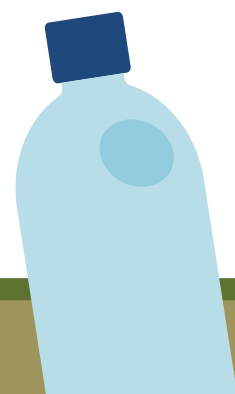


REGULATION ON PLASTIC FOOD PACKAGING IN THAILAND

31.03.2025



Food Contact Materials Regulations and Standards in Thailand

Food Packaging Supply Chain

Polymer resin /
Raw materials manufacturing



Polymer resin /
Raw materials

Food contact article manufacturing



Processing

Food packaging

Households / utensil / apparatus

Consumer

Food Manufacturing



Use packaging in
food manufacturing

Regulatory Bodies



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

Industrial Product
Standard Act B.E. 2511

- Control : material manufacturer
- Regulation (voluntary standard) on Quality, Safety and Labeling



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

- Control : packaging manufacturer
- Regulation (mandatory and voluntary standard) on Quality, Safety and Labeling



[The Prime Minister's Office]
Office of the Consumer Protection Board (OCPB)

Consumer
Protection Act
B.E. 2522

- Control : Packaging Manufacturer
- Regulation (mandatory standard) on Labeling



[Ministry of Commerce]
Department of Foreign Trade (DFT)

Export and Import of
Goods Act, B.E. 2522

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



[Ministry of Public Health, MOPH]
Food and Drug Administration (Thai-FDA)

Food Act, B.E. 2522

- Control : Food manufacturer
- Regulation (mandatory standard) on Quality, Safety

THE FOOD ACT, B.E. 2522 (1979)

Subject Matter and Scope:

- ❑ *The Food Act B.E 2522 is the major law protecting consumers against unsafe, impure, and fraudulently presented food.*
- ❑ *It empowers the public health minister to promulgate regulations on various matters relative to safety, quality, hygiene, food processing, and labeling.*

The powers of the minister of public health; Section 6 (6)

“Laying down the quality or standard of food packaging (or container), the use of food packaging, and the prohibition of any material to produce food packaging.”

Definition; Section 4:

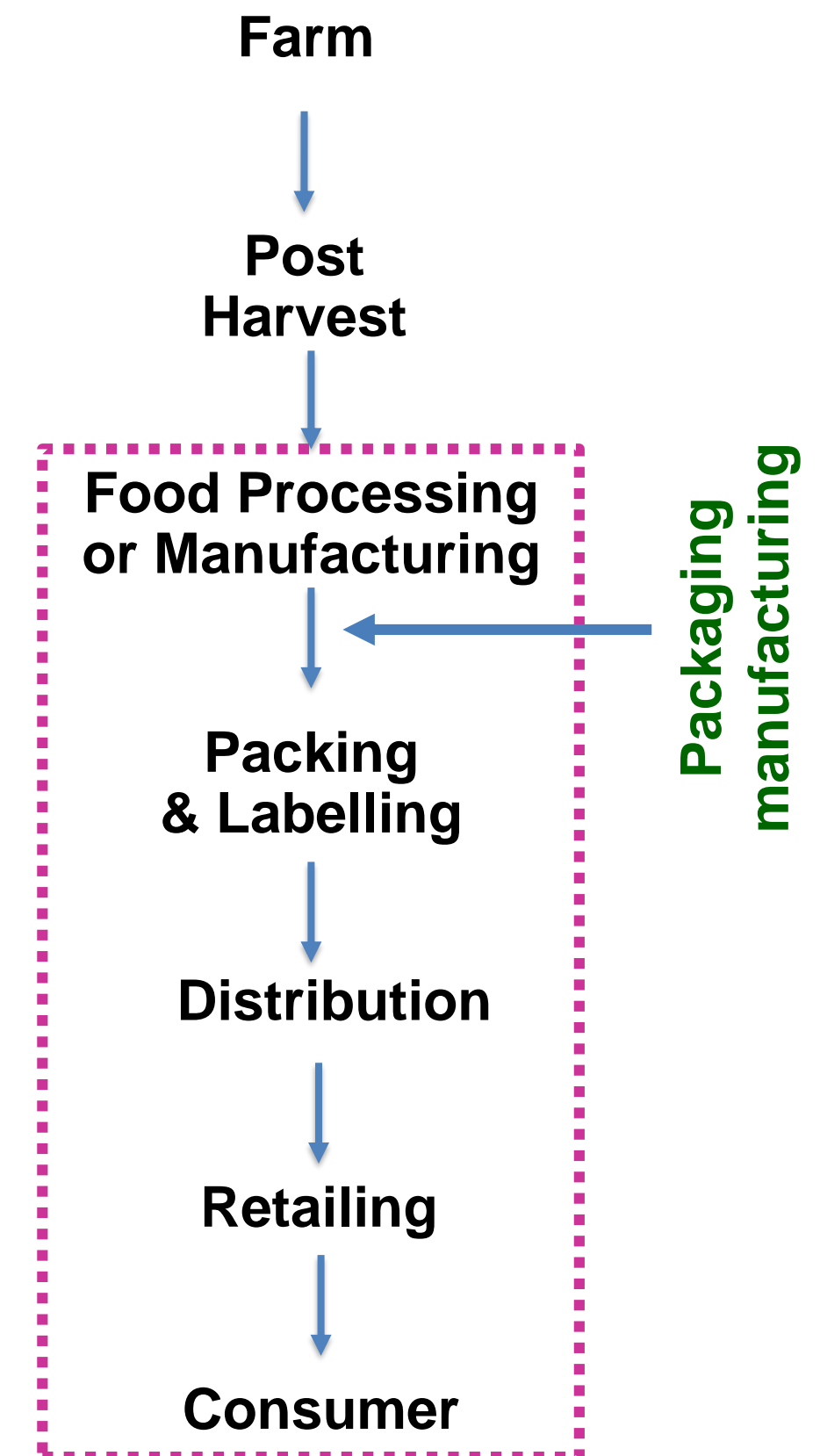
Food Container/ Packaging means any object that is used to hold or wrap food by whatever means.



