

Submission from Breast Cancer UK

to the Environmental Audit Select Committee Inquiry on the
Transatlantic Trade and Investment Partnership (TTIP)

1. Summary

- 1.1 Breast Cancer UK has serious concerns that current proposals under the Transatlantic Trade and Investment Partnership (TTIP) could lead to a weakening of chemicals legislation designed to protect the environment and public health.**
- 1.2 The EU and U.S. currently have very different approaches to chemicals which makes convergence unfeasible and incompatible with promises to uphold the EU approach to regulation.**
- 1.3 TTIP threatens to undermine current EU chemicals regulation, delay or weaken proposed regulation of EDCs, prevent unilateral action on the part of member states and thwart innovation especially for greener chemistry.**
- 1.4 The proposed inclusion of the ISDS would undermine the states right to regulate in order to protect its environment and citizen's health.**

2. About Breast Cancer UK

- 2.1 Breast Cancer UK is dedicated to the prevention of breast cancer by reducing public exposure to carcinogenic and hazardous chemicals in our environment and everyday products. There is growing scientific concern that exposure to chemicals known as endocrine disrupting chemicals (EDCs), which mimic, inhibit or interfere with natural hormones can lead to cell changes that may increase the risk of developing breast cancers and other diseases.**
- 2.2 Breast Cancer UK believes tougher regulation of chemicals and better environmental and public health policies are needed to reduce exposures to harmful chemicals, to help protect the natural environment and prevent diseases like breast cancer. We are strongly opposed to the inclusion of any terms in TTIP that implicate the regulation of chemicals, as they would almost certainly weaken measures designed to protect the natural environment and human health.**

3. The role of EDCs in environmental pollution and human and wildlife health.

- 3.1 The detrimental effects of EDCs on aquatic and terrestrial wildlife have been recognized since the 1990s (see review by UNEP and WHO¹). Effects range from reproductive disorders, cancers, reduced biodiversity and population decline. EDCs may affect the immune system of wildlife, cause neurotoxicity and behavioural changes and have been implicated in adrenal and bone disorders. EDCs have also been linked to a range of adverse health effects in humans including infertility, thyroid problems, neurological disorders, obesity, diabetes and cancers – including breast cancer².
- 3.2 A wide variety of known or suspected EDCs are used in everyday products including pesticides, herbicides, pharmaceuticals, and preservatives. Once released into the environment, the more persistent can be carried by air and water across the globe, working their way up to the highest levels of the food chain. Whilst other chemicals may have shorter life spans, the regularity with which they are released into the environment (e.g. through effluents or agricultural runoff), ensures that environmental levels in some areas remain high³.
- 3.3 Some EDCs cause adverse effects at very low dose levels and exposure to multiple EDCs may cause “combination” or additive effects in both humans and wildlife⁴. Exposures in utero may be particularly harmful and it may take a very long time for effects to be noted^{5,6}. Hence, it is often difficult to prove beyond doubt that a particular EDC is harmful; therefore, it is vital that a precautionary approach to assess and regulate these compounds is used.

4. The EU and U.S. have different approaches to Chemicals Regulation

- 4.1 The EU and U.S. currently have very different approaches to chemicals regulations. Although both follow scientific principles when assessing chemical toxicity, the EU follows a hazard-based approach, which follows the “precautionary principle”. Even if evidence is not conclusive, where a chemical is suspected of causing harm, it can be banned. In contrast, the U.S. follows a risk-based approach to assessment which

1 UNEP and WHO (2013) State of the science of endocrine disrupting chemicals 2012 (editors Åke Bergman, Jerrold J. Heindel, Susan Jobling, Karen A. Kidd and R. Thomas Zoeller). <http://www.unep.org/hazardoussubstances/Portals/9/EDC/StateOfEDCScience.pdf> (Accessed January 21 2015)

2 Darbre, PD and Charles, AK (2010) Environmental Oestrogens and Breast Cancer: Evidence for Combined Involvement of Dietary, Household and Cosmetic Xenoestrogens. *Anticancer Research* **30**: 815-828

3 Loos, R et al. (2010) Pan-European survey on the occurrence of selected polar organic persistent pollutants in ground water. *Water Research* **44** 4115-41126

4 Kortenkamp, A (2007) ‘Ten Years of Mixing Cocktails: A Review of Combination Effects of Endocrine-Disrupting Chemicals. *Environmental Health Perspectives* **115**(1): 98–105

5 UNEP and WHO (2013) *ibid*

6 Bellingham M, et al. (2012) Effects of exposure to environmental chemicals during pregnancy on the development of the male and female reproductive axes. *Reproduction in Domestic Animals* **47**: 15–22

requires a far higher level of scientific proof that a chemical is dangerous before action is taken to prohibit its use.

