

EPA's MULTIMEDIA STRATEGY FOR PRIORITY PERSISTENT, BIOACCUMULATIVE, AND TOXIC (PBT) POLLUTANTS

EXECUTIVE SUMMARY

Purpose and Goal

The goal of this strategy is to further reduce risks to human health and the environment from existing and future exposure to priority persistent, bioaccumulative, and toxic (PBT) pollutants.

The U.S. Environmental Protection Agency (EPA) has developed this draft strategy to overcome the remaining challenges in addressing priority PBT pollutants. These pollutants pose risks because they are toxic, persist in ecosystems, and accumulate in fish and up the food chain. The PBT challenges remaining stem from the pollutants' ability to travel long distances, to transfer rather easily among air, water, and land, and to linger for generations, making EPA's traditional single-statute approaches less than the full solution to reducing risks from PBTs. Due to a number of adverse health and ecological effects linked to PBT pollutants -- especially mercury, PCBs, and dioxins -- it is key for EPA to aim for further reductions in PBT risks. The fetus and child are especially vulnerable. EPA is committing, through this strategy, to create an enduring cross-office system that will address the cross-media issues associated with priority PBT pollutants.

Building on a Strong Foundation

This strategy reinforces and builds on existing EPA commitments related to priority PBTs, such as the 1997 Canada – U.S. Binational Toxics Strategy (BNS), the North American Agreement on Environmental Cooperation, and the recently released Clean Water Action Plan. EPA is forging a new approach to reduce risks from and exposures to priority PBT pollutants through increased coordination among EPA national and regional programs. This approach also requires the significant involvement of stakeholders, including international, state, local, and tribal organizations, the regulated community, environmental groups, and private citizens.

Approach to PBT Reductions

1. ***Develop and Implement National Action Plans for Priority PBT Pollutants.*** EPA is initially focusing action on the 12 BNS Level 1 substances: aldrin/dieldrin, benzo(a)pyrene, chlordane, DDT, hexachlorobenzene, alkyl-lead, mercury and compounds, mirex, octachlorostyrene, PCBs, dioxins and furans, and toxaphene. EPA is

developing action plans that will use the full range of its tools to prevent and reduce releases of these 12 (and later other) PBTs. These tools include international, voluntary, regulatory, programmatic, remedial, compliance monitoring and assistance, enforcement, research, and outreach tools. EPA will analyze PBT pollutant sources and reduction options as bases for grouping pollutants, activities, and sectors to maximize efficiencies in achieving reductions. EPA will integrate and sequence actions within and across action plans, and will seek to leverage these actions on international and industry-sector bases.

Activities ready for near-term action include:

- ▶ Conduct process-specific and pollution prevention (P2) projects under the mercury action plan, including regulatory actions to reduce mercury and voluntary reductions through potential partnerships with various industries (e.g., chloralkali industry, hospitals using mercury-containing products).
 - ▶ Focus enforcement and compliance assistance activities on PBTs, analyzing compliance within PBT-related sectors for problems and opportunities. Select industries, sectors, or regulations that would benefit from focused compliance attention/assistance. Target actions with high potential to reduce PBT releases.
 - ▶ Develop or revise water quality criteria for mercury and other priority PBTs, and revise methodology for mercury water quality criteria.
 - ▶ Conduct research and analysis on PBTs, especially on mercury emission control approaches for coal-fired utility boilers, and on the transport, fate, and risk management of mercury. Develop P2 options for preventing mercury/dioxin risks from industrial combustion.
 - ▶ EPA is actively engaged in international efforts beyond the BNS to reduce PBT risks, including the recently negotiated Persistent Organic Pollutants (POPs) and Heavy Metals protocols to the UN Economic Commission for Europe's Long Range Transboundary Air Pollution Convention, the preparation for the upcoming negotiation of a global POPs convention under UN Environmental Program auspices, and the Regional Action Plans on DDT, chlordane, PCBs, and mercury developed under auspices of the North American Commission for Environmental Cooperation.
2. ***Screen and Select More Priority PBT Pollutants for Action.*** Beyond the BNS Level 1 substances, EPA will select additional PBT pollutants for action. EPA will apply selection criteria in consultation with a technical panel. Candidate chemicals will be those highly scored by EPA's Waste Minimization Prioritization Tool and other chemicals of high-priority to EPA offices. EPA will seek internal and external comment on the proposed selection methodology in 1999.
3. ***Prevent Introduction of New PBTs.*** EPA is acting to prevent new PBT chemicals from entering commerce by: (a) proposing criteria for requiring testing/restrictions on new

PBT chemicals; (b) developing a rule to control attempts to re-introduce out-of-use PBT chemicals into commerce; (c) developing incentives to reward the development of lower-risk chemicals as alternatives to PBTs; and (d) documenting how PBT-related screening criteria are taken into account for approval of new pesticides and re-registration of old pesticides.

4. **Measure Progress.** EPA is defining measurable objectives to assess progress. EPA will use direct and indirect progress measures, including: (a) human health or environmental indicators (such as National Health and Nutritional Examination Surveys and a national study of chemical residues in fish); (b) chemical release, waste generation or use indicators (such as enhancing the Toxics Release Inventory and using other release reporting and monitoring mechanisms); and, (c) program activity measures (such as EPA compliance/enforcement data).

Mercury -- An Action Plan Example

EPA's PBT Strategy is a living document that supports the development and implementation of action plans on priority PBTs. Attached to the strategy is EPA's draft Mercury Action Plan. It illustrates an action plan that is national and even international in scope, and describes the kinds of actions EPA may take to reduce risks posed by other priority PBT pollutants. Each substance or group of substances will present its own set of action opportunities.