the substances through the life cycle of the product and how to communicate with the supply chain;
- The substances in the transition from product to waste and from waste to product (the implications for the circular economy and resource efficiency).

The following proposal is an outcome of this workshop. It is structured around 4 main tasks presented below.

This proposal aims to complement and support the existing regulatory instruments, concerning chemicals substances, to make it more efficient.

Task 1: Establishment of a list of priority substances to work on

There is a growing number of regulations which impose stringent obligations regarding substances in articles or in processes. This could be either a complete prohibition of the incorporation of a substance in an article or the prohibition of its use in a process; it could be also a restriction for a category of articles or for some applications, or a systematic identification, or a disclosure of the substance to the recipient of the article or to the user. In any case, complying with these obligations requires getting the relevant information either through an appropriate declaration from the supplier or through a recognised and standardized chemical analysis.

As it is unrealistic to establish a standardized protocol for the measurement of each of the substances of concern, there is a need to determine a list of priority substances, and to know if chemical/analytical methods already exist for some substances in relevant or neighbouring matrices.

Such a list of priority substances could be derived from the following tasks.

Tasks and schedule

- T 1.1** – Establish an updated list of regulated substances in articles (and/or in processes) (list of substances to be monitored within EU and per Member States including regulatory reference and % at which the concentration must be monitored (regulatory limit value));

Schedule: now → mid 2015

- T 1.2** – Establish a list of existing local, regional, national and international chemical / analytical methods used to routinely identify and determine the concentration of substances in articles (ECHA Forum working group);

Schedule: mid 2015 → mid 2016

- T 1.3** – Establish a methodology to rank the priority substances to work on.

Schedule: beginning 2015 → end 2015

Deliverables and target dates:

- D 1.1 – Compendium** of the substances regulated within EU and its Member States, with revision frequency, based on:

- EU listing established by ECHA,
- Member States listing established by Member States,

Target date: mid 2015 (assessing EU & MSs list available)

- D 1.2 – Register** of the standardized analytical methods to identify and determine the concentration of substances in articles, with frequency and review process for a regular update of the register. Associated to the lists, some comments will be made with regards to the applicability of the methods (LOD, range...). These data will be gathered from the scope of existing standard (claim range)

- Listing established by CEN/CENELEC and/or SABE appropriate structure

Target date: mid 2016 (1 year after D 1.1)

D 1.3 – Methodology to prioritize the substances to work on

- Proposal¹ established by CEN/CENELEC and/or SABE appropriate structure – publication of a technical specification (CEN/TS) or a CEN guide

Target date: end 2015

D 1.4 – Listing of priority chemicals to work on.

- Running of the methodology developed in D 1.3 (delivery of T 1.3) on the compendium established in D .1.1 (delivery of T 1.1)

Target date: beginning 2017 at earliest (1 year after D 1.3)

Overall deliverable:

D1.5 – CEN/CENELEC Technical report on the list of priority chemicals

Task 2: Standardized Material Declaration sheet

As the information on substances in articles may be disclosed from the suppliers, following the regulatory requests, in order to ease the exchanges of information throughout the supply chain and improve its reliability, there is a need to standardize the way this information is provided to the user or the recipient of the information.

Tasks and schedule:

T 2.1 – Creation of a working group involving necessary stakeholders within an ad hoc CEN/CENELEC PC (2015)

Schedule: beginning 2015 → mid 2015

T 2.2 – Establish the state of the art; collection of existing templates on substances declarations (2015)

Schedule: mid 2015 → end 2015

T 2.3 – Drafting and publication of an EN (starting 2016)

Schedule: beginning 2016 → end 2019

Deliverable and target date

D 2 – European standard on material declaration –Publication 2019

Target date: end 2019

¹Reflexion should incorporate the methodology developed in DG ENV/WG “chemicals” for the prioritization of substance in scope of WFD and NORMAN CEP group:

- Procedures for Identification and Prioritisation of Priority Substances: Scoping Report (DRAFT REPORT TO DG ENVIRONMENT). (wca-environment 2013)
- NORMAN Prioritisation framework for emerging substances - April 2013 (ISBN : 978-2-9545254-0-2)

Task 3: General standardized methods to determine the content of substances in articles (or in waste)

Referring to a standardized protocol to determine the content of substances of an article is crucial, in particular to establish the frame for the relationships between declarative route and the testing route.

