

Appendix A: Summary of Acceptable and Pending Decisions

REFRIGERATION AND AIR CONDITIONING—ACCEPTABLE SUBSTITUTES

| End-use | Substitute | Decision | Comments |
|--|------------------------------|------------------|---|
| CFC-11, CFC-12, CFC-113, CFC-114, CFC-115 Non-Mechanical Heat Transfer (Retrofit and New Equipment Designs/NIKS). | Volatile Methyl Siloxanes .. | Acceptable. | EPA strongly recommends the containment and reclamation of this substitute. |
| CFC-13, R-13B1, and R-503 Industrial Process Refrigeration and Very Low Temperature Refrigeration (Retrofit and New Equipment/NIKS). | Water | Acceptable. | |
| | Mineral Oil | Acceptable. | |
| | R-508 | Acceptable | |
| CFC-12 Household Refrigerators and Freezers, New Equipment/NIKS. | Ammonia absorption | Acceptable. | |

REFRIGERATION AND AIR CONDITIONING—PENDING DECISIONS

| Application | Substitute | Comments |
|--------------------------------------|--------------------------------|---|
| All CFC-12 End-Uses | Blend Zeta | EPA has requested additional data. |
| Heat Transfer | HCFC-225. | |
| Motor Vehicle Air Conditioning | R-406A, HCFC Blend Delta | MVAC refrigerants will be used in accordance with use conditions, which require full notice-and-comment rulemaking. |

FOAM BLOWING—PENDING SUBSTITUTES

| End-use | Substitute | Comments |
|--|--------------------------|----------|
| HCFCs, Polyurethane and Polyisocyanurate Laminated Boardstock Foam. | HFC-134a/HFC-143a Blend. | |
| HCFCs, Rigid Polyurethane Appliance Foam .. | HFC-134a/HFC-143a Blend. | |
| HCFCs, Rigid Polyurethane Commercial Refrigeration, Spray and Sandwich Panel Foam. | HFC-134a/HFC-143a Blend. | |
| HCFCs, Rigid Polyurethane Slabstock and Other Foam. | HFC-134a/HFC-143a Blend. | |
| HCFCs, Polyolefin Foams | HFC-134a/HFC-143a Blend. | |
| HCFCs, Polyurethane Flexible Foams | HFC-134a/HFC-143a Blend. | |
| HCFCs, Polyurethane Integral Skin | HFC-134a/HFC-143a Blend. | |

FIRE SUPPRESSION AND EXPLOSION PROTECTION—ACCEPTABLE SUBSTITUTES

| End-use | Substitute | Decision | Comments |
|------------------------------------|--|--|----------|
| Halon 1211, Streaming Agents | Water Mist Systems using Potable or Natural Sea Water. | Acceptable. | |
| Halon 1301 | Water Mist Systems using Potable or Natural Sea Water. | Acceptable. | |
| Total Flooding Agents | [Water Mist Surfactant Blend] A | Acceptable in Normally Unoccupied Areas. | |

FIRE SUPPRESSION AND EXPLOSION PROTECTION PENDING SUBSTITUTES

| End-use | Substitute | Comments |
|-----------------------------|---------------------------------------|---|
| Halon 1211 | CF ₃ I | Will be proposed acceptable in nonresidential applications in a forthcoming rulemaking. |
| Streaming Agents | HFC-227ea | Complete SNAP submission and personal monitoring data required. |
| | [Water Mist/Surfactant Blend] A | Pending review by EPA |
| | Water Mist with Additives | Must be individually submitted to EPA and reviewed on a case-by-case basis. |
| Halon 1301 | [HFC Blend] A | Pending receipt of further data requested by the Agency. |
| Total Flooding Agents | IG-55 (formerly [Inert Gas Blend] B). | Proposed Acceptable (forthcoming). |
| | IG-01 (formerly [Inert Gas Blend] C). | Proposed Acceptable (forthcoming). |