the Notification of MOPH on Food Packaging

Powers of Authorized Officers

- ❖ Inspect any stage of the food processing, manufacturing, importing, distribution, and retailing.
- ❖ Enter a premises, seize and detain foods.
- ❖ Take a sample of food or food packaging for testing to ensure compliance with food regulations.
- ❖ Take action against a food business operator who does not comply with the food regulations.



Implementation and Enforcement



the Notification of MOPH on Food Packaging

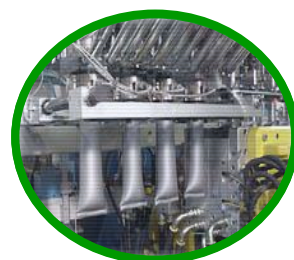
- Enforcement: **Food manufacturers and Food Importer**
- Packaging and containers shall comply with the requirements laid down in the Notification of MOPH



Raw materials



Converters



Packaging Suppliers/ Retailers



Food Manufacturers



- **The Notification of MOPH on Food Packaging**

Laying down the Safety and Quality standards for Finished Articles/Packaging that are intended for use by food producers

**Notification of MOPH
No.92/2528 (1985)**

**Ceramic Container,
Enameled Metal Container
and Food Packaging other than
Plastic packaging**

**Notification of MOPH
No. 435/2565 (2022)**

Plastic Food Packaging

- **NOTIFICATION OF THE MINISTRY OF PUBLIC HEALTH**
- **(NO. 435), B.E. 2565 (2022)**
- **Issued under The Food Act, B.E. 2522 (1979)**
- **Re: Specification of Qualities or Standards of Plastic Food Packaging**



Notification of MOPH No. 435/2565 (2022)

<https://food.fda.moph.go.th/food-law/category/package>

1. NOTIFICATION OF MOPH (NO. 435), B.E. 2565 (2022) Issued under The Food Act, B.E. 2522 (1979)

Re: Specification of Qualities or Standards of Food Packaging made from Plastic (available in Thai and English version)