There is a need to produce, for the prioritized substances, a standardised general method adapted to the various types of articles possibly encountered, including in particular a standardized strategy for sampling.

Pre-normative R&D performed by metrologists experts to establish guidelines for harmonized references methods will be considered, as linking standardisation and research is an effective means to support the dissemination and transfer of research findings with positive benefits to standardisation.

Task and schedule:

- T 3** – critical review by the CEN/CENELEC PC of the register D 1.2 (delivery of T 1.2) and proposal of a general strategy to identify and determine the concentration of substances in various types of articles

Schedule: mid 2016 → mid 2019 (starting with availability of register D 1.2, + 3 years)

Deliverable and target date

- D 3** – CEN/CENELEC Guideline for a general approach (Overall deliverable)

Target date: mid 2019

Task 4: Dedicated standard methods to determine the content of specific substances in articles (or in waste)

Considering the state of the art established in the register (D 1.2, Task 1.2) there shall be also some needs for some specific recognised and standardized analytical methods for individual substances or for some category of substances and of types of articles, if not already existing.

Tasks and schedule:

- T 4.1** – Critical review by the CEN/CENELEC PC and potential gap filling of existing methodologies as outlined in register D 1.2 to possibly enlarge the scope of existing methods to other substances

Revalidation protocol for the standards which scope can be enlarged to other type of articles and/or substances.

Schedule: mid 2016 → mid 2017 and further if necessary (starting with availability of register D 1.2, + 1 years)

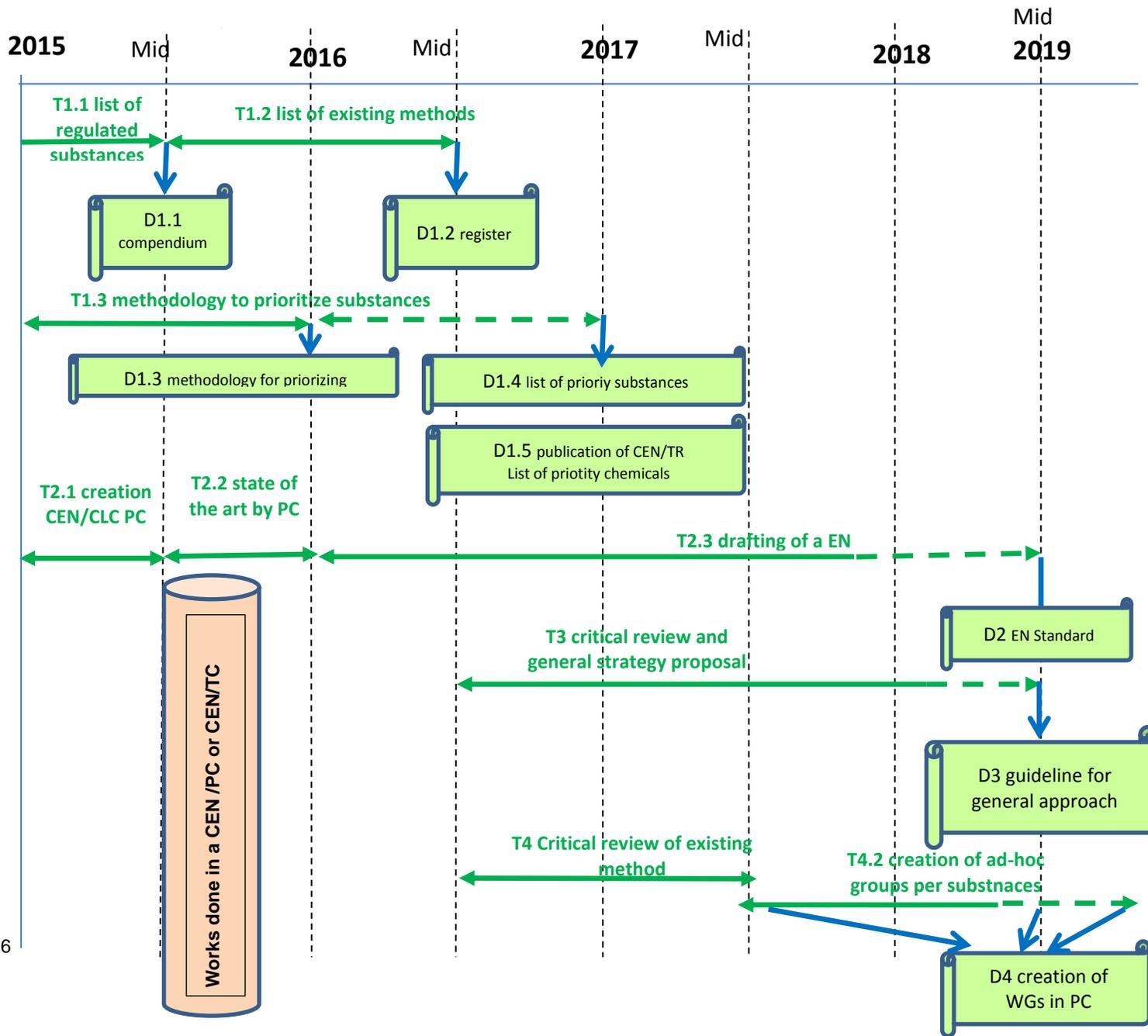
- T 4.2** – Create of ad-hoc working groups within the CEN/CENELEC PC per type of substances, composed of relevant experts, in charge of proposal of new work items according to CEN guide 13 (drafting, ruggedness verification, inter-laboratory validation)

