

ACTION PLAN FACT SHEET
APRIL 2011

Bisphenol A (BPA) – Used in manufacturing polycarbonate plastics and epoxy resins used in nearly every industry and many consumer products, including food packaging regulated by FDA. BPA is a reproductive, developmental, and systemic toxicant in animal studies and is weakly estrogenic. Novel studies addressing different endpoints than standardized tests suggest possible adverse effects to sensitive aquatic organisms at lower concentrations than previously identified, but uncertainties exist in interpreting those data. To address these environmental concerns and uncertainties, EPA intends to:

- Initiate TSCA §5(b)(4) Concern List rulemaking on BPA. Proposed rule in 2011.
- Initiate TSCA §4 rulemaking to develop data on environmental presence and effects. Advance notice of proposed rulemaking in spring 2011.
- Initiate collaborative alternatives assessment activities under the EPA Design for the Environment (DfE) program. Partnership kick-off meeting held in July 2010 focused on reducing BPA use in thermal paper coatings in such applications as cash register receipts. Final Report in December 2011.
- Continue to consult and coordinate closely with FDA, CDC, and the National Institute of Environmental Health Sciences (NIEHS) to better determine and evaluate the potential health consequences of BPA.

Dyes Derived from Benzidine and Its Congeners – Used in the production of textiles, paints, printing inks, paper, and pharmaceuticals. These dyes have long been known as potential human carcinogens. The primary human health concern for consumers is exposure to the benzidine-based and benzidine-congener-based dyes through oral, dermal or inhalation routes. Evidence from animal studies suggests that there is early life susceptibility to benzidine carcinogenesis. To reduce these potential risks, EPA intends to:

- Initiate rulemaking to add four dyes to the existing TSCA §5(a)(2) Significant New Use Rule (SNUR) for benzidine-based substances. Proposed rule in fall 2011.
- Initiate rulemaking to propose a new TSCA §5(a)(2) significant new use rule for benzidine congener-based dyes. Proposed rule in late 2011.
- Consider initiating TSCA §6 rulemaking if EPA determines that any dyes are present in imported finished textiles or have other ongoing uses in consumer products which present concerns.

Hexabromocyclododecane (HBCD) – Used as a flame retardant in expanded polystyrene foam in the building and construction industry, as well as consumer products. HBCD is persistent, bioaccumulative and can undergo long-range atmospheric transport. HBCD is highly toxic to aquatic organisms. Health concerns include potential reproductive, developmental and neurological effects in humans. To reduce these potential risks, EPA intends to:

- Consider initiating TSCA §5(b)(4) Concern List rulemaking on HBCD. Proposed rule in late 2012.

- Initiate TSCA §5(a)(2) Significant New Use Rule to designate HBCD use in consumer textiles as a flame retardant as a significant new use. Proposed rule early 2012.
- Consider initiating rulemaking under TSCA §6(a) to regulate HBCD.
- Initiate rulemaking to add HBCD to the Toxics Release Inventory. Initiate action early 2012.
- Conduct a Design for the Environment and Green Chemistry alternatives assessment of HBCD. Launch expected spring 2011.

Long Chain Perfluorinated Chemicals (PFCs) – Used in a variety of industrial and consumer applications, including as a processing aid in the manufacture of non-stick and stain-resistant surfaces. PFCs are found world-wide in the environment, wildlife, and humans; are bioaccumulative in wildlife and humans and persistent in the environment; and are toxic to laboratory animals and wildlife. EPA intends to:

- Consider initiating TSCA §6(a) rulemaking in 2012 to limit or ban long-chain PFCs. Proposed rule expected in 2012.
- Continue with the 2010/15 PFOA Stewardship Program to work toward the elimination of long-chain PFCs from emissions and products.
- Continue to evaluate alternatives under EPA's New Chemicals Program.
- Continue with international collaboration on PFCs.

Methylene Diphenyl Diisocyanate (MDI) and Related Compounds – Used in chemical reactions to produce a wide variety of polyurethane products. Diisocyanates are known dermal and inhalation sensitizers that have been documented as a major cause of work-related asthma, lung damage, and in severe cases, fatal reactions. Most polyurethane products are fully reacted, or “cured,” and thus don’t contain uncured, available MDI, but some products (such as spray-applied foam sealants, adhesives, and coatings) are intended to undergo further reactions in use. To address the potential health effects that may result from consumers, non-OSHA (self-employed) workers, or the general population being exposed to uncured (unreacted) MDI through the use of such products, including products being marketed for consumer use, EPA intends to:

- Issue a data call-in for uncured MDI under TSCA §8(c) to determine if there are allegations of significant adverse effects and initiate a TSCA §8(d) rulemaking for one-time reporting of relevant unpublished health and safety studies for uncured MDI.
- Consider initiating a TSCA §4 test rule to require exposure monitoring studies on uncured MDI and its related polyisocyanates in consumer products and exposure monitoring studies in representative locations where commercial products with uncured MDI and its related polyisocyanates would be used.
- Consider initiating rulemaking under TSCA §6 for:
 - Consumer products containing uncured MDI, and
 - Commercial uses of uncured MDI products in locations where the general population could be exposed.
- Consider identifying additional diisocyanates and their related polyisocyanates that may be present in an uncured form in consumer products that should be evaluated for regulatory and/or voluntary action.

