

## PaperImpact Handbook

# Environmental Standards applicable to Speciality Papers

(version 1, November 2011)

### Packaging/packaging waste

#### **EU directive on Packaging and packaging waste**

Directive 94/62/EC on packaging and packaging waste (Directive 2004/12/EC) aims to harmonize national measures in order to prevent or reduce the impact of packaging and packaging waste on the environment and to ensure the functioning of the Internal Market. It contains provisions on the prevention of packaging waste, on the re-use of packaging and on the recovery and recycling of packaging waste. In 2004, the Directive was reviewed to provide criteria clarifying the definition of the term 'packaging' and increase the targets for recovery and recycling of packaging waste. In 2005, the Directive was revised again to allow new Member States transitional periods for attaining the recovery and recycling targets.

[http://ec.europa.eu/environment/waste/packaging\\_index.htm](http://ec.europa.eu/environment/waste/packaging_index.htm)

<http://www.europen.be/?action=onderdeel&onderdeel=3&titel=Key+Topics&categorie=3&item=21>

<http://www.cepi.org/docshare/docs/1/JKAFGGMDMKPHGDBGIPEBHGPO5E53B373BW9YBDCDEYP3/CEPI/docs/DLS/ENV-079-08-20080612-00024-01-E.pdf>

#### **EN13432**

The EN 13432 (Packaging - Requirements for packaging recoverable through composting and biodegradation)

Test scheme and evaluation criteria for the final acceptance of packaging industrial standard is arguably the most international in scope and compliance with this standard is required to claim that a product is compostable in the European marketplace. In summary, it requires biodegradation of 90% of the materials in a commercial composting unit within 180 days. The ASTM 6400 standard is the regulatory framework for the United States and sets a less stringent threshold of 60% biodegradation within 180 days, again within commercial composting conditions.

<http://esearch.cen.eu/esearch/Details.aspx?id=5111170>

<http://www.ilex-envirosciences.com/leaflets/EN13432.pdf>

<http://esearch.cen.eu>

### Green Procurement, eco-labels

#### **Blauer Engel**

The **Blue Angel (Blauer Engel)** is the first and oldest environment-related label for products and services in the world. It was created in 1978 on the initiative of

the Federal Minister of the Interior and approved by the Ministers of the Environment of the federal government and the federal states. It considers itself as a market-conform instrument of environmental policy designed to distinguish the positive environmental features of products and services on a voluntary basis. The Blue Angel (Blauer Engel) is a German certification for products and services that have environmentally friendly aspects. It has been awarded since 1978 by the Jury Umweltzeichen, a group of 13 persons from environment and consumer protection groups, industry, unions, trade, media and churches. After the introduction of Germany's Blue Angel in 1978 as the first worldwide environmental label, other European and non-European countries followed this example and introduced their own national and supra-regional environmental labels. The common goal of these labels is to inform consumers about environmentally friendly products thereby giving global support to product-related environmental protection. In 1994, some countries cooperated in developing the Global Ecolabelling Network (GEN) - a non-profit interest group composed of ecolabel organisations throughout the world.

<http://www.blauer-engel.de/en/>

### **EU eco-label**

The European Eco-label is a voluntary scheme, established in 1992 to encourage businesses to market products and services that are more friendly to the environment. Products and services awarded the Eco-label carry the flower logo. Eco-label criteria are not based on one single factor, but on studies which analyze the impact of the product or service on the environment throughout its life cycle, starting from raw material extraction in the pre-production stage, through to production, distribution and disposal. The EU Eco-label is part of a broader action plan on Sustainable Consumption and Production and Sustainable Industrial Policy adopted by the Commission on 16 July 2008.

[http://ec.europa.eu/environment/ecolabel/menus/products\\_en.htm](http://ec.europa.eu/environment/ecolabel/menus/products_en.htm)

### **Nordic Swan**

The **Nordic Eco-label** is the official eco-label of the Nordic countries and was established in 1989 by the Nordic Council of Ministers with the purpose of providing an environmental labeling scheme that would contribute to a sustainable consumption. It is a voluntary eco-labeling of products and services. The Nordic Eco-label was also initiated as a practical tool for consumers to help them actively choose environmentally sound products. It is an ISO 14024 type 1 eco-labeling system and is a third-party control organism.