Schedule: mid 2017 → and further based on the list of the priority substances elaborated under D.1.4 (starting with availability of register D 1.2, + 1 years)

Deliverable and target date

D 4 – European standards for specific substances

Target date: beginning 2017 and further (2017 could be possible for standards for which the scope has been enlarged)



Annex: Elements to be taken into account during the implementation of the roadmap

Database

- Database with existing EU legislation on regulated (notified) dangerous substances put together for DG ENTR by the expert panel on dangerous substances Either this could serve as the example or as the actual deliverable
http://ec.europa.eu/enterprise/sectors/construction/cp-ds/index_en.htm.
- IEC 62474 – Material Declaration for Products of and for the Electrotechnical Industry, which yet exists as a data base
- Feasibility study assessing the possibilities of developing an information platform regarding the content of SVHV in materials (Ökopol has been commissioned by ECHA); link to the summary of the intended platform, so called, Materials Information Platform (MIP):
http://www.oekopol.de/wp-content/uploads/Short_description_MIP.pdf

Directive (other than REACH and RoSH)

- European Toys Directive 2009/48/EC
http://ec.europa.eu/enterprise/sectors/toys/documents/directives/index_en.htm

CEN/SABE projects:

- ‘Tailored support to Technical Committees to address the use of hazardous/chemical substances in product standards’
- ‘CEN Guide 4 supplement on testing standards’

CEN/TC/WG working on analytical methods for substances

- CEN/TC 52 Safety of toys
- CEN/TC 351 Construction Products - Assessment of release of dangerous substances
- CLC/TC 111X environment

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Standards

- CEN/TR 16045 – Construction Products – Assessment of release of dangerous substances – Content of regulated dangerous substances – Selection of analytical methods
- XP E01-009 – Produits mécaniques – Collecte et communication de données liées aux substances soumises à traçabilité"
- CEN/TC 351/WG5 N 24 Content regulations and referenced of potentially applicable analytical standards (see document joint after this page)
- IEC 62474, which proposes a global, standard-based approach for materials declaration
- IEC 62631 series which provide analytical test methods, taking into account the newly regulated substances in various regulations across the world
- IEC TR 62476 which is a Guidance for evaluation of product with respect to substance use restrictions in electrical and electronic products
- IEC 63000, project to transpose the EN 50581 which specifies the technical documentation that the manufacturer needs to compile in order to declare compliance with the applicable substance restrictions.



CEN/TC 351/WG 5
CEN/TC 351/WG 5 - Content and eluate analysis in construction products
Email of secretary: harry.steeghs@nen.nl
Secretariat: NEN (Netherlands)

Content Overview of regulations and standards (May 2011)

Document type: Other committee document

Date of document: 2012-01-30

Expected action: INFO

Background:

Committee URL: <http://cen.iso.org/livelink/livelink/open/centc351wg5>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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item nr.	supersedes document N 056	
Committee	CEN/TC 351/TG 5 Construction products: Assessment of release of dangerous substances / TG 5 Content	

final

Content regulations and referenced or potentially applicable analytical standards.

