13	STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS (2024-25) EIGHTEENTH LOK SABHA

MINISTRY OF CHEMICALS AND FERTILIZERS
(DEPARTMENT OF CHEMICALS AND PETROCHEMICALS)

HEALTH HAZARDS DUE TO USE OF COMPROMISED/SUBSTANDARD QUALITY OF FOOD-GRADE PLASTICS AND THEIR EXPOSURE TO EXTREME INDIAN CLIMATIC CONDITIONS

THIRTEENTH REPORT

LOK SABHA SECRETARIAT

NEW DELHI

AUGUST, 2025/ SHRAVAN, 1947 (SAKA)

CC&F.No. 193

THIRTEENTH REPORT

STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS

(2024-25)

(EIGHTEENTH LOK SABHA)

MINISTRY OF CHEMICALS AND FERTILIZERS

(DEPARTMENT OF PHARMACEUTICALS)

HEALTH HAZARDS DUE TO USE OF COMPROMISED/SUBSTANDARD QUALITY OF FOOD-GRADE PLASTICS AND THEIR EXPOSURE TO EXTREME INDIAN CLIMATIC CONDITIONS

(2024-25)

Presented to Lok Sabha on 20 August, 2025

Laid in Rajya Sabha on 20 August, 2025

LOK SABHA SECRETARIAT

NEW DELHI

AUGUST, 2025/ SHRAVAN, 1947 (SAKA)

CONTENTS

COMPOSITION OF THE STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS (2024-25)

Shri Azad Kirti Jha - Chairperson

MEMBERS

2. Shri Brijmohan Agrawal
3. Shri Ajay Bhatt
4. Shri Robert Bruce C.
5. Shri Bharatsinhji Shankarji Dabhi
6. Smt. Kriti Devi Debbarman
7. Dr. Kalyan Vaijinathrao Kale
8. Shri Malvinder Singh Kang
9. Shri Babu Singh Kushwaha
10. Shri Utkarsh Verma Madhur
11. Shri Praveen Patel
12. Dr. Sambit Patra
13. Shri Balram Naik Porika
14. Shri Sachithanantham R.
15. Shri Eatala Rajender
16. Shri Rajesh Ranjan
17. Shri Daggumalla Prasada Rao
18. Shri Tharaniventhan M.S.
19. Shri Nalin Soren
20. Dr. Ricky Andrew J. Syngkon
21. Shri Shivmangal Singh Tomar

RAJYA SABHA

22. Shri Subhash Barala
23. Dr. Bhagwat Karad*
24. Shri Subhash Chandra Bose Pilli
25. Shri Naresh Bansal[&]
26. Shri Sanjay Raut
27. Shri Meda Raghunadha Reddy
28. Dr. Kalpana Saini
29. Shri Arun Singh
30. Shri Akhilesh Prasad Singh
31. Shri Tejveer Singh

.

SECRETARIAT

1.	Smt. Maya Lingi	:	Joint Secretary
2.	Ms. Miranda Ingudam	:	Director
3.	Shri Kulvinder Singh	:	Deputy Secretary

INTRODUCTION

I, the Chairperson, Standing Committee on Chemicals & Fertilizers (2024-25) having been authorized by the Committee do present on their behalf, this Thirteenth Report (Eighteenth Lok Sabha) on 'Health hazards due to use of compromised/substandard quality of food-grade plastics and their exposure to extreme Indian climatic conditions' pertaining to the Ministry of Chemicals and Fertilizers (Department of Chemicals and Petrochemicals).

2. The Committee had a briefing by the representatives of the Department of Chemicals and Petrochemicals on 6th January, 2025 and oral evidence of the representatives of the Department of Chemicals and Petrochemicals, the Bureau of Indian Standards (BIS) and Food Safety and Standards Authority of India (FSSAI) on the subject on 9th May, 2025.

3. The Committee considered and adopted this Report at their sitting held on 18th August, 2025.

4. The Committee wish to express their thanks to the representatives of the Ministries/Departments of the Government of India for tendering evidence and placing before the Committee all the requisite information related to examination of the subject.

5. The Committee also place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

6. For ease of reference and convenience, the Observations/ Recommendations of the Committee have been printed in bold letters in the body of the Report.

New Delhi;
18 August, 2025
27 Shravan, 1947(Saka)

Azad Kirti Jha
Chairperson,
Standing Committee on
Chemicals and Fertilizers.

REPORT
Part – I

NARRATIVES

"Food grade" means material made of substances which are safe and suitable for food packaging applications and shall not endanger human health or result in unacceptable change in the composition of the food or properties such as taste, smell, sight etc.

2. The Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers have informed that packaging of foodstuffs is a universally accepted method for avoiding contamination, maintenance of hygienic conditions, conservation and also for ease of transport, handling and sale of foodstuffs. Usage of plastics for food packaging is increasing both in quantum as well as in variety. A number of plastics raw materials are available in various forms such as sheets, sachets, containers of various shapes and sizes, both ordinary as well as co-extruded/composite type. Since there is always a possibility of migration of a part of the packaging material to the contents of the packed material due to intimate contact, it is essential that the formulation of the package should be selected with care to ensure that any such migration is at a minimum and substances which do migrate from the package to the packed material are within limits and cause no toxic hazards when consumed.

3. **Regulatory measures to control use of compromised / substandard quality of food-grade plastics:**

I. To consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto The Food Safety and Standards Act, 2006 was enforced. Under the act Food Safety and Standards (Packaging) Regulations, 2018(attached at Annexure-III) are issued to ensure that various packaging materials coming in contact with food materials are of standard quality and safe to use.

4. **Study on adverse effects of the plastic:**

Food Safety and Standards Authority of India (FSSAI) has funded a project entitled "Micro-and nano-plastics as emerging food contaminants: Establishing validated Methodologies and understanding the prevalence in different food. matrices". The project was started in March, 2024 to develop

and validate analytical methods to detect micro and nano-plastics in various food products and assess their prevalence and exposure levels in the country. The project duration is for 02 years and sanctioned to 03 research institutes:

1. CSIR-Indian Institute of Toxicology Research, Lucknow
2. ICAR-Central institute of Fisheries Technology (ICAR-CIFT), Kochi
3. Birla Institute of Technology and Science (BITS). Pilani

Objectives of the project:

1. Development and validation of analytical methods for identification and quantification of micro/nano- plastics in foods matrices
2. Inter- and intra-laboratory comparison of developed methods in identified food matrices
3. Surveillance and determination of exposure levels of micro-/nano-plastics in identified foods matrices

Deliverables:

- Development of standard protocol and preparation of SOPs for micro-/nano-plastics analysis
- Information on prevalence of micro-/ nano-plastics in various foods matrices.
- Better understanding of the exposure levels to micro-/nano-plastics in consumers.
- May help regulatory bodies for formulation of regulations and legislations.

The research project is under progress. Method validation for microplastic detection (PC, PET and Polystyrene) in packaged animal products (Chicken, Meat and Fish), beverages and packaged drinking water is completed. Sampling and analysis of the packaged food products from Rajasthan, Kerala and Uttar Pradesh is under progress.

5. **Food Safety and Standards (Packaging) Regulations, 2018:**

The Regulations provide for general packaging requirements including the materials or metals used and for packaging requirements for specific food products. The salient features of the regulations are:

- Every food business operator shall ensure that the packaging material used shall be in accordance with these regulations:
- Any material which comes in direct contact with food or likely to come in contact with food and used for packaging, preparation, storing, wrapping, transportation and sale or service of food shall be of food grade quality.
- Packaging materials shall be suitable for the type of product, the conditions provided for storage and the equipment for filling, sealing and packaging of food as well as transportation conditions.

- Packaging materials shall be able to withstand mechanical, chemical or thermal stresses encountered during normal transportation. In case of flexible or semi-rigid containers, an overwrap packaging may be necessary.
- Food products shall be packed in clean, hygienic and tamper-proof package or container.
- Every food business operator shall obtain the certificate of conformity issued by NABL accredited laboratory against these regulations for the packaging material which comes in direct contact with food or layers likely to come in contact with food to be used.

6. The Food Safety and Standards (Packaging) Regulations, 2018 have been issued to ensure that various packaging materials coming in contact with food materials are of standard quality and safe to use on being asked as to how the provisions of these Regulations are being implemented so that the food standards are enforced in the way it was contemplated, the Department submitted that Food Safety and standards Authority of India (FSSAI) had put the following safeguards in place, to minimize use of compromised and substandard quality of food grade plastics:

a) FSSAI has notified Food Safety and Standards (Packaging) Regulation, 2018. The regulation specifies the standards for the packaging materials for food inter alia plastic packaging material.
b) This regulation mandates that every Food Business Operators (FBOs) shall obtain the certificate of conformity for the packaging material which comes in direct contact with food or layers likely to come in contact with food. The certificate of conformity issued by NABL accredited laboratory for food grade material ensures that the substances used in material are safe and suitable for their intended use, and shall not endanger human health or result in unacceptable change in the composition of the food or organoleptic characteristics in Indian climatic conditions.
c) As per Food Safety and Standards (Licensing and Registration of Food Businesses) Regulation, 2011, only food grade packaging materials are to be used for primary packaging which comes in direct contact with the food.
d) The specific standards of different kind of plastic materials used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in Schedule – III (Annexure-D) of the ibid regulation.
e) The provisions under Schedule IV of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulation, 2011 explicitly provides that the food material be it raw, food ingredients or finished goods to be stored in appropriate conditions in controlled temperature, humidity and other environmental conditions to ensure food safety.

f) The Licensing Regulation also specifies that the storage instructions over food packaging should be followed by theFoodBusiness Operators (FBOs) at all stages in the food supply chain.
g) Furthermore, the Food Safety and Standards (Labelling and Display) Regulations, 2020 makes it mandatory for the labels to display the storage instructions in order to maintain the safety and integrity of food.
h) All these provisions are statutory in nature and are to be followed by the Food Business Operators, failing which attracts regulatory actions under the FSS Act 2006.
i) A stringent enforcement mechanism is in place to check & verify the compliance by the Food Businesses with the set standards, specification and requirements under the act.
j) FSSAI through its regional office and states/UTs regularly conducts inspections, audits, random sampling and surveillance. During these inspections, food grade packaging materials are also monitored. In all cases where non-compliance is observed during inspection, improvement notices are issued.

(Reply to Q. No. 1)

7. When asked as to how many cases of violation of provisions of the Food Safety and Standards (Packaging)) Regulations, 2018 have come to notice since the year 2018 and action taken for non-compliance it was submitted that FSSAI through its Regional Office and States/UTs regularly conducts inspections, audits, monitoring, random sampling and surveillance to check & verify compliance to the provisions as laid down under the Act and its regulations including the Food Safety and Standards (Packaging) Regulations, 2018.

8. In case of non-compliances observed during inspections, Improvement notices are issued and it is ensured that corrective measure are taken by the Food Business Operations (FBO) as per the provision under sec 32 of the Food Safety and Standards Act. During the year 2023-24, 5453 cases of non-compliance were found. The action taken on the non-compliance is placed at Annexure - II.

(Reply to Q. No. 2)

9. When asked to state the exact role and responsibilities of the Department of Chemicals and Petrochemicals in the implementation of the Food Safety and Standards (Packaging) Regulations, 2018 the Department submitted that the Department of Chemicals & Petrochemicals is entrusted with the responsibility of planning, development, control and assistance for the chemicals, petrochemicals, man-made fibres, synthetic rubber and plasticindustries.Department of Chemicals and Petrochemicals does not have any role in the implementation of the Food Safety and Standards (Packaging) Regulations, 2018. FSSAI is the implementing authority for Food Safety and Standards (Packaging) Regulations, 2018.

(Reply to Q. No. 3)

10. On a pointed query of number of cases of food safety hazards arising out of substandard packaging in plastic containers have come to the notice of the Department of Chemicals and Petrochemicals, the action taken by the Department in those cases and steps taken to stop recurrence of such unfortunate incidents in future. The Department in a written reply submitted that FSSAI is the implementing authority for Food Safety and Standards (Packaging) Regulations, 2018. DCPC is not entrusted with the implementation of FSSAI Regulation 2018.

(Reply to Q. No. 5)

11. On the role of FSSAI in the implementation of Food Safety and Standards (Packaging) Regulations, 2018, the Department submitted as follows:-

1. FSSAI plays a substantive role in the implementation of Food Safety and Standards (Packaging) Regulations, 2018by

    a) Notifying Regulations or by bringing amendment in regulations time to time.
    b) Verifying the compliance with the set standards through inspections and surveillance.
    c) Creating awareness through training of food handlers.

2. FSSAI through its regional office and states/UTs regularly conducts inspections, audits, monitoring, random sampling and surveillance to check & verify compliance to the provisions as laid down under the Act and its regulations including the Food Safety and Standards (Packaging) Regulations, 2018.
   In case of non-compliance regulatory actions are taken under the provisions of the Food Safety and Standards Act and rules laid down there under.
3. Creating awareness through training of food handlers on usage of food grade material for packaging of food items. Since 2017, FSSAI has trained around 22 lakhs Food handlers under Food Safety Training and Certification (FoSTaC) program which educates food handlers on usage of food grade material for packaging of food items as one of the important topic of training.