2. NOTIFICATION OF FOOD AND DRUG ADMINISTRATION (FDA) (Thai version)

2.1 Re: Explanation of Notification of MOPH (No. 435)

2.2 Re: Analysis of Plastic Food Packaging

2.3 Re: Guideline for the Test of Food Packaging, Feeding Bottles, and Milk Containers for Infants and Young Children

2.4 Re: Guideline for Food Packaging Safety Assessment

2.5 Re: List of the assigned agency for Food Packaging Safety Assessment

3. Guideline (Thai version)

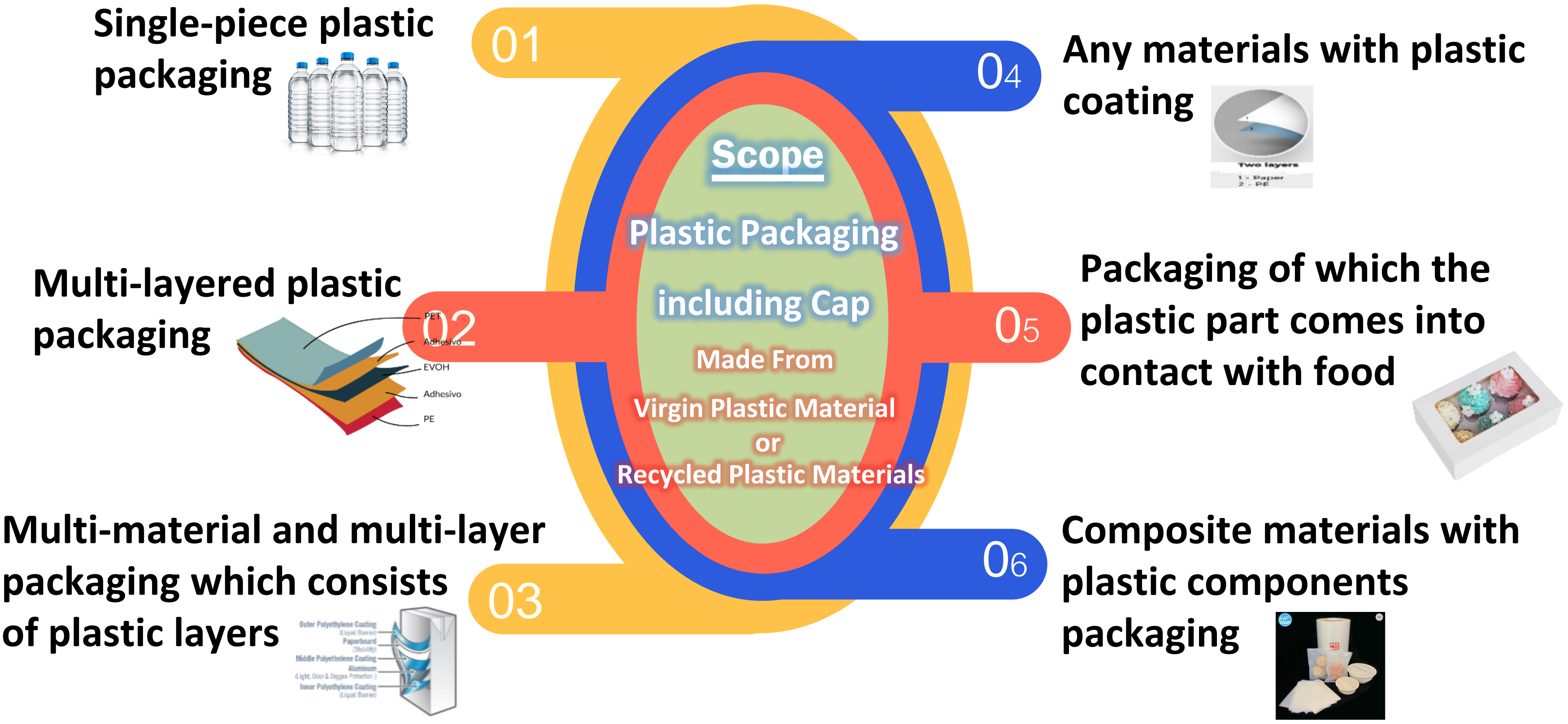
3.1 The Safety Assessment Application Manual Re: the Quality or Standard and Safety Assessment of Food Packaging and Plastic Food Packaging

3.2 Guidance on Safety Assessment and Efficiency Evaluation of Mechanical Recycling Process and Recycled Plastic Resin for Food Contact Materials

3.3 Guideline for Preparing Documents and Evidence for Submitting Report on safety assessment of recycled plastic in the production of Food Packaging.



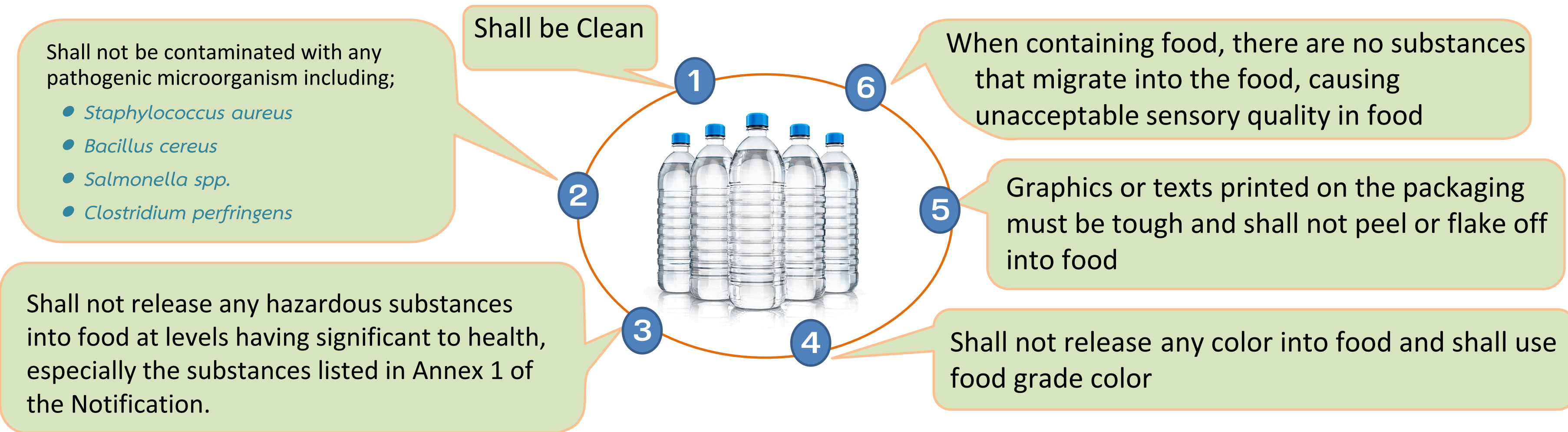
Notification of MOPH No. 435/2565 (2022)