<http://www.nordic-ecolabel.org/about/>

### **Paper Profile**

Paper Profile is a voluntary environmental product declaration scheme developed and provided by leading paper producers. It is developed to enable the paper buyer to make well informed product choices, by presenting figures on essential environmental parameters in a uniformed way for specific products. Collecting and compiling the information for the declaration is based on common calculation guidelines. The key parameters that are declared in the Paper Profile primarily relate to the production of pulp and paper. The information provided in the single Paper Profile sheet is based on parameters, considered to give the best general picture of a mills environmental

performance to authorities and thereby gives a good environmental characteristic of a specific product.

<http://www.paperprofile.com/>

### **Walmart scorecard**

The Walmart supermarket chain is working around the globe with their suppliers to develop sustainable solutions to product packaging. They developed an online packaging scorecard to gather information on suppliers' product packaging and help our buyers make more informed purchasing decisions. The aim is reducing packaging across its global supply chain by 5 percent by 2013, helping Walmart and its suppliers improve packaging and save resources.

<http://walmartstores.com/sustainability/9125.aspx>

### **WWF scorecard**

The **WWF Paper Scorecard** is designed as a user friendly tool for paper purchasers to evaluate their footprint on the environment and to channel paper consumption towards alternatives with the least Environmental impact. Rather than trying to address every conceivable aspect, the Scorecard focuses on a limited number of major impacts related to human and ecosystem health and vitality.

[http://www.wwf.org.uk/filelibrary/pdf/paper\\_scorecard\\_manual.pdf](http://www.wwf.org.uk/filelibrary/pdf/paper_scorecard_manual.pdf)

### **Raw Material labels**

#### **Forest Stewardship Council (FSC)**

The **Forest Stewardship Council** is an independent, non-governmental, not for profit organization established to promote the responsible management of the world's forests. It provides standard setting, trademark assurance and accreditation services for companies and organizations interested in responsible forestry. FSC certification is a voluntary, market-based tool that supports responsible forest management worldwide. FSC certified forest products are verified from the forest of origin through the supply chain. The FSC label ensures that the forest products used are from responsibly harvested and verified sources. Products carrying the FSC label are independently certified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations.

<http://www.fsc.org/107.html>

#### **Programme for the Endorsement of Forest Certification (PEFC)**

The Programme for the Endorsement of Forest Certification (PEFC) is an international non-profit, non-governmental organization dedicated to promoting Sustainable Forest Management (SFM) through independent third-party certification. PEFC works throughout the entire forest supply chain to promote good practice in the forest and to ensure that timber and non-timber forest products are produced with respect for the highest ecological, social and ethical standards. Thanks to its eco-label, customers and consumers are able to identify products from sustainably managed forests. PEFC is an umbrella organization. It works by endorsing national forest certification systems developed through multi-stakeholder processes and tailored to local priorities and conditions. With about 30 endorsed national certification systems and more

than 220 million hectares of certified forests, PEFC is the world's largest forest certification system. Each national forest certification system undergoes rigorous third-party assessment against PEFC's unique Sustainability Benchmarks to ensure consistency with international requirements.

<http://www.pefc.org/>

### **Percentage of renewable raw materials**

The Green Public Procurement Guidelines include criteria that allow bio-based products to be given preference in tender specifications. The European Commission cooperates with Member States and stakeholders to set common GPP criteria for endorsement in national action plans. The fact that a product is bio-based is not alone a proof of its environmental sustainability; a range of other factors need to be considered (e.g. health, safety, environmental effects, waste). By integrating the requirement for bio-based content with other common GPP criteria and by applying the EU Eco-label to products complying with a minimum level of bio-based content set for that product category, public procurers are able to distinguish the products that should be eligible for preferential selection. A broader use of renewable raw materials (RRM) and the substitution of fossil based materials and products by RRM could be an important step to the sustainable use of natural resources and further develop sustainable consumption and production patterns in the production sector. RRM as a feedstock for the industrial production of materials, chemicals and other bio-based products can save fossil resources and reduce negative impacts on the environment.

[http://ec.europa.eu/enterprise/policies/innovation/policy/lead-market-initiative/biobased-products/index\\_en.htm](http://ec.europa.eu/enterprise/policies/innovation/policy/lead-market-initiative/biobased-products/index_en.htm)

### **Percentage of recycled materials**

Recycled content of paper is required by most eco-labeling schemes, depending on the paper quality required for fitness for use and legal requirements such as food contact, health and safety. Some schemes only consider post consumer recovered paper as recycled paper or require a percentage of recovered fiber input of which a certain percentage needs to be post consumer fiber.

