

The ISO TC92 SC3 Initiative on Fire Threat to the Environment

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Today's Outline

- Charter of ISO TC92 SC3, Fire Threat to People and the Environment
- Workshop on Fire Threat to the Environment
- Next Steps
- Potential Work Items

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ISO TC92 SC3: Fire Threat to People and the Environment

- Scope: Standardization in the area of the impact of fire and fire effluent on people and the environment
- Chair: Dick Gann (USA); Secretariat: USA (Gordon Hartzell)
- U.S. TAG Chair: Jim Hoover, DuPont
- Membership
 - 19 participating countries
 - 13 observer countries
 - active: ~ 10

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SC3: Fire Threat to People and the Environment

- My guidance:
 - Develop standards and guides needed for the accurate use of smoke toxic potency information in fire hazard and risk analysis
 - Develop standards and guides in environmental areas where *international* standardization is warranted
 - Measures of uncertainty (accuracy and precision) to be included in all documents
- Generate ISO Standards where appropriate, Technical Specifications and Technical Reports where needed

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Documents Under Development

- 19706 Hazard to Life from Fire – General Guidance
- 19701 Analytical Methods for Fire Effluents
- 19702 Analysis of Fire Gases Using FTIR
- 19703 Calculating Yields of Major Fire Gases, Smoke, Equivalence Ratios, etc.
- 19700 Fire Toxicity Model (Tube Furnace)
- 13344 Rat Lethal Toxic Potency Methodology
- 13571 Guidance for Estimating Time Available for Escape

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Workshop: Fire Threat to the Environment

- Held October 25, 2002 at TC92 SC3 meeting in Boras, Sweden
 - 3 announcements sent to TC92 member bodies
 - Attended by delegates from U.S., Denmark, France, Germany, Japan, Sweden, U.K., TC 61 (Plastics)
- Objectives
 - List possible environmental effects of fires
 - Identify those effects appropriate for standards documents
 - Identify documents of high priority for New Work Items
- Discuss procedure (Working Group, assigned experts, schedule)

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Workshop: Fire Threat to the Environment



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Workshop: Fire Threat to the Environment

- Presentation by Chair of draft overall list of environmental effects of fires
- Presentations by delegations regarding their expected level of participation and specific topics of high interest for standardization
- Identification of some general principles to guide possible ISO TC92 standardization activity in this field:
 - Not small individual fires, except as noted below
 - Not incinerators or power stations
 - Focus on large fires, such as in industrial buildings and other large occupancies
- Indication by delegations of areas of sufficient interest that the country would likely supply an expert

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Environmental Effects

Topic	"Votes"
Taxonomy of fires of environmental concern	4
Identification (definition) gas, liquid, solid contaminants	6
Effect of combustion conditions on yields	5
Evaluation of transport (plume, runoff) and deposition	4
Fire response tactics	3
Business interruption, cleanup/re-occupancy, non-thermal damage	3
Population evacuation	4
Categorization process of materials for potential hazard/benefit	6
Harm from multiple contaminants (FED); bioimpact of contaminants	6

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ISO TC92 SC3 TG1

- Task Group commissioned to prepare an annotated outline of a guidance document for how SC3 would proceed
 - Margaret Simonson (Convenor)
 - James Hoover
 - Guy Marlair
 - David Purser
 - Shyuitsu Yusa

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Next Steps

- Announcement of meeting in Norwood as Part of TC92 Plenary
 - Request for experts
 - To be sent to all member bodies of ISO
 - Synopses of two potential work items to be attached
- September 16, 2003, afternoon
 - Fashion TG agenda
 - Decisions whether to proceed with work items



Guidance Document

- General guide to the hazards of fire effluent on the environment and to people through environmental exposure
- Enumeration of effects
 - People (evacuation, water supply, etc.)
 - Soil and crops
 - Marine and terrestrial habitats
- Effluent components to be considered
- Modes of transfer between the fire and the environmental



Guidance – Water Runoff

- Tabulation of effects of pollution due to run-off of contaminated water from fire fighting
- Design and sizing of emergency spill basins for the containment of contaminated fire water
- Compilation of available technical and organizational techniques that may be used to prevent or mitigate pollution of surface or underground watercourses

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Thank you for your
interest

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