

Food Packaging Regulations and planned measures to support using recycled plastic in Food industry

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the Thailand stakeholder consultation on reducing marine litter by addressing the management of the plastic value chain in south East Asia
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OUTLINE

- **Overall Regulations of Food Contact Materials in Thailand.**
- **Thai FDA charged with Food Safety Control and Food Packaging.**
- **Planned Measures for recycled plastic in Food Packaging.**

FOOD CONTACT MATERIALS REGULATION IN THAILAND

Chain of FCM Control

Polymer resin /
Raw materials manufacturing



Polymer resin /
Raw materials

Food contact article manufacturing



Processing

Food packaging

Households / utensil / apparatus

Retailer / Market

Food Manufacturers



Use packaging in
food manufacturing

Regulatory Agencies and Roles


[Ministry of Industry]

Thai Industrial Standards Institute (TISI) 

- Control : material manufacturer
- Regulation (voluntary standard)
 - Materials standard

[Ministry of Industry]

Thai Industrial Standards Institute (TISI) 

- Control : packaging manufacturer
- Regulation (mandatory and voluntary standard)
 - Quality standards for food packaging / Households / utensil / apparatus (including labeling) 

[The Prime Minister's Office]

Office of the Consumer Protection Board (OCPB) 

- Control : Packaging Manufacturer
- Regulation (mandatory standard)
 - controlling of labeling of plastic container

[Ministry of Commerce Thailand]

Department of Foreign Trade (DFT) 

- Control : Packaging Importer
- Regulation (mandatory standard)
 - Controlling measure for importing ceramic container and enamelware

[Ministry of Public Health]

Food and Drug Administration (Thai-FDA) 

- Control : Food manufacturer
- Regulation (mandatory standard)
 - food containers standard to enforce food manufacturer

REGULATORY AGENCIES AND ROLES

[Ministry of Public Health]

Food and Drug Administration (Thai-FDA)



- Control : Food manufacturer
- Regulation (mandatory standard)

Quality standards for food packaging [*General requirements, Chemical-safety requirements*]

Notification No.92/2528 (1985)

**Food Container
Ceramic Container
Enameled Metal Container**

Notification No. 295/2548 (2005)

Plastic Container

Notification No.369/2558 (2015)

**Feeding Bottles and
Milk Containers
for Infants and Young Children**

- Mandatory to food manufacturer

Food manufacturer must use food container which comply with the Notification of the MOPH

- Declare type of plastic or container
- Self-certify that qualities or standard of plastic or container is comply with Notification (No.92 / No.295)
 - Submit analysis report of food packaging (in case pre-marketing approval for the registrations of specially controlled foods-*high risk foods*)
 - Keep an analysis report at manufacture

Plastic Food Packaging Regulation



Notification No. 295/2548 (2005)

Definition

Plastic packaging

An article used to contain food irrespective of whether it be used by putting or by wrapping the food or by any other methods, and it shall mean to include cover or stopper.

General Standard

- Must be Cleaned
- Shall not be contaminated with any pathogenic microorganisms
- Migrate hazard substances to food within the acceptable limit.
- Shall not release any color to food.

Specific Standard

- Impurities in Plastic Materials e.g. Heavy metals and Volatile substances
- Maximum levels for migration substances eg. Heavy metals and residue substances which evaporated in water.

Food Packaging Regulation by Thai FDA



Notification No. 295/2548 (2005)

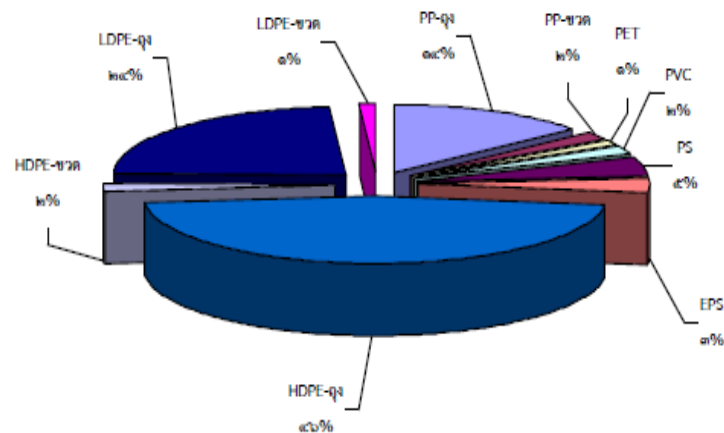
Plastic Container

Prohibition for use plastic food containers

1. Prohibited to use coloured plastic containers to contain food except
 - (1) Laminate plastic specifically the layer that does not directly with food.
 - (2) Plastic used the of contain fruits which the peel is not consumed.
 - (3) Other cases which approval has been obtained from Thai-FDA.
2. Prohibited to use plastic container made from recycled plastic except using for packing fruits which the peel is not consumed.
3. Prohibited to use plastic containers which is used to contain or pack fertilizer, toxic substances or other hazardous substances to health.
4. Prohibited the use of plastic containers made for containing material other than food or a plastic container with a picture, design or statement that could mislead in important information of food in the container.