### **Food contact, Product safety**

#### **BfR 36th recommendation**

BfR 36th Recommendation "Paper, card and cardboard for contact with foodstuffs" of BfR 46 (German Federal Institute for Risk Assessment) lists which manufacturing auxiliaries may be used. The maximum quantities or concentrations as specified in this recommendation must not be exceeded. The BfR Recommendations on Food Contact Materials are based on European law and its transposition into national law. The BfR Recommendations on Food Contact Materials are not legal norms. They do, however, represent the current state of the scientific and technical knowledge for the conditions under which consumer goods made of high polymer substances meet the requirements of § 31, para 1, German Food and Feed Code (Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch, LFGB) as well as those of Article 3, para 1 a of the Regulation (EC) No 1935/2004 in respect to their health safety. According to

these provisions, materials and articles that come into contact with food shall be manufactured in compliance with good manufacturing practice so that, under normal or foreseeable conditions of use, they do not transfer their constituents to food in quantities which could endanger human health. If consumer goods are produced or used in a manner that deviates from the provisions of the recommendations, the manufacturer or user may receive complaints based on food law provisions (§§ 30, 31 para 1 LFGB).

[http://www.bfr.bund.de/en/database\\_bfr\\_recommendations\\_on\\_food\\_contact\\_materials\\_formerly\\_plastics\\_recommendations\\_-1711.html](http://www.bfr.bund.de/en/database_bfr_recommendations_on_food_contact_materials_formerly_plastics_recommendations_-1711.html)

### **British Retail Consortium (BRC/IOP)**

The BRC/IOP Global Standard for Packaging and Packaging Materials (food and non-food packaging), is a leading global standard adopted by major retailers and packaging businesses around the world. Certification to the Standard verifies technical and functional performance, aids manufacturers' fulfillment of legal obligations, and helps provide protection to the consumer.

<http://www.brcglobalstandards.com/standards/packaging-and-packaging-materials/>

### **California Proposition 65**

In 1986, California voters approved an initiative to address their growing concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known by its original name of Proposition 65. Proposition 65 requires the State to publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, has grown to include approximately 800 chemicals since it was first published in 1987. Proposition 65 requires businesses to notify Californians about significant amounts of chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. By providing this information, Proposition 65 enables Californians to make informed decisions about protecting themselves from exposure to these chemicals. Proposition 65 also prohibits California businesses from knowingly discharging significant amounts of listed chemicals into sources of drinking water. The Office of Environmental Health Hazard Assessment (OEHHA) administers the Proposition 65 program. OEHHA, which is part of the California Environmental Protection Agency (Cal/EPA), also evaluates all currently available scientific information on substances considered for placement on the Proposition 65 list.

<http://www.oehha.ca.gov/>

### **Good Manufacturing Practice (GMP)**

CEPI guidelines 2010 definition: means those aspects of quality assurance, which ensure that materials and articles are consistently produced and controlled to ensure conformity with the rules applicable to them and with the quality standards appropriate to their intended use. It is a requirement of the Regulation (EC) No 1935/2004, on materials and articles intended to come into contact with food (the Framework Regulation), that all materials and articles intended for food contact shall be manufactured in accordance with Good Manufacturing Practice (GMP). The components and principles of such a GMP are described in Commission Regulation (EC) No 2023/2006 on good

manufacturing practice for materials and articles intended to come into contact with food (the GMP Regulation).

Because the GMP Regulation applies to all types of food contact materials and articles, there is a need for specific advice on its implementation in each manufacturing sector. The CEPI paper and board GMP gives that implementation advice for the paper and board manufacturing industry.

[http://www.cepi.org/docshare/docs/2/GOPEGGMDENKPOLGEBBHLAJHL8KCM6U9Y3PDWDBGW19D/CEPI/docs/DLS/GMP\\_final-20100915-00027-01-E.pdf](http://www.cepi.org/docshare/docs/2/GOPEGGMDENKPOLGEBBHLAJHL8KCM6U9Y3PDWDBGW19D/CEPI/docs/DLS/GMP_final-20100915-00027-01-E.pdf)

### **Hazard Analysis Critical Control Point (HACCP)**

HACCP is a systematic preventive approach to food safety and pharmaceutical safety that addresses physical, chemical, and biological hazards as a means of prevention rather than finished product inspection. HACCP is used in the food industry to identify potential food safety hazards, so that key actions can be taken to reduce or eliminate the risk of the hazards being realized. The system is used at all stages of food production and preparation processes including packaging, distribution, etc. Related standards a.o. ISO 22000, BRC's Global Standard for Packaging and Packaging Materials.