- For information
- For comment before:
- For approval before: (no reply will be considered as an approval)
- For consideration during the next meeting

Remarks:

An updated proposal (N 060) for the Work Programme of TG 5/ WG 5 on content has been made. The present document N 061 is a background document to N 060 and gives an overview of regulatory requirements for content methods.

Kind regards,
Harry Steeghs
secretary of TG 5

Content regulations and referenced or potentially applicable analytical standards

Neither the referenced nor the potentially applicable standards for a given content standard cover the full range of construction products covered by the CPD, which implies that in any case adaptation of standards will be necessary to ensure that standards are applicable, if or when content measurement is necessary or practical.

The following table cross checks the table of the existing substance regulations as given in Annex B of TR 16045 with the compiled analytical standards in that report.

The result for the different regulations and substances could differ between:

- Standard available for the matrix of the construction product → no action necessary
- Standard available, but not validated for the matrix of the construction production → work on validation and as the case may be on sample preparation is necessary
- No standard available → adoption of an existing standard is necessary.

In both cases if a standard should be validated/ adopted or a standard should be developed the focus should lie on multi-matrix, multi-substance methods, to keep the analytic effort as low as possible.

Please note that the following table shows a background analysis and is no work programme. In the work programme priorities will be identified, taking into account the most important substances and the most developed standards from other fields.

Table 1 — Content regulated substances in the ‘indicative list’ and the available analytical standards

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation. (See also CENTR 16045)
Inorganic substances			
REACH Annex XVII Nr. 16, 17	Lead	paints	<u>digestion and analysis:</u> ISO 6503 (paints and varnishes)

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation. (See also CENTR 16045)
REACH Annex XVII Nr. 18	Mercury	wood	<u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)
REACH Annex XVII Nr. 19	Arsenic / Arsenic Compounds	wood	<u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)
REACH Annex XVII Nr. 23	Cadmium and its Components	use restrictions in plastics, paints and varnishes, metal surfaces	<u>digestion and analysis:</u> EN 1122 (Cd in plastics) ISO 3856-4 (Cd in paints and varnishes) IEC 62321 (Cd in electronics)
REACH Annex XVII Nr. 28, 29, 30	CMR-Substances Cat. 1 and 2	mixtures available for consumers	too many substances to give recommendations, generic methods for chemical elements with carcinogenic properties can be applied
REACH Annex XVII Nr. 47	Chromium (VI)	cement	EN 196-10 (chromium VI in cement)
1996-PL	Chromium (VI)	Inadmissible in building materials	EN 15192 (chromium VI in waste) EN IEC 62321 (chromium VI in electronics) EN 196-10 (chromium VI in cement)
	Lead	anti-corrosive agents	non

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation. (See also CENTR 16045)
2001-200-A	Cadmium Lead Mercury	elastic flooring materials	<u>digestion and analysis</u> EN 1122 (Cd in plastics) <u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)
	Chromium (VI)	elastic flooring materials	ISO 3856-5 (chromium VI in paints and varnishes)
2001-450-D	Arsenic Cadmium Chromium Copper Lead Mercury	waste wood	<u>digestion:</u> EN 13657 (digestion as waste) <u>analysis of digest:</u> EN ISO 11969 (arsenic in water) ISO 11047 (digestion and analysis of cadmium, chromium, copper and lead in soil digests) EN ISO 11885 (cadmium, chromium, lead, copper in water) EN 1483 (mercury in water) EN ISO 12338 (mercury in water) prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)
	Chloride Fluoride	waste wood	<u>digestion:</u> DIN 51727 (chlorine in solid fuels) <u>analysis of digest:</u> EN ISO 10304 (chloride in water – ion chromatography) EN ISO 10304 (fluoride in water – ion chromatography)
2002-9039-N	Chromium	wood	<u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste) ISO 11047 (digestion and analysis of chromium in soil digests)

