

# A Report from the Basel, Rotterdam, and Stockholm Conventions

May 22, 2019—CHE-Alaska

**Pamela Miller**

Executive Director,  
Alaska Community Action on Toxics  
IPEN Co-Chair  
[pamela@akaction.org](mailto:pamela@akaction.org)

**Samarys Seguinot Medina DrPH**

Environmental Health Program Director  
Alaska Community Action on Toxics  
[samarys@akaction.org](mailto:samarys@akaction.org)

**Vi Waghiyi**

Environmental Health and Justice Program Director  
Alaska Community Action on Toxics  
[vi@akaction.org](mailto:vi@akaction.org)



# Overview of United Nations Chemicals and Wastes Conventions

- **Basel Convention**—to address management, disposal, and transboundary movement of hazardous waste (entered into force in 1992)
- **Rotterdam Convention**—creates legally binding obligations for the Prior Informed Consent Procedure (entered into force in 2004)
- **Stockholm Convention**—legally binding international agreement on persistent organic pollutants (entered into force in 2004; now **182 Parties**)



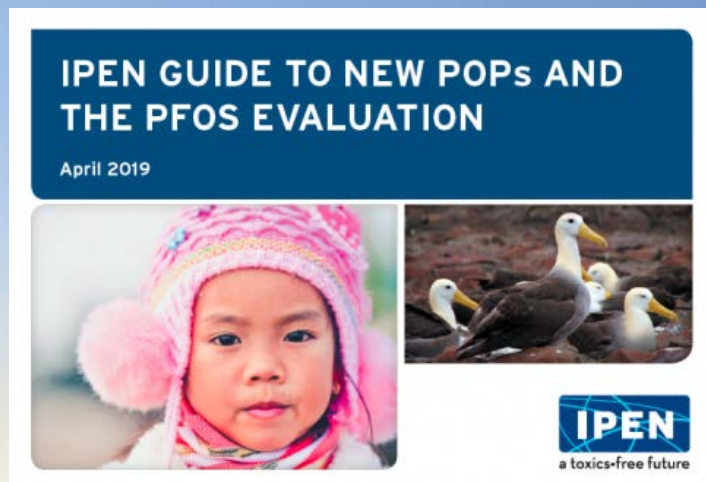
**IPEN—Working for a Toxics-Free Future:  
A Network of Environmental Health, Justice, and Human Rights—  
500 groups from 100 countries**





# Recent IPEN Reports

[www.ipen.org](http://www.ipen.org)





# Protecting the Health of Future Generations— Engagement at the Stockholm Convention



- Conference of the Parties  
29 April to 10 May 2019 in  
Geneva
- Decision on PFOA, PFOS  
loopholes
- Action and engagement of  
civil society
- The “conscience of the  
Convention”



# The Language of the Stockholm Convention

- “Aware of the health concerns...in particular **impacts upon women and children** and, through them, upon future generations.”
- “Conscious of the need for **global action**...”
- “Acknowledging that **precaution** underlies the concerns of all the Parties and is embedded within this Convention...”
- “Determined to **protect human health and the environment**...”
- “Acknowledging that the **Arctic ecosystems and Indigenous communities** are particularly at risk...”





# Key Elements of the Stockholm Convention on Persistent Organic Pollutants (POPs)

- Focus is on elimination rather than managing risk
- Ensure addition of new chemicals beyond initial list of twelve -- a “living treaty”
- Identification and inventory of contaminated sites for clean up
- Effectiveness evaluation
- Based on the precautionary principle



# New POPs—the POPS Review Committee (POPRC)





# The Process for Listing a POP

The POPRC reviews proposals submitted by Parties in accordance with Article 8 in three stages:

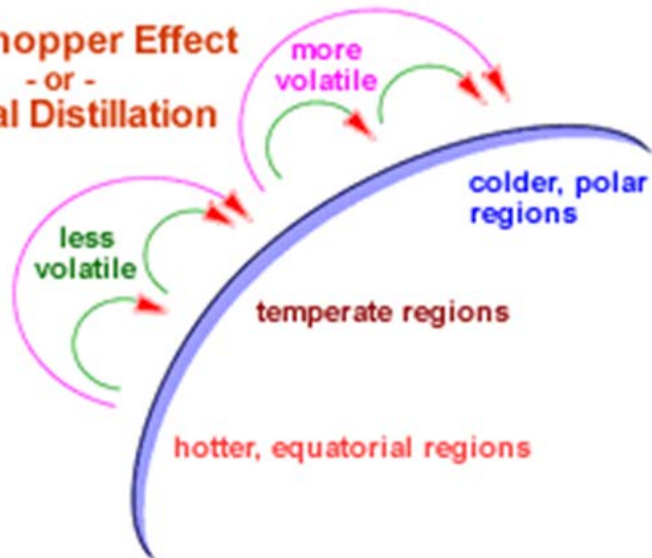
- 1) Annex D—Screening
  - Persistence, Bioaccumulation, Long-range transport, Adverse Effects
- 2) Annex E—Risk Profile—Assessment of Properties
  - *"lack of full scientific certainty shall not prevent the proposal from proceeding..."*
- 3) Annex F--Prepare Risk Management Evaluation  
Socio-economic considerations and Alternatives
- Recommend to COP to consider listing
- COP makes a decision