### **ISO 22000**

Guidelines on the application of ISO 9001:2000 for the food and drink industry. It is a global food safety management standard for establishing and certifying food safety management systems

### **§ 31 Lebensmittel- und Futtermittelgesetzbuch**

§ 31, para 1, German Food and Feed Code (Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch, LFGB). The BfR Recommendations on Food Contact Materials are not legal norms. They do, however, represent the current state of the scientific and technical knowledge for the conditions under which consumer goods made of high polymer substances meet the requirements of § 31, para 1, German Food and Feed Code (Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch, LFGB) as well as those of Article 3, para 1 a of the Regulation (EC) No 1935/2004 in respect to their health safety. According to these provisions, materials and articles that come into contact with food shall be manufactured in compliance with good manufacturing practice so that, under normal or foreseeable conditions of use, they do not transfer their constituents to food in quantities which could endanger human health. If consumer goods are produced or used in a manner that deviates from the provisions of the recommendations, the manufacturer or user may receive complaints based on food law provisions (§§ 30, 31 para 1 LFGB).

[http://www.bfr.bund.de/en/database\\_bfr\\_recommendations\\_on\\_food\\_contact\\_materials\\_formerly\\_plastics\\_recommendations\\_-1711.html](http://www.bfr.bund.de/en/database_bfr_recommendations_on_food_contact_materials_formerly_plastics_recommendations_-1711.html)

### **Toy safety (EN 71/3; EN 71/9)**

Toy safety is the practice of ensuring that toys, especially those made for children, are safe, usually through the application of set safety standards. Distinction must be drawn between regulations and voluntary safety standards. Many regions model their safety standards on the EU's EN 71 standard, either

directly, or through adoption of the ISO 8124 standard which itself is modeled on EN 71. Council Directive 88/378/EEC of 3 May 1988 on the approximation of the laws of the Member States concerning the safety of toys. This Directive applies to toys, i.e. any product or material designed or clearly intended for use in play by children under 14 years of age. It lays down the safety criteria or "essential requirements" which toys must meet during manufacture and before being placed on the market. The safety of toys is harmonized at European level so that the essential requirements can be met at the manufacturing stage. The standards laid down by the European standardization bodies provide evidence of compliance with the essential requirements. Toys that meet these requirements bear the CE conformity marking.

[http://europa.eu/legislation\\_summaries/consumers/consumer\\_safety/l21005\\_en.htm](http://europa.eu/legislation_summaries/consumers/consumer_safety/l21005_en.htm)

## **Manufacturing, use of chemicals**

### **Bisphenol A**

Products containing Bisphenol A (BPA) are regulated by both EPA and the Federal Food and Drug Administration (FDA); only products regulated by EPA are covered in the action plan. Products regulated by EPA include thermal paper; the manufacture of polycarbonate plastics for non-food and non-medical applications (such as compact disks and safety glasses); epoxy resins; flame retardants; and foundry castings. Products regulated by FDA generally include those related to food and medical devices, such as polycarbonate used for baby bottles and epoxy resins used in can linings. BPA is known to be estrogenic since the mid 1930s, concerns about the use of bisphenol A in consumer products were regularly reported in the news media in 2008 after several governments issued reports questioning its safety, prompting some retailers to remove products containing it from their shelves. A 2010 report from the United States Food and Drug Administration (FDA) raised further concerns regarding exposure of fetuses, infants and young children. In September 2010, Canada became the first country to declare BPA as a toxic substance.

[www.epa.gov/dfs/alternative\\_assessments.html](http://www.epa.gov/dfs/alternative_assessments.html)

### **Registration, Evaluation, Authorization and Restriction of Chemical substances (REACH)**

*Comment: For REACH in most cases, compliance with the SVCH list was required*

REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances. Manufacturers and importers are required to gather information on the properties of their chemical substances, which will allow their safe handling, and to register the information in a central database run by the European Chemicals Agency (ECHA) in Helsinki. The Agency acts as the central point in the REACH system: it manages the databases necessary to operate the system, co-ordinates the in-depth evaluation of suspicious chemicals and is building up a public database in which consumers and professionals can find hazard information. The Regulation also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified.

[http://ec.europa.eu/environment/chemicals/reach/reach\\_intro.htm](http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm).

