



## United States Politics & Refrigeration

Presented by David L. Rule, President



#### Board of Directors Initiates Standards Development Project, PINS Standards Committee Initiates Consensus Body development, determines drafting task force **Drafting Task Force** Drafts Standard Board of Directors/ Votes to approve draft for public review process Standards Committee Revisions of Draft Standard for public review Begins public review (BSR 8), Board of Directors/ continues Consensus Body Standards Committee development, sends draft to finalized Consensus Body Comment Resolution Address all comments received, develops response letters Task Force Standards Committee. Revise standard, conduct additional public reviews, appeals **Drafting Task Force** if necessary Appeals Process/ SC, BOD, Appeals Body Review final draft, changes, Consensus Body unresolved comments, appeals. Votes to approve Standards Committee Votes to approve publication Board of Directors Votes to approve publication, file BSR 9 with ANSI **ANSI** Approve for publication

**Simplified Flow Chart:** 

# Procedures for the Development of IIAR Standards for ANSI Approval

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### **IIAR/ANSI Standards**



IIAR 1 – 2012	Definitions and Terminology Used in IIAR Standard	S
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IIAR 2 – 2014	Safe Design of	Closed-Circuit Ammonia	Refrigeration System	ms

**IIAR 3 – 2012** Ammonia Refrigeration Valves

IIAR 4 – 2015 Installation of Closed-Circuit Ammonia Refrigeration Systems

IIAR 5 – 2013 Start-up and Commissioning of Closed-Circuit Ammonia Refrigeration Systems

IIAR 7 – 2013 Developing Operating Procedures for Closed-Circuit Ammonia Mechanical

Refrigerating Systems

IIAR 8 – 2015 Decommissioning of Closed-Circuit Ammonia Refrigeration Systems



#### IIAR/ANSI Standards Under Development

- IIAR 6 20xx Maintenance, Testing and Inspection of Closed-Circuit Ammonia Refrigeration Systems
  - Address regulatory issue(s) to maintain ammonia systems
- IIAR 9 20xx Recognized and Generally Accepted Good Engineering Practices for Closed-Circuit Ammonia Refrigeration Systems
  - > RAGAGEP The "Grandfather" issue for system updates



- **IIAR C2 20xx** CO<sub>2</sub> Refrigeration Systems
  - > Safety design, maintenance & operation



### Politics of Change

Refrigeration and AC industry in the U.S.A. driven by two quite different political forces

- 1. Climate change
- 2. Health and safety laws





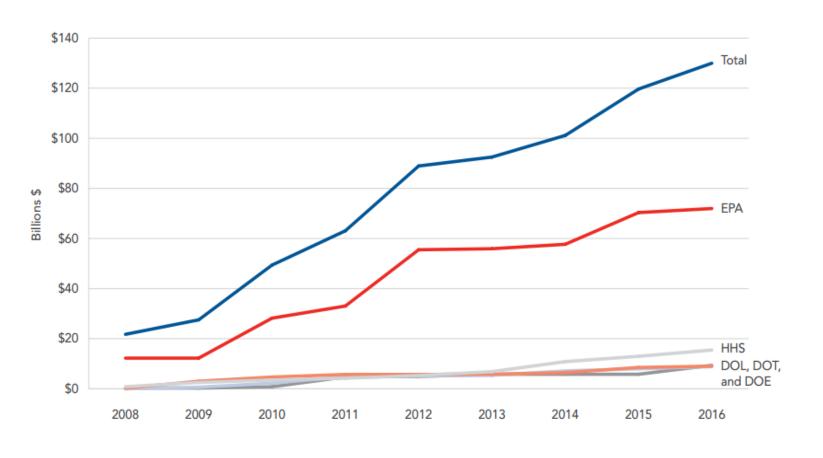




- 4. Significant New Alternatives Policy *SNAP*
- 5. Process Safety Management PSM



Cumulative Costs by Agency for Top Five Executive Branch Agencies



Source: U.S. Chamber of Commerce Taming the Administrative State"



#### <u>Ammonia and Building Codes</u>



- IIAR-2 has recently been adopted by US building codes for ammonia.
- ASHRAE 15 will soon refer to IIAR-2 whenever ammonia is used.
- IIAR-2 has become the de facto industry standard for ammonia installations.
- Academy of Natural Refrigerants will address regulatory concerns for documented education.



#### CONCLUSIONS

public safety still limits application of ammonia and hydrocarbons.

Low charge technology has expanded applications for ammonia.

The politics of climate change has driven the phase-out of HFCs by EPA SNAP rule.

cO2 systems are expanding to industrial & commercial sectors.

The "Donald Effect" on regulations and/or enforcement is unclear.





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Thank you very much!

