

US EPA Activities – Halons and Aviation



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IASFPWG Meeting

November 18, 2009

Atlantic City, NJ

Outline

- **EPA Activities**
- **Montreal Protocol and Halons**
- **UNEP Halons Technical Options Committee (HTOC) Assessment**

EPA Regulations

- Clean Air Act Title VI authority for stratospheric ozone layer protection: halons and fire protection
 - Ban on production and import
 - Ban on halon blends
 - Emissions reductions; ban on discharge testing, training; recovery and safe disposal
 - Significant New Alternatives Policy (SNAP) Program listings
 - No ban on use of recycled halons
 - No requirement for de-commissioning, destruction
- Final Rule exempting aircraft halon 1301 system bottles from ODS import petition requirement:
 - Published 3/10/2009 (74 FR 10182)
 - Exempts imports from EPA ODS petition process
 - Recordkeeping and reporting requirements remain
- NPRM for ODS import for destruction (2010)

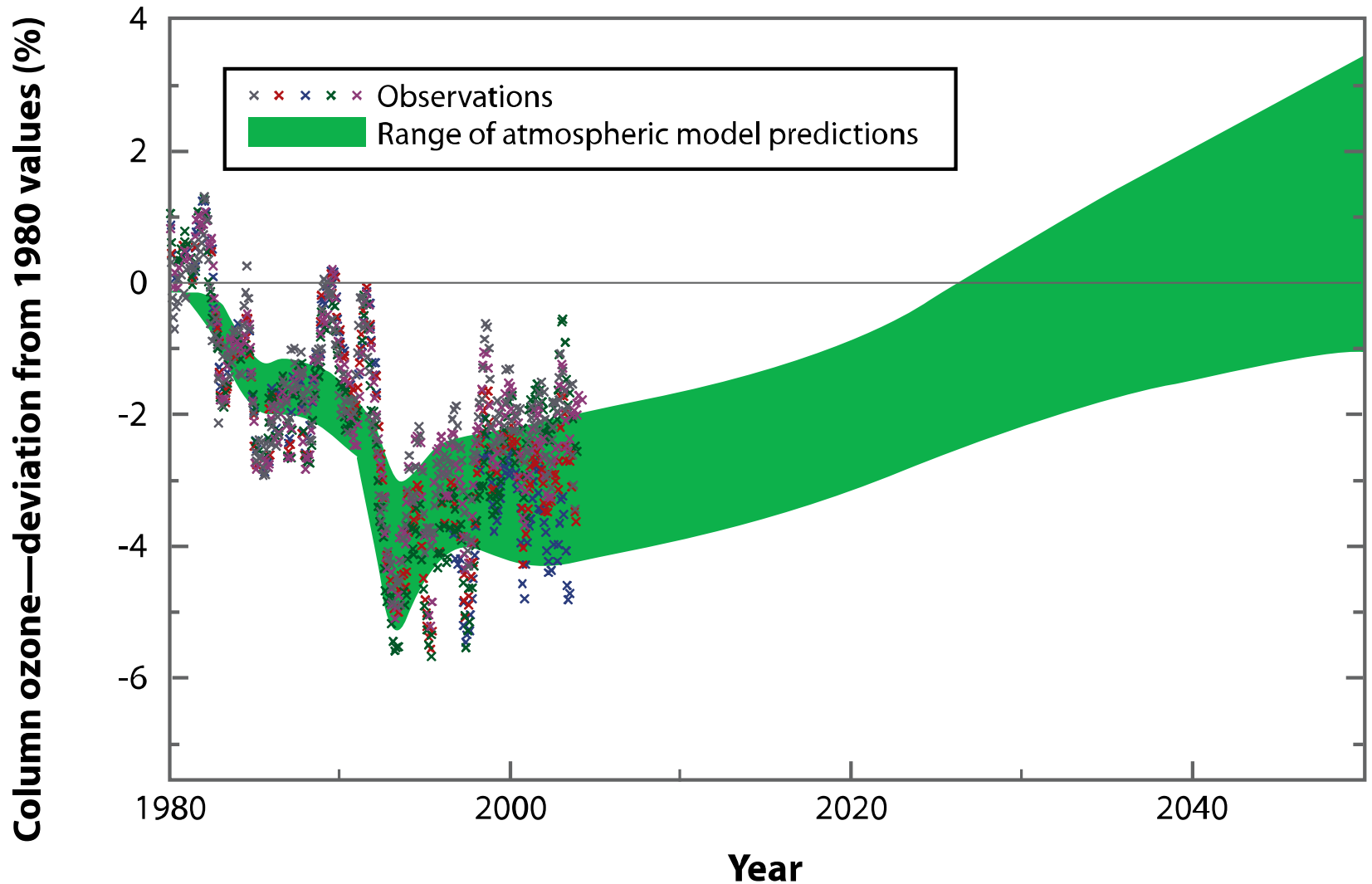
Other Activities

- Codes and Standards
 - IMO Fire Protection Subcommittee
 - ISO TC21/SC8
 - NFPA 12, 12A, 2001, 2010
- Cooperation on Halon Replacement
 - FAA IASFPWG Handheld Advisory Circular Working Group
 - UNEP HTOC
 - ODS DoD Services Steering Committee
 - HARC and HRC
- Emerging Issues:
 - Montreal Protocol: ODS bank management and destruction
 - Carbon credits for ODS destruction
 - **Chicago Climate Exchange (CCX) (2007): ODS destroyed between 2007-2010**
 - **Voluntary Carbon Standard (VCS): new protocol in 2009**
 - **Climate Action Reserve (CAR): new protocol early 2010 (workgroup)**

Montreal Protocol

- **Signed in 1987**
- **Now ratified by ALL 196 countries of the world**
- **Considered the most successful international environmental treaty**
- **ICAO Member States are also Parties to the Montreal Protocol**

Global Ozone Depletion and Recovery



Montreal Protocol and Halons: Key Milestones

- 1987 – Montreal Protocol signed
- 1992 – IMO ban on new ships; Australia bans production, prohibits use; Canada bans new uses
- **1994 – US/other developed countries ban production**
- 1998 – US ban on halon blends, intentional venting; technician training, proper disposal; SNAP
- 2000 – NFPA, ISO standards for halon substitutes
- **2001 – US Halon Management Strategy**
- 2003 – EC ban on use, de-commissioning