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation. (See also CENTR 16045)
2004-71-D	TOC	aggregates for road construction	EN 13137 (TOC in waste)
2005-255-D	Carcinogenic, mutagenic, toxic and very toxic substances	floor coverings and adhesives	too many substances to give recommendations, generic standards for chemical elements with carcinogenic properties can be applied
2005-735-FIN	Arsenic Cadmium Chromium Copper Lead Zinc	concrete chippings, fly and bottom ash	<u>digestion:</u> EN 13656 (digestion as waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> no special method recommended, but ICP-MS, ICP-AES or AAS must be used for metals
	Barium Molybdenum Vanadium	fly and bottom ash	<u>digestion:</u> EN 13656 (digestion as waste) EN 13657 (digestion as waste) <u>analysis of digest:</u> no special method recommended, but ICP-MS, ICP-AES or AAS must be used for metals
	TOC	concrete chippings, fly and bottom ash	EN 13137 (TOC in waste)

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation. (See also CENTR 16045)
2006-81-S	Mercury	all products	<p><u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste)</p> <p><u>analysis of digest:</u> EN 1483 (mercury in water) EN ISO 12338 (mercury in water) ISO 16772 (mercury in soil digests) prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16171 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)</p> <p>extraction and analysis: IEC 62321 (mercury in electronics)</p>
2006-90-D	CMRs and toxic, very toxic or environmentally hazardous substances	concrete / concrete compounds	too many substances to give recommendations, generic methods for chemical elements with carcinogenic properties can be applied
2007-9016-N	Arsenic and its compounds Cadmium and its components Lead and its compounds	Consumer products	<p><u>digestion and analysis</u> EN 1122 (Cd in plastics)</p> <p><u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste)</p> <p><u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)</p>
2009-485-A	Arsenic, Lead, Cadmium, Chromium, Copper, Nickel, Mercury, Zinc	recycled building materials (special cases)	<p><u>digestion:</u> prEN 16174 (digestion as soil, sludge, biowaste or waste) EN 13657 (digestion as waste)</p> <p><u>analysis of digest:</u> prEN 16170 (analysis of digests from soil, sludge, sediments or biowaste) prEN 16192 (analysis of eluates from waste)</p>

a) In case national and European or international standards are addressed in the regulation, only the EN or ISO are cited here)

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
Organic substances			
Biocide-Directive 98/8/EC together with Commission Decisions 2007/565/EC 2007/598/EC 2008/681/EC 2008/809/EC	Biocides Existing active substances for which a decision of non-inclusion into Annex I or IA of Directive 98/8/EC has been adopted and which may no longer be placed on the market	products containing these active substances shall no longer be placed on the market for the relevant product-types	too many substances to give recommendations
Decopaint-Directive 2004/42/EC	Very Volatile Organic Compounds (VVO) and Volatile Organic Compounds (VOC)	paints and varnishes	EN ISO 11890-1 (paint and varnishes) EN ISO 11890-2 (paint and varnishes) EN ISO 17895 (paint and varnishes)
POP-Regulation 2004/850/EC	p,p'-Dichlor-2,2-diphenyl-1,1,1-trichlorethan (DDT)	all products	ISO 6468 (chlorinated pesticides in water)
	Dioxins and Furanes	all products	CSS 99045 (Dioxins, furans and DL-PCB in soil, sludge and treated biowaste)
	Polychlorinated Biphenyls (PCB)	all products	prEN 15308 (PCB in waste) ISO 15318 (PCB in Pulp, Paper and Board) ISO 10382 (PCB in Soil) ISO 16000-14 (PCB in Indoor Air) CSS 99016 (PCB in soil, sludge and treated biowaste)
REACH Annex XVII, Nr. 5	Benzene	all mixtures	non, but NEN 7331 (benzene in bitumen)
REACH Annex XVII, Nr. 20	Organotin compounds	unbound paints, uses under water	ISO 23161 (organotin compounds in soil)
REACH Annex XVII, Nr. 27	Pentachlorophenol (PCP)	use restriction (for substances and mixtures)	CEN/TR 14823 (pentachlorophenol in wood) EN ISO 15320 (pentachlorophenol in pulp, paper and board)
REACH Annex XVII Nr. 28, 29, 30	CMR-Substances Cat. 1 and 2	mixtures available for consumers	too many substances to give recommendations