(Reply to Q. No. 6)

12. When asked as to how the Department coordinates with the FSSAI for effective implementation of the Food Safety and Standards (Packaging) Regulations, 2018, it was replied that the Food Safety and Standards Act, 2006 was made for laying down the science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto. The Food Safety and Standards Authority of India is established and entrusted with the responsibility of FSS Act. An expert committee has been constituted by FSSAI to develop a guideline/ advisory document regarding use of safe food packaging materials by various food service establishments like hotels/

restaurants / street venders etc.The department of Chemicals & Petrochemicals is participating in the same and assisting the FSSAI.

13. On being asked whether the Ministry of Health and Family Welfare is also involved in the implementation of the provisions of Food Safety and Standards (Packaging) Regulations, 2018, it was submitted that the Ministry of Health and Family Welfare is not directly involved in the implementation of the provision of Food Safety and Standards (Packaging) Regulation, 2018 and comes under the purview of FSSAI, which is a statutory body under the administrative control of Ministry of Health and Family Welfare.

(Reply to Q. No. 8)

14. As regards the demarcation in the roles and responsibilities of the Department, the FSSAI and the Ministry of Health and Family Welfare in the implementation of the provisions of Food Safety and Standards (Packaging) Regulations, 2018, the Department submitted as follows:-

(i) Role of Department of Chemicals and Petrochemicals(DCPC):

The Department of Chemicals & Petrochemicals is entrusted with the responsibility of planning, development, control and assistance for the chemicals, petrochemicals, man-made fibres, synthetic rubber and plastic industries. Department of Chemicals and Petrochemicals does not have any role in the implementation of the Food Safety and Standards (Packaging) Regulations, 2018.

(ii) Role of Food Safety and Standards Authority of India (FSSAI):

1. FSSAI plays substantive role in the implementation of the provisions of Food Safety and Standards (Packaging) Regulations, 2018 by :

    a) Notifying Regulations or by bringing amendment in regulations time to time.
    b) Verifying the compliance with the set standards through inspections and surveillance.
    c) Creating awareness through training of food handlers.

2. Further, FSSAI through its regional office and states/UTs regularly conducts inspections, audits, monitoring, random sampling and surveillance to check & verify compliance to the provisions as laid down under the Act and its regulations including the Food Safety and Standards (Packaging) Regulations, 2018. In case of non-compliance regulatory actions are taken under the provisions of the FSS Act and rules laid down there under.

3. Creating awareness through training of food handlers on usage of food grade material for packaging of food items. Since 2017, FSSAI has trained around 22 lakhs Food handlers under Food Safety Training and Certification (FoSTaC) program which educates food handlers on usage of food grade material for packaging of food items as one of the important topic of training.

(iii) Role of Ministry of Health and Family Welfare:

15. The implementation of provisions related to Food Safety and Standards (Packaging) Regulations, 2018 comes under the purview of FSSAI, which is a statutory body under the administrative control of Ministry of Health and Family Welfare.

(Reply to Q. No. 9)

16. When asked whether the Department was facing any problems/bottlenecks in the implementation of Food Safety and Standards (Packaging) Regulations, 2018, it was submitted that Department of Chemicals and Petrochemicals does not have any role in the implementation of Food Safety and Standards (Packaging) Regulations, 2018.

(Reply to Q. No. 10)

17. When asked whether the Food Safety and Standards (Packaging) Regulations, 2018 are sufficient enough to eliminate or minimize the health hazards due to the use of compromised/substandard quality of food grade plastics and their exposure to extreme Indian climatic conditions, it was replied that as per the General Requirements of the Food Safety and Standards (Packaging) Regulations, 2018, any material which comes in direct contact with food or likely to come in contact with food used for packaging, preparation, storing, wrapping, transportation and sale or service of food shall be of food grade quality. Further, clause (b) of sub-regulation 4(4) of these regulations specifies that all packaging materials of plastic origin shall pass the prescribed overall migration limit of 60mg/kg or 10mg/dm2 when tested as per IS 9845 with no visible colour migration.

18. Additionally, as per clause (c) of sub-regulation 4(4) of these regulations, plastic materials and articles shall not release the following substances in quantities exceeding the specific migration limits.

Sl. No.	**Substances**	**Maximum Migration Limit (mg/Kg)**
1.	Barium	1.0
2.	Cobalt	0.05
3.	Copper	5.0
4.	Iron	48.0
5.	Lithium	0.6

6.	Manganese	0.6
7.	Zinc	25.0
8.	Antimony	0.04
9.	Phthalic acid, bis (2- ethylhexyl) ester (DEHP)	1.5]

Furthermore, Schedule IV of these regulations provide the suggestive list of the packaging materials for food articles suitable in Indian climatic conditions.

(Reply to Q. No. 12)

19. When specifically asked about the provision of penalty/punishment to the defaulters, the Department replied as under:-

a) **Section 48-67** describe the penalties for the production, sale, storage etc. of food which is in contravention of the FSS Act, 2006, the rules and regulations thereunder and includes the provision of penalties and criminal prosecution in cases of unsafe food.

- **Section 50:** Penalty for selling food not of the nature or substance or quality demanded: not exceeding five lakh rupees. For Petty Food Business Operators not exceeding twenty-five thousand rupees.
- **Section 51:** Penalty for sub-standard food: may extend to five lakh rupees.
- **Section 52:** Penalty for misbranded food: may extend to three lakh rupees.
- **Section 54:** Penalty for food containing extraneous matter: may extend to one lakh rupees.
- **Section 55:** Penalty for failure to comply with the directions of Food Safety Office: may extend to two lakh rupees.
- **Section 56:** Penalty for unhygienic or unsanitary processing or manufacturing of food: may extend to one lakh rupees.
- **Section 57:** Penalty for possessing adulterant: not exceeding two lakh rupees; (ii) if adulterant is injurious to health, a penalty not exceeding ten lakh rupees.
- **Section58:** Penalty for contraventions for which no specific penalty is provided: may extend to two lakh rupees.
- **Section 59.** Punishment for unsafe food:
  (i) imprisonment for a term which may extend to three months and also with fine which may extend to three lakh rupees;
  (ii) in case of a non-grievous injury, imprisonment for a term which may extend to one year and also with fine which may extend to three lakh rupees;
  (iii) in case of a grievous injury, imprisonment for a term which may extend to six years and also with fine which may extend to five lakh rupees;
  (iv) in case of death, imprisonment for a term which shall not be less than seven years but which may extend to imprisonment for life and also with fine which shall not be less than ten lakh Rupees.

- **Section 60.** Punishment for interfering with seized items: imprisonment for a term which may extend to six months and also with fine which may extend to two lakh rupees.
- **Section 61**. Penalty for false information. liable to penalty which may extend to ten lakh rupees.
- **Section 62.** Punishment for obstructing or impersonating a Food Safety Officer imprisonment for a term which may extend to three months and also with fine which may extend to one lakh rupees.
- **Section 63.** Penalty for carrying out a business without licence. liable to penalty which may extend to ten lakh rupees.
- **Section 64.** Punishment for subsequent offences: twice the punishment, which might have been imposed on a first conviction, subject to the punishment being maximum provided for the same offence; (ii) a further fine on daily basis which may extend up to one lakh rupees, where the offence is a continuing one.

(Reply to Q. No. 14)

20. With regard to the issue of the extant enforcement regime to ensure zero tolerance for compliance in so far as standards on food safety, the Department submitted, that the Food Safety and Standards (Labelling and Display) Regulations, 2020 makes it mandatory for the labels to display the storage instructions in order to maintain the safety and integrity of food. Accordingly, Food Business Operators are required to comply with the appropriate storage conditions. The provisions under Schedule IV of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulation, 2011 explicitly provides that the food material be it raw, food ingredients or finished goods to be stored in appropriate conditions in controlled temperature, humidity and other environmental conditions to ensure food safety. All these provisions are statutory in nature and are to be abided by the Food Business Operators, failing which regulatory actions are taken under the FSS Act 2006. If during inspections, any violations related to above are observed, instructions are issued to the FBO through Improvement Notice under Sec 32 of FSS Act 2006.The Product standard (IS 14625:2015) also prescribes the requirements of plastic materials in contact with food under high temperature condition. Moreover, BIS has granted Licenses to domestic as well as foreign manufacturers for this product standard. Post grant of license a mechanism for surveillance both at factory & market exists for monitoring the quality compliance of product as per relevant Indian standards.

(Reply to Q. No. 16)

21. On being asked whether the companies/distributors/individuals engaged in packaging of food items in plastic containers have to seek any prior permission from the Department or they inform the Department Suo motto regarding their packaging activities, it was submitted that FSSAI was the authorized government agency for implementation of FSS Regulation 2011. As per regulation no 2.1.1 & 2.1.7 &

Schedule 2, FSS (Licensing & Registration of food Businesses) Regulation 2011) a declaration was to be submitted to the authority by the applicant while applying for the license that- the food business to be conducted shall conform to the FSS Act and regulations made there under/ bye-laws enacted thereunder. By virtue of this, all the FBOs were required to abide by the statutory provisions including packaging material.

22. In addition to this, every Food Business Operator (FBO) shall obtain the certificate of conformity for the packaging material which comes in direct contact with food or layers likely to come in contact with food. The certificate of conformity issued by NABL accredited laboratory for food grade material ensures that the substances used in material are safe and suitable for their intended use, and shall not endanger human health or result in unacceptable change in the composition of the food or organoleptic characteristics in Indian climatic conditions.

(Reply to Q. No. 18)

23. The Committee desired to know the level of inter Ministerial - Departmental coordination carried out by the Department of Chemicals and Petrochemicals, FSSAI and Ministry of Health and Family Welfare coordinate with each other for effective implementation of the Food Safety and Standards (Packaging) Regulations, 2018. In reply, it has been stated that Food Safety and Standards Authority of India (FSSAI) invites the DCPC during the meeting with FBO industry/packaging material manufacturer on related issues.

24. An Expert Committee has been constituted by FSSAI to develop a guideline/ advisory document regarding use of safe food packaging materials by various food service establishments like hotels/ restaurants / street venders etc. The Department of Chemicals & Petrochemicals was participating in the same and assisting the FSSAI.

25. During the course of oral evidence, the Committee desired to know about the methodology being developed to tackle the menace of micro and nano plastics which were emerging as food contaminants. In this regard the representatives of the Department apprised the Committee as follows:

"माइक्रो और नैनो प्लास्टिक जो फूड कंटेमनेंट्स के तौर पर उभर रहे हैं, उसके बारे में मैथडोलॉजी डेवलप करने के लिए कि कैसे इनका पता लगाया जाए और वे कितने डिफरेंट फूड आइटम्स में पाए जाते हैं? इसकी स्टडी फसाई करा रही है। इंडियन इंस्टीट्यूट ऑफ टॉक्सिकोलॉजिकल रिसर्च, लखनऊ, आईसीएआर का इंस्टीट्यूट सेंट्रल इंस्टीट्यूट ऑफ फिशरीज़ टेक्नोलॉजी कोच्चि और बिट्स पिलानी, ये तीन इंस्टीट्यूट मिलकर इसे कर रहे हैं। यह मार्च, 2024 में शुरू हुआ। इसमें यह है कि एक स्टैंडर्ड प्रोटोकॉल डेवलप करेंगे जिससे कि माइक्रो और नैनो प्लास्टिक का एनालिसिस हो पाए कि कैसे पता लगाया जा सके कि फूड में कितना मैटेरियल है। इसके बाद डिफरेंट फूड्स जो बिकते हैं, उसमें कितना माइक्रो और नैनो

प्लास्टिक है, यह स्टडी उसका पता करेगी और एक्सपोजर लेवल टू माइक्रो नैनो प्लास्टिक टू कंज्यूमर्स का क्या एक्सपोजर लेवल्स हैं, उसके बारे में पता लगाएगी। फाइनली जब स्टडी के रिजल्ट्स आएंगे, तो रेगुलेटरी बॉडी को बेटर रेगुलेशन्स फ्रेम करने में मदद होगी। अभी रिसर्च प्रोजेक्ट को 9 महीने ही हुए हैं, यह अंडर प्रोग्रेस है। जो काम हो चुका है, वह है कि पीसी पैक्ट और पॉलिस्ट्रीन को कैसे पता लगाया जाए, उसका मैथड वैलिडेशन हो चुका है। सैंपलिंग एनालिसिस ऑफ पैकेज्ड फूड प्रोडक्ट्स - राजस्थान, केरल और उत्तर प्रदेश से सैंपलिंग करना और एनालिसिस करना अभी प्रोग्रेस में है।

(Verbatim Proceeding dated 06.01.2025 Proceeding Pg. 8)

26. During the Oral Evidence, the representatives of the Department informed about the inspections conducted by FSSAI. The total number of Food Businesses Licensed as on 31.12.2024 were stated to be 11.49 Lacs. and total number of manufacturers and restaurants/food vending establishments using packing material were about 3.99 lacs. It was submitted that during the financial year 2023-2024 overall inspections conducted on licensed food business operators were 2,32,638. Out of these overall inspections non compliance cases observed regarding food grade packing material were informed to be 4,765. Similarly during the Financial Year 2024-2025 (as on 02.01.2025) overall inspections conducted on licensed Food Business Operators were 1,68,000 and non compliance observed regarding Food Grade Packing material was 3,063.

27. On aspects of Inspection the representative of FSSAI submitted that they visit the kitchen, factories etc. where they were being manufactured. The representative submitted that there are two categories one is the manufacturer where pickles were prepared and the second was food vending establishment i.e, restaurants etc. The representative submitted that they inspect the restaurants and they have 44 List of Points to inspect.