4.2 This has led to significant differences in practice and has resulted in very different standards of protection. For example:

- i. There are currently 82 pesticides permissible by U.S. law that are banned in the EU⁷. Of these, 9 are known and 16 are possible or probable carcinogens and 34 are suspected EDCs. Despite 6 of these pesticides (Aldicarb, Bromethalin, Difethialone, Phenothrin, Phorate, Terbufos) classified by WHO as extremely hazardous, the U.S. has plans currently for only one of these (Aldicarb) to be phased out (by 2018).
- ii. The chemical Atrazine, the most heavily used herbicide in the U.S., has been banned in Europe since 2003 (Directive 91/414/EEC), but its use as a pesticide is widespread in the U.S. Atrazine is a ubiquitous environmental contaminant and despite an EU ban, is still frequently detected in European ground water samples at concentrations above the allowable level in drinking water. Atrazine is a suspected endocrine disruptor and at extremely low doses it causes dramatic changes in sexual differentiation in amphibians⁸. It has also been linked to a number of human diseases⁹ including breast cancer¹⁰.
- iii. The EU, guided by the precautionary principle, in 2013 imposed a two year ban on the use of neonicotinoids (Regulation (EU) No 485/2013), due to concerns that they may be contributing to the decline in honeybee populations; such a ban in the U.S. looks unlikely.
- iv. Other chemicals such as formaldehyde or formaldehyde-releasing ingredients are heavily restricted in the EU, but are under no such restrictions in the U.S.
- v. The maximum residue levels of certain pesticides in food are considerably higher in the US than the EU, for example permethrin in cabbage (MRL, mg/kg: US: 6 and EU: <0.5) and simazine in sweetcorn (MRL, mg/kg: US: 0.25 and EU: <0.1)¹¹.
- vi. Perfluorooctanoic acid (used e.g. in the manufacture of Teflon) is widely recognized as a persistent organic pollutant, and in 2013 was classified under REACH as a SVHC. In the U.S., the EPA negotiated a *voluntary* ban

7 CIEL report (2015) Erica Smith, David Azoulay, and Baskut Tuncak. Lowest Common Denominator: How the proposed eU-US trade deal threatens to lower standards of protection from toxic pesticides. http://ciel.org/Publications/LCD_TTIP_Jan2015.pdf (Accessed January 21 2015)

8 Hayes TB, et al. (2010) Atrazine induces complete feminization and chemical castration in male African clawed frogs (*Xenopus laevis*). *Proceedings of the National Academy of Sciences USA* 107(10): 4612–4617

9 Sass, JB and Colangelo, AC (2006) European Union Bans Atrazine, While the United States Negotiates Continued Use. *International Journal of Occupational and Environmental Health* 12: 260–267

10 Kettles MA, et al. (1997). Triazine herbicide exposure and breast cancer incidence: An ecological study of Kentucky counties. *Environmental Health Perspectives*, 105: 1222-1227

11 CIEL report (2015) *ibid.*,

to eliminate PFOA from emissions and product contents by 2015, highlighting the different approaches to regulation of toxic chemicals

- 4.3 The consequences of the EU's precautionary approach is a much healthier environment and safer consumer products. The EU is often seen as the global leader in environmental regulation - it's a lead which is beginning to be followed by non-EU countries.

5. Proposals for convergence under TTIP would weaken Chemicals Regulation

- 5.1 According to their position paper on Chemicals and TTIP¹² the European Commission's aim is to "promote regulatory convergence and recognition in the chemicals sector". The purpose of convergence is to "increase efficiency and reduce costs for economic operations". There is no mention of how TTIP would protect the precautionary principle, the natural environment or human health.
- 5.2 Proposals for convergence in four key areas include the cooperation on the prioritisation of chemicals; alignment in the classification and labelling of chemicals; cooperation on new and emerging issues; and, enhanced information sharing¹³. Proposals under each of these areas in our opinion are incompatible with EU Commissioner De Gucht's statement that "a possible TTIP agreement would under no circumstance result in the lowering of existing EU environmental and health standards with regard to chemicals¹⁴". It is impossible to see how existing laws will be implemented or how future legislation will be formulated without recourse to the current U.S. rulemaking process which is geared towards advancing the chemical industry's agenda rather than a healthy environment.
- 5.3 A similar general concern was included in a report by the European Parliament which concluded that "there is a risk with regulatory convergence... as well as mutual recognition, that the TTIP could align common standards with the lower level ones"¹⁵.
- 5.4 In a joint letter signed by 111 civil society organisations, including Breast Cancer UK, "strong opposition" was expressed to the inclusion of chemicals regulation in TTIP

12 The EU position on chemicals: http://trade.ec.europa.eu/doclib/docs/2014/may/tradoc_152468.pdf (accessed Jan 21st 2015)

