DOI: 10.15199/42.2023.3.3

ADAM FOTEK / ORCID: 0009-0002-1462-1580 / afotek@jsh.com.pl

EXPERT IN THE STUDIES AT THE RESEARCH LABORATORY J.S. HAMILTON POLAND LTD.

THE INTRODUCED AND PLANNED CHANGES IN THE LAW REGARDING FOOD CONTACT MATERIALS

OBOWIĄZUJĄCE I PLANOWANE ZMIANY W PRAWIE DOTYCZĄCYM MATERIAŁÓW DO KONTAKTU Z ŻYWNOŚCIĄ

ABSTRACT: In the paper, the review of the implemented and planned changes in the legislation concerning packaging, including the packaging intended to come into contact with food, was presented.

Key words: packaging, food packaging

STRESZCZENIE: W artykule przedstawiono przegląd wdrożonych i planowanych zmian dotyczących otoczenia prawnego opakowań w tym do kontaktu z żywnościa.

Słowa kluczowe: opakowania, opakowania do żywności

AMENDMENT TO THE REGULATION (EU) NO 10/20111

In July and August 2023, the European Commission (EC) published two amendments to Regulation (EU) 10/2011. The Regulation (EU) 2023/1442 of 11 July 20232 introduces the ban for the employment of the additive to plastic in a form of wood flour and fibres. It has a very big importance in manufacture of the products which are expected to make the impression of 'ecological", i.e. containing the additive of natural materials. From the viewpoint of recyclability, such material cannot be subjected to mechanical or biological recycling. The European Commission excluded the application of the discussed materials due to the impossibility of ensuring the compatibility with the Regulation (EU) No 1935/2004. It refers to the presence of naturally occurring substances with a low molecular weight. Due to the differences in the composition of raw wood material, it is necessary to evaluate each wood species separately, considering - apart from a species, its origin, processing and treatment. Due to the above reason, the mentioned regulation admits the application of wood addition but after obtaining individual opinion of EFSA (European Food Safety Authority) and consent of the European Commission. In practice, it eliminates the employment of such additive in plastic products. On the other hand, a popular bamboo is not formally a wood but a grass and as such, it has been never considered in the list of the substances allowed in the Regulation (EU) No 10/2011; so, theoretically, it is not subjected to the described limitation. A final decision in this matter will belong to national control organs. In the same regulation, the problem of phthalates' migration has been developed. The table given below contains the adopted limitations and group limits of specific substance migration (table).

The Commission Regulation (EU) No 2023/1627 of 10 August 2023³ introduces (in Annex I to the Regulation – list of the admitted substances) bis (2-ethylhexyl) cyclohexane-1,4-dicarboxylate (FCM no 1079) with a limit of a specific migration 0.05 mg/kg exclusively "as an additive (plasticizer) in Poly(vinyl

gulation. (UE) no 10/2011 L= 0.3 mg/kg	Regulation 2023/1442
I = 0.3 mg/kg	
L- 0.5 Hig/kg	SML = 0.12 mg/kg
up limitation 32	Group limit 32 and 36
L = 30.0 mg/kg	SML = 6.0 mg/kg
up limit 32	Group limit 32 and 36
L = 1.5 mg/kg	SML = 0.6 mg/kg
up limit 32	Group limit 32 and 36
	Ban for use of DINP together with DBP (157), BBP (159), DEHP (283), DIBP (1085)
	Phthalate is not listed as a substance admitted to consumption. It may, however, occur in other phthalates
	as a result of its application as a polymerisation-supporting agent and is covered with the group limits
	with allocation to FCM (Food Contact Materials) no 1085.
	Sum of DBP, DIBP, BBP, DEHP expressed as equivalent of DEHP using the following equation:
	DBP*5 + DIBP*4 + BBP*0.1 + DEHP*1.
L	up limitation 32 . = 30.0 mg/kg up limit 32 . = 1.5 mg/kg

chloride) (PVC) at up to 25% w/w in contact with aqueous, acidic and low-alcohol food for long-term storage at room temperature or below (refrigerated and frozen) for which food stimulants A and B were assigned in Tab.2 of Annex III".

RECYCLING OF PLASTIC MATERIALS

Since 2008, the principles of admitting the recycled plastic materials to contact with food were specified by the Commission Regulation (EC) 282/2008 of 27 March 20084. It required the consent for each recycling process. In 2010, the EU register of the mentioned authorizations was planned to appear. The European Commission has never published this register. During the several successive years, a few draft versions of the changes in the discussed regulation were published. As late as after 14 years, i.e. in September 2022, the European Commission introduced the Commission Regulation (EC) 2022/1616 of 15 September 2022 into life 5. On one hand, the published document gives the hope to push forward the problem of admission of recycled plastic materials to contact with foods, but from the other hand, it imposes a great number of administrative barriers. The most important limitation includes admission of only PET materials to mechanical recycling. The second condition which increases considerably the costs is the necessity of issuing the compliance declaration for each batch of recyclate and for the product, manufactured with its participation. The discussed regulation is very complicated by itself, and difficult in practical application. It concerns principally the administrative way of obtaining the permission for recycling. The discussed document splits the total process into the main authorizations, that is, into the process of recycling "RAN" and a series of "auxiliary" registrations: the number of the entity dealing with recycling "RON", the number of its recycling plants "RFN", the employed installations for decontamination of recyclate "RIN". Oppositely to the earlier situation, the European Commission published draft register of the granted authorizations. On the market, there have already appeared PET plastic materials with a correctly filled compliance declaration. The requirements concerning the quality of the input raw materials were subjected to a certain change, i.e. apart from the fraction of the waste which had been earlier admitted to contact with food, the 5-% participation of non-food waste is allowed. Similarly as earlier, the quality of a final product cannot be a threat to the consumer.

