Maintenance is an important phase of any control procedure, and is as true for respirators as it is for ventilation equipment. No matter how well a respirator is designed, how good its performance, it cannot give satisfactory protection unless it is maintained in good condition. This is one of the most frequently neglected factors, particularly with routinely used respirators. The operations of a maintenance program, including frequent inspections, cleaning, replacing, or repairing worn or deteriorated parts, and storage, should be centralized. They should also be supervised carefully by a responsible and capable person since proper care and maintenance requires a thorough knowledge of the devices.

All routinely used respirators should be inspected frequently. The tightness of connections should be checked, as well as the condition of the facepiece, exhalation and inhalation valves, connecting tubes and/or cartridges, and cannisters.

Respirators should be cleaned after each use, and they should be collected at a central point at the end of each shift for cleaning and inspection. Each employee's respirator should bear some sort of identification, such as his initials or clock number. When a worker receives a respirator, he should be briefed on the cleaning procedure and assured that he will always get the same device. If the respirators are serviced between shifts, only one respirator per worker is needed. If the cleaning is done during a shift, each worker will require two respirators. When not in use, the respirators should be stored in clean cabinets at convenient locations in the work area. As long as each respirator is assigned to only one person, there is no reason to require special sterilizing. Scrubbing with warm water and soap, rinsing, and air drying is adequate. When the respirator is used by only one individual, a practical method of cleaning is as follows:

1. Remove the filter or cartridge and discard.

2. Wash in detergent or soap in warm water.

3. Rinse completely in clean, warm water.

4. Air dry the device in a clean area.

5. Inspect the valves, headstraps, and other parts; replace with new parts if defective.