13 Ibid.,

14 Reply from EU Trade Commissioner Karel De Gucht to Civil Society Letter to Ambassador Michael Froman & Commissioner Karel De Gucht, KDG/MVH/CBE/dcm/S(14)3254715

http://trade.ec.europa.eu/doclib/docs/2014/october/tradoc_152820.pdf (Accessed January 21 2015)

15 European Parliament, Directorate-General for Internal Policies, Risks and Opportunities for the EU Agri-Food Sector in a Possible EU-US Trade Agreement, 62 (2014).

http://www.europarl.europa.eu/RegData/etudes/STUD/2014/514007/AGRI_IPOL_STU%282014%2029514007_EN.pdf [hereinafter Risks and Opportunities]. (Accessed January 21 2015)

because of concerns that it “would threaten to chill or even freeze forward looking chemicals regulation”¹⁶.

- 5.5 A paper by The Centre for International Environmental Law and Client Earth ‘Toward a Toxic Partnership’ outlines in more detail an analysis of what the proposals would mean in practice¹⁷.

6. TTIP would slow progress on regulating EDCs in the European Union

- 6.1 Proposals for convergence would almost certainly slowdown EU efforts to further assess and regulate EDCs. This is in part due to the different approaches to assessment but also the obvious U.S. opposition to the EU approach.
- 6.2 The U.S. has an extensive screening system to test chemicals for potential endocrine effects, developed by the EPA’s Endocrine Disruptor Screening Program (EDSP). This has resulted in a process whereby chemicals demonstrating hormonal activity must now undergo testing to measure their effects in animals. Although this provides a consistent framework for screening possible EDCs, approximately 87,000 chemicals may have endocrine disrupting effects and assessing all of these will take decades¹⁸. Furthermore, the EDSP provides no authority for eventual regulatory action. As such, no U.S. law currently addresses EDCs under a unified and comprehensive framework.
- 6.3 In the EU however, slow but steady progress has been made towards more stringent assessment and regulation of EDCs. It is of concern that the TTIP negotiations have the potential to influence (and may have done so already) the EC’s final decisions on EDC criteria, resulting in less stringent regulations. The U.S. Trade Representative’s 2014 Report on Technical Barriers to Trade¹⁹ clearly demonstrates the desire by the U.S. government to interfere with the EU’s development of more protective measures on EDCs, which they see as “trade barriers”. The U.S. has raised concerns regarding REACH at every WTO TBT Committee meeting since 2003 and in 2013 raised concerns with DG Environment’s proposal on the categorization of endocrine disruptors bilaterally, at the WTO TBT and SPS Committees²⁰.

16 https://noharm-europe.org/sites/default/files/documents-files/2760/Chemicals%20and%20TTIP%20letter_final.pdf (Accessed January 21 2015)

17 CIEL/Client Earth (2014) ‘Toward a Toxic Partnership’: A critique of the EU position on chemicals under the Trans - Atlantic Trade and Investment Partnership (TTIP) Agreement with the US’. <http://www.clientearth.org/reports/10714-response-to-eu-position-paper.pdf>

18 Flint, S, et al. (2012) Bisphenol A exposure, effects, and policy: a wild-life perspective. *Journal of Environmental Management* 104 19-34.

19 USTR (2014) 2014 REPORT ON TECHNICAL BARRIERS TO TRADE <http://www.ustr.gov/sites/default/files/2014%20TBT%20Report.pdf> (Accessed 21 January 2015)

20 Ibid.,

- 6.4 It therefore seems likely that the U.S. government and industry allies would try to use TTIP rules to weaken stronger measures by the EU, such as those concerning EDCs.

7. TTIP will prevent unilateral action on chemicals of concern

- 7.1 TTIP would lead to a clamp down of unilateral action on the part of member states – as the European Commission wants all rules under TTIP to prevent regulatory differences to apply at the national level. This could have a significant impact in the area of EDCs where member state frustration at the slow progress of the European Commission on this issue has led to a number of states taking unilateral action to help protect their environment and citizens.
- 7.2 For example, progress on banning Bisphenol A (BPA)²¹, widely used in the manufacture of plastics and epoxy resins and routinely detected in wildlife and humans²² has only been made because of upward pressure from individual states. Denmark was the first EU country to ban bisphenol A in baby bottles, and soon after the ban was extended to cover all EU member states. In 2013, the EU harmonised classification of BPA, labeling it as a reproductive toxicant. In the EU such decisions on classification and labelling undergo public consultations; no such harmonised classification system is in place in the U.S..
- 7.3 Individual U.S. states, including Connecticut and Minnesota, banned BPA in children and baby bottles years ahead of a U.S. Food and Drug Administration national ban imposed in 2012.