PACKAGING WASTE

For the first time since 1992, the European Union undertook the fundamental work on the amendment of Directive 94/62/EC⁶ of 20 December 1994 on packaging and packaging waste (Proposal for Packaging and Packaging Waste Regulation, PPWR). The most important change consists in

establishing of the regulation which enters into effect directly at the territory of the whole EU instead of directive which requires implementation to the national law of each country separately. The amendment considers all current trends concerning procedures with packaging and packaging waste i.e. reduction of the quantity of the waste and increase of the level of packaging recycling.

The mentioned requirements will be referred to all types of packaging. The listed below assumptions are not the only ones which are assumed by the discussed amendment:

- Up to 2025 all single-use packaging of fruits and vegetables and additional packaging for the products already packed-in shall be prohibited;
- Since 2030 the quantity of packaging must be reduced by 5% and then, by the additional 1% in each successive year – target: by 15% in 2040

The aims of recycling:

- Up to 31.12.2025 at least 65% of all packaging waste shall be subjected to recycling
- Up to 2030 all packaging must be recyclable at least in
- Up to 2040 the packaging must contain at least 50 –
 65% of recyclate.
- Up to 31.12.2025 recycling shall include as follows: 50% of plastics, 25% of wood, 70% of iron metals, 50% of aluminium, 70% of glass, 75% of paper and cardboard.

Minimum content of recyclates in packaging since 01.01.2030:

- 30% of packaging intended to come into contact with sensitive products, made from PET as the main component
- 10% of packaging intended to come into contact with sensitive products, made from plastic materials different than PET, excluding single-use plastic bottles for beverages.
 The mentioned requirement will require the change e.g. in pharmaceutical law which, at present, does not allow for application of recyclates.
- 30% of single-use plastic bottles for drinks
- 35% of other packaging

SUMMING UP

Based on the total work conducted in the European Union on the packaging we may recognize that the most important direction of the changes is a widely understood problem of waste management, not only of packaging waste. All other requirements and legal regulations will be subordinated to the mentioned target. We may expect further tightening and extension of the requirements in this respect for the producers, processors and users of the packaging.

LITERATURE

- [1]. Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food. Text with EEA relevance (In Polish: Rozporządzenie Komisji (UE) nr 10/2011 z 14 stycznia 2011 r. w sprawie materiałów i wyrobów z tworzyw sztucznyh przeznaczonych do kontaktu z żywnością)
- [2]. Commission Regulation (EU) 2023/1442 of 11 July 2023 amending Annex I to Regulation (EU) No 10/2011/on plastic materials and articles intended to come into contact with food, as regards changes to substance authorizations and addition of new substances (In Polish: Rozporządzenie Komisji (UE) 2023/1442 z 11 lipca 2023 r. zmieniające załącznik I do Rozporządzenia (UE) nr 10/2011 w sprawie materiałów i wyrobów z tworzyw sztucznych przeznaczonych do kontaktu z żywnością w odniesieniu do zmian zezwoleń na stosowanie substancji i wprowadzenia nowych substancji)
- [3]. Commission Regulation (EU) 2023/1627 of 10 August 2023 amending Annex I to Regulation (EU) No 10/2011 as regards the authorization of the substance bis (2-ethylhexyl) cyclohexane-1,4-dicarboxylate (FCM No 1079) (In Polish: Rozporządzenie Komisji (UE) 2023/1627 z dnia 10 sierpnia 2023 r. zmieniające załącznik I do zezwolenia na stosowanie substancji bis (2 etyloheksylocykloheksano-1,4-dikarboksylan (FCM nr 1079)
- [4]. Commission Regulation (EC) No 282/2008 of 7 March 2008 on recycled plastic materials and articles intended to come into contact with foods and meaning Regulation (EC) No 2023/2006 (In Polish: Rozporządzenie Komisji (WE) nr 282/2008 z dnia 27 marca 2008 r. w sprawie wyrobów i materiałów z tworzyw sztucznych pochodzących z recyklingu przeznaczonych do kontaktu z żywnością oraz zmieniające Rozporządzenie (WE) nr 2023/2006
- [5]. Commission Regulation (EU) 2022/1616 of 15 September 2022 on recycled plasti materials and articles intended to come into contact with foods and repealing Regulation (EC) No 282/2008 (In Polish: Rozporządzenie Komisji (UE) 2022/1616 z dnia 15 września 2022 r. z w sprawie wyrobów i materiałów z tworzyw sztucznych pochodzących z recyklingu przeznaczonych do kontaktu z żywnością oraz uchylające Rozporządzenie (WE) nr 282/2008
- [6]. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (In Polish: Dyrektywa 94/62/WE Parlamentu Europejskiego i Rady z dnia 20 grudnia 1994 r. w sprawie opakowań i odpadów opakowaniowych)