SENATE RULES COMMITTEE

Office of Senate Floor Analyses (916) 651-1520 Fax: (916) 327-4478

THIRD READING

Bill No:AB 906Author:Bloom (D)Amended:6/6/17 in SenateVote:21

SENATE ENVIRONMENTAL QUALITY COMMITTEE: 5-1, 6/21/17 AYES: Wieckowski, Hill, Lara, Skinner, Stern NOES: Stone NO VOTE RECORDED: Gaines

SENATE APPROPRIATIONS COMMITTEE: 6-0, 9/1/17 AYES: Lara, Beall, Bradford, Hill, Nielsen, Wiener NO VOTE RECORDED: Bates

ASSEMBLY FLOOR: 76-0, 5/4/17 (Consent) - See last page for vote

SUBJECT: Beverage containers: polyethylene terephthalate

SOURCE: Association of Plastic Recyclers

DIGEST: This bill, beginning October 1, 2018, defines "polyethylene terephthalate" (PETE) as a plastic derived from a reaction between terephthalic acid or dimethyl terephthalate and monoethylene glycol when specified conditions are met.

ANALYSIS: Existing law requires that all rigid plastic bottles and containers sold in California have a molded label indicating the plastic resin used to produce the product. The resin codes are (Public Resources Code §18015):

1) 1 = PETE (polyethylene terephthalate), commonly referred to as PET;

- 2) 2 = HPDE (high density polyethylene);
- 3) 3 = V (vinyl);
- 4) 4 = LDPE (low density polyethylene);

- 5) 5 = PP (polypropylene);
- 6) 6 = PS (polystyrene); and,
- 7) 7 = OTHER (includes containers made from more than one layer of resin).

This bill:

- 1) Defines polyethylene terephthalate as a plastic derived from a reaction between terephthalic acid or dimethyl terephthalate and monoethylene glycol when both of the following conditions are met:
 - a) The terephthalic acid or dimethyl terephthalate and monoethylene glycol reacted constitutes at least 90% of the mass of the monomer reacted to form the polymer.
 - b) The plastic exhibits a melting peak temperature that is between 225 degrees Celsius and 255 degrees Celsius, using specified American Society for Testing and Materials procedures.
- 2) Provides that this bill becomes operative on October 1, 2018.

Background

1) *Polyethylene terephtahalate: acronyms: PET and PETE: same thing*. In 1988, AB 3299 (Killea, Chapter 838, Statutes of 1988) required all rigid plastic bottles and containers sold in California after January 1, 1992, to bear a label denoting the type of resin used in the manufacture of these containers. The purpose was to facilitate the efficient sorting of used plastic containers for recycling. There are seven categories, each identified by both a number (1 through 7) and a letter code.

One of the seven categories consists of containers made of the material polyethylene terephthalate. A commonly used term of trade for this substance is "PET." When the coding system was first under consideration, a company named, "Pet Incorporated," complained that the use of "PET" would infringe on their registered trademark. Accordingly, the code was to be "PETt" and this was the designation included in AB 3299 in 1988. However, Pet Incorporated objected that "PETt" also infringed on their trademark and the code was subsequently changed the following year from "PETt" to "PETE" via AB 952 (Killea, Chapter 37, Statutes of 1989).

2) *PETE vs. PETG*. PETE is widely used in water and soft drink bottles and is used for a variety of other products. PETE is recyclable; PET flakes and pellets are commonly recycled into other types of packaging and fiber (e.g. carpet and microfiber).

Polyethylene terephthalate glycol-modified (PETG) refers to PETE plastic resin with the addition of glycol. PETG eliminates hazing that can occur when manufacturing PETE containers and is less brittle than PETE. PETG also produces a softer and more pliable exterior surface, which is viewed by some as more comfortable to hold for consumers.

Comments

- Purpose of bill. According to the author, "AB 906 creates a chemically-based definition for PET that reflects its chemical composition and melting point. This definition will help ensure that PET and PETG, which have incompatible processing conditions, are not processed together in the Beverage Container Recycling Program."
- 2) *The melting point*. Unlike PETE, PETG does not have a consistent melting point and becomes molten when heated.

Because both PETE and PETG are comprised of polyethylene terephthalate, they are both labeled with "1" resin code. However, PETE has a much higher processing temperature than PETG. This creates significant challenges for recycling. When processed together, PETG melts and becomes sticky while PETE remains solid. This results in PETG sticking to PETE chips, forming large clumps that cannot be processed.

This bill revises the definition of polyethylene terephthalate to exclude PETG. As a result, PETG containers would not be labeled "1," which would assist in separating out the different materials more effectively prior to recycling.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Senate Appropriations Committee, this bill contains no state costs.

SUPPORT: (Verified 9/6/17)

Association of Plastic Recyclers (source) American Beverage Association Californians Against Waste Dart Container Corporation National Association for PET Container Resources Plastic Recycling Corporation of California Talco Plastics, Inc. The Sustainable Packaging Coalition Verdeco Recycling, Inc.

OPPOSITION: (Verified 8/31/17)

Eastman

Plastics Industry Association (formerly known as Society of the Plastics Industry)

ASSEMBLY FLOOR: 76-0, 5/4/17

AYES: Acosta, Aguiar-Curry, Arambula, Baker, Berman, Bloom, Bocanegra, Bonta, Brough, Burke, Caballero, Calderon, Cervantes, Chau, Chávez, Chen, Chiu, Choi, Chu, Cooley, Cooper, Cunningham, Dababneh, Dahle, Daly, Eggman, Flora, Fong, Frazier, Friedman, Gallagher, Eduardo Garcia, Gipson, Gloria, Gomez, Gonzalez Fletcher, Gray, Grayson, Harper, Holden, Irwin, Jones-Sawyer, Kalra, Kiley, Lackey, Levine, Limón, Low, Maienschein, Mathis, Mayes, McCarty, Medina, Melendez, Mullin, Muratsuchi, Nazarian, Obernolte, O'Donnell, Quirk, Quirk-Silva, Reyes, Ridley-Thomas, Rodriguez, Rubio, Salas, Santiago, Steinorth, Mark Stone, Thurmond, Ting, Voepel, Waldron, Weber, Wood, Rendon

NO VOTE RECORDED: Travis Allen, Bigelow, Cristina Garcia, Patterson

Prepared by: Joanne Roy / E.Q. / (916) 651-4108 9/6/17 11:58:55

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