Plastic Wastes in Thailand

- More plastic was produced over the last 10 years about 2 million ton per year with more than half are food packaging.
- There is an emphasis throughout Thailand on increasing the uses of recycled plastic including Food Packaging.



ที่มา : โครงการสำรวจและวิเคราะห์องค์ประกอบขยะมูลฝอยของเทศบาลทั่วประเทศ, ๒๕๔๗

However,

There are several reasons that Thai FDA concerned with the use of recycled plastic materials in food packaging including:

- 1) **contaminants from the post consumer material** may appear in the final food packaging which made from the recycled material.
- 2) recycled post-consumer material not regulated for food packaging use **may be incorporated into food packaging** supply chain, and
- 3) **some adjuvants** in the recycled plastic may not suitable for food packaging use.

Supply Chain of recycled plastic material use for food packaging Control

- [Ministry of Natural Resources and Environment]

- Pollution Control Department (PCD)
- Department of Environmental Quality Promotion (DEQP)

- [Ministry of Public Health]
- Department of Health (DOH)

- [Ministry of Interior]
- Department of Local Administration (DLA)
- Industries

Waste sorting



Recycling process



Recycled plastic



Food packaging manufacturing



Food packaging made from recycled plastic



- [Ministry of Industry]
- Thai Industrial Standards Institute (TISI) (recycling manufacturer control)
- [Ministry of Industry]
- Department of Industrial Works (DIW) (manufacturer registration, plastic flake control)

- [Ministry of Industry]
- Thai Industrial Standards Institute (TISI) (materials standard)

- [Ministry of Industry]
- Thai Industrial Standards Institute (TISI) (packaging manufacturer control)
- [Ministry of Industry]
- Department of Industrial Works (DIW) (manufacturer registration)

Plastic waste



- [Ministry of Industry]
- Thai Industrial Standards Institute (TISI) (food packaging manufacturer control, food packaging standard, labeling)
- [Ministry of Public Health]
- Food and Drug Administration (Thai-FDA) (food manufacturer control, requirement of use and food packaging standard)
- [The Prime Minister's Office]
- Office of the Consumer Protection Board (OCPB) (food packaging labeling)

Challenges in Safety Control of Recycled Plastic Materials in Food Packaging



Recycling process

Recycled plastic materials



Food packaging manufacturers



Food Packaging

Supported Measures

- standard for recycled plastic pellets
- Recycling manufacturer control (the efficient of the recycling process and safety evaluation of recycled plastic)
- Waste sorting management

- Quality assurance system or Good Manufacturing Practice
- Standard for recycled plastic pellets

- Developing standard for Food packaging made from recycled plastic
- Safe, Do not migrate toxic substances in amount that may have effects to health
- Labeling of packaging

Authorities

TISI DIW
PCD DEQP DOH DLA

TISI DIW

TISI FDA OCPB

Collaboration between the relevant authority

Technical Guidance or Guideline for recycle plastic materials safety evaluation

- Guidance for industry
- Guideline for relevant authorities
- Guideline for Risk assessors

Set up or revising the relevant regulations through out the supply chain

Developing plan for monitoring and inspection

Capacity building for risk assessors for manufacturing and recycled materials safety evaluation

Capacity building for Laboratories

Planned Measures for use of Recycled Plastic Materials in Food Packaging

- To support the Thailand's Roadmap on Plastic Waste Management, Thai FDA preparing a revision of Notification of Ministry of Public Health with the cooperation of private and academic sectors;
- to allow recycle plastic material use for food packaging.
 - to begin with PET that meets the need from private sector.
 - in order to address the safety concerns, FDA will considers each proposed use of recycled plastic on a case-by-case basis and based on scientific evidences.





THANK YOU

Food and Drug Administration

Ministry of Public Health

<http://www.fda.moph.go.th>

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