

extracting refrigerant and separating lubricant from refrigerant. Unlike SAE J2209, ARI standard 740 is not designed to address the servicing of mobile automotive air-conditioning systems, and does not meet the statutory requirement of being as rigorous in all respects as J1990. Unlike J1990 and J2209, ARI 740 does not establish an oil separation requirement or require that a contaminated CFC-12 sample be processed to verify oil separation.

One commenter remarked that sections 6.2 and 6.2.1 of J2209 should not be adopted into appendix B because these sections, which describe the preconditioning of the equipment with a standard contaminated CFC-12 sample, apply only to recycle equipment and not to recover-only equipment. These provisions not only apply to measuring the efficiency with which a unit cleans the refrigerant for recycling, but also to measuring how much lubricant has been removed from the air-conditioning system during the recovery process, so that technicians may determine how much lubricant to replace prior to the completion of servicing. This determination should be made whenever any refrigerant is recovered, whether from a recover-recycle unit or a recover-only unit.

In addition, the language contained in Sections 6.2 and 6.2.1 is almost identical to the language of J1990, Sections 8.3 and 8.4.1. Since today's standard must at a minimum be as stringent as SAE J1990, these provisions should be contained in appendix B. The Agency believes that the proper determination of how well a particular model of equipment extracts refrigerant depends in part on testing the model with a contaminated sample. Noncondensable gases in particular may affect extraction efficiency. In addition, the Agency desires to further consistency between industry standards such as J2209 and Agency regulations.

A commenter remarked that the reference in section 6.3.3 of appendix B to the use of overfill protection based on a tank's volume should be based on weight rather than volume, because many tank filling operations recognize that weight is a better control to prevent overfilling a tank. The Agency has decided to base its overfill protection method on volume since both the Department of Transportation specifications for shipments and packagings and the American Society of Mechanical Engineers do so.

One commenter argued that the Agency should consider a six-month grace period which would allow owners of uncertified equipment to use older recover-only equipment while ordering

and installing recover-only equipment that would comply with this rule. The Agency believes that the provisions set forth in today's rule governing substantially identical equipment, combined with the extended time frame between the publication of the proposal and the publication of this final rule, and the adoption of standard closely modeled on a consensus SAE standard, sufficiently address these lead time concerns. Equipment owners have had a significant time period to purchase equipment that should meet the standards to be adopted today.

Finally, two commenters objected to the provision set forth in section 6.7 of appendix B requiring that the equipment be able to separate the lubricant from recovered refrigerant and accurately indicate the amount removed from the system. These commenters claimed that this was a redundant requirement, and was not needed to determine the amount of oil to be replaced. EPA has included this provision in appendix B because it promotes consistency between the Agency requirements and the industry standard, as set forth in SAE J2209; because it promotes consistency in operating recover-only and recover/recycle equipment (*i.e.*, the technician will know that oil separation and measurement is a component in operating both types of machines); and because, by helping to prevent overcharging the vehicle system with lubricant, section 6.7 provides the technician with every opportunity to complete compressor lubrication properly.

IV. Summary of Today's Final Rule

A. Adoption of Standard Based on ARI 700-1993 in Definition of "Properly Using" and in Appendix B

Section 82.32(e) provides in the definition of "properly using" that "(r)efrigerant from reclamation facilities that is used for the purpose of recharging motor vehicle air conditioners must be at or above the standard of purity developed by the Air-conditioning and Refrigeration Institute (ARI 700-88) * * * in effect as of November 15, 1990." Today's rulemaking changes the definition of "properly using" to refer to ARI 700-1993, which is an updated version of ARI 700-88. In addition, references to the ARI 700 standard in appendix B, the Standard for Recover Equipment, are to ARI 700-93 rather than ARI 700-88.

EPA believes that ARI 700-1993 should substitute for ARI 700-1988 in order for section 609 regulations to remain consistent with other provisions

of the Clean Air Act regulations and with industry standards. The direct final rule amending the Refrigerant Recycling Regulations published on August 19, 1994 (59 FR 42949) and effective on October 18, 1994 requires that persons reclaiming refrigerant for sale to a new owner must return refrigerant to a standard of purity based on ARI 700-1993. In addition, the Society of Automotive Engineers is in the process of revising all of its air-conditioning standards and recommended practices to reference current ARI specifications for fluorocarbon refrigerants. SAE will soon revise its J2209 standard, the basis for appendix B.

Whereas ARI 700-1988 allowed 0.5 as the maximum percentage by weight of "other refrigerants", ARI 700-1993 allows 0.50 as the maximum percentage by weight of "all other organic impurities, including other refrigerants," effectively tightening the standard. Changes in ARI 700-1993 that do not affect the automotive industry include adding purity standards for eleven additional refrigerants, and increasing liquid phase contaminant water levels for certain refrigerants not used in automobile air conditioners.

EPA is substituting the ARI 700-1993 standard for ARI 700-1988 as a direct final rule, recognizing that the Agency did not propose the substitution in the April 22, 1992 proposal of this rulemaking. This substitution predominantly affects the activities of refrigerant reclaimers, who were similarly affected by the substitution of ARI 700-93 for ARI 700-88 in the direct final rule amending the Refrigerant Recycling Regulations published on August 18, 1994 (59 FR 42949). Commenters to that rule overwhelmingly agreed that the changes to the ARI standard were both appropriate and necessary.

As discussed above, this portion of today's rule will become effective on July 3, 1995, unless EPA is has received by June 1, 1995 adverse comment. Should EPA receive such notice, EPA will publish one subsequent action in the **Federal Register** to withdraw the portion of this final action, and will publish another action proposing this action and requesting comments. In that event, following a public comment period and the opportunity for a public hearing, the Agency will draft the final regulation to be published in the **Federal Register**.

B. Standard for Recover-Only Equipment

Section 82.36(a) of the regulations specifies that equipment that recovers and recycles refrigerant must meet the