- **2007 – ICAO Assembly Resolution A36-12; CCX credits for ODS destruction**
- **2010 – end of global production of halons for fire protection**

HTOC 2006 Assessment Report

- Remaining production of halon 1211/1301 for fire protection ending in S. Korea and China
- Halon 2402 inventories sufficient but export restrictions exist
- Adequate global stockpiles of halon 1211/1301 exist to meet existing equipment needs to EOL
- Barriers to import/export of recycled halons
- Mixed results on halon banking
- Severely contaminated halons in Africa
- Transition progress in all sectors of use except for aviation
- Destruction/transformation options

Decision XXI/

Submission by the USA, Australia, and Canada

The Parties to the Montreal Protocol:

***Recognizing* that the International Civil Aviation Organization (ICAO) General Assembly adopted a resolution A36-12 at its 36th Session encouraging ICAO to continue collaboration with the Technical and Economic Assessment Panel (TEAP) and its Halon Technical Options Committee (HTOC) and requesting its Secretary General to consider mandates to be effective: (1) in the 2011 timeframe, for the replacement of halon in lavatories, hand held extinguishers, engines and auxiliary power units in newly designed aircraft; (2) in the 2011 timeframe, for the replacement of halons in lavatories in new production aircraft; and (3) in the 2014 timeframe, for the replacement of halons in hand held extinguishers for new production aircraft;**

***Noting* that the 2009 report by the Halon Technical Options Committee observed that legislative barriers preventing the free flow of recycled halon among Parties could result in halon not being available to meet future needs, including those of the aviation industry;**

Decision XXI/ (cont'd)

Decide

- To express the Parties' continued support for the implementation of mandatory dates by when halon alternatives will be used in previously agreed upon applications of newly designed aircraft;**
- To request TEAP and its HTOC to continue to engage ICAO on this issue and to report progress on this issue to the Parties at MOP-22;**
- To continue to encourage Parties to inform, on a regular basis, their users of halons, including the maritime industries, the aviation sector and the military, of the need to prepare for reduced access to halons in the future and to take all actions necessary to reduce their reliance on halons;**