(Verbatim Proceeding dated 06.05.2025 Pg. No. 8-13)

28. On being asked whether they conduct surprise visit also, the representative submitted in affirmative and wherever they found objectionable things/ adulterated spices etc. they were destroyed and such drives were conducted regularly.

29. As regards the role and functions of the Department of Chemicals and Petrochemicals, the representative submitted as follows:

"Sir, the plastic, as a subject comes under the Department of Chemicals and Petrochemicals. So, the entire value chain up to the level of plastic, यह रॉ मटेरियल से शुरू होता है। यह पेट्रो कैमिकल्स की पूरी चेन है। रॉ मटेरियल से होते हुए लास्ट में प्लास्टिक की मैन्युफैक्चरिंग यूनिट्स इसमें आती हैं। बेसिकली, हमारे मैनडेट के हिसाब से manufacturing of different products in the entire value chain को प्रमोट करते हैं। अगर रॉ मटेरियल वगैरह नहीं है तो उस पर ड्यूटीज कितनी होनी चाहिए, वह कहां से आ

सकता है और कैसे उसका इम्पोर्ट होना चाहिए, इन चीजों को हम लोग प्रमोट करते हैं। जहां पर आवश्यकता महसूस होती है, वहां पर हम उसकी क्वालिटी को भी प्रमोट करते हैं कि उसमें अच्छी क्वालिटी के रेजिन्स वगैरह यूज हों। वह बहुत बड़ी इंडस्ट्री है। बेसिकली यह प्रोडक्ट एग्रीकल्चर में, हेल्थकेयर में, कंस्ट्रक्शन बिजनेस में, ऑटोमोटिव्स में और कंज्यूमर गुड्स इंडस्ट्री में यूज होता है। यह एक बहुत बड़ा इंडस्ट्री है। इसमें अलग-अलग यूजेज के हिसाब से जो भी स्टैंडर्ड्स लगाए जाने होते हैं, वे लगते हैं। जैसे हमारे पास एक सिपेट इंस्टिट्यूट है, जो इंस्टिट्यू ऑफ प्लास्टिक इंजीनियरिंग एंड पेट्रो कैमिकल इंजीनियरिंग है, उनके पास भी बहुत सारी सरकारी स्कीम्स में जो प्रोविजन होता है कि अगर आप कोई खरीद कर रहे हैं या इवेन प्राइवेट इंडस्ट्रीज के लिए भी अगर उनको अपने पेट्रो कैमिकल प्रोडक्ट की क्वालिटी और स्टैंडर्ड चेक करवानी होती है तो वे इनके पास आते हैं और जो स्टैंडर्ड ले डाउन होता है, उसके हिसाब से वे चेकिंग करके उसको दे देते हैं। फूड ग्रेड प्लास्टिक इसी का एक बिल्कुल अलग सेगमेंट है, जिसकी हम बात कर रहे हैं। फूड ग्रेड प्लास्टिक और जो ह्यूमेन हेल्थ है, वह हेल्थ मिनिस्ट्री के अंडर आता है। उसके स्टैंडर्ड्स वही ले डाउन करते हैं। उन्हीं का एक्ट है। वही इसमें चेकिंग करते हैं और इम्प्लीमेंटेशन करते हैं। इसीलिए, आज हमने एफएसएसएआई के प्रतिनिधियों को भी बुलाया है। स्टैडर्ड्स बीआईएस बनाता है। वह कंज्यूमर अफेयर्स डिपार्टमेंट के अंडर आता है। स्टैंडर्ड रूल्स सारे बनाते जाते हैं, लेकिन उसमें से जिनको नोटिफाई किया जाता है, वे इम्प्लीमेंटेबल हो जाते हैं। वह नोटिफिकेशन हेल्थ मिनिस्ट्री के अंडर में एफएसएसएआई करता है। इसीलिए, उनका जो एक्ट था, उसके तहत इनका क्रिएशन हुआ है और जो पूरा सिस्टम है, उसकी मॉनिटरिंग ये करते हैं। आज जो ज्यादातर प्रश्न आए हैं, वे फूड ग्रेड पैकेजिंग मटेरियल से रिलेटेड हैं या जो खाने-पीने की चीजें हैं, उसमें जो कॉन्टेमिनेशन या एडल्टरेशन हो रहा है, उससे रिलेटेड हैं और ह्यूमेन हेल्थ से भी रिलेटेड है। उसके स्टैंडर्ड वे बनाते हैं।

मैं इनसे रिक्वेस्ट करूंगी कि इनका जो मॉनिटरिंग का पूरा सिस्टम है कि कैसे-कैसे जब ये लाइसेंस देते हैं, तो क्या-क्या चेक करते हैं, कहां से उनको सर्टिफिकेट मिलता है। उसके बाद, मॉनिटरिंग कैसे करते हैं। आप उसके बारे में बता दीजिए।"

(Verbatim Proceeding dated 06.01.2025 Pg. No. 15-16)

30. On the precise steps taken by the Department to protect the Human Health from the harmful effects of plastic which migrates/melts into the food/pickles etc. stored in it and exposed to high temperature and the steps taken to protect the human health from the bad effects of *'Gutkha'*, the representatives submitted that Gutkha does not comes under the purview of FSSAI. The representative further submitted as follows: -

"सर, एक्चुअली हम दो-तीन फ्रंट्स पर साइमलटैनियसली काम करते हैं। जैसा हमने बताया कि हम इंस्पेक्शन करते हैं, जब हम इंस्पेक्शन करते हैं तो सर्टिफिकेट ऑफ एनालिसिस के बारे में हमेशा पूछते हैं कि आप पैकेजिंग के लिए जो प्लास्टिक का मटेरियल यूज कर रहे हैं, उसका आपके पास एनएबीएल एक्रेडिटेड लैब से है या नहीं। ये हमने जो इंस्टैंसेज बताए हैं, ये वो हैं, जहां पर उनके पास लैब का सर्टिफिकेट नहीं होता है। उसके बाद

हम उनके अगेंस्ट एक्शन लेते हैं। Most of the time, they have certificate of analysis. सबको पता है कि मार्केट में फूड ग्रेड प्लास्टिक से पैकेजिंग करना है।

दूसरा, जो स्मॉल टाइम प्लेयर्स होते हैं, जैसे जो छोटा ढाबा वाला, चाय वाला या किसी ने अपना एक छोटा स्टॉल बनाया है, जिसमें वह दाल-चावल बना रहा है, उनके लिए हम ट्रेनिंग देते हैं। उसको हम फॉस्टैक ट्रेनिंग कहते हैं। इस साल हमने कम से कम पांच लाख लोगों को ट्रेनिंग दी है। In the next two years, we want to take it up to 25 lakh. उस ट्रेनिंग में हम बताते हैं कि आपको ट्रैडिशनल पैकेजिंग यूज करना चाहिए and not any kind of plastic. वे वेंडर्स होते हैं, स्ट्रीट फूड वेंडर्स होते हैं, वे छोटे टाइप के प्लेयर्स होते हैं, a lot of time, they are floating also. उनको हम सेंसिटाइज करते हैं। उसके बाद हमने कुछ थर्ड पार्टी ऑडिटर्स और हाइजीन रेटिंग ऑडिटर्स इंगेज किए हैं। वे जाकर हमारे बिहॉफ पर ट्रेनिंग करवाते हैं। इस साल अभी तक हमने थर्ड पार्टी ऑडिट तकरीबन पांच हजार करवा लिये हैं और हाइजीन रेटिंग ऑडिट भी तकरीबन पंद्रह हजार करवा लिये हैं। उसमें सभी छोटे मैन्युफैक्चरर्स हैं। जो सेल्फ हेल्प ग्रुप्स होते हैं, पापड़, आचार, जिसको महिलाएं घरों में बनाती हैं और गाँव में भी बनाती हैं, उनके लिए हम सेंसिटाइजेशन वर्कशॉप करते हैं।"

31. The representative further added as follows:

"जैसा कि मैंने पहले बताया है, राज्यों में हमारे एफडीए के विभाग होते हैं। हमारे जो एफएसएसएआई के सीईओ हैं, प्रत्येक तिमाही उनकी अध्यक्षता में एक सेन्ट्रल एडवाइजरी कमेटी की मीटिंग होती है। उस मीटिंग के तहत हम राज्यों से हर तिमाही यही अपडेट्स लेते हैं कि आपने कितने सैंपल्स उठाए हैं, कितने इंस्पेक्शंस किए हैं, आपके राज्यों की जो लैब्स हैं, उन्होंने कितने सैंपल्स का टेस्ट किया है, आपने कितने केसेज़ फाइल किए हैं और कितनी पेनल्टीज़ लगाई हैं। हम राज्यों के साथ रेगुलर मॉनीटरिंग करते हैं और हम हमेशा उनसे यही कहते हैं कि जो भी रिक्त पद हैं, आप उनको भरिए। ज्यादा से ज्यादा फूड सेफ्टी अधिकारियों को नियुक्त करिए, समय पर नियुक्त करिए और हम उनको रेगुलर ट्रेनिंग भी देते हैं। हमारे जो फूड सेफ्टी अधिकारी होते हैं, हम उनको रेगुलर ट्रेनिंग के अलावा अपडेट्स भी देते हैं।"

(Verbatim Proceeding dated 6.01.2025 Pg. 18-19)

32. On the aspects pertaining to microwave bowels and standards governing them, the representative of the Department submitted that till now there was no standards laid down in this regard. The representative of the BIS submitted in this regard as follows:

"महोदय, हमारे पास इस तरीके के स्टैंडर्ड्स नहीं हैं। हम फूड ग्रेड कटलरी या बाउल की बात करें। हमारी जो कमेटी है, बच्चों के लिए फूड ग्रेड कटलरी और फूड ग्रेड बाउल्स और स्पून्स के लिए एक ड्रॉफ्ट स्टैंडर्ड बनाने पर काम चल रहा है। इसी तरीके से सिलिकॉन रबड़ से बच्चों के इस्तेमाल के लिए जो कटलरी बनाई जाती है, हमारे यहां पर उसके लिए एक रबड़ सेक्शन कमेटी है, वह एक नया विषय टेकअप करने का प्रपोजल चला रही है।"

(Verbatim proceeding dated 06.01.2025 Pg. 20)

33. On being asked specifically since when the proposal was under consideration of BIS, the representative submitted as follows:

> *"महोदय, एक ड्रॉफ्ट स्टैंडर्ड बना था, लेकिन वह फाइनलाइज्ड नहीं हो पाया है। पिछले माह वह विषय ड्रॉप हुआ था, क्योंकि जो प्रोडक्ट स्टैंडर्ड बना था, that was not meeting the requirements of the safety. जो स्टैंडर्ड्स थे, वे सिलिकॉन और प्लास्टिक के लिए थे।"*

(Verbatim Proceeding dated 06.01.2025 Pg. 21)

34. The representative further submitted as under:-

> *"I would just like to point out some of the initiatives which have been done recently. The FSSAI is conducting a study on micro and nano-plastics. So, basically in the project, validated methodologies and understanding the prevalence of micro and nano-plastic in different food items are to be studied, and this study is to be done by CSIR-Indian Institute of Toxicology Research, Lucknow; ICAR-Central Institute of Fisheries Technology Kochi, and Birla Institute of Technology and Science, Pilani.*
>
> *The FSSAI has also constituted an expert Committee to examine the alternative packaging material for use by food service establishments. In the recent past, that is, in November, FSSAI has reclassified packaged drinking water and mineral water as 'high risk'. So basically, that mandates stricter regulatory controls and annual inspections. FSSAI has also conducted national stakeholder consultation on sustainable packaging on 16th April 2025 where the significance of eco-friendly packaging solutions was discussed and highlighted to various stakeholders. FSSAI has notified another amendment in 2025 which has specified standards for the products made of recycled PET for packaging, storing, carrying or dispensing of food products. ……..BIS has also published the following Indian Standards to compostable plastics and biodegradable plastics in order to see that the products made out of that conform to quality. The first is compostable plastics standard, and then second is the assessment of biodegradability of plastics in varied condition. CIPET is the recognized lab which tests these products.*
>
> *Then, IIT Guwahati and IIT Madras have been established as centre for excellences. They are working on promoting bioplastics and their applications.Especially IIT Guwahati is developing the technology for production of polylactic acid and their products, and also the application development using Poly Lactic Acid (PLA). IIT Madras is working on developing packaging from biobased resources.*

…… CIPET is also working on developing innovative solutions in the area of sustainable packaging of various food items using biopolymers like PLA, PBAT, and PHB. They are basically bio-compostable polymers. A dedicated microplastic analysis laboratory has been set up at CIPET to analyse the prevalence of microplastics in soil, sediments, marine environment, etc.They use the internationally available test protocols. CIPET offices are also participating in several committees of BIS to establish the standards in the domains of plastics and packaging.

