that address evacuation requirements relative to oil changes and destruction

of purged emissions.

Under section 608 of the Clean Air Act Amendments of 1990, regulations were required to establish standards and requirements regarding the use and disposal of class I and class II substances during the service, repair, or disposal of appliances and industrial process refrigeration. The regulations were required to reduce the use and emission of class I and class II substances to the lowest achievable levels and to maximize the recapture and recycling of such substances. Regulations published on May 14, 1993 set out comprehensive requirements for recovery and reclamation of refrigerants from stationary sources. These regulations also establish leak repair requirements to further minimize emissions of class I and class II substances. The new information received from CMA indicates that under certain circumstances the timelines within which to repair industrial process refrigeration system leaks or retrofit such systems are not achievable. Today's proposed rulemaking seeks to respond to those circumstances by proposing the shortest timeframes possible, yet still achievable. EPA believes that today's proposal meets the standards set forth by Congress in the Clean Air Act Amendments. EPA requests comment on the legal basis under which EPA is proposing these revisions.

In today's action, EPA also proposes to allow additional time for repairs and retrofits and replacements of federallyowned or operated commercial or comfort-cooling systems where procurement requirements prevent timely acquisition of parts or services. This issue was not part of the settlement agreement, but was brought to EPA's attention by the U.S. Department of Energy. EPA also proposes to clarify that leaks exceeding the annual leak rate need only be brought to a level below that applicable annual leak rate, not to zero. Although this issue was not part of the settlement agreement, such clarification is necessary to be consistent with the terms of settlement, relative to the 35% annual leak rate and repair requirements. This clarification affects owners and operators of commercial refrigeration systems and comfort-cooling systems containing more than 50 pounds of refrigerant. The recycling rule, 40 CFR part 82, subpart F, is only being re-opened for purposes of reconsidering these specific provisions outlined in this paragraph and the paragraph above, and discussed in today's proposed rule. EPA is not

inviting comment on any other provisions of the recycling rule.

A. Need for Separate Leak Repair Requirements

Three main refrigeration sectors are affected by the leak repair provisions promulgated under section 608 of the Act: commercial refrigeration, comfortcooling, and industrial process refrigeration. While many different commercial refrigeration and comfortcooling systems are similar in design and function, EPA has received new information from CMA illustrating the uniqueness of industrial process refrigeration systems. Industrial process refrigeration units are custom-designed and assembled in-place at a process location. Thus, each of these industrial units has unique operating characteristics. Industrial process refrigeration is defined in § 82.152 as:

* * * complex customized appliances used in the chemical, pharmaceutical, petrochemical and manufacturing industries. This sector also includes industrial ice machines and ice rinks.

There are several apparent differences between industrial process refrigeration equipment and other types of equipment affected by the leak repair provisions. Industrial process refrigeration systems are larger and more complex than hermetically-sealed consumer units. Most comfort-cooling systems have hermetically-sealed or semi-hermetically-sealed refrigerant loops. By contrast, industrial process refrigeration systems often have compressor shaft seals, gasketed flange seals, and valves with packing gland seals. All of these are potential leak points. For example, an industrial process system can include 17 different evaporators, located at distances up to half a mile from the compressor. Another example is that of a system that has a 5,000-horsepower compressor moving nearly 200,000 pounds of refrigerant. A system that size cannot be a "sealed" unit. This complexity makes leak detection and leak rate calculations more difficult than for other sectors affected by the leak repair provisions.

Industrial process refrigeration systems are also frequently designed to provide refrigeration to more than one industrial process and at more than one location within the same facility. These distributed refrigeration systems have multiple refrigerant reservoirs and evaporators and may be connected by pipe runs of half a mile or more, as mentioned above. Piping, valves and even evaporators in industrial process refrigeration systems are likely to be less accessible than the potential leak

sources normally found in the other systems.

Industrial process equipment, particularly that used in the chemical manufacturing industry, is frequently located in plant areas near high pressure/temperature piping and equipment and where leaks/spills of flammable or otherwise hazardous chemicals may occur. A heat exchanger in which a class I or class II refrigerant is cooling a hazardous process fluid at high pressure poses different safety risks than those normally encountered in the commercial refrigeration sector or the comfort-cooling sector. Many industrial process sources are manufacturing or handling acutely toxic, corrosive, or carcinogenic chemicals that need to be handled in an extremely cautious manner. It is imperative that they be cooled properly to avoid fire, explosion, or emissions.

In order to perform certain types of repair work on industrial process systems, a shutdown of the facility may be necessary to avoid such hazards. Shutting down industrial process refrigeration equipment means curtailing production or shutting a plant down completely, which can incur enormous costs in terms of time and money. In some cases, the size and complexity of a plant may require hours or days to completely shut down all the process equipment to avoid any unwanted chemical reactions that could lead to fires, explosions, or other immediate hazards. Such a costly and complex shutdown is not required to repair commercial or comfort-cooling systems that can sustain a short shutdown without significant added cost or consequence.

Because of the new information that illustrates the substantial differences between the industrial process refrigeration sector and the other sectors affected by the leak repair provisions, EPA is proposing to revise the leak repair provisions promulgated under § 82.156(i) to establish separate provisions for the industrial process refrigeration sector. EPA requests comment on the appropriateness of establishing separate repair provisions for industrial process refrigeration.

B. Additional Time To Complete Repairs

Section 82.156(i)(1) of the current rule requires that owners of commercial and industrial process refrigeration equipment must have all leaks repaired if the equipment is leaking at a rate such that over 35% of the refrigerant is released within a 12-month period. Under § 82.156(i)(3), owners are not required to repair such leaks if, within