CEPI has developed a guideline for the paper industry

<http://www.cepi.org/docshare/docs/1/JKAFFGGMDMKPHGDBGIPEBHGPO5E53B373BW9YBDCDEYP3/CEPI/docs/DLS/ENV-079-08-20080612-00024-01-E.pdf>

### **Restriction of Hazardous Substances (ROHS)**

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment 2002/95/EC. The RoHS Directive is intended to restrict the use of certain hazardous substances in electrical and electronic equipment. This increases the protection of human health and aids the environmentally sound recovery and disposal of waste electrical and electronic equipment.

The ban of four heavy metals (lead, cadmium, mercury, hexavalent chromium) and two categories of brominated flame retardants (PBBs and PBDEs) entered into force in July 2006, although certain applications of these substances have been temporarily exempted until their substitution becomes scientifically and technically feasible.

[http://ec.europa.eu/environment/waste/rohs\\_eee/index\\_en.htm](http://ec.europa.eu/environment/waste/rohs_eee/index_en.htm)

### **Totally Chlorine Free Elemental Chlorine Free (TCF, ECF)**

The two main types of bleaching methods in use are so-called ECF (Elemental Chlorine Free i.e. when no molecular or gaseous chlorine is dosed in the bleaching) and TCF (Totally Chlorine Free) bleaching. ECF bleaching uses chlorine dioxide, alkali for the extraction of dissolved lignin, peroxide and oxygen for the reinforcement of the extraction stages. TCF bleaching uses oxygen, ozone or peracetic acid and peroxide with alkali for lignin extraction.

<http://eippcb.jrc.es/reference/>

### **Special issues**

#### **BSE TSE**

**Bovine spongiform encephalopathy (BSE)**, commonly known as mad-cow disease, is a fatal neurodegenerative disease in cattle that causes a spongy degeneration in the brain and spinal cord. **Transmissible spongiform encephalopathies (TSEs)**, also known as **prion diseases**, are a group of progressive conditions that affect the brain and nervous system of many animals, including humans.

#### **Dioxin**

The environmental control authorities in many countries have set severe restrictions on the discharges of chlorinated organics measured as AOX (adsorbable organic halogens) into the aquatic environment.

<http://eippcb.jrc.es/reference/>

#### **Genetically Modified Organism (GMO)**

Products consisting of or containing GMOs and food products obtained from GMOs which have been authorised on the basis of the procedure under Directive 2001/18/EC (Part C) or Regulation (EC) No 1829/2003 are subject to



traceability and labeling requirements pursuant to Regulations (EC) Nos 1829/2003 and 1830/2003.

Labeling provides information for consumers and users of the product and allows them to make an informed choice.

Generally speaking, in the case of pre-packaged products consisting of or containing GMOs, Regulation (EC) No 1830/2003 requires operators to state on a label that "This product contains genetically modified organisms". In the case of non-pre-packaged products offered to the final consumer, these words must appear on, or in connection with, the display of the product.

Food products (containing or consisting of GMOs, produced from GMOs or containing ingredients produced from GMOs) delivered as such to the final consumer or to mass caterers (restaurants, hospitals, canteens and similar establishments) must be labeled in accordance with Regulation (EC) No 1829/2003, regardless of whether or not the final product contains DNA or protein resulting from genetic modification. The labeling obligation also applies to highly refined products, such as oil obtained from genetically modified maize.

A genetically modified organism (GMO) or genetically engineered organism (GEO) is an organism whose genetic material has been altered using genetic engineering techniques. These techniques, generally known as recombinant DNA technology, use DNA molecules from different sources, which are combined into one molecule to create a new set of genes. This DNA is then transferred into an organism, giving it modified or novel genes. Transgenic organisms, a subset of GMOs, are organisms which have inserted DNA that originated in a different species.

[http://ec.europa.eu/food/food/biotechnology/gmfood/index\\_en.htm](http://ec.europa.eu/food/food/biotechnology/gmfood/index_en.htm)

### **Kosher**

A kosher approval, the special certification marking found on the packages of products (usually foods) that have been certified as kosher (meaning "fit" for consumption). There are three categories of kosher food – meat, dairy and parve (or pareve). The laws of kashrut pertaining to these derive from various passages in the Jewish Torah, and are numerous and complex.