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
REACH Annex XVII Nr. 31	PAH (distillation products of coke or petrol)	wood	ISO 13877 (PAH in soil) ISO 18287 (PAH in soil) CSS 99015 (PAH in soil, sludge and treated biowaste) also NEN 7331 (PAH in bitumen)
REACH Annex XVII, Nr. 44,45	Pentabromodiphenylether (PentaBDE) Octabromodiphenylether (OctaBDE)	all products (flame retardant mostly used in plastics, coatings)	IEC 62321 (PBDE in electronics)
REACH Annex XVII Nr. 53	Perfluorooctanesulfonate (PFOS)	all products	ISO 25101 (PFOS in water)
REACH Annex XIV (only authorized uses apart from 2105)	Benzyl butyl phthalate (BBP) Dibutyl phthalate (DBP) Di(2-ethylhexyl)phthalate (DEHP)	all products	CSS 99042 (Phthalates in soil sludge and treated biowaste)
	Hexabromocyclododecane (HBCD)		non
Comm. Dec. 1994/783/EC on German restriction	Pentachlorophenol (PCP)	use restriction for articles	CEN/TR 14823 (pentachlorophenol in wood) EN ISO 15320 (pentachlorophenol in pulp, paper and board)
Comm. Dec. 1996/211/EC on Danish restriction	Pentachlorophenol (PCP)	use restriction for articles	-“-
Comm. Dec. 1999/831/Econ Dutch restriction	Pentachlorophenol (PCP)	use restriction for articles	-“-
Commission Decision 2004/1/EC on Dutch restriction	C10-13-Chloroalkanes (SCCP)	paints, sealants, adhesives, plastics, rubbers	NEN 6971 – NEN 6976 (extraction form soil and clean up)
1987-125-F	Formaldehyde	foams for indoor use	EN 120 (formaldehyde in wood based panels) EN ISO 4614 (formaldehyde in melamineformaldehyde mouldings)

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
1995-213-A	Benzene	paints, varnishes, wood preservatives, buildings preservation materials (including bitumen cold adhesives), adhesives, paint strippers, antifouling and underwater coatings	Non, but NEN 7331 (benzene in bitumen)
	Volatile Organic Compounds (VOC)	paints, varnishes, wood preservatives, buildings preservation materials (including bitumen cold adhesives), adhesives, paint strippers, antifouling and underwater coatings	EN ISO 11890- EN ISO 11890-2 (paint and varnishes) EN ISO 17895 (paint and varnishes) ISO 15009 (soil) ISO 22155 (soil) Emission Standards for many matrices
1996-PL	Benzene	admissible content in building materials up to 0,1% by mass	-
	Pentachlorophenol (PCP)	inadmissible content in building materials used inside buildings	CEN/TR 14823 (pentachlorophenol in wood) EN ISO 15320 (pentachlorophenol in pulp, paper and board)
1998-9034-N	Acrylamide and Methyloacryl amide	grouting agents	Non, but NEN 6971 – NEN 6976 (extraction form soil and clean up)
2001-121-DK	Fluorinated hydrocarbons, perfluorocarbons (HFCs, FCs, PFCs, SF6)	all products (used mainly in foams and windows)	non
2001-450-D	Pentachlorophenol (PCP)	waste wood	CEN/TR 14823 (pentachlorophenol in wood)
	Polychlorinated Biphenyls (PCB)	waste wood	ISO 15318 (PCB in Pulp, Paper and Board) ISO 10382 (PCB in Soil) ISO 16000-14 (PCB in Indoor Air) CSS 99016 (PCB in soil, sludge and treated biowaste)
2002-37 A	Fluorinated hydrocarbons, perfluorocarbons (HFCs, FCs, PFCs, SF6)	foams, insulation materials	non