Notification of MOPH No. 435/2565 (2022)

General Requirements



Guidelines for Consideration: In case substances other than those specified in Annex 1;

- If that substance is listed in the EU 10/2011 and its amendments, the quantity shall not exceed the limits specified.
- If that substance is not listed in EU 10/2011 and the detected quantity exceeds 0.01 mg/kg, a safety assessment must be conducted on a case-by-case basis, and the chemical must not be mutagenic, carcinogenic, or toxic to reproduction.

Prohibition of reusing packaging for food

- ☐ Packaging used to contain fertilizers, toxic substances, or any substance that may harm health.
- ☐ Packaging that had been used to contain other than food or have any image, mark, or statement that causes misunderstanding to the food contained in the packaging



Notification of MOPH No. 435/2565 (2022)

Specific Requirements

❑ **Standard of migration limits** for certain type of plastic food packaging.

Plastic type used for food packaging		Type of plastic packaging used for milk or milk products*
<ul style="list-style-type: none">• Polyvinyl chloride• Polyethylene• Polypropylene• Polystyrene• Polyvinylidene chloride• Polyethylene terephthalate	<ul style="list-style-type: none">• Polycarbonate• polyamide / Nylon• Polyvinyl alcohol• Polymethyl methacrylate• Polymethyl pentene• Melamine-formaldehyde polymer	<ul style="list-style-type: none">• Polyethylene• Polypropylene• Polystyrene• Polyethylene terephthalate• Ethylene 1-alkene copolymerized resin

* Milk or Milk products : fermented milk, modified milk for Infant , flavored milk, and cream. [liquid form]. But not include milk product in powder or dry form.

❑ Plastic food packaging other than these lists **must undergo safety assessment to set up the Migration limits.**

- Document Preparation
 - Submit Safety Assessment Documents

- The Safety Assessment Application Manual
 - e-submission

e-submission - **SKYNET Thai FDA** ➤ <https://privus.fda.moph.go.th/>





Notification of MOPH No. 435/2565 (2022)

Specific Requirements

Migration Limit (Annex 1 of the Notification); will be enforced on 19 June 2025 (B.E. 2568)

☐ **For all Plastic type**

- Overall Migration Limits; OML) $\leq 10 \text{ mg/dm}^2$
- Migration Limits for Metals (19 types)
- Migration Limits for Primary Aromatic Amines (PAAs),
Group 1 plastic packaging which added or used of 22 Azo-colorants,
Group 2 plastic packaging which uses PAAs as raw material.

☐ Specific Migration Limits; SML

For certain plastic type : PVC, PVDC, PC, PA, PMMA, melamine, and PET

Note: Only substances used in the production of plastic can be analyzed by PAAs (table 3.2) and lists of specific migrations for PET (table 4.7). To support the clarification of the chemicals under analysis exemption, there must be verifiable documentation to prove the use of chemicals.

(reference: Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food)

Notification of MOPH No. 435/2565 (2022)

The quality requirements or standards during the grace period [until 18 June 2025 (B.E. 2568)]

Standards of plastic packaging (**Annex 2 of the Notification**);

- ☐ **Material test**
- ☐ **Migration Limit**

Guidelines for Analytical Methods of Migration Limit According to Annex 1 of the Notification