# Global Transport of Persistent Chemicals into the North/Arctic

## Alaskans and other northern peoples are especially affected:

- The north has become a hemispheric sink for industrial chemicals
- Northern/Arctic food webs favor the deposition and retention of persistent, bioaccumulative toxics
- Contaminants in the north threaten the health of people who rely on traditional diets of fish and marine mammals.
- Global warming is exacerbating the transport and mobilization of contaminants into and within the Arctic.

### Grasshopper Effect - or - Global Distillation





# Stockholm Convention Milestones

- February 1997—UN Environment Program establishes intergovernmental negotiating committee (INC)
- May 2001—92 countries and EC sign the global legally-binding treaty
- May 2004—the Convention enters into force
- May 2009—Fourth Conference of the Parties (COP4)—nine new chemicals added
- May 2011—Fifth Conference of the Parties (COP5)—endosulfan added for global elimination
- April 2013—Sixth Conference of the Parties (COP6), HBCD added for global elimination
- May 2015—COP7, Pentachlorophenol, HCBD, Chlorinated Naphthalenes (CNs)
- May 2017—COP8, Deca-BDE, SCCPs
- April-May 2019—COP9, PFOA and Dicofol
- 182 nations have now ratified

# PFAS Chemicals and the Stockholm Convention

- **PFOS** listed in 2009 with exemptions and “acceptable purposes”  
POPRC recommended closing of major loopholes in 2018
- **PFOA** nominated by the EU in 2015—POPRC made recommendation in September 2018 to list for global elimination and COP will make final decision in April 2019
- **PFHxS** nominated by Norway in 2017—advanced to final stage of review in September 2018, Annex F



# What are PFAS?

Per- and poly-fluoroalkyl substances  
also known as highly fluorinated chemicals

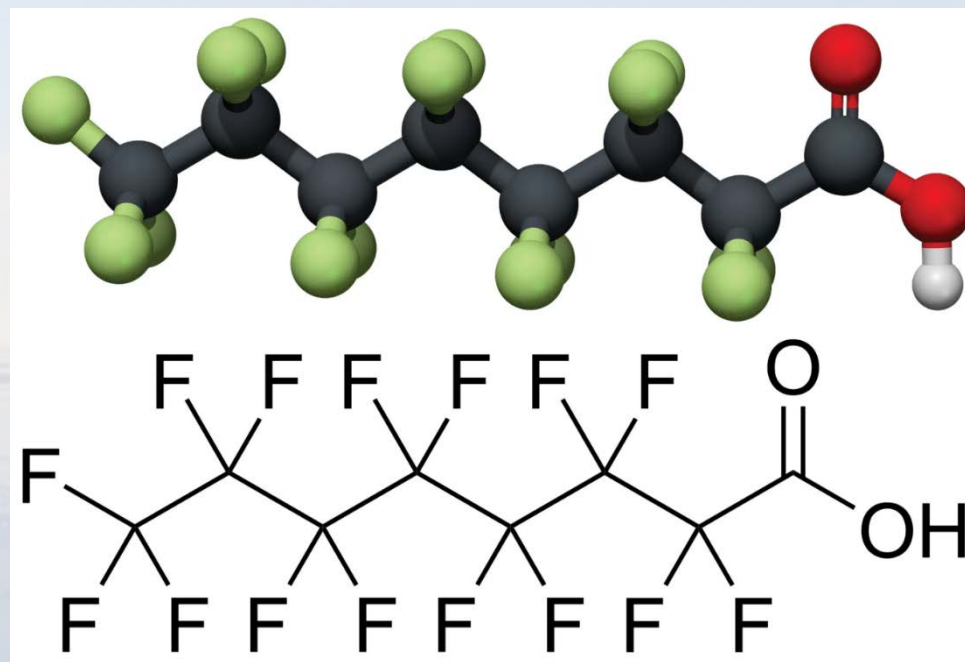
## What makes this class of chemicals unique?