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
2004-71-D	Mineral oil	aggregates for road construction	EN 14039 (C10-C14 in waste) also: NEN 6978 (mineral oil in soil) NEN 5733 (mineral oil in soil and sediment)
	Polycyclic Aromatic Hydrocarbons (PAH)	aggregates for road construction	ISO 13877 (PAH in soil) ISO 18287 (PAH in soil) CSS 99015 (PAH in soil, sludge and treated biowaste) also NEN 7331 (PAH in bitumen)
2005-255-D	Carcinogenic, mutagenic, toxic and very toxic substances Cat. 1 and 2	floor coverings and adhesives	too many substances to give recommendations
	Polybrominated Diphenylether (PBDE)	floor coverings and adhesives	IEC 62321 (PBDE in electronics)
	Benzo(a)pyren (BaP)	floor coverings and adhesives	ISO 13877 (PAH in soil) ISO 18287 (PAH in soil) CSS 99015 (PAH in soil, sludge and treated biowaste) also NEN 7331 (PAH in bitumen)
2005-735-FIN	Polycyclic Aromatic Hydrocarbons (PAH)	concrete chippings, fly and bottom ash	ISO 13877 (PAH in soil) ISO 18287 (PAH in soil) CSS 99015 (PAH in soil, sludge and treated biowaste)
	Polychlorinated Biphenyls (PCB)	concrete chippings, fly and bottom ash	prEN 15308 (PCB in waste) ISO 10382 (PCB in Soil) CSS 99016 (PCB in soil, sludge and treated biowaste)
2005-9020-N	Decabromodiphenylether (DecaBDE) Pentabromodiphenylether (PentaBDE) Octabromodiphenylether (OctaBDE)	all products (used as flame retardant)	IEC 62321 (PBDE in electronics)
2006-90-D	CMRs and toxic, very toxic or environmentally hazardous substances Cat. 1 and 2	concrete / concrete compounds	too many substances to give recommendations

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
2006-557-NL	Benzene Ethylbenzene Toluene Xylene Polyaromatic Hydrocarbons (PAH)	stony building materials	NEN 7331 (benzene, toluene, ethylbenzene, xylene, PAH in bitumen)
	Mineral Oil	stony building materials	EN 14039 (C10-C14 in waste) also: NEN 6978 (mineral oil in soil) NEN 5733 (mineral oil in soil and sediment)
	Phenol	stony building materials	ISO 8165-1, ISO 8165-2 (phenol in water)
	PCB	stony building materials	ISO 10382 (PCB in Soil) CSS 99016 (PCB in soil, sludge and treated biowaste)
2007-9016-N	C14-17-chloroalkanes (MCCP)	consumer products	non, but NEN 6971 – NEN 6976 (extraction from soil and clean up)
	Di(2-ethylhexyl)phthalate (DEHP)	consumer products	CSS 99042 (Phthalates in soil sludge and treated biowaste)
	Hexabromocyclododecane (HBCD)	consumer products	non
	Tetrabromobisphenol A (TBBPA)	consumer products	non
	Tributyltin compounds	consumer products	ISO 23161 (organotin compounds in soil)
2009-485-A	Polycyclic Aromatic Hydrocarbons (PAH)	recycled building materials	ISO 13877 (PAH in soil) (Preference for multi matrix standard !!) ISO 18287 (PAH in soil) CSS 99015 (PAH in soil, sludge and treated biowaste) also NEN 7331 (PAH in bitumen)
EACH Annex XVII Nr. 6	Asbestos R	pure asbestos and all articles containing asbestos	Non, but NEN 5896 VDI 3866-1, -2, -4, -5

Regulation	Substances	Matrices covered (expert guess)	European or international standard referenced or available for adoption/validation (See also CENTR 16045)
1996-PL	Asbestos	construction materials, facilities and components of furniture in rooms intended for human residence	
1997-527-DK	Asbestos	all products in indoor air (also a general ban in Denmark exists)	-“-
1998-156-D	Synthetic vitreous (silicate) fibres	special qualities of mineral wool for insulation	Non, but DIN 52340-2
2004-294-NL	Asbestos	all products	Non, but NEN 5896 VDI 3866-1, -2, -4, -5
2006-557-NL	Asbestos	stony building materials	-“-

a) See: http://ec.europa.eu/environment/biocides/pdf/list_dates_product_phasing_out.pdf

Regulations

All EU-Legislation can be found under http://eur-lex.europa.eu/RECH_naturel.doc [5].

All notified regulations can be found under http://ec.europa.eu/enterprise/tris/index_en.htm [6].

Table 2 — Regulations regarding content in the ‘indicative list’