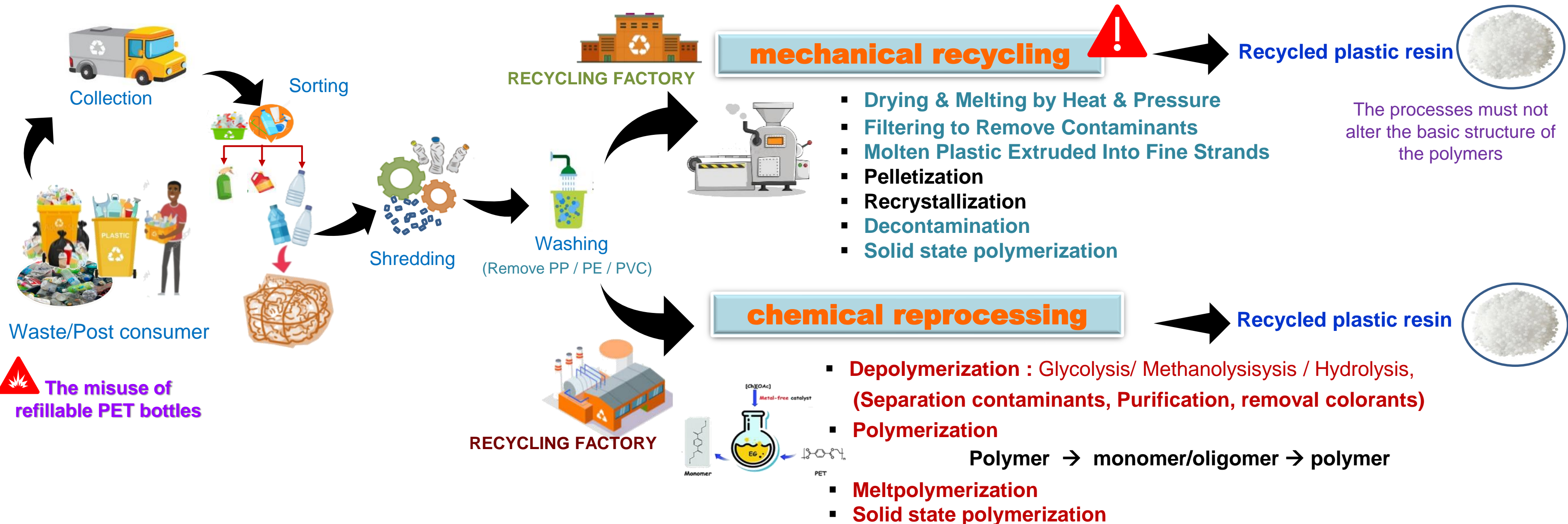
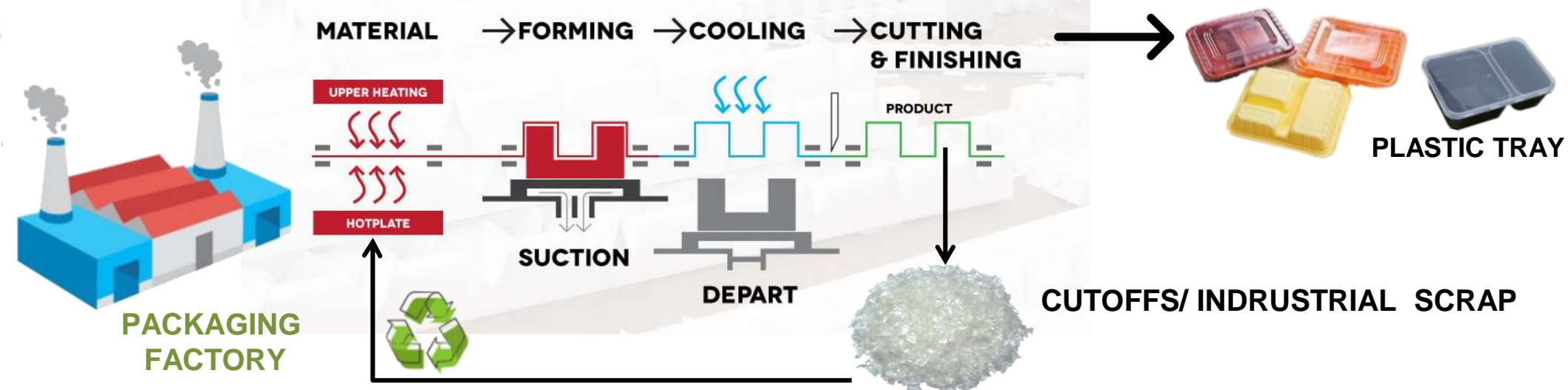
→ **NOTIFICATION OF FDA** Re: Analysis of Food Packaging made from Plastic

- **Analysis method**
- **Food simulants**
- **Test condition**
- **Guidelines for Testing Procedures.**
 - Guidelines for testing food packaging/Containers not yet in contact with food or already in contact with food,
 - Selection of Appropriate Testing Methods for Packaging Types
 - Testing for Repeated use