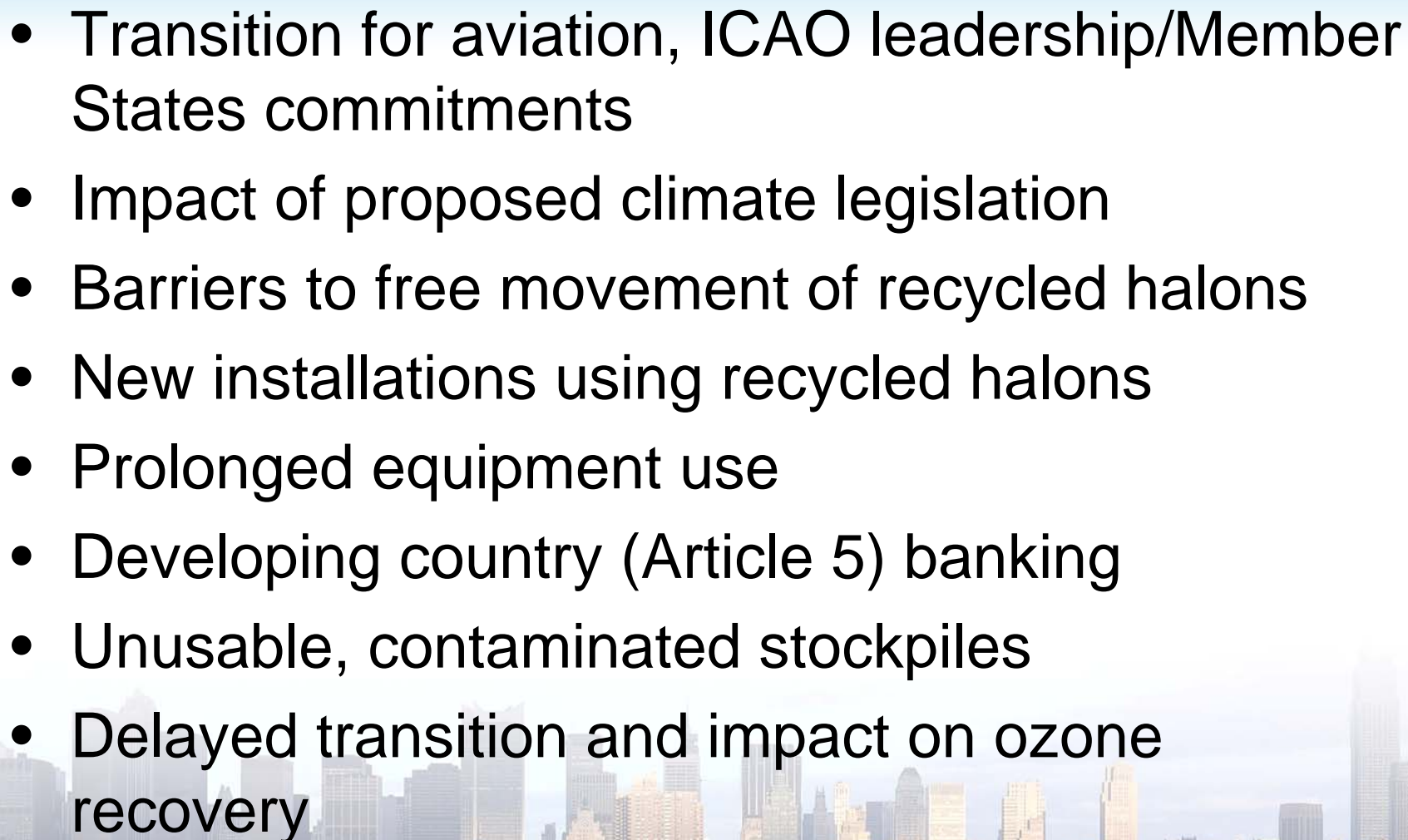
Decision XXI/ (cont'd)

To encourage Parties that have implemented import and/or export restrictions of recycled halons to reassess their situation with a view towards removing barriers on the import and export of recycled halons so as to encourage the free movement of recycled halons between Parties to meet current and future needs, even as Parties continue to transition to available halon alternatives;

To encourage Parties to refrain from destroying uncontaminated recycled halons before they have considered their domestic, as well as the global long-term future needs for halons, and to consider retaining uncontaminated recycled halons for anticipated future needs in a manner that employs best practices for storage and maintenance, in order to minimize emissions;

To encourage Parties to report their assessments of current and long-term future needs for halons to the Ozone Secretariat for use by the TEAP and its HTOC in their future assessments of management of halon banks.

Key Issues for HTOC 2010 Assessment

- Transition for aviation, ICAO leadership/Member States commitments
 - Impact of proposed climate legislation
 - Barriers to free movement of recycled halons
 - New installations using recycled halons
 - Prolonged equipment use
 - Developing country (Article 5) banking
 - Unusable, contaminated stockpiles
 - Delayed transition and impact on ozone recovery
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