Regulation	Title
European Regulations	
Directive 98/8/EC	Directive 98/8/EC of the parliament and of the council of 16 February 1998 concerning the placing of biocidal products on the market
Directive 2004/42/EC	Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC
Regulation (EC) 2004/850/EC	Regulation (EC) 2004/850/EC of the European Parliament and of the Council of 29 April 2004 on Persistent Organic Pollutants
Regulation (EC) 1907/2006 (REACH)	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)
REACH Candidate-List	http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp
Commission Decisions	
1994/783/EC	Commission Decision of 14 September 1994 concerning the prohibition of PCP notified by the Federal Republic of Germany
1996/211/EC	Commission Decision of 26 February 1996 concerning the prohibition of pentachlorophenol (PCP) notified by Denmark
1999/831/EC	Commission Decision of 26 October 1999 concerning the national provisions notified by the Kingdom of the Netherlands concerning the limitations of the marketing and use of pentachlorophenol (PCP)
2004/1/EC	Commission Decision of 16 December 2003 concerning national provisions on the use of short-chain chlorinated paraffins notified by the Kingdom of the Netherlands under Article 95(4) of the EC Treaty
2007/565/EC	Commission Decision of 14 August 2007 concerning the non-inclusion in Annex I, IA or IB to Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market of certain substances to be examined under the 10-year work programme referred to in Article 16(2) thereof
2007/598/EC	COMMISSION DECISION of 27 August 2007 concerning the non-inclusion of guazatine triacetate in Annex I, IA or IB to Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market
2008/681/EC	Commission Decision of 28 July 2008 concerning the non-inclusion of certain substances in Annexes I, IA or IB to Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market
2008/809/EC	Commission Decision of 14 October 2008 concerning the non-inclusion of certain substances in Annex I, IA or IB to Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market

Regulation	Title
National (notified) Regulations	
1987-125-F	Décret 88-683 Of 06/05/1988 on the use of urea-formaldehyd foams in buildings intended for permanent or semi-permanent human occupation. Arrete of 06/05/1988 fixing a maximum content of formaldehyde foams in buildings intended for a permanent or semi permanent human occupation.
1993/141/D	Prohibition of materials, preparations and products containing certain polyhalogenated dibenzo-p-dioxins (phdds) or certain polyhalogenated dibenzofuranes (phdfs) (extension of applicability) order
1995-188-DK	Building regulations
1995-213-A	Regulation of the Federal Minister for the Environment concerning bans and restrictions of organic solvents (Lösungsmittelverordnung (Solvent Regulation) LMVO 1995)
1996-PL	Monitor Polski Nr 19/1996, poz. 231: ORDINANCE OF THE MINISTER OF HEALTH AND SOCIAL WELFARE of 12 March 1996 on the permitted concentrations and intensities of agents harmful for health emitted by construction materials, facilities and components of furniture in rooms intended for human residence http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WMP19960190231&type=2&name=M19960231.pdf
1996-183-D	Specimen introductory order for the sample list of Technical Building Provisions
1997-527-DK	Building regulations for small houses
1998-156-D	Order amending the Orders on chemical law
1998-9034-N	A proposal for regulations relating to a permanent prohibition against the use of acryl amide based grouting agents for the sealing against water leakages in connection with construction works (incorporated into 2002-9039-N)
2001-121-DK	Order regulating certain industrial green house gases
2001-200-A	Quality regulations for elastic flooring materials
2001-450-D	Order on the disposal of waste wood
2002-37-A	Order of the Federal Minister for Agriculture and Forestry, the Environment and Water Management concerning bans and restrictions on partially fluorinated and fully fluorinated hydrocarbons as well as sulphur hexafluoride (HFC/FC/SF6 Order)
2002-9039-N	Regulations relating to restrictions on certain dangerous chemicals and products
2004-71-D	Technical Terms of Delivery for aggregates used in road construction (German designation: TL Gestein-StB 04)
2004-294-NL	Draft Decree regulating asbestos and products containing asbestos (Asbestos Products Decree)
2005-255-D	Principles for the health assessment of construction products used in interiors, as at April 2005
2005-283-NL	Regulation amending the Regulation implementing the Building Materials (Soil and Surface Water Protection) Decree
2005-735-FIN	Council of State Decree concerning the recovery of certain wastes in earth construction products
2005-9020-N	Regulation amending regulation of 1 June 2004 No 922 relating to restrictions on the use of chemicals dangerous to health and environment and other products (Product regulations)
2006-81-S	Order amending the Order (1998:994) on bans etc. in certain cases in connection with the handling, import and export of chemical products
2006-90-D	Principles for assessing the effects of construction products on soil and groundwater
2006-557-NL	Preliminary Draft of the Soil Quality Regulation

Regulation	Title
2007-9016-N	Draft of new chapter concerning consumer products in the Norwegian Product Regulations: Hazardous substances in consumer products
2009-485-A	Guideline for recycled building materials (8th edition)