primary recycling : pre-consumer scrap



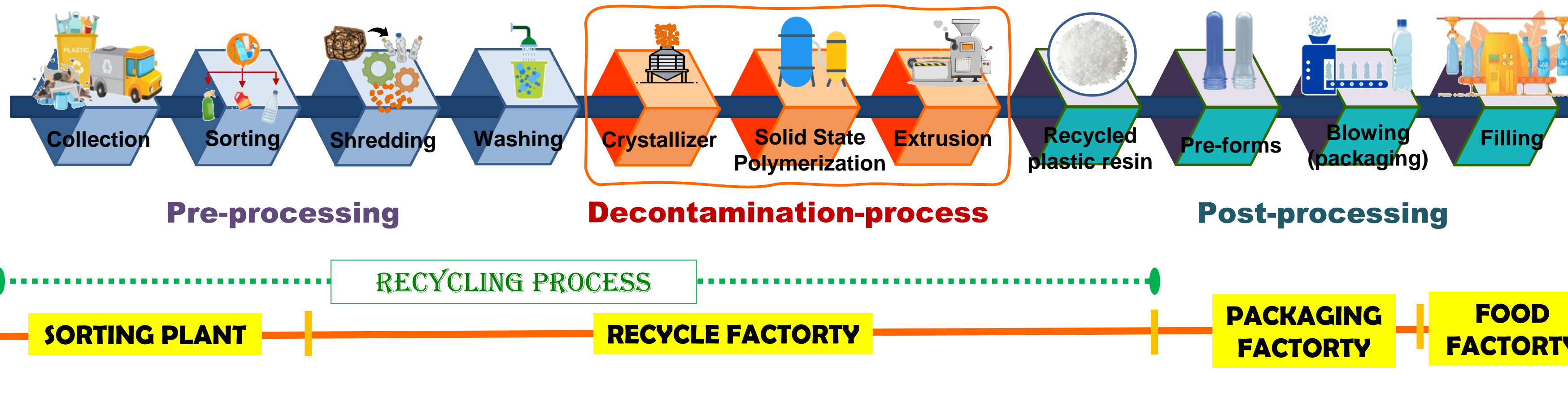
Type of recycling process



Notification of MOPH No. 435/2565 (2022)



mechanical recycling



Chemical contaminants might come into contact with the post-consumer plastic feedstock because of consumer misuse of food packaging.



The recycling process must effectively remove contaminants from the feedstock.

shall be evaluated the effectiveness of the recycling process by surrogate contaminant testing



Guidance on Safety Assessment and Efficiency Evaluation of Mechanical Recycling Process and Recycled Plastic Resin for Food Contact Materials

- Scope:**
- For evaluation of the efficacy of the mechanical recycling process and safety assessment of recycled plastic resin,
 - The purpose of this document is to highlight the issues that Thai FDA considers during the manufacturer's evaluation of a recycling process for producing material suitable for food-contact applications.

Criteria;

Recycled Plastic Manufacturers

Surrogate Contaminant Testing;

: is the worst-case scenario in which plastic feedstock is contaminated with chemicals (surrogate contaminants),
: to evaluate the effectiveness of the recycling process in reducing or eliminating surrogate chemical contaminants.

Maximum contaminant concentration $\leq 210 \mu\text{g/kg}$

Submit document

Follow as the lists of required Data and Information

The Safety Assessment Agency assigned by FDA

Risk Assessment Center for Food Packaging

- ❑ Packaging and Material Technology Department, Faculty of Agro-Industrial, Kasetsart University
- ❑ Thailand Risk Assessment Center (TRAC), Institute of Nutrition, Mahidol University

The use of packaging made from recycled plastic material.



Plastic resin used in packaging is obtained from mechanical recycling.



- **Only PET**
- Plastic resin comes from the recycling process that has undergone safety assessment and efficiency evaluation. The safety assessment report from a safety assessment agency assigned by the FDA shall be submitted to the FDA
- **OR plastic resin is certified by the Thai Industrial Standards Institute (TISI)**

Food use recycled plastic produced in Thailand

- Submit the report on the efficiency evaluation of the recycling process from recycling technology manufacturers.

Food / Imported food use recycled plastic produced form foreign country

- Submit the documents or report on efficiency evaluation from the relevant agency in the country where the product was manufactured or a country with a reliable safety assessment system.



Plastic food packaging



The quality or standards comply with the qualities or standards in this notification

recycled plastic = virgin plastic

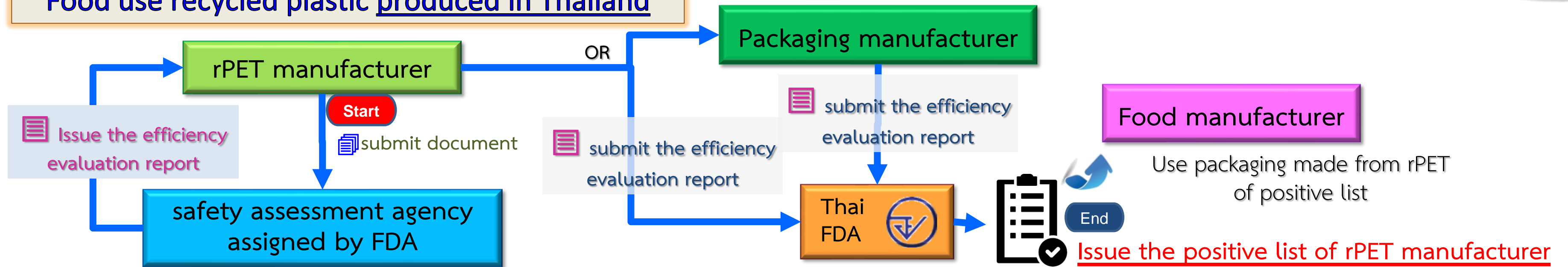
Plastic resin used in packaging is made from pre-consumer scrap or chemical recycled plastic material.