(Verbatim Proceeding dated 09.05.2025 Pg. 7 & 8)

35. As regards the standards of BIS, the representative submitted during oral evidence as follows:

"महोदय, मैं सभी माननीय सदस्यों को आश्वासन देना चाहूंगी कि प्लास्टिक और फूड पैकेजिंग के बारे में जो भारतीय मानक हैं, वे विश्व स्तर के मानक हैं। बीआईएस के साथ मिलकर फूड सेफ्टी एंड स्टैंडर्ड अथारिटी के जो रेगुलेशन्स हैं, वे बनाई जाती है। हमारे रेगुलेशन्स में बहुत सारे मानक प्राथमिक तौर पर बीआईएस द्वारा बनाए गए हैं। पैकेजिंग में हमें एक बात और ध्यान में रखनी होगी कि सिर्फ खाद्य पदार्थों के लिए ही देश में पैकेजिंग नहीं बन रही है, बल्कि कई अन्य चीजों के लिए भी पैकेजिंग बन रही है इसलिए मैनुफैक्चर्स द्वारा एक ही प्रकार की पैकेजिंग बनाना मुश्किल काम है। फूड के लिए मैनुफैक्चरर ने पैकेजिंग को ध्यान में रखा है। इसके लिए लाइसेंसिंग रेगुलेशन के तहत एफबीओ के लिए मैनडेटरी है कि फूड ग्रेड पैकेजिंग का ध्यान रखे और सालाना इंस्पेक्शन्स में हम चैक करते हैं कि उन्होंने फूड ग्रेड पैकेजिंग का इस्तेमाल किया है या नहीं। इसे हमें क्रिटिकल चैकिंग का दर्जा हमने दिया है। प्लास्टिक पैकेजिंग के बारे में पिछली मीटिंग में चेयरमैन साहब ने जो आदेश दिया था, हमने तुरंत बदलाव किया है कि प्लास्टिक की इंस्पेक्शन के दौरान मार्क्स या वेटेज दिया करते थे, उसे हमने डबल कर दिया है। इसका मतलब यह है कि यदि कोई चूक होती है तो वह हाई रिस्क केटेगिरी की बात हो गई है और हमारी इंस्पेक्शन इस मुद्दे पर बहुत टाइट हो गई है। वायलेशन के बारे में जो बात पूछी गई है, उसके बारे में बताना चाहती हूं।

(Verbatim Proceeding dated 09.05.2025 Pg. 10-11)

36. On being asked about the number of non compliant cases the representative submitted as follows:

"इसमें यह देखा गया कि नॉन कम्प्लाएंस कितना है। हमारे इंस्पेक्शन्स में जो निकल कर आता है, वह 2.85 प्रतिशत नॉन कम्प्लाएंस निकल कर आता है। सिविल और क्रिमिनल केसेज दायर करने के बाबत हमने जो एक्शन लिया, वर्ष 2023-2024 का जो आंकड़ा है, उसमें नम्बर ऑफ कंविक्शन्स 1,70,513 सैम्पल्स एनालाइज किए गए और जिनमें से 33,808 सैम्पल्स स्टैंडर्ड्स को कंफर्म कर रहे थे और कंविक्शन के केसेज 29,586 पाए गए और पैनल्टीज 74 करोड़ रूपये के करीब रेज की गई। इसमें क्रिमिनल केसेज भी दायर किए गए जो 1161 हैं और पैनल्टीज भी रेज की गई हैं।"

(Verbatim Proceeding dated 09.05.2025 Pg.11)

37. On a specific query on the quantum of plastic material imported in the Country. The representative submitted that it was a deregulated sector and imports were being made. As regard quantum of PVC imported, it was submitted that it was around 2.8 million metric ton and it was not only used in Packing but also in manufacturing of polythenes.

38. When asked about the details of funds given to CIPET for manufacturing an alternative to the plastic, the representative submitted during oral evidence as follows

"सर, इसमें हम लोगों को विभाग से प्लान फंड में करीब साल में सौ करोड़ रुपये इंफ्रास्ट्रक्चर के लिए मिलता है। साथ में हमारी जो तीन लैबोरेट्रीज़ हैं, वे अधिकृत हैं, जिसमें हम लोग विभिन्न प्रयोजित प्रोजेक्ट्स हैं, उसमें ले कर, उसमें करने के लिए। तो इसमें हम लोग स्पेशली, जैसे सीपेट, भुवनेश्वर में हम लोगों का काफी अच्छा काम हो रहा है और साथ में बैंगलूरू की लैबोरेट्री में भी। इसमें सीपेट भुवनेश्वर में जो ऑल्टरनेटिव प्रोडक्ट रीडेवल्पमेंट के बारे में भी काफी हम लोग तेज़ी से उसमें कार्य कर रहे हैं। साथ में स्टेंडर्ड्स पर भी हम लोग इसमें कार्य कर रहे हैं। जितनी हमारी क्षमता है, उसके हिसाब से विभाग से सहयोग मिल रहा है।"

(Verbatim Proceeding dated 09.05.2025 Pg. 15)

39. When asked about research and development being done by the Department of Chemicals and Petrochemicals, the representative submitted as follows.

"जैसे कि पहले भी बताया था कि हम लोगों ने दो जगहों पर सेंटर फॉर एक्सिलेंसिस शुरू किए हैं। We give them Rs. 5 crore for development of infrastructure and equal amount the institute contributes, and on top of that they can take projects from industries."

(Verbatim Proceeding dated 09.05.2025 Pg. 15)

40. On being enquired since when the COEs are functioning in this regard and whether any breakthrough has been made, representative submitted as follows:

"सर, पीएलए जो एक होता है, पॉलिइलेक्टिक एसिड कर के एक होता है, वह बायोडिग्रेडेबल तो नहीं है, कम्पोस्टेबल है। तो उसकी उन्होंने इंडिजिनस टैक्नोलॉजी डेवल्प की है। अब हम उसकी पायलट स्केल टेस्टिंग कर रहे हैं"

(Verbatim Proceeding dated 09.05.2025 Pg.16)

41. The representative further submitted that plastic was being used in everything from automotive to medical instruments to packing material till polythene and in bags of foodgrains, automobile construction, shoes etc. On the aspect of wide use of

plastic and their harmful effect on human health and need to control harmful effect of the plastic on the environment, the representative submitted during oral evidence as follows:-

"सर, मुझे ऐसा लगता है कि सिंगल यूज्ड प्लास्टिक को हम कंट्रोल करने में सफल हों, उस पर थोड़ा-सा अपना फोकस बढ़ाएं, रिसाइकलिंग को बहुत ज्यादा बढ़ावा दें तो उसमें बहुत सारी प्लास्टिक जो हम यूज कर रहे हैं अगर वह रिसाइकल होगी तो अल्टीमेटली उसका यूजेज भी कम होगा। अगर हम इन दो चीजों पर ध्यान दें और थोड़ा-सा अवेयरनेस बढ़ाने पर ध्यान दें तो हम इसको कम कर सकते हैं। बाकी जो अल्टरनेटिव मैटेरियल वगैरह डेवलप्ड हो रहे हैं उसमें थोड़ा टाइम लगेगा। हम बायो-वेस्ट डेवलप कर भी ले रहे हैं तो उसके लिए रॉ मैटेरियल भी उतनी ही मात्रा में चाहिए होगा। जैसे- एक बार यह चला था कि जेट्रोफा से हम जो ऑयल बनाते थे, तब उसके लिए उतनी बड़ी क्वांटिटी में जेट्रोफा की खेती करनी है और उसका पौधा उपलब्ध हो, तब उससे बनाएँगे। उन सब चैलेंजेज को भी जब तक हम नहीं टैकल कर पाने वाली स्थिति में हम रिसर्च कर लेंगे, तब तक थोड़ा-सा टाइम लगेगा। टेक्नोलॉजी का डेवलपमेंट एक तरफ चलता रहे और दूसरी तरफ रिसाइकलिंग पर भी और कंट्रोल पर भी हम ध्यान दें तो अगर ये टू प्रांग अप्रोच रहेगी तो मुझे लगता है हम सफल होंगे।"

(Verbatim Proceeding dated 09.05. 2025 Pg. 20)

42. The Committee then enquired from the representatives of BIS as to how to get rid of the menace of plastic, the representatives submitted as follows:

(Verbatim Proceeding dated 09.05.2025 Pg. 22)

"टेक्निकल कमेटी ने इसके स्टैण्डर्ड्स बनाए हैं। पिछली बार आपने जो निर्देश दिए थे, उसके पहले ही एक वर्किंग पैनल का गठन किया था, जो हमारा आईएस 9845 है उसके रिवीजन के लिए और अब उसके स्कोप में यह बात भी डाल दी गई है कि एक्स्ट्रीम क्लाइमेटिक कंडीशन्स में प्लास्टिक पर क्या असर होता है, उसको भी हम स्टडी करेंगे तो हमारा विचार यही है कि हम मार्केट से काफी बड़ी संख्या में ऐसे सैम्पल्स लेकर, उनको टेस्ट करेंगे। हमारी जो एफीलियेटेड या बीआईएस की रिकानाइज्ड लेबोरिटीज हैं, उनमें टेस्ट करके हम देखने की कोशिश करेंगे कि कोई लिचिंग या कंटैमिनेशन की समस्या हाई टैम्प्रेचर पर उस तरह से होती है या नहीं। हमारे स्टैण्डर्ड्स में जो टेस्ट मैथड्स प्रेस्क्राइब्ड हैं, उनसे इंश्योर होता है कि यह समस्या नहीं होनी चाहिए।

हमारे पास इसका कोई इमपेरिकल स्टडी नहीं है, एक्सट्रीम कन्डशीन्स वास्तव में क्या होता है? अधिक से अधिक दो महीने में हम इस स्टडी को कम्पलीट कर लेंगे और स्टैन्डर्ड को रिवाइज कर देंगे।"

(Verbatim Proceeding dated 09.05.2025 Pg. 22)

43. **<u>STUDY ON RATS</u>**

On the study on Rats the representative of Indian Medical Council Research submitted during ;oral evidence as follows:

"आईसीएमआर ने एनिमल स्टडीज रैट पर किया है, प्रिलिमनरी स्टडी हुआ है, ह्यूमन पर अभी स्टडी नहीं किया है। हमने जो रैट का जेस्टेशनल पीरियड होता है, उस समय बीपीओ और बीपीएस जो केमिकल प्लास्टिक बनाने में यूज होता है, उसका एक्सपोजर दिया, हमने प्रिलिमिनरी स्टडी में देखा कि जो ऑस्प्रिंग हुए, उसमें मेटाबोलिक और रिप्रोडक्टिव फंक्शन्स में फर्क आया?"

44. The representatives further submitted as follows:

"उनके जो बोन मिनरलाइजेशन है, कैल्सियम का बोन मिनरलाइजेशन बहुत ज्यादा था, जो कि सामान्य तौर पर नहीं होता है। उसी तरह से उनके रिप्रोडक्टिव फंक्शन थे, वह भी कम्प्रोमाइज था, यह प्रिलिमिनरी फाइंडिंग्स है। हमें एक और वैलिडेट करने के लिए एनिमल पर बड़ा स्टडी करना पड़ेगा और ह्यूमन पर भी बड़ा स्टडी करना है, वह नहीं किया है।"

(Verbatim Proceeding dated 09.05.2025 Pg. 22)

45. On the aspects of Bisphenol A (BPA) and Bisphenol S (BPS) used in plastics, the representative submitted during oral evidence as follows:

"Sir, there have been some studies, most of them from abroad. About BPA, it has been seen that 60 per cent of food containers in India have BPA. इससे रिप्रोडक्टिव हेल्थ इश्यूज भी होता है, फर्टिलिटी इश्यूज भी होता है, कैंसर का भी रिस्क होता है, It is known to cause obesity also. जहां-जहां जिस कंट्री में ज्यादा प्लास्टिक यूज होता है, वहां पर डायबिटिज भी ज्यादा है, ओबिसिटी भी ज्यादा है, रिप्रोडक्टिव इश्यूज भी ज्यादा है। पीवीसी के फलेक्सीबल फूड कन्टेनर्स होते हैं, इसमें सेलेड्स होत हैं, which are also linked to increase body fat especially in children. हमारे देश में बच्चों काफी ओबेसिटी ज्यादा होती है।.....Also, there is styrene, which is seen as a group 28 carcinogen. यह भी बहुत सारे फूड कंटेनर्स में होते हैं, कैंसर की घटना भी हमारे यहां ज्यादा बढ़ रही है।..... There is a study. पॉलिस्टरीन या फूड कंटेनर्स या डिसपोजेबल कटलरीज होते हैं, So, this was also linked with increased carcinogen consumption by the public. इसी तरह से हीट एक्सपोजर होता है तो बहुत सारी विनाइल क्लोराइड माइग्रेशन होती है, from the plastic into the food. It is especially seen in high fatty food अंचार के बारे में बताया, नॉन-वेजिटेरियन फूड, So, that also is linked with increased risk of cancer..... Yes, Sir. So, these are all real risks. These diseases we are seeing in our society. वेस्ट में कैंसर ज्यादा होता था, अब अपने यहां भी बहुत ज्यादा हो गया है। ओबेसिटी भी है, डायबिटिज भी है, So, these metabolic syndromes may be linked to the consumption of microplastics."

