conducted. One commenter stated that EPA should take confidence in the fact that leak detection and repair of appliances did not originate with section 608; it has been an integral part of maintenance practice for many years.

EPA agrees that in certain circumstances, performing a follow-up verification test prior to normal operating characteristics and conditions may be more meaningful and reliable. Performing multiple verification tests may be appropriate under many conditions. One of the Agency's concerns, however, was that until normal operating characteristics and conditions are achieved, it may be unclear if the leak repair work was truly successful. EPA was concerned that at less than true operational state, a particular fix may not hold. The Agency understands that leak detection and repair has been part of this sector's practices before the development of these regulations. Furthermore, EPA believes that as class I and class II refrigerants become less readily available, leak detection and repair efforts may increase. Moreover, EPA believes that in most cases the owners or operators rely on personnel with appropriate professional judgment in determining the best way to repair and verify the repair of a leak source. Therefore, through this action EPA will amend the proposed requirements for performing follow-up verification tests. EPA will require that the test be performed at normal operating characteristics and conditions unless sound professional judgment determines that a follow-up test should be performed prior to returning to normal operating characteristics and conditions.

EPA received several comments requesting that the Agency clarify that initial and follow-up verification tests are to be performed even when repairs are made within 30 days. One commenter stated that the NPRM was unclear. The commenter believes that as a practical matter, and to minimize confusing plant operations, it would be preferable to treat all repairs equally, and to require documentation that tests should be done to verify a successful repair. Another commenter stated that these tests are a measure of compliance. Another commenter stated that the settlement agreement makes no mention that these requirements must be met only in cases where the owners or operators are granted additional time. Furthermore, the settlement agreement does not limit these tests to situations where an industrial process shutdown has occurred, or where the repairs were made while an appliance was

mothballed. This commenter believes that, with regards, to the performance of these tests, the regulatory language should be in full agreement with the settlement agreement.

EPA agrees that the tests demonstrate whether a leak repair effort was successful or not, though the tests do not necessarily mean that the leak rate has been sufficiently reduced. In addition, EPA understands that often these tests have been routinely performed regardless of any regulatory requirement. EPA believes that many organizations have internal policies requiring that verification tests be performed. EPA agrees that having a consistent requirement that can easily be paraphrased for technicians is useful. Moreover, EPA does not believe requiring these tests in all circumstances equates to any substantial burden to industry. Therefore, EPA will require that initial and follow-up verification tests be performed when repairing leaks on industrial process refrigeration equipment where such leakage has surpassed the 35 percent annual leak rate.

One commenter requested that EPA clarify that the verification tests demonstrate the success of a leak repair, not that the leak rate has been reduced below the threshold. EPA agrees with this commenter. It was not EPA's intention to imply that the verification test shows what the leak rate is. However, EPA believes that where the verification test shows that the repairs have been successful, in most cases this will mean that there has been a reduction in the leak rate. If more than one leak exists, it is possible that the leak rate could remain above acceptable levels. In such cases the owners or operators would be expected to take reasonable actions.

Two commenters stated that where an industrial process shutdown is not required, the initial and follow-up verification tests will be identical; therefore, a follow-up verification test is unnecessary. EPA disagrees with these commenters. While the same test might be performed, the fact that the tests are performed at different times is important. If a repair consists of tightening flange bolts, for example, it may appear that a repair is successful during an initial verification test. However, it may not be immediately obvious that the repair was unsuccessful. A bolt may appear to have been tightened sufficiently; however, if the threading is damaged, it may loosen in a short period of time. Performing a follow-up verification test will demonstrate that a problem still exists. EPA believes that even when an

industrial process shutdown is not necessary, initial and follow-up verification tests will play vital roles. Therefore, EPA is requiring that both initial and follow-up verification tests be performed when repairs are made even if an industrial process shutdown is not required.

EPA received one comment requesting that more than one follow-up verification test be permitted before an owner or operator must notify EPA of a failure. The commenter is concerned that situations could arise in which a follow-up verification test may indicate a failure even though in reality the leak has been fixed. The commenter suggested that it would be more reliable in the event that the test was inconsistent with the expected results, that subsequent tests be permitted to be performed during the 30-day period. EPA understands this commenter's concerns. Since repairs are often interrelated, tests may demonstrate a need to continue repair efforts. EPA proposed to permit the follow-up verification test to occur within 30 days. However, since the Agency is revising the terminology used in the NPRM to first repair efforts and second repair efforts, EPA believes the issue has been resolved. Tests will be completed after the repair efforts are complete.

EPA received comments concerning the interpretation and use of sound engineering/professional judgment. Commenters stated that EPA should not incorporate sound engineering/ professional judgment into the interpretation of best efforts. Sound engineering/professional judgment should only be discussed in relation to verification tests. EPA has already addressed the commenters' concerns about the NPRM's incorporation of sound engineering/professional judgment with the use of best efforts.

A few commenters stated that since the decision-making process may not be performed by an engineer, the use of the term engineering is inappropriate. In the NPRM, EPA states that sound engineering or professional judgment means a "combination of the use of logic and operational experience, with methods of calculation that are practical, based on training, experience and education" (60 FR 3997). EPA agrees that in many cases the professional making the decision may not be an engineer. Therefore, EPA will use the term, "sound professional judgement.'

One commenter stated that sound professional judgement should be employed to determine where and which initial and follow-up verification tests should be performed, whenever