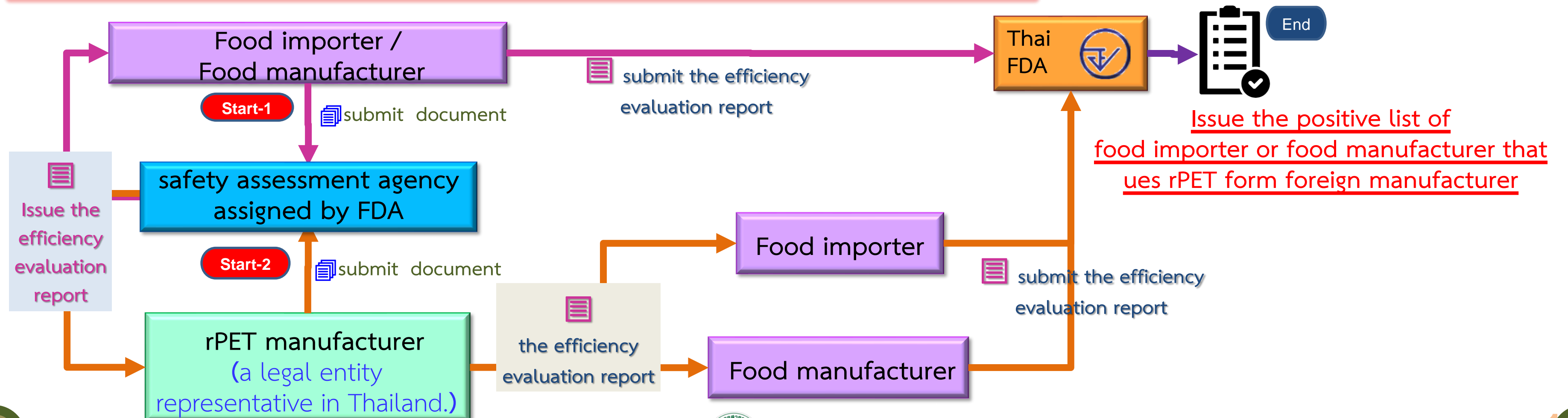
- **All types of plastics listed in this notification**
- **Do not require undergoing safety assessment and efficiency evaluation for the recycling process**



Food use recycled plastic produced in Thailand



Food / Imported food use recycled plastic produced form foreign country

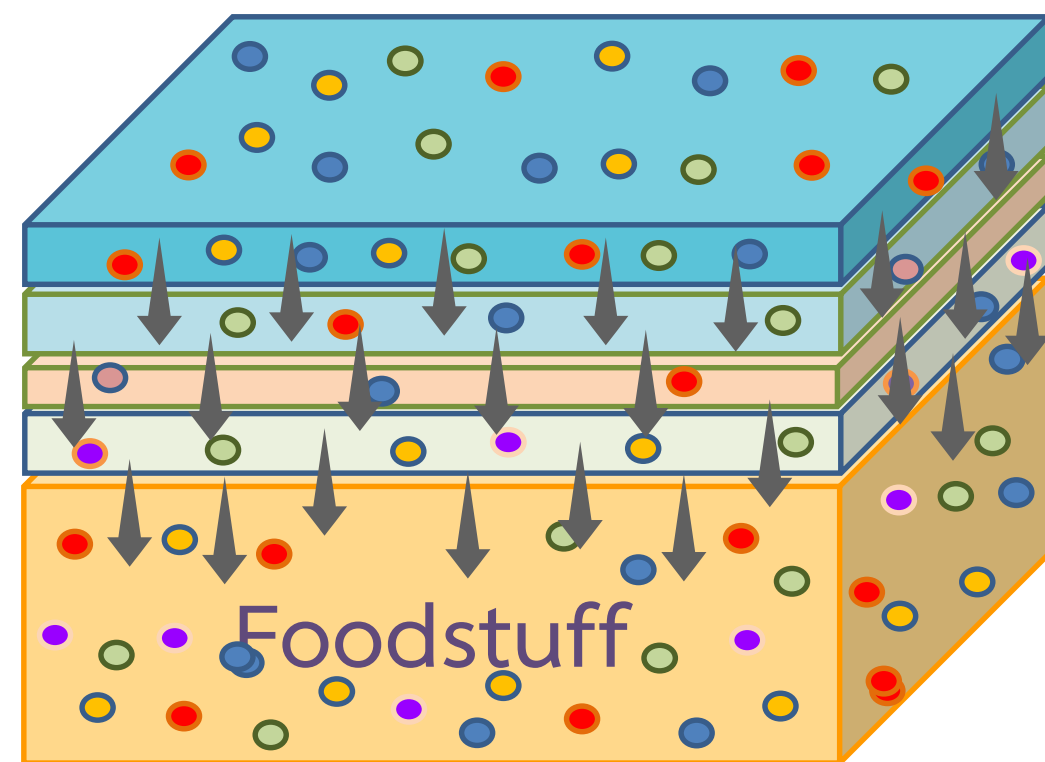




The use of plastic packaging containers with functional barrier.