### **Lacey Act**

The **Lacey Act of 1900**, or more commonly **The Lacey Act** (16 U.S.C. §§ 3371–3378) is a conservation law introduced by Iowa Rep. John F. Lacey. Protecting both plants and wildlife by creating civil and criminal penalties for a wide array of violations, the Act most notably prohibits trade in wildlife, fish, and plants that have been illegally taken, transported or sold. The law was signed into law by President William McKinley on May 25, 1900, and is still in effect, although it has been amended several times

### **Mineral oil**

Mineral oil is a component of offset inks used to print newspapers. The recycling process cannot get all of the mineral oil out, so some of it ends up in recycled cardboard. Mineral oils can leak out in gaseous form from the cardboard and be absorbed by the food. More susceptible foods are those with a large surface area relative to volume, such as flour, rice, semolina or breakfast cereals. The German BfR carried out a risk assessment of mineral oil exposure in 2009. They concluded that there is an urgent need to reduce the

exposure from recycled paperboard, but did not introduce any specific legislation. The Swiss authorities have concluded that consumers who eat a balanced and varied diet are safe. In the UK the FSA have stated that they do not believe that the current data shows there to be a health risk to consumers who eat a balanced and varied diet, but are keeping the situation under review and carrying out research of their own.

<http://www.pira-international.com/testing/mineral-oil-contamination-of-food-packed-in-recycled-paper-and-board.aspx>

### **Nanoparticles**

A new EU Regulation on plastic materials and articles intended to come into contact with food came into force on 4 February 2011. This updates and consolidates the food contact legislation for plastics into one Regulation. The scope includes plastic layers in multi-material multi-layer materials and printed or coated plastic and plastic multi-layer materials and articles and plastic layers held together by adhesives. A single list of authorised substances which may be intentionally used in the manufacture of plastic food contact materials is provided. Only nanoparticles which are specifically included in the Union list as a nanoparticle may be used. Authorizations which are based on the risk assessment of the conventional particle size of a substance do not cover engineered nanoparticles.

[http://ec.europa.eu/food/food/chemicalsafety/foodcontact/legisl\\_list\\_en.htm](http://ec.europa.eu/food/food/chemicalsafety/foodcontact/legisl_list_en.htm)

### **Radioactivity in raw materials from Japan**

As more radioactive material from the Fukushima Dai-ichi nuclear power plant after the accident at the plant following the earth quake on 11 March 2011 finds its way into the environment, Japan's health ministry is compiling a growing list of foods that have been contaminated. The health ministry released a new list with a total of 99 different products that had tested positive for radioactive iodine-131 and cesium-137 in Tokyo and five other prefectures. The allowable government limit is 2,000 Becquerel's per kilogram for iodine-131 and 500 Bq/kg for cesium-137. Most, but not all of, the readings showed the foods were still below the legal limit. The U.S. Food and Drug Administration says that once iodine-131 hits levels of 170 Bq/kg in foods, the agency recommends that "protective measures" be taken so that no one receives a significant dose. According to the FDA, all milk and milk products and vegetables and fruits produced or manufactured from the four Japanese prefectures of Fukushima, Ibaraki, Tochigi and Gunma will be detained at U.S. ports and tested for radionuclide contamination.

<http://www.npr.org/blogs/health/2011/03/30/134930199/japan-finds-more-foods-tainted-by-radioactive-material>

### **Organisations**

#### **The Food and Drug Administration (FDA)**

The Food and Drug Administration (FDA or USFDA) is an agency of the United States Department of Health and Human Services, one of the United States federal executive departments. The FDA is responsible for protecting and promoting public health through the regulation and supervision of a.o. food safety. (21 CFR Ch. I, §§176.170 and 176.180 (Food Contact))

<http://www.fda.gov/>

### **International Food Standard (IFS)**

*Comment: HACCP / ISO 22000*

German and French food trade associations, with the assistance of other international retailers, have responded by developing IFS or the International Food Standard. The aim of the standard is to focus the various requirements of retailers on one standard. The structure of IFS corresponds to ISO 9001, but with a focus on food safety, HACCP, hygiene, the manufacturing process and business surroundings.

<http://www.bsi-emea.com/Food+Safety/Standards/IFS.xalter>

### **ISEGA, Beratungs- und Prüfinstitut für die Industrie und den Handel**

ISEGA is an independent testing institute with the capability for analytical and consulting work in a.o. pulp, paper and board in the fields of chemical and physical analytical work, environment, microbiology, ecology, certification and approval of products. The analytical work is carried out in conformity with the technical rules and according to national and international standards.

<http://www.isega.de/index.html>