(*Verbatim Proceeding dated 09.05.2025 Pg. 23, 24)*

46. The representative further submitted as under:-

"Sir, PET exposure has been seen to cause DNA damage also. So, DNA exposure can lead to some antenatal, especially in babies, बच्चा पैदा होने से पहले एक्सपोजर हो तो बेबी में कुछ प्रॉब्लम हो सकती है। Sir, there is a study that shows that microplastics are found in human placenta also now.....सर, हमारे यहां क्लाइमेटिक कन्डीशन ऐसी होती है बहुत ज्यादा गर्मी होती है, बहुत ज्यादा सर्दी होती है, बहुत ह्यूमिडिटी है, इन सबसे प्लास्टिक की समस्या बढ़ जाती है।"

(Verbatim Proceeding dated 09.05.2025 Pg. 24)

47. The representative further submitted as under:

सर, हमारा काम सर्वेलेंस करना है, जो आउटब्रेक होते हैं उनको रिस्पांड करना, हम बायो मोनिटरिंग का एक प्रोग्राम इनिशिएट करना चाह रहे हैं, इसमें हम सर्वेलेंस से स्टार्ट कर रहे हैं, हैवी मेटल, माइक्रो प्लास्टिक और नैनो प्लास्टिक पर भी हमने सोचा है कि एनवायरमेंटल सेंपल स्वॉयल एंड अदर्स, हमने उसके लिए लास्ट ईयर्स कन्सलटेशन किया था, किन्तु प्रोग्रेस स्लो है, हम उस पर काम कर रहे हैं ताकि हमारे पास बर्डन भी रहे और जैसे हमने देखा है कि इंडियन स्टडीज कम है, हम उसको देख पाएं और उसके लिए आगे डाटा के आधार पर क्या-क्या स्ट्रेटजी बना सकते हैं।

प्लास्टिक पर बहुत कम लोग काम कर रहे थे, अभी मैडम ने बताया, आईआईटीआर कुछ काम कर रहे हैं, आइजर जो पूणे में है, वह काम कर रहा है। ओसियन वाटर पर क्या इफेक्ट आएगा।

How will it enter into the food chain? सर, हमारी एक रिपोर्ट है, जिसमें लिखा हुआ है कि कौन किस पर काम कर रहा है। हम उसको आपसे शेयर कर लेंगे। अभी हमने जस्ट काम स्टार्ट किया है। हमने लेबोरेट्रीज की मैपिंग की है कि कौन-सी लेबोरेट्रीज कौन-कौन सी कैमिकल्स पर काम कर रही हैं, ताकि वहां एनवॉयरमेंटल सैंपल्स की टेस्टिंग हो जाए, फूड की भी जाए और ह्यूमेन सैंपल्स, जैसे ब्लड सैंपल्स की उनमें what is the risk and what are the levels available.

Sir, this is a part of surveillance."

(Verbatim Proceeding dated 09.05.2025 Pg. 25-26)

48. On the bad effects of plastic on human body, the representative from CIPET submitted during oral evidence as follows:

"I want to understand one thing from them. Like, Madam has talked about the animal studies. I want to understand as to what is the dosage that is creating that impact on the animals. When we are talking about the products and the standards, everything is having the limitations. For example, Madam was talking about PVC where the vinyl chloride monomer is leaching from the plastics. For example, we have a PVC pipe wherein we will be estimating as to what is the vinyl chloride monomer content from the pipe, and the standard is prescribing the limitation. So, I mean we just want to understand as to what

is the dosage of the microplastics or the plastic particles which is creating such kind of an impact."

(Verbatim Proceeding dated 09.05.2025 Pg. 26)

49. On the doses of Bisphenol A (BPA), it was submitted as follows:

"There were three groups in the experiment. One was control. The other was given .4 microgram per kilogram body weight of BPA and the third was given the same dose of BPS."

(Verbatim Proceeding dated 09.05.2025 Pg.27)

RESEARCH AND DEVELOPMENT ON JUTE BAGS

50. During the course of oral evidence the Committee desired to know whether the Department has given money for finding alternative to the plastic and for research and development of Jute Bags. In reply the representative of the Department submitted as follows:

"चूंकि प्लास्टिक का यूसेज इतना ज्यादा वाइड है कि हमारी लाइफ के लगभग हर सेक्टर में किसी न किसी रूप में यूज़ हो ही जा रहाहै। उसकी रीसाइक्लिंग के लिए प्रयास किया जा रहा है और रीसाइक्लिंग इंडस्ट्री भी हमारे यहां डेवल्प हो रही है। उसके अलावा जो तीसरा प्रयास किया जा रहा है, वह नए मटीरियल को डेवल्प करने का है, जो कि नॉन-प्लास्टिक, जो कि बायो वेस्ट ग्रीन मटीरियल डेवल्प किया जाए, जो कि प्लास्टिक को रिप्लेस कर सके। तो सीपेट और हमारे सेंटर ऑफ एक्सिलेंस तो इसमें काम कर ही रहे हैं। लेकिन यही ऑर्गनाइज़ेशंस ही नहीं है, जो कि इस पर काम कर रहे हैं। जैसे आई आई टी वगैरह और बहुत सारे और साइंटिफिक ऑर्गनाइज़ेशंस और प्राइवेट इंडस्ट्री भी अपने तौर पर रिसर्च कर रही है कि ऐसा मटीरियल जोकि कॉस्टइ फेक्टिव भी हो और एनवायरमेंट के लिए भी अच्छा हो, हम लोग उसको डेवल्प कर सकें। रिसर्च एण्ड डेवल्पमेंट में जनरली भी एक लाख करोड़ रुपये का जो अनुसंधान फंड डिक्लेयर हुआ है, तो हमें उम्मीद है कि उसमें से कुछ हिस्सा हमारी इस रिसर्च में भी ज़रूर जाएगा, क्योंकि वह जो इस समय की ज्वलंत आवश्यकता है, उसी पर रिसर्च में वह खर्च होगा तो अलग-अलग लैवल पर प्रयास किए जा रहे हैं, इसमेंअलग-अलग तरह का सॉल्युशन ढूंढने के जिससे कि सारे प्रयास मिलकर कुछ न कुछ तो इंपैक्ट करेंगे। पर रिसर्च एंड डेवल्पमेंट में थोड़ा टाइम लगता है क्योंकि लगातार काफी समय तक करते रहना होता है।

उस प्रयास में हमारे यहां सीपेट के सेन्टर ऑफ एक्सीलेंस लगे हुए हैं और हमारी यही कोशिश है कि हम जल्दी से जल्दी अल्टरनेटिव मैटेरियल डेवलप कर सकें। हम एम ओई एफसीसी से भी बात कर रहे हैं जो सिंगल यूज प्लास्टिक को बैन करने के प्रयास में लगे हुए हैं।पॉल्यूशन के जो और सोर्सेज हैं, उनको भी किसतरीके से टेकल किया जाए, उस पर विचार चल रहा है और बहुत सारे मेजर्स के साथ वे सामने आ रहे हैं।होपफुली हम कुछ न कुछ इसमें आने वाले समय में इंपैक्ट करने में सफल होंगे। ऐसीहमेंआशाहै।"

(Verbatim Proceeding dated 09.05.2025 Pg.17-18)

Observations/Recommendations

STUDY TO DETECT PLASTICS AND NANO PLASTICS

1. The Committee note that the Food Safety and Standards Authority of India (FSSAI) is funding a project w.e.f March, 2024 entitled "Micro and Nano-plastics as Emerging Food Contaminants: Establishing Validated Methodology and Understanding the Prevalence in Different Food Matrices". While the objective of the project is statedly to develop and validate analytical methods to detect micro and nano-plastics in various food products and assess their prevalence and exposure levels, the duration of the project is two years and sanctioned to three (03) research institutes namely (i) CSIR-Indian Institute of Toxicology Research, Lucknow, (ii) ICAR-Central Institute of Fisheries Technology (ICAR-CIFT), Kochi; and (iii) Birla Institute of Technology and Science (BITS), Pilani. The Committee note that a considerable time period of more than one year have already elapsed and while the research project was under progress, the method validation for microplastic detection (PC, PET and Polystyrene) in packaged animal products, beverages and packaged drinking water was reportedly completed. The Committee, therefore, desire that findings of the research projects as and when completed may be furnished by the Department/FSSAI highlighting the actionable points thereon for tackling the menace of plastics and nano-plastics; and protection of human health from the use of compromised/substandard quality of food grade plastics and their exposure to extreme Indian climatic conditions. The Committee find that sampling and analyzing of the packaged food products from Rajasthan, Kerala and Uttar Pradesh was under progress. The Committee desire that the same

may be put to a fruitful completion and findings/recommendations alongwith the details of steps taken/proposed to be taken by the Department/FSSAI/BIS in pursuance of those findings may be furnished within the timelines set. The Committee further desire that feasibility of adequate publicity of these research findings may also be explored so that they are disseminated to all the citizens.

SUBSTANTIVE ROLE OF FSSAI IN THE IMPLEMENTATION OF FOOD SAFETY AND STANDARDS PACKAGING REGULATIONS 2018

2. The Committee note that FSSAI has been entrusted with the responsibility for the implementation of the Food Safety and Standards (Packaging) Regulations, 2018 by way of notifying (i) Regulations or by bringing amendments; (ii) by verifying the compliance through inspection and surveillance; and (iii) by creating awareness through training of food handlers. In this connection, the Committee further note that FSSAI through its regional offices was regularly conducting inspections, audits, monitoring, random sampling and surveillance and have trained around twenty two lakhs Food handlers under Food Safety Training and Certifications (FoSTaC) program. Though the Committee are of the view that training of food handlers was one of the steps which could lead to minimization of harmful effects of use of compromised / substandard quality of food grade plastics and needs more intensification, the Committee feels that much more needs to be done by the FSSAI. It appears to the Committee that FSSAI has failed to play a substantive role in the implementation of the Food Safety and Standards (Packaging) Regulations, 2018 and the Food Safety and Standards Act, 2006 was not enforced effectively and failed to counter use of compromised and substandard quality of food grade plastic. The Committee, therefore,

desire that FSSAI should come out with a roadmap to implement the Food Safety and Standards (Packaging) Regulations, 2018 strictly and bring forth requisite amendments to the Regulation as may be deemed fit in the interest of ordinary citizens.

COORDINATION BETWEEN FSSAI AND DCPC FOR EFFECTIVE IMPLEMENTATION OF THE FOOD SAFETY AND STANDARDS PACKAGING REGULATIONS, 2018

3. The Committee note that, there is lack of coordination between Food Safety and standards Authority of India (FSSAI) and the Department of Chemicals and Petrochemicals (DCPC) for effective implementation of the Food Safety and Standards (Packaging) Regulation 2018. The Food Safety and Standards Authority of India (FSSAI) was established and entrusted with the responsibility of implementation of the Food Safety and Standards Act, 2006 (FSS Act). The Committee note that though FSSAI was established and entrusted with responsibility of implementation of the Food Safety and Standards Act, 2006 but ufortunately it has a long way to go. The Committee note with concern that no other concrete actionable mechanisam of a robust coordination between the FSSAI and the Department exists. The Committee, therefore recommend that the Department and FSSAI should work in close tandem and bring out a robust coordination mechanisam for effective implementation of the Food Safety and Standards (Packaging) Regulation, 2018. The Committee further note that an expert committee was constituted by FSSAI to develop guidelines/advisory document regarding use of safe food packaging materials by various food service establishments like hotels/ restaurants / street vendors etc. wherein the Department of

Chemicals & Petrochemicals (DCPC) also participated. The Committee desire the details of the expert Committee, its mandate, composition, work done, recommendations given etc. may be furnish to the Committee.

FSSAI'S SCIENTIFIC PANEL ON PACKAGING

4. The Committee note that the Food Safety and Standards (Packaging) Regulations, 2018, focus largely on packaging materials such as glass, metal, paper, and plastic. However, a comprehensive framework for safety of biodegradable and compostable plastics, testing methods and long-term performance and migration limits for emerging chemicals from food packaging, such as: Bisphenol A (BPA), per fluorinated Alkyl substances (PFAS), phthalates and other harmful chemicals found in plastic packaging were under deliberations of FSSAI's Scientific Panel on Packaging. The Committee desire that the findings of Scientific Panel on Packaging on elimination of the harmful effects of plastics on human health be furnished to the Committee at the earliest. The Committee further recommend that FSSAI come out with a comprehensive framework for zero tolerance of plastic contamination in food packaging processes.

MIGRATION OF PLASTIC AND NANO PLASTIC IN THE FOOD CONTENTS

5. The Committee find that FSSAI had submitted that inspections are carried out on outlets of manufacturer where pickle etc are prepared and food vending establishment i.e, Restaurants etc on the 44 List of Points drawn up for inspection of these units. The Committee are of the considered view that while the pickle manufactured may qualify the quality test of the FSSAI but instances of contamination may occur while they are packed/stored or

transported and exposed to high temperature when plastic migration occurs in the pickle from its plastic container. This exposure can also affect bottled water etc. The Committe finds that no specific authority has been assigned to check contamination when migration of the plastic occurs. The Committee, therefore, desire that a specific authority should ensure that the migration was as per permissible limits and the pickle was fit for human consumption. The Committee also recommend that foolproof measures need to be initiated at the earliest to ensure that pickle stored and sold in plastic containers are indeed fit for consumption by human beings. To this extent the Committee desire that concrete actionable steps to protect human health from the ill effects of plastic/nano plastic contamination be taken at the earliest. The Committee desire that information regarding the steps taken firstly by the Department, secondly by FSSAI and thirdly by BIS may be furnished to them at the earliest.