Functional barrier : a layer or material in a packaging that prevents migration of substances in general and non-authorized substances

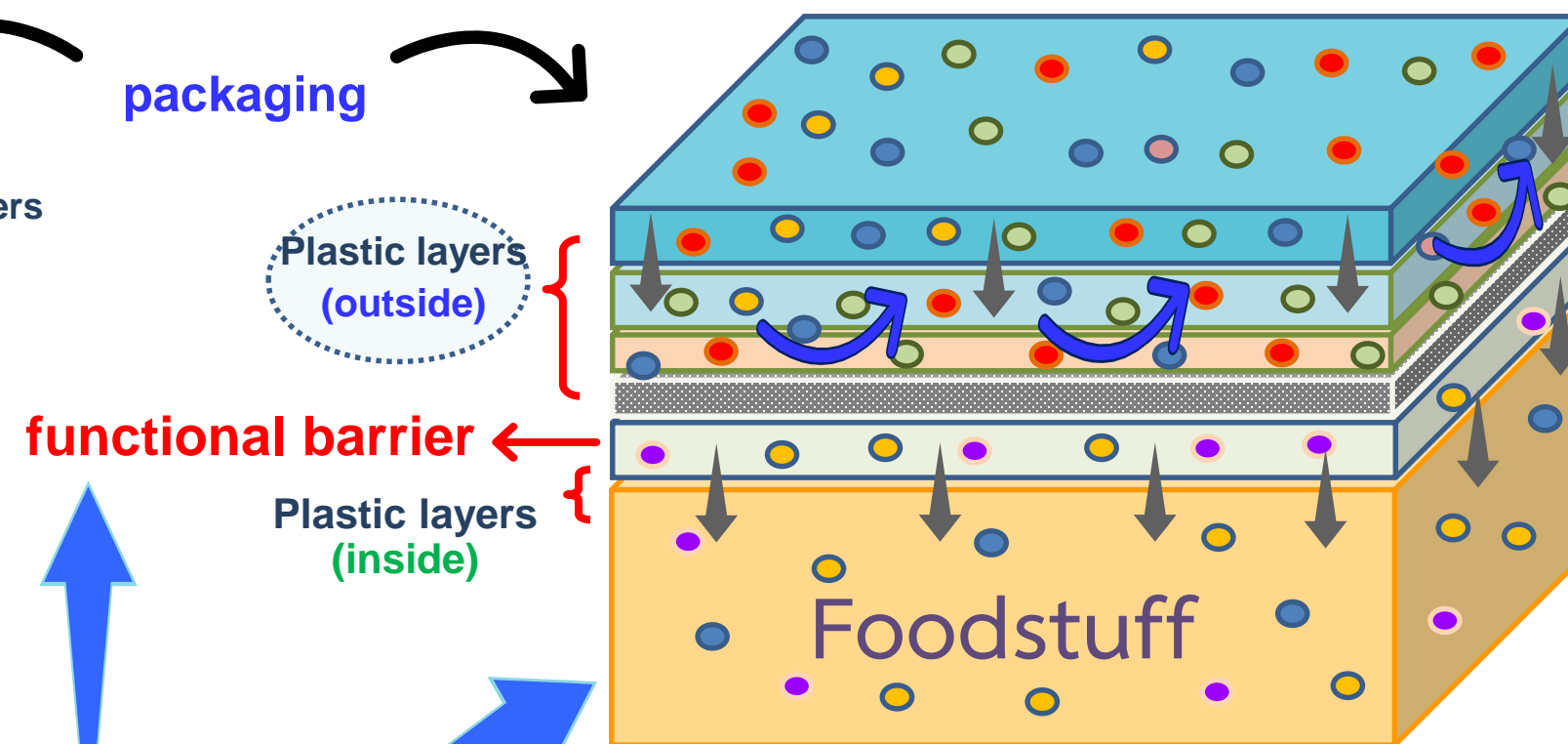
migration of packaging **without** functional barrier



Plastic layers

packaging

migration of packaging **with functional barrier**



functional barrier

Plastic layers (inside)

If functional barrier can prevent the migration of substances from the material layer in front of the functional barrier into the food (the migration of substances to food ≤ 0.01 mg/kg), The layer plastic in front of a functional barrier is exempt from conforming to the qualities or standards laid down in Annex 1 of this Notification, and undergone safety assessment and efficiency evaluation for mechanical recycling process . as well as the submission of safety assessment for types of plastics is not specified in this Notification.

" THANK YOU "



สำนักงานคณะกรรมการอาหารและยา
กระทรวงสาธารณสุข