

30 days, they develop a one-year retrofit or retirement plan for the leaking equipment. Due to differences between the industrial process refrigeration sector and other sectors affected by the leak repair provisions, EPA recognizes that the potential for reasonable delays in repairing leaks is great in the industrial process sector. Thus, EPA proposes to allow the owners and operators of industrial process refrigeration equipment more than 30 days to repair leaks when the necessary parts are unavailable, or if requirements of other federal, state or local regulations make a repair within 30 days impossible. Additional time to receive delivery of any necessary parts or comply with any applicable regulations would be allowed.

Although EPA proposes to allow this additional time when necessary, EPA proposes that the owner or operator of the industrial process refrigeration equipment must exert best efforts to repair leaks within the 30-day time period. If the equipment cannot be repaired within the 30-day requirement, the owner or operator must document repair efforts, notify EPA of the inability to comply with this 30-day repair requirement, provide appropriate information concerning the reason for the inability to complete repair efforts and submit to EPA a one-year retrofit, replacement or retirement plan for the leaking equipment.

Generally, EPA believes that most leaks can be repaired within 30 days. For example, a leak caused by a ruptured tube would normally be repaired within several days to a few weeks, depending on the size and complexity of the system. Another example of a leak that could normally be repaired within the 30-day timeframe would be a leaking gasket. If refrigerant is leaking from the gasket between the flanges where two pieces of pipe come together, a repair can often be accomplished by merely tightening the bolts that hold the flanges together. Assuming that the piping is accessible, this might take only a few minutes.

However, EPA recognizes that under certain circumstances it may not be possible for the owners and operators of industrial process refrigeration equipment to complete all necessary repairs within the thirty-day timeframe, or complete retrofit activities within one year, as established by the final regulations. Such necessary repairs may not be able to be completed within 30 days due to the need for the owners and operators of industrial process refrigeration equipment to comply with all other applicable federal, state, and local regulations. For example, if the

piping for the industrial process equipment is covered with asbestos-containing insulation, the insulation for the affected portions of the system will have to be removed to detect and repair the leaks. Depending on the amount of piping affected, EPA regulations may require a ten working day notice before any asbestos-handling activities may begin. Only once the process of removing the insulation is complete can work begin on the refrigeration system.¹

Other types of regulatory requirements that may impact the ability of a facility to either complete the necessary repairs within 30 days or retrofit the facility within one year include the need to obtain appropriate state or local permits. For example, one company planning to replace its ozone-depleting component with an ammonia refrigeration component in California encountered many unavoidable delays because ammonia is treated as a hazardous substance under the California Risk Management Prevention Plan (RMPP) program. As a result, the company had to prepare a risk management plan that met the approval of the local fire department before ammonia could be brought to the site. It took a total of six months to write and receive approval of the plan from the State. A similar situation could be encountered by any facility in California that decided to replace its ozone-depleting system with an ammonia system. Since most companies are unlikely to commit significant investment to a project until it is clear that the project can be approved, this requirement could, in effect, delay other necessary retrofit activities by up to six months. This may limit the ability of the company to complete retrofitting the system within one year.

In some cases, industrial process refrigeration systems, particularly refrigerated condensers, serve as emission control devices for chemicals that could otherwise be released. For example, a refrigeration system may be used to cool and condense vapors, allowing recovery rather than venting to the atmosphere. Federal or state emission control requirements will typically specify that the condenser must be in operation whenever the manufacturing process is running. Limited periods of down time for maintenance on the condenser may be allowed. However, companies may not have unlimited freedom to shut down the system that controls emissions.

Repairing leaks and retrofitting systems may be delayed because of the

unavailability of needed parts. Many parts in an industrial process refrigeration system are custom-built. This is different from the commercial and comfort-cooling sectors, where parts tend to be more uniform, more widely available, and may often be purchased "off the shelf." In order to repair or replace a leak source in an industrial process facility, the needed part may have to be custom-built. The process of building the part and shipping it to the facility may cause a delay that makes it impossible for the owner or operator of the industrial process facility to repair the leaks within 30 days.

Although EPA recognizes these potential difficulties and delays, EPA proposes that the owner or operator of the industrial process refrigeration equipment must exert best efforts to repair leaks within the 30-day time period. EPA believes that best efforts on the part of the owner or operator of the industrial process refrigeration system implies that a methodology for repair that is reasonably expected to be effective based on past experience has been used. A best efforts approach used to repair leaks should first consider the experience of the individual or individuals charged with performing the repairs. However, for repairs that are less common or have not been performed in the past, best efforts on the part of the owner or operator of the industrial process system may imply appropriate consultation by the technician with manuals or colleagues, both within and outside of the company. If the owners or operators of the industrial process system followed the methodology discussed above, and are unable to repair all necessary leaks within thirty days, EPA proposes to grant extra time. EPA requests comments on this repair methodology. While EPA believes that a best efforts approach that incorporates the information above is important, EPA is concerned about the lack of formal protocols referred to in this definition.

The owners or operators of the industrial process facility would be required to maintain records of their actions and submit information to EPA that details the need for additional time to complete all repair work. EPA believes the following information should be maintained by the owners or operators of the affected system and reported to EPA:

- (1) Identification of the industrial process facility;
- (2) Leak rate;
- (3) Method used to determine the leak rate and full charge;
- (4) Date a leak rate of 35 percent or greater was discovered;

¹ See 40 CFR 61.145(a)(5) and 40 CFR § section 61.145(b).