- Persistence  
“Forever chemicals”

- Complexity  
More than 4,700  
chemicals

- Versatility

Used in many products



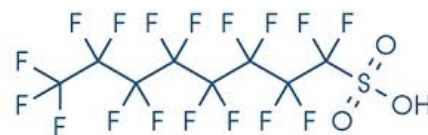
Perfluorooctanoic acid (PFOA) or C8

# Definitions

## Per- and Poly-Fluorinated Chemicals

- Per = fully fluorinated

PFOA and PFOS



perfluorooctanesulfonic acid

- Poly = partly fluorinated (8:2 FtS Fluorotelomer sulfonate)



# Widely used in products

- Fire fighting foam
- Carpets, upholstery
- Waterproof fabrics
- Waxes (floor, skis)
- Non-stick cookware
- Paints and coatings
- Food packaging
- Personal care products
- Dental floss
- Electronics—  
semiconductors
- Metal plating



# Sources of Drinking Water Contamination

- AFFF (aqueous film-forming foam) for fuel fires
- Production facilities
- Waste disposal sites
- Wastewater
- Other industries



[Environmental Topics](#)

[Laws & Regulations](#)

[About EPA](#)



## News Releases

[CONTACT US](#)

[SHARE](#)



### News Releases from Region 02

**EPA Adds Saint-Gobain Performance Plastics Site in Hoosick Falls, N.Y. to the Federal Superfund List**



# Independent expert panel convened by IPEN

- *“The continued use of PFAS (per- and polyfluorinated substances) foams is not only unnecessary but would continue to add to the legacy and on-going contamination that is responsible for the substantial, widespread and growing socio-economic and environmental costs being experienced globally.”*



## FLUORINE-FREE FIREFIGHTING FOAMS (3F) VIALE ALTERNATIVES TO FLUORINATED AQUEOUS FILM-FORMING FOAMS (AFFF)

Independent Expert Panel Convened by IPEN  
Stockholm Convention POPRC-14  
Rome

September 2018



**IPEN**  
a toxics-free future

# The Global PFAS Problem and Fluorine-Free Alternatives as Solutions



- 13 independent experts—chemistry, health, fire safety, engineering
- Investigates sources and dispersive uses including fire fighting foam, textiles
- Necessity of addressing PFAS as a class
- Short chain fluorinated chemicals should not be used due to their persistence, mobility, and harm to health and environment



# Decisions of Stockholm Convention 2019

- Global ban on PFOA and more than 150 related substances with eight 5-year exemptions and one exemption until 2036.
- Special restrictions on firefighting foams containing PFOA and related substances including a ban on production, no export or import except for environmentally sound disposal, no use in training, and no use in testing unless all releases are contained.
- Warning about PFAS as a class noting that, *“fluorine-based fire-fighting foams could have negative environmental, human health and socioeconomic impacts due to their persistency and mobility.”*
- Global ban on dicofol with no exemptions.
- Closed 10 loopholes in the PFOS listing and converted two time-unlimited uses to 5-year phase-outs (hard metal plating in closed-loop systems and firefighting foams). Sulfluramid was left as the only time-unlimited use in the treaty but it was named in the treaty and its use narrowed to agriculture.

# Decisions of the Rotterdam Convention

- HBCD and phorate were listed in Annex III of the Rotterdam Convention, making them subject to the treaty's prior informed consent procedure.
- Acetochlor, chrysotile asbestos, fenthion, paraquat, and carbosulfan were all blocked from listing in the Rotterdam Convention – even though they met all criteria for addition to the treaty.
- A compliance mechanism was added as a new Annex VII and achieved with the first vote in the history of the treaty.



# Decisions of the Basel Convention

- Delegates curbed unrestricted plastic waste exports by requiring countries to obtain prior informed consent before exporting contaminated or most mixed plastic waste and requiring recycling (not burning or landfilling) for the clean, sorted plastics that are exported.
- Adopted actions on plastic waste including encouraging the removal or reduction in the use of hazardous chemicals in plastics production and at any subsequent stage of their life cycle.
- Established a plastics partnership to conduct pilot projects and develop awareness-raising materials including extended producer responsibility, leakage of plastic waste, and re-usable alternatives to single-use plastics.



# Some key findings concerning sentinel fish species—nine-spine stickleback

- Exceptionally high levels of PBDEs (especially BDE-47) and PFAS (especially PFOS and PFNA) in stickleback of Troutman Lake indicate local source, such as landfills.
- 100% detection frequency in fish of PFNA, PFOS, PFUdA; 94% detection of PFOA; and 78% detection of PFHxS





# Key findings concerning human exposures on St. Lawrence Island

- PFOS and PFNA were detected in more than 98% of the serum samples and PFOA was detected in 92% of the samples.
- Serum PFAS comparable to levels in the U.S. general population, however PFNA and PFUnDA elevated.
- We demonstrated that certain PFAS disrupt thyroid homeostasis.