DEVELOPMENT OF ALTERNATIVES TO PLASTIC

6. As regards development of alternatives to plastic use, the Committee find that Central Institute of Petrochemicals Engineering & Technology (CIPET) was granted Rs.100 Crore as planned fund for infrastructure development and it has authorized three laboratories. The Committee was apprised that work in this reagard was in progress in CIPET Bhubneshwar and CIPET, Bangaluru with full support of the Department. The Committee desire that the work of developing alternatives to the Plastics is very important and imperative to help curb plastic usage and its ill effect on human health and therefore urges CIPET to complete the project and comeforth with a concrete alternatives.

RESEARCH AND DEVELOPMENT TO MINIMISE HARMFUL EFFECTS OF PLASTIC AND NANO PLASTICS

7. The Committee note that two Centre of Excellence (CoEs) have been entrusted the work of finding alternatives to the plastics. The Committee further note with concern that these CoEs were engaged long back about six years ago for the purpose but two COEs could manage to come out with only one Polylactic acid which was not biodegradable but compostable and indigenous technology have since been developed for which pilot scale testing was under progress. The Committee are however dismayed that these CoEs have not been able to make any breakthrough even after a laps of a considerable time period of over six years. The Committee observe that the slow pace of work being carried out by the two CoEs need thorough review as to whether these centres are indeed delivering excellent work as expected. The Committee, therefore, recommends that the functioning of these CoEs may be reviewed as per the extant benchmarks set for CoEs. The Committee may be apprised of the action taken in this regard.

REVISION OF STANDARDS BY Bureau of Indian Standards (BIS)

8. The Committee note with serious concern that BIS does not have standards governing microwave bowels as admitted by the representative of BIS during oral evidence. The Committee, however find that BIS was working to make standards for Food grade bowels and spoons but could not be finalized as it could not pass the requirements of requisite safety standards, but on the intervention of the Committee, BIS constituted a working panel to revise ISI 9845 standards and also put in its scope to study the harmful effects emanating from use of plastics when exposed to extreme climatic conditions.

The Committee were apprised that the working panel was expected to complete its study in about two months time period to revise the standard. The Committee, therefore, urges the BIS to expedite the findings of the panel and complete the study within the stipulated time period of two months as assured to the Committee. The Committee may be apprised of the action taken in this matter.

9. As regard provisions of Penalty/punishment to defaulters/violators of Food Safety and Standards (Packaging) Regulations, 2018, the Committee find that provisions for penalties have been given in Sections 48 to 67 of the Food Safety and Standards (Packaging) Regulations, 2018. The Penalties provided for the production, sale, storage etc. of food which was in contravention of the Regulations includes both fines as well as imprisonment. For instance under Section 54,55,56,57,58,61 and 63 of the regulations penalty can be levied for contravention of provisions of the Regulation and under Section 59 imprisonment for a term which may extend to three months and also with fine which may extend to three lac rupees can be imposed. The Committee desire that they may be furnished data on levy of fine/penalties/imprisonment for violation of these regulations for the last three years. The Committee also desire that these provisions of the Regulations may be implemented in letter and spirit by the FSSAI.

10. The Committee are dismayed to note the figures of inspections of licenced food business operators conducted *viz-a-viz* the figures of non compliance reported as they are not proportionate. Out of the overall inspections conducted on 2,32,638 licensed food business operators, non-compliance reported was only 4,765 cases during the year (2023-24) and only 3,063 cases during the year (2024-25) out of 1,68,000 overall inspections

conducted on licensed food business operators. The Committee observe that the figures sighted on non-compliance does not appear to be realistic for the whole country for one full year. The Committee therefore desire that the basis of these data may be re-visited and reasons furnished for such non-compliance figures be furnished. The Committee are of the considered view that adequate number of inspections were not conducted specially in those areas/sectors where there is non-compliance to the regulations. To this extent, the Committee strongly recommend that a robust inspection mechanisam with specific periodicity inspections and stipulated to cover all sectors may be put in place to overcome the present lacuna.

STUDY BY ICMR ON EXPOSURE OF BISPHENOL A (BPA) AND BISPHENOL S (BPS) ON RATS

11. The Committee note that Indian Council for Medical Research (ICMR) has conducted a preliminary study on Rats exposed to Bisphenol A (BPA) and Bisphenol S (BPS) chemicals used in manufacturing plastic and the study found that there were serious ill effects of said exposure on Rats to the extent that their metabolic and reproductive functions were altered. The Committee have also been apprised that to validate the findings of the preliminary study, a bigger study on animals and human beings need to be conducted, which has not yet been done. The Committee are of the considered view that the harmful effects of exposure to plastic were very serious and an imminent danger to mankind as evidenced by the findings of the preliminary study on Rats. The Committee, therefore, recommend that studies be conducted so that reliable data on the harmful impacts of plastic contamination be collated. The

Committee recommend that the Department, FSSAI, BIS should collectively come out with a concrete actionable solution to address the alarming situation being faced by present day citizens.

ILL EFFECTS OF PLASTICS ON HUMAN HEALTH AND ENVIRONMENT

12. As regards ill-effects of plastic and nano-plastic on human health, the Committee note that in the Country 60% of our food containers have BPA which causes not only reproductive and fertility issues but also causes cancer. Further BPA was also responsible for obesity particularly amongst children. The Committee further finds that "styrene", a group of 28 carcinogen was apparently responsible for increased cases of cancer in the country. In a nutshell, metabolic syndromes like obesity, reproductive as well as fertility issues, cancer may be linked to the consumption of microplastics. Apart from these risks studies have shown microplastics being found in human placenta indicating wide spread migration of plastics in the human body. The Committee, therefore, recommend that elimination of the Plastic and nano-plastic from our day to day life is the dire need of the hour to tackle the plastic menace which is looming large over the country. The Committee, therefore, recommend that to curb the menace collective wisdom of the Department, BIS and FSSAI may result in a roadmap with concrete measures and implementation in letter and spirit of the present regulations are requird to save the citizens and also their future generations.

13. The Committee note that the Department is taking steps to minimize the use of plastic and also to minimize the harmful effects of it by taking a slew of measures which include to recycle the plastic, to develop new material which would be non-plastic and bio-wastegreen material which could replace plastic,

several IITs and scientific organisations as well as private industries are also doing research to develop a material which would be cost effective and good for environment. Further, the Department is taking up the matter with the Ministry of Environment Forest and Climate Change to ban the use of single use plastic. The Committee are deeply concerned to note that nothing concrete has emerged so far from the various steps stated to be taken by the Department. The Committee desire that the matter may be taken at the highest level and vigorously pursued with all concerned Ministries/Organisations etc. to find a concrete solution of the plastic menace. The Committee further find that nothing is being done for manufacturing and promotion of Jute bags as an alternative to the plastic. The Committee are of the view that Jute bags may be an alternative to the plastic. The Committee would like to be apprised of the steps taken by the Department in this regard.

New Delhi;
18 August, 2025
27 Shravan, 1947(Saka)

Azad Kirti Jha
Chairperson,
Standing Committee on
Chemicals and Fertilizers.

ANNEXURE- I

Food Safety and Standards (Packaging) Regulations, 2018

1. Short Title and Commencement. - (1) These regulations may be called the Food Safety and Standards (Packaging) Regulations, 2018.

(2) They shall come into force on the date of their publication in the Official Gazette and Food Business Operator shall comply with all the provisions of these regulations by 1st July, 2019.

2. Definitions. - (1) In these regulations unless the context otherwise requires: -

(a) **"Act"** means the Food Safety and Standards Act, 2006 (Act 34 of 2006);

(b) **"food grade"** means material made of substances which are safe and suitable for their intended use, and shall not endanger human health or result in unacceptable change in the composition of the food or organoleptic characteristics;

(c) **"multilayer/composite food packaging"** means a food packaging material composed of two or more layers of same or different types of packaging materials specified under these regulations;

(d) **"overall migration limit"** means the maximum permitted amount of non- volatile substances released from a material or article into food simulants;

(e) **"package or container"** means a pre-packaged box, bottle, casket, tin, barrel, case, pouch, receptacle, sack, bag, wrapper or such other things in which an article of food is packed;

(f) **"packaging material"** means materials such as cardboard, paper, glass, metal, plastic, multi-layer packaging material used for packaging of food products;

(g) **"primary food packaging"** means packaging material in direct contact with food products;

(h) **"secondary food packaging"** means packaging material which encloses the primary food packaging and does not come in direct contact with food products;

(i) **"specific migration limit"** means the maximum permitted amount of a given substance released from a material or article into food or food simulants.

(2) All other words and expressions used herein and not defined, but defined in the Act, rules or regulations made thereunder, shall have the meanings assigned to them in the Act, rules or regulations, respectively.

3. General Requirements. - (1) Every food business operator shall ensure that the packaging material used shall be in accordance with these regulations:

Provided where Indian Standards are not available, then relevant International Standards may be complied with.

(2) Any material which comes in direct contact with food or likely to come in contact with food used for packaging, preparation, storing, wrapping, transportation and sale or service of food shall be of food grade quality.

(3) Packaging materials shall be suitable for the type of product, the conditions provided for storage and the equipment for filling, sealing and packaging of food as well as transportation conditions.

(4) Packaging materials shall be able to withstand mechanical, chemical or thermal stresses encountered during normal transportation. In case of flexible or semi-rigid containers, an overwrap packaging may be necessary.

(5) Food products shall be packed in clean, hygienic and tamper-proof package or container.

(6) The sealing material shall be compatible with the product and the containers as well as the closure systems used for the containers.

(7) Tin containers once used, shall not be re-used for packaging of food.

(8) Plastic containers of capacity 5 litre and above and Glass bottles, which are reused for packaging of food, shall be suitably durable, easy to clean or disinfect.

(9) Printing inks for use on food packages shall conform to IS: 15495.

(10) Printed surface of packaging material shall not come into direct contact with food products.

(11) Newspaper or any such material shall not be used for storing and wrapping of food.

(12) In case of multilayer packaging the layer which comes in direct contact with food or layers likely to come in contact with food shall meet the requirements of packaging materials specified in Schedule I, II and III of these regulations.

(13) The materials listed in Schedule I, II and III of these regulations shall be compatible with their intended use as a packaging material so as not to alter the quality and safety of the food product.

(14) Every food business operator shall obtain the certificate of conformity issued by NABL accredited laboratory against these regulations for the packaging material which comes in direct contact with food or layers likely to come in contact with food to be used.

4. Specific Requirements for Primary food packaging. - (1) Paper and board materials intended to come in contact with food products-

(a) Paper and board material shall be of uniform formation, thickness and substance.

(b) It shall be free from visible specks, grease marks, cuts, pinholes and other blemishes.

(c) The paper used for the manufacture of boxes, cartons, plates, cups and paper lids or paper which are meant to be direct in contact with food shall be of food grade and shall be free from contaminants.

(d) Paper and board materials used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule – I.**

(2) Glass containers intended to come in contact with food products- (a) As far as possible, they shall be free from blisters, mould marks, stones and chippings and as far as possible shall be free from cords, seeds and other visible defects.

(b) They shall have a smooth surface without cracks, pinholes and sharp edges.

(c) The sealing surface shall be free from hairline cracks and prominent seam marks.

(3) Metal and Metal Alloys intended to come in contact with food products-

(a) A utensil or container made of the following materials or metals, when used in the preparation, packaging and storing of food shall be deemed to render it unfit for human consumption: -

(i) containers which are rusty;

(ii) enamelled containers which have become chipped and rusty;

(iii) copper or brass containers which are not properly tinned.

(b) Appropriate grades of metal and metal alloys where applicable shall be used for packing or storing of food products.

(c) Metal and metal alloys used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule – II**.

(4) Plastic materials intended to come in contact with food products-

(a) Plastic materials used for the manufacturing of containers for packing or storing the food products shall conform to either of the Indian Standards specifications as provided in **Schedule – III**:

Provided that Drinking Water (both Packaged and Mineral Water) shall be packed in colourless, transparent and tamper-proof bottles or containers made of polyethylene (PE) conforming to IS: 10146 or polyvinyl chloride (PVC) conforming to IS: 10151 or polyalkylene terephthalate (PET and PBT) conforming to IS: 12252 or polypropylene (PP) conforming to IS: 10910 or food grade polycarbonate conforming to IS: 14971 or polystyrene conforming to IS: 10142 or sterile glass bottles only. The transparency of a container shall not be less than 85 percent in

light transmittance:

Provided also that all pigments or colorants as specified in Indian Standard IS: 9833 may be allowed in plastic containers of five litre and above made of Polycarbonate and Polyethylene Terephthalate (PET) used for packaging of mineral water and packaged drinking water. The transparency of such containers shall not be less than 85 percent in light transmittance.

[1][Provided further that food grade packaging materials as specified in regulation 4(1) to (3), which may or may not contain plastic as component compatible with

the water to be packaged may also be used. In such cases requirements of transparency would not apply.]

(b) All packaging materials of plastic origin shall pass the prescribed overall migration limit of 60mg/kg or 10mg/dm^2 when tested as per IS 9845 with no visible colour migration.

(c) Plastic materials and articles shall not release the substances in quantities exceeding the specific migration limits listed under **Table 1**.

(d) Pigments or Colorants for use in plastics in contact with food products and drinking water shall conform to IS: 9833.

(e) Products made of recycled plastics including carry bags shall not be used for packaging, storing, carrying or dispensing articles of food.

