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OECD Webinar on alternatives to long chain PFCs

Co-organized with the Stockholm Convention Secretariat

Japan's efforts on management of PFOS

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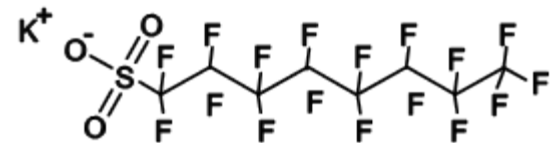
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Contents

1. Japan's laws and POPs
2. Amendment to the Chemical Substances Control Law
3. Establishment of the relevant Ordinances and a technical guideline



1. Japan's laws and POPs

Laws regulating the manufacture, use, import and export of POPs in Japan

Manufacture etc. are prohibited or virtually prohibited under the following laws:

- the Chemical Substances Control Law (CSCCL)
chemicals are categorized according to their properties and subject to regulation according to their categories
- the Agricultural Chemicals Regulation Law
- the Pharmaceutical Affairs Law
- the Foreign Exchange and Foreign Trade Law

CACL and the Stockholm Convention

- ✓ Chemicals newly listed as POPs in the Stockholm Convention shall be deliberate whether to designate as Class I Specified Chemical Substances under the CACL.
- ✓ Class I Specified Chemical Substances under the CACL are subject to regulatory measures such as
 - prior permission required for manufacture/import (*virtually prohibited*)
 - prohibition of import of products using them
 - prohibition of any usages other than those specified by a Cabinet Order
 - recall of products using them (if necessary)
 - etc.



Before the implementation of new regulatory measures on the 9 new POPs, the state of manufacture, import, use, etc. was researched (March to April 2009)

Market research on manufacture etc. of the new POPs

- Among the 9 new POPs, only PFOS, its salts and PFOS-F have been manufactured/imported during the past 3 years (April 2006 to May 2009) in Japan.
- As for the continuing uses of PFOS and its salts, no alternatives are known for the production of (1) Etching agent, (2) Photo-resist for semi-conductor and (3) Photographic film for industry.
- No business is planning to manufacture, import or use of PFOS-F after FY 2010.
- The use of fire fighting foam using PFOS and its salts continues even after April 2010.

2. Amendment to the CSCL

Key Points of Amendment of the CSCL in 2009

(1) Designation for Class I Specified Chemical Substances

The 9 new POPs including PFOS, its salts and PFOS-F are designated as the Class I Specified Chemical Substances. (*Enforced in 1 April 2010*)

(2) Import-prohibited Items

The import of 14 articles is prohibited. (*Enforced in 1 May 2010*)

[PFOS and its salts]

- Aviation hydraulic fluids
- Spinning oil
- Etching agent for processing of metal
- Etching agent for semi-conductor production (exclude the compound-semi-conductor which makes it possible for the radio equipment to send and receive an equal to or more than 3 MHz frequency electric wave)
- Surface preparation agent or its preparation additives for metal plating
- Anti-reflective coating for semi-conductor production
- Abrading agent
- Fire extinguisher, fire-extinguishing chemical for fire extinguisher and fire fighting foam
- Insect baits (limited to insecticides for control of termites or ants)
- Photographic paper

[Tetrabromodiphenyl ether and Pentabromodiphenyl ether]

- Paints
- Adhesives

(3) Essential Uses

Class I Specified Chemical Substances should not be used in principle; however, the following exceptional uses would be acceptable. *(Enforced in 1 April 2010)*

Essential Uses of Class I Specified Chemical Substances

[PFOS or its salt]

- Production of etching agent (limited to ceramic filter or the compound-semi-conductor which makes it possible for the radio equipment to send and receive an equal to or more than 3 MHz frequency electric wave)
- Production of photo-resist for semi-conductor
- Production of photographic film for industry

Those who use Class I Specified Chemical Substances in their articles shall follow the technical standards and implement labeling to prevent the environmental pollution. *(Enforced in 1 October 2010)*

Articles with the Class I Specified Chemical Substances which shall conform to the technical standards and labeling

[PFOS or its salt]

- Production of etching agent (limited to ceramic filter or the compound-semi-conductor which makes it possible for the radio equipment to send and receive an equal to or more than 3 MHz frequency electric wave)
- Photo-resist for semi-conductor
- Photographic film for industry
- fire extinguisher, fire-extinguishing chemical for fire extinguisher and fire fighting foam (for the time being)

3. Establishment of the relevant Ordinances and a technical guideline

Establishment of the relevant Ordinances of CSCL in 2010 *(Enforced in 1 October 2010)*

(1) Technical standards concerning articles using PFOS and its salts

- PFOS and its salts
- Etching agents for semiconductors (limited to voltage filters and high-frequency compound semiconductors to allow radio equipment to transmit waves of 3 megahertz or higher.)
- Semiconductor resists
- Photo films for industrial purposes

(2) Technical standards concerning fire extinguisher, fire-extinguishing chemical for fire extinguisher and fire fighting foam using PFOS and its salts

(3) Mandatory labeling on articles using PFOS and its salts

- PFOS and its salts
- Etching agents for semiconductors (limited to voltage filters and high-frequency compound semiconductors to allow radio equipment to transmit waves of 3 megahertz or higher.)
- Semiconductor resists
- Photo films for industrial purposes
- Fire extinguishers, agents for fire extinguishers and fire-extinguishing foam

Technical guideline for the environmentally sound management of PFOS wastes *(in September 2010; revised in March 2011)*

A technical guideline was established for the disposal of the waste consisting of, containing or contaminated with PFOS and its salts under the Waste Management and Public Cleansing Law.

The goals for the destruction and irreversible transformation methods

- Destruction efficiency of PFOS wastes (no less than 99.999%)
- Upper limit of emission levels of PFOS and its salts in effluent (no greater than 2 µg/L) and residues (no greater than 3 mg/kg) after the treatment
- Upper limit of emission levels of hydrogen fluoride in exhaust gas (5 mg/m³N) and effluent (15 mg/L for seas; 8 mg/L for the other public waters) after the treatment

○ **Incineration at about 850 degrees centigrade or more could meet these requirements.**

○ **Each treatment facility must confirm its ability to fulfill the above requirements before performing the treatment.**

Thank you for your kind attention!

Website (MOE Japan)

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