Nonylphenol (NP) and Nonylphenol Ethoxylates (NPEs) – Used in a wide variety of industrial applications and consumer products such as detergents, cleaners, agricultural and indoor pesticides, food packaging and cosmetics. NP is persistent in the aquatic environment, moderately bioaccumulative, and extremely toxic to aquatic organisms. NPs have been detected in human breast milk, blood, and urine and are associated with reproductive and developmental effects in rodents. There are potential children's health concerns related NP and NPE exposure. To reduce these potential risks, EPA intends to:

- Support voluntary phase out by the Textile Rental Services Association (TRSA) of the use of NPEs in industrial laundry detergents and encourage additional voluntary industry actions to address other uses of NPEs
- Consider initiating TSCA §5(b)(4) rulemaking on NP and NPEs. Proposed rule in fall 2011.
- Initiate rulemaking to add NP and NPEs to the Toxics Release Inventory, early 2012.
- Initiate rulemaking to simultaneously propose a TSCA §5(a)(2) Significant New Use Rule and a TSCA §4 test rule for NP and NPEs. Proposed rule late 2011.

Phthalates (includes eight phthalates) – Used as plasticizers to increase the flexibility, transparency, durability and longevity of plastics. Phthalates primarily pose a concern for development of the male reproductive system. On the basis of existing information, EPA believes the following actions would be warranted to manage the risks that may be presented by the eight phthalates:

- Consider initiating TSCA §5(b)(4) Concern List rulemaking on the eight phthalates. Proposed rule in 2011.
- Initiate TRI rulemaking to add six phthalates not already covered, early 2012.
- Consider initiating TSCA §6(a) rulemaking in 2013 to limit or ban phthalates, utilizing CPSC assessment due to be completed in 2012 and working with FDA on future work.
- For DnPP, confirm production status, which could result in TSCA §5 Significant New Use Rule (SNUR) to require submission of new chemical notices. Proposed rule fall 2011.
- Develop a DfE/Green Chemistry program for alternatives assessment. Launch expected fall 2011.

Polybrominated Diphenyl Ethers (includes Penta, Octa, and Decabromodiphenyl Ethers) (PBDEs) – Used as flame retardants in a wide range of products. PBDEs may pose hazards to both humans, particularly children, and the environment due to their toxicity. On the basis of existing information, the Agency believes the following actions would be warranted:

- Support phase-out of DecaBDE following commitments from the principal manufacturers and importers to phase-out production by December 31, 2013. The Design for the Environment (DfE) alternatives assessment partnership project to identify suitable alternatives to DecaBDE began in October 2010.
- Consider initiating TSCA §5(b)(4) Concern List rulemaking on PBDEs. Proposed rule in 2011.
- Initiate action to include articles in current Penta/OctaBDE SNUR, which requires new chemical notices prior to manufacture or import for any uses. Proposed SNUR spring 2011.

- Initiate rulemaking to simultaneously propose a SNUR and the previously announced TSCA §4 test rule for DecaBDE. The significant new use would be manufacture, (including import) of DecaBDE or articles to which DecaBDE has been added. The test rule would require laboratory studies to determine the effects that decaBDE has on human health and the environment. Proposed SNUR and test rule fall 2011.

Short-Chain Chlorinated Paraffins (SCCPs) and Other Chlorinated Paraffins – Used as a component of lubricants and coolants in metalworking applications and as both a secondary plasticizer and flame retardant in plastics. SCCPs are persistent, bioaccumulative, and toxic to aquatic organisms at low concentrations. EPA intends to:

- Address SCCP reporting issue on TSCA inventory and take follow-up action, which could include enforcement action, if appropriate, to require companies to submit Pre-Manufacture Notices for the SCCPs fractions that are not on the TSCA Inventory. Depending on outcome of this effort, EPA will:
 - If appropriate, take additional action under TSCA §5 to address the risks posed by SCCPs.
 - Consider initiating TSCA §6(a) rulemaking to limit or ban SCCPs.
- Address reporting issues on TSCA inventory for medium- and long-chain chlorinated paraffins, taking follow-up action as appropriate.
- Evaluate whether the medium- and long-chain chlorinated paraffins pose a risk which should be addressed under TSCA §6(a) ban authority.
- For SCCP C12-13, confirm production status, which could result in TSCA §5 Significant New Use Rule (SNUR) to require submission of new chemical notices.

Toluene Diisocyanate (TDI) and Related Compounds – Used in chemical reactions to produce a wide variety of polyurethane products. Diisocyanates are known dermal and inhalation sensitizers that have been documented as a major cause of work-related asthma, lung damage, and in severe cases, fatal reactions. Most polyurethane products are fully reacted, or “cured,” and thus don’t contain uncured, available TDI, but some products (such as spray-applied sealants and coatings) are intended to undergo further reactions in use. To address the potential health effects that may result from consumers, non-OSHA (self-employed) workers, or the general population being exposed to uncured (unreacted) TDI through the use of such products, EPA intends to:

- Initiate rulemaking under TSCA §5(a)(2) for a Significant New Use Rule (SNUR) designating the new use as use of uncured TDI and its related polyisocyanates in a consumer product.
 - If it is determined that there are existing consumer uses of uncured TDI products, work with industry to develop a voluntary phase-out within one year, and follow with a proposed SNUR.
 - If a voluntary phase-out either is not agreed upon or is not completed as agreed, consider initiating a TSCA §4 test rule to require exposure monitoring studies on TDI and its related polyisocyanates in consumer products.
- Issue a data call-in under TSCA §8(c) to determine if there are allegations of significant adverse effects and initiate a TSCA §8(d) rule for relevant unpublished health and safety studies.

- Consider initiating a TSCA §4 test rule to require exposure monitoring studies in representative locations where commercial products with uncured TDI would be used.
- Consider initiating rulemaking under TSCA §6 to regulate commercial uses of uncured TDI products in locations where the general population could be exposed.
- Consider identifying additional diisocyanates and their related polyisocyanates that may be present in an uncured form in consumer products that should be evaluated for regulatory and/or voluntary action.