Substitution of highlighted provision

[(e) Products made of recycled plastics including carry bags may be used for packaging, storing, carrying or dispensing of food products as and when standards and guidelines are framed by the Food Authority. Such packaging materials shall also comply with any other national standards/regulations as applicable.] *[Operationalized w.e.f. 18th January, 2022 vide Direction F.No.STD/SC/A-40 dated 18th January, 2022*

Table 1

Requirement for specific migration limits of substances from plastic materials intended to be in contact with articles of food

SI. No.	Substances	Maximum Migration Limit (mg/Kg)
1.	Barium	1.0
2.	Cobalt	0.05
3.	Copper	5.0
4.	Iron	48.0
5.	Lithium	0.6
6.	Manganese	0.6
7.	Zinc	25.0
8.	Antimony	0.04
9.	Phthalic acid, bis (2-ethylhexyl) ester (DEHP)	1.5]

5. A list of suggestive packaging materials which may be used for packaging of food products falling under the specified categories is provided in **Schedule – IV**:

Provided that this is an indicative list not restricting the use of any other packaging material complying with the specified standards.

Schedule – I

Paper and board materials intended to come in contact with food products

SI. No	List of Standards
1.	Grease proof paper – IS 6622
2.	Vegetable parchment or Grease proof paper or Aluminium Foil Laminate – IS 7161
3.	Aluminium Foil Laminates for Packaging – IS 8970
4.	General purpose packing or wrapping Paper – IS 6615

5.	Folding Box Board, uncoated – IS 1776
6.	Corrugated Fibre Board Boxes- Specification (Part 1) – IS 2771

Note: The wax used for coating the paper or board shall be paraffin wax conforming to Type I of IS 4654.

Schedule – II

Metal and Metal Alloys intended to come in contact with food products

SI. No	List of Standards
1.	Cold-reduced Electrolytic Tinplate – IS 1993/ISO 11949
2.	Cold reduced Electrolytic Chromium or Chromium Oxide – Coated Steel - IS 12591/ISO 11950
3.	Wrought Aluminium and Aluminium Alloy Sheet and Strip for General Engineering – IS 737
4.	Aluminium and Aluminium Alloy Bare Foil for Food Packaging – IS 15392
5.	Specification for Crown Closures – IS 1994
6.	Specification for Round Open Top Sanitary Cans for Foods and Drinks – IS 9396 (Part 1)
7.	Specification for Round Open Top Sanitary cans for Foods and Drinks – IS 9396 (Part 2)

Schedule – III

Plastic Materials intended to come in contact with food products

SI. No.	List of Standards
1.	Specification for Polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10146
2.	Specification for Polystyrene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10142
3.	Specification for Polyvinyl Chloride (PVC) and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10151
4.	Specification for Polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 10910
5.	Specification for Ionomer Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 11434

6.	Specification for Ethylene Acrylic Acid (EAA) copolymers for their safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 11704
7.	Specification for Polyalkylene Terephathalates (PET & PBT) for their safe use in contact with foodstuffs, pharmaceuticals and drinking water - IS 12252
8.	Specification for Nylon 6 Polymer for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 12247
9.	Specification for Ethylene Vinyl Acetate (EVA) copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 13601
10.	Specification for Ethylene Metha Acrylic Acid (EMAA) copolymers and terpolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 13576
11.	Specification for Polycarbonate Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 14971
12.	Specification for Flexible Packaging Materials for packaging of Edible Oils, Ghee and Vanaspati - IS 14636
13.	Specification for Polyalkylene Terephthalates (PET & PBT) for Moulding and Extrusion – IS 13193
14.	Specification for Polyethylene Films and Sheets – IS 2508
15.	Specification for Linear Low Density Polyethylene (LLDPE) Films – IS 14500
16.	Specification for High Density Polyethylene Materials for Moulding and Extrusion – IS 7328
17.	Specification for Melamine-Formaldehyde Resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water – IS 14999
18.	Low Density Polyethylene Films – IS 2508
19.	Blow Moulded Polyolefin Containers - Part 2 : Over 5 Litres, Up to and Including 60 Litres Capacity – IS 7408
20.	Stretch Cling Films – IS 14995

Schedule – IV

List of suggestive packaging materials

SI.No.	Product Category	Types of Packaging materials
1.	Milk and milk products	• Glass bottle with metal caps or plastic (polypropylene (PP) or High-density polyethylene (HDPE)) caps.
		• Rigid Plastic container made of PET with plastic (polypropylene (PP) or High-density polyethylene (HDPE))

		caps. • Rigid Plastic container made up of High density polyethylene (HDPE) or Polypropylene (PP) or Polystyrene (PS) with Plastic (PP or High-density polyethylene (HDPE) caps. • Flexible plastic pouch made of polyethylene (PE) or Polypropylene (PP) based co-extruded multilayered material. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Tin plate container. • Paper based lined cartons with liner made of aluminium foil based laminated structure. • Plastic based polypropylene (PP) or polystyrene (PS) cups with paper or Peel-off lid. • Wax coated paper butter wrappers. • Paper and Paper Board based folding carton inside butter wrapped with butter paper. • Metal Containers with plastic polypropylene (PP) caps or metal or plastic lid. • Plastic pet container with plastic lid. • Thermoform cup or tray with paper or peel-off lids. • Paper and Paper Board setup boxes with or without lamination –plastic film inside. • Paper and Paper Board setup boxes with or without grease proof paper placed inside.
		• Plastic Based multi layered flexible laminated heat sealed pouch. • Mud or clay pots. • Thermoformed Plastic container (blister pack) with aluminium foil or polyethylene (PE) based lid
2.	Fats, oils and fat emulsions	• Tin plate container. • Glass bottle with metal caps or plastic polypropylene (PP) or High-density polyethylene (HDPE) caps. • Plastic rigid container (jar) made of High-density polyethylene (HDPE). • Plastic bottle or Jar Polyethylene terephthalate (PET) with plastic caps. • Plastic Pouch made of Multi layered laminated or co-extruded structure. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic laminated pouch in duplex board box (Bag in Box). • Thermoformed plastic based jar with plastic caps. • Paper based lined cartons with liner made of aluminium foil based laminated structure.

3.	Fruit Vegetable & products	• Glass bottle with metal caps or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Aluminium can with easy open end. • Tinplate container.
		• Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic rigid container (jar) made of either High- density polyethylene (HDPE) or Co-extruded structure with Plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Stand up Pouch made up of Plastic based structure with plastic spout. • Flexible Plastic pouch made of either polyethylene (PE) or Laminated structure. • Thermoformed Plastic container (blister Pack) with aluminium foil or polyethylene (PE) based lid. • Plastic jar (Co-extruded) with metal caps. • Plastic trays with overwrap. • Polyethylene terephthalate (PET) or polypropylene (PP) or Poly Vinyl Chloride (PVC) Punnets
4.	Sweets and Confectionery	• Metal Containers with plastic polypropylene (PP) caps or metal or plastic lid Plastic based multilayered laminated Heat sealed pouches. • Composite containers made up of Paper Board or Aluminium foil or plastic base films with plastic or metal lids. • Plastic based rigid containers. • Foil wrap. • Plastic film based twist wraps (Polyethylene terephthalate (PET) or polypropylene (PP) or Poly Vinyl Chloride (PVC)). • Thermoformed tray and punnet with lid. • Glass bottle with metal or plastic caps.
		• Plastic cups with film lid.

5.	Cereals and cereal products	• Tin container. • Aluminium Foil Based laminated pouch in metal container. • Wrapper made of wax coated paper. • Wrapper made of three layered laminated structure. • Plastic based multilayered laminated pouch (heat sealed). • Plastic based thermoform container with plastic lid. • Lined carton with liner made of multi layered laminated structure. • Plastic based multilayered laminated structured Zipper pouch. • Thermoform trays with plastic lids or over wraps. • Glass bottle with metal caps. • Polyethylene terephthalate (PET) or Plastic based rigid containers with metal or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps • Plastic films or co-extruded film or polypropylene (PP) or polyethylene (PE)
6.	Meat and Meat Products or Poultry Products	• Glass jars with plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Metal Containers with metal lid (lacquered tin containers). • Plastic based flexible pouches in paper & paper Board carton. • Plastic based multilayered flexible laminates heat sealed pouches. • Plastic tray with overwrap.

		• Aluminium foil wrap. • Polyethylene terephthalate (PET) punnets or containers with plastic caps
7.	Fish and fish products or Seafood	• Glass jars with plastic (PP or High-density polyethylene (HDPE) caps. • Metal Containers with metal lid (lacquered tin containers). • Polyethylene terephthalate (PET) punnets or containers with plastic caps. • Plastic based multilayered flexible laminates heat sealed pouches. • Plastic tray with overwrap.
8.	Sweetening agents including Honey	• Glass bottle with Metal Caps or Plastic (polypropylene (PP) or High-density polyethylene (HDPE) Caps. • Plastic based Thermoformed container. • Blister Pack with foil or polyethylene lid. • Polyethylene Terephthalate (PET) container with Plastic Caps. • Plastic laminated Tube.
9.	Salt, spices, Condiments and related products	• Glass bottle with metal lid or plastic (polypropylene (PP) or High-density polyethylene (HDPE) caps. • Plastic based rigid container with Plastic cap (Polyethylene terephthalate (PET) and High- density polyethylene (HDPE) Containers). • Paper & Paper board or Aluminium foil or Plastic Film based Composite Container. • Folding cartons with Plastic based flexible laminated structure (heat sealed) pouch placed inside.

		• Plastic based multilayered layered laminated pouch (heat sealed).
10.	Beverages (other than Dairy and Fruits & vegetables based)	• Plastic bottles made of either Polyethylene terephthalate (PET) or Polycarbonate (PC) with Plastic (Polypropylene (PP) or High-density polyethylene (HDPE) or Aluminium caps. • Heat sealed Plastic pouches made of Polyethylene (PE). • Glass bottles with metal caps or plastic caps. • Plastic pouches made up of Polyethylene (PE) in Corrugated fibre board Boxes. • Aluminium can with easy open end. • Tin plate container. • Plastic pouch made of laminated structure. • Aseptic and flexible packaging material (Paper board or Aluminium foil or polyethylene) based multilayered structure. • Plastic based multi layered structure heat sealed pouches. • Plastic based multi layered structure heat sealed Zipper pouches or stand up pouches. • Metal Containers with plastic or Polypropylene (PP) caps or metal or plastic lid, Rigid Plastic container with plastic caps (Polypropylene (PP) Caps). • Wooden cask (for wines).

Note. - The Food Safety and Standards (Packaging) Regulations, 2018 were published in the Gazette of India, Extraordinary, Part III, Section 4 vide notification number File No. 1-95/Stds/Packaging/SP(L&C/A)/FSSAI-2017, dated the 24th December, 2018 and subsequently amended vide notification numbers:

1. F. No. Std/SP-08/A-1.2019/N-01, dated 25th January 2022.
2. F.No. Std/SP-20/T(Migration-N), dated 30th August 2022.

Annexure-II

Action against non-compliance reported during FY 2023-24

State	Inspection Conducted	Non-Compliance w.r.t Packaging material	Improvement Notice Issued
Andaman And Nicobar Islands	900	26	7
Andhra Pradesh	5,146	272	129
Arunachal Pradesh	235	0	0
Assam	2,127	18	14
Bihar	272	30	0
Chandigarh	1,162	33	1
Chhattisgarh	4,203	29	16
Dadra And Nagar Haveli	387	5	3
Delhi	1,084	22	10
Goa	417	11	11
Gujarat	18,268	205	166
Haryana	1,727	47	30
Himachal Pradesh	1,710	42	20
Jammu and Kashmir	6,260	32	30
Jharkhand	584	4	4
Karnataka	7,188	225	225
Kerala	36,468	565	15
Ladakh	189	0	0
Lakshadweep	5	0	0
Madhya Pradesh	7,780	74	49
Maharashtra	10,175	1163	22
Manipur	90	0	0
Meghalaya	112	1	0
Nagaland	45	0	0
Odisha	7,418	118	48
Puducherry	21	2	0
Punjab	3,962	52	7
Rajasthan	3,948	35	30
Sikkim	433	3	3
Tamil Nadu	65,866	1763	1671
Telangana	1,661	58	25
Tripura	267	7	1
Uttar Pradesh	20,890	258	136
Uttarakhand	1,472	14	14
West Bengal	18,440	321	44

State	Inspection Conducted	Non-Compliance w.r.t Packaging material	Improvement Notice Issued
Railways/Airport/Seaport	1,622	18	01
Total	2,32,534	5453	2732

Action against non-compliance reported during FY 2024-25

State	Inspection Conducted	Non-Compliance w.r.t. Packaging material	Improvement Notice Issued
Andaman And Nicobar Islands	736	16	8
Andhra Pradesh	1,141	18	12
Arunachal Pradesh	383	4	
Assam	1,517	10	10
Bihar	123	4	1
Chandigarh	999	36	1
Chhattisgarh	3,957	34	20
Dadra And Nagar Haveli	201	3	
Delhi	614	33	22
Goa	272	14	14
Gujarat	15,446	258	215
Haryana	1,088	38	14
Himachal Pradesh	1,401	60	38
Jammu and Kashmir	4,105	25	24
Jharkhand	374	1	1
Karnataka	6,915	282	282
Kerala	23,276	233	36
Ladakh	195	0	0
Lakshadweep	4	0	0
Madhya Pradesh	7,817	85	2
Maharashtra	6,415	1008	21
Manipur	253	7	4
Meghalaya	223	1	0
Mizoram	3	0	0
Nagaland	10	0	0
Odisha	3,972	63	35
Puducherry	37	0	0
Punjab	2,040	39	10
Rajasthan	4,846	105	88
Sikkim	170	4	4
Tamil Nadu	43,373	497	427

State	Inspection Conducted	Non-Compliance w.r.t. Packaging material	Improvement Notice Issued
Telangana	1,151	63	101
Tripura	169	2	1
Uttar Pradesh	17,682	201	108
Uttarakhand	1,090	15	15
West Bengal	13,150	257	16
Railways/Airport/Seaport	1,795	26	10
Total	1,66,943	3442	1540

APPENDIX-I

MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS (2024-25)

The Committee sat on Monday, the 6th January, 2025 from 1500 hrs. to 1615 hrs. in Committee Room 074, Parliament Library Building (PLB), New Delhi.