8. TTIP will undermine innovation and the drive to introduce green chemicals

- 8.1 Regulators, product developers, industry workers and the general public require access to information about toxic chemicals, in order to legislate, develop or choose safer products and enable a safe working environment. Important differences exist between relevant EU and U.S. laws, with each system enabling access to information. Industry proposals to implement more stringent standards on data protection and confidential business information through TTIP would limit access to data and information, adversely affecting innovation in improved public health, consumer safety, occupational health, and environmental protection. This includes new rules regarding how governments access information, what types of information is eligible to be confidential business information, and for how long it can be protected.

21 For more in the adverse effects of BPA please see <http://www.breastcanceruk.org.uk/science/bcukfs-bpa/>
22 Flint et al. (2012) *ibid.*,

8.2 TTIP is likely to slow down development of green alternatives as secrecy rules will make it more difficult for product developers to access information about which products contain hazardous chemicals, and so businesses will have less information regarding products that need to be substituted.

9. The Investor State Dispute Mechanism would threaten the right to regulate

9.1 Breast Cancer UK supports the right to regulate in the public interest and believes that the Investor to State Dispute Settlement (ISDS) should be excluded from TTIP. ISDS would seriously undermine stronger chemical regulations by empowering corporations to circumvent domestic courts and directly challenge such protections before extrajudicial tribunals. It is of serious concern to us that ISDS cases have forced governments to repeal laws and protections against toxic chemicals²³. The number of ISDS cases has risen dramatically in the last decade with a record 59 claims started in 2012²⁴. TTIP is likely to lead to an increase in ISDS as companies seek to use the new power to protect markets and investments in the EU.

9.2 In a recent European Commission consultation on ISDS, the majority of respondents “expressed concerns about TTIP in general or ISDS in TTIP in particular”²⁵.

10. TTIP has potential to impact regulations on Fracking

10.1 Breast Cancer UK is concerned that the TTIP agreement could result in toxic, carcinogenic and hormone disrupting chemicals being permitted for use in fracking operations in the EU.

10.2 In comparison to the U.S., the EU has far more stringent regulations on the use of chemicals permitted in fracking operations, especially with regard to chemical additives used and how flowback wastewater is stored and treated.

10.3 In the U.S., chemicals used in fracking operations have resulted in contamination of groundwater²⁶ as a result of leakage from open pits²⁷. In the EU the use of open pits or tanks to store flowback is not permitted. Many of the chemicals used in fracking in the US²⁸ are known to be of concern and have been linked to an increase in risk of

23 E.g Ethyl Corporation v. the Government of Canada 1997 on MMT

24 The economist Oct 11th 2014. The arbitration game <http://www.economist.com/news/finance-and-economics/21623756-governments-are-souring-treaties-protect-foreign-investors-arbitration>

25 http://europa.eu/rapid/press-release_MEMO-15-3202_en.htm?locale=en (Accessed 21 January 2015)

26 Pavillion Gas Well Integrity Evaluation U.S. Environmental Protection Agency Region 8. <http://www2.epa.gov/region8/pavillion> (Accessed 21 January 2015)

27 Wood, R, *et al.* (2011). Shale Gas: A provisional assessment of climate change and environmental impacts. The Tyndall Centre. http://www.tyndall.ac.uk/sites/default/files/tyndall-coop_shale_gas_report_final.pdf (Accessed 21 January 2015)

28 <http://fracfocus.org/chemical-use/what-chemicals-are-used> (Accessed 21 January 2015)

disease, including breast cancer. Additives permitted include known carcinogens such as benzene, acrylamide, and formaldehyde²⁹. One study that examined a subset of chemicals used during U.S. fracking operations. suggested that more than 25% of them are carcinogens³⁰. No chemicals classified as hazardous, which include carcinogens, are currently permitted for use in fracking operations in the EU.

11. Conclusions

11.1 The EU's approach to chemicals regulation and the utilization of the precautionary principle has meant that we have some of the toughest chemicals regulation in the world and as a result have helped to protect the environment, our natural wildlife, provide healthier food and safer consumer products. The proposals for convergence in chemicals regulation under TTIP would not lead to the U.S. adopting similar measures but would see a watering down of the current EU approach and delay much needed regulation and assessment of EDCs. There is nothing in any of the current proposals or position papers that provides reassurance that either the precautionary principle, public health or the natural environment will be better protected under TTIP.

12. Recommendations

- That any terms implicating the regulation of chemicals be excluded from TTIP
- That the ISDS be excluded from TTIP
- That reassurances are sought in relation to the primacy of the precautionary principle
- That the EU continues to prioritise public health and does not elevate trade to a more important status

29 Rudel, RA, *et al.* (2007). Chemicals Causing Mammary Gland Tumors in Animals Signal New Directions for Epidemiology, Chemicals Testing and Risk Assessment for Breast Cancer Prevention. *Cancer* **109**(12): 2635-66

30 Colborn T, *et al.* (2011). Natural gas operations from a public health perspective. *Human and Ecological Risk Assessment* **17**(5): 1039-56