PRESENT

Shri Azad Kirti Jha– Chairperson

MEMBERS

LOK SABHA

2. Shri Ajay Bhatt
3. Shri Robert Bruce C.
4. Shri Bharatsinhji Shankarji Dabhi
5. Dr. Kalyan Vaijinathrao Kale
6. Shri Malvinder Singh Kang
7. Shri Babu Singh Kushwaha
8. Shri Utkarsh Verma Madhur
9. Shri Praveen Patel
10. Dr. Sambit Patra
11. Shri Balram Naik Porika
12. Shri Shivmangal Singh Tomar

RAJYA SABHA

13. Shri Subhash Barala
14. Shri Subhash Chandra Bose Pilli
15. Shri Akhilesh Prasad Singh
16. Shri Tajveer Singh

SECRETARIAT

1.	Smt. Suman Arora	-	Additional Secretary
2.	Ms. Miranda Ingudam	-	Director
3.	Shri Kulvinder Singh	-	Deputy Secretary

LIST OF WITNESSES

Department of Chemicals and Petrochemicals

1. Ms. Nivedita Shukla Verma, Secretary (C&PC)
2. Shri Deepak Mishra Joint Secretary
3. Shri Ganga Kumar DDG, DCPC
4. Ms Vandana Director, DCPC

5. Ms. Shalini Mahajan Joint Director, DCPC
6. Shri Chitvan Singh Dhillon, Dy Director, DCPC
7. Shri Kheem Singh Chauhan, Section Officer, DCPC
8. Shri Rajesh Kumar Mishra, Director
9. Dr. Alka Rao Adviser, FSSAI
10. Ms. Inoshi Sharma, Executive Director,
11. Dr. R. S. Dhaliwal, Scientist G & Head, Division of Non-Communicable Diseases, ICMR
12. Dr. Amita Bali, DDG(P)- CMO(SAG), Dte.GHS
13. Dr. Meera Dhuria Joint Director,
14. Shri Rajeev Sharma Scientist G & DDG, Standardization-I, BIS
15. Shri Chinmay Dwivedi Scientist E and Head PCD, BIS
16. Shri Shivam Dwivedi Scientist C/DD, PCD, BIS

Representatives of CIPET

1. Dr. Shishir Sinha DG, CIPET
2. Dr. Smita Mohanty Principal Director & Head, CIPET

Representatives of MoHFW

1. Shri Rajiv Wadhwan Advisor Cost, MOHFW
2. Shri G.A. Raghuvanshi, Deputy Secretary, MOHFW

2. At the outset, the Chairperson welcomed the Members of the Committee and the representatives of the Department of Chemicals and Petrochemicals (DCPC), Ministry of Chemicals and Fertilizers to the sitting of the Committee convened for briefing on the subject 'Health hazards due to the use of compromised/substandard quality of food-grade plastics and their exposure to extreme Indian climatic conditions'. Drawing the attention of the witnesses to Direction 58 of the 'Directions by the Speaker' regarding confidentiality of the proceedings of the Committee, the Chairperson asked them to apprise the Committee about the subject particularly regarding the safeguards put in place to eliminate or to minimize the health hazards due to the use of compromised/substandard quality of food grade plastics and their exposure to extreme Indian climatic conditions.

3. The Secretary, accordingly, briefed the Committee about the initiatives taken by them to eliminate the health hazards due to the use of compromised/substandard

quality of food-grade plastics in accordance with the provision made in the Food Safety and Standards (Packaging) Regulations, 2018 and Food Safety and Standards Act, 2006

4. The Committee, then, sought clarifications on various issues viz. (i) Implementation and enforcement of standards of quality of plastics particularly in remote/rural areas (ii) inspection of quality packaging by food business operators (FBO's) (iii) Harmful effects of plastic containers on pickles food substances in which they are packaged particularly when exposed to high temperature (iv) Harmful effects of the use of thin plastic packets for packaging milk and other food material particularly on human health and animal health etc.

5. As some points required detailed information, the Chairperson asked the representatives to furnish detailed replies thereon within two weeks.

The witnesses then withdrew.

A copy of the verbatim record of the proceedings of the sitting has been kept.

The Committee then adjourned.

****

APPENDIX-II

MINUTES OF THE TWENTIETH SITTING OF THE STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS (2024-25)

The Committee sat on Friday, the 9th May, 2025 from 1500 hrs. to 1630 hrs. in Committee Room '2', EPHA, New Delhi.

PRESENT

Shri Azad Kirti Jha– Chairperson

MEMBERS

LOK SABHA

2. Shri Robert Bruce C.
3. Shri Bharatsinhji Shankarji Dabhi
4. Shri Malvinder Singh Kang
5. Shri Babu Singh Kushwaha
6. Shri Praveen Patel
7. Shri Balram Naik Porika
8. Daggumalla Prasada Rao
9. Shri Shivmangal Singh Tomar

RAJYA SABHA

10. Shri Subhash Barala
11. Dr. Kalpana Saini
12. Shri Arun Singh
13. Shri Akhilesh Prasad Singh
14. Shri Tejveer Singh

SECRETARIAT

1. Smt. Maya Lingi - Joint Secretary
2. Shri Kulvinder Singh - Deputy Secretary

LIST OF WITNESSES

Representatives of the Department of Chemicals & Petrochemicals

1. Ms. Nivedita Shukla Verma Secretary (C&PC), DCPC
2. Shri Deepak Mishra Joint Secretary, DCPC
3. Dr.Shishir Sinha DG, CIPET
4. Ms. DivyaParmar EA, DCPC
5. Shri Rajiv Wadhawan, Adviser (Cost), MoHFW

6. Ms Vandana Director, DCPC
7. Shri Chitvan Singh Dhillon, Dy Director, DCPC
8. Dr.SmitaMohanty Principal Director & Head, CIPET
9. Dr. Vishal Verma Director (TSS&BD), CIPET
10. Dr. K. P. Bhuvana Manager, CIPET
11. Dr. Priyanka Bansal, Scientist E, ICMR
12. Dr.Amita Bali, DDG(P)- CMO(SAG), Dte. GHS
13. Dr.Meera Dhuria Joint Director, NCDC

Representatives of Food Safety and Standards Authority of India (FSSAI)

1. Dr. Alka Rao, Advisor, S&S, FSSAI
2. Mr. Rakesh Director, FSSAI

Representatives of Bureau of Indian Standards (BIS)

1. Shri Pramod Kumar Tiwari Director General, BIS
2. Shri Chinmay Dwivedi Scientist E and Head PCD, BIS
3. Shri Shivam Dwivedi Scientist C/DD, PCD, BIS

2. At the outset, the Chairperson welcomed the Members of the Committee and representatives of the Department of Chemicals & Petrochemicals, the Bureau of Indian Standards (BIS) and Food Safety and Standards Authority of India (FSSAI) to the Sitting of the Committee convened to take oral evidence on the subject 'Health hazards due to the use of compromised/substandard quality of food-grade plastics and their exposure to extreme Indian climatic conditions'. Drawing the attention of the witnesses to Direction 55 of the 'Directions by the Speaker' regarding confidentiality of the proceedings of the Committee, the Chairperson asked them to apprise the Committee about the subject particularly regarding the safeguards put in place to eliminate or to minimize the health hazards due to the use of compromised/substandard quality of food grade plastics and their exposure to extreme Indian climatic conditions.

3. The Secretary, accordingly, briefed the Committee about the initiatives taken by them to eliminate the health hazards due to use of compromised/substandard quality of food-grade plastics and Food Safety and Standards (Packaging) Regulations, 2018 as well as Food Safety and Standards Act, 2006. The Secretary briefed the Committee regarding health concerns from Food Grade Plastics; regulations for food-grade plastics; evolution of Food Safety and Standards (Packaging) Regulations; salient features of the Regulations; specific requirements of plastic packaging materials under Regulations; safeguards against extreme Indian Climatic conditions; studies, R&D and initiatives on Food Grade Plastic; studies,

Research and initiatives on Food Grade Plastic; etc,

4. The Committee, then, sought clarifications on certain issues related viz. the details about the Food Safety and Standards (Packaging) Regulation, 2018 that have been issued that various packing materials used for packing food are of standard quality and does not contaminate the packed food; the Food Safety and Standards (Packaging) Regulation, 2018 are enough or not to control the health hazards arising out of use of compromised/substandard quality of food-grade plastics; the meaning of 'requirement for careful selection of packaging materials as it is not specific'; the number of complaints received regarding milk packaged in plastic bags; the information regarding the quality of polythenes and packaging material available in the market]being checked randomly or not; the details about plastic containers used for juice, ice-cream, boxes of take away items, plastic containers of pickles etc; the procedure for obtaining license for a Food Business Organization (FBO) the data regarding packaging imported from other countries and its annual quantum; the information regarding missing license number of some laboratories testing packaging material; the reasons for laxity in controlling the health problems being posed by the use of compromised/substandard quality of food-grade plastics; the exact rule and responsibilities of the Department of Chemicals and Petrochemicals in the implementation of Food Safety and Standards (Packaging) Regulation, 2018; the reasons for availability of plastic bags etc. in the market despite ban/regulation on them and what action the Department is taking for research and development etc.

5. As some points required detailed information, the Chairperson asked the representative to furnish detailed replies thereon within two weeks. They assured to comply.

The Chairperson thanked the representatives of the Department, FSSAI and BIS for appearing before the Committee and responding to the queries of the Members.

A copy of the verbatim record of the proceedings of the sitting has been kept.

(The witness then withdrew).
The Committee then adjourned.
******

APPENDIX- III

STANDING COMMITTEE ON CHEMICALS AND FERTILIZERS (2024-25)
MINUTES OF THE TWENTY SIXTH SITTING

The Committee sat on Monday, the 18th August, 2025 from 1500 hrs. to 1700 hrs. in the Committee Room '2', EPHA, New Delhi.

PRESENT

SHRI AZAD KIRTI JHA - CHAIRPERSON

MEMBERS

LOK SABHA

2. Shri Brijmohan Agrawal
3. Shri Ajay Bhatt
4. Shri Robert Bruce C.
5. Shri Malvinder Singh Kang
6. Shri Babu Singh Kushwaha
7. Shri Utkarsh Verma Madhur
8. Shri Praveen Patel
9. Dr. Sambit Patra
10. Shri Balram Naik Porika
11. Shri Sachithanantham R.
12. Shri Eatala Rajender
13. Shri Nalin Soren
14. Dr. Ricky Andrew J. Syngkon

RAJYA SABHA

15. Shri Subhash Barala
16. Dr. Bhagwat Karad
17. Shri Subhash Chandra Bose Pilli
18. Shri Naresh Bansal
19. Shri Sanjay Raut
20. Shri Meda Raghunadha Reddy
21. Shri Arun Singh
22. Shri Tejveer Singh

SECRETARIAT

1. Smt. Maya Lingi - Joint Secretary
2. Ms. Miranda Ingudam - Director
3. Shri Kulvinder Singh - Deputy Secretary
4. Shri Nagendra Suman - Deputy Secretary
5. Shri Panna Lal - Deputy Secretary
6. Shri Abhishek Kumar - Deputy Director
7. Ms. Neelam Bhave - Under Secretary

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee. Thereafter, the Committee took up for consideration, the following Draft Reports:

(i) XXXX XXXX XXXX XXXX
(ii) XXXX XXXX XXXX XXXX
(iii) XXXX XXXX XXXX XXXX
(iv) XXXX XXXX XXXX XXXX
(v) Thirteenth Report on the subject 'Health hazards due to use of compromised/substandard quality of food-grade plastics and their exposure to extreme Indian climatic conditions' pertaining to the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers.
(vi) XXXX XXXX XXXX XXXX
(vii) XXXX XXXX XXXX XXXX
(viii) XXXX XXXX XXXX XXXX

3. Giving an overview of the important Observations/Recommendations contained in the draft Reports, the Chairperson solicited the views/suggestions of the Members.

4. After some deliberations the Committee decided to Adopt five (05) Draft Reports *viz*, 03 ATRs and 02 subject Reports i.e, the Ninth, Tenth, Eleventh, Twelfth and Thirteenth draft Reports. The Committee then authorized the Chairperson to finalize the Reports and present/lay the Reports in the ongoing Session in both the Houses of Parliament.

5. The Committee decided to consider Draft Report No. Fifteenth and Sixteenth for adoption in the next Sitting of the Committee to be held on 19.08.2025 at 1600 hrs. onwards.

***The Committee then adjourned*.**