

# **POLSON City/Rural FIRE DEPARTMENT**

## **Operating Guidelines**

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## **200.00 Respiratory Protection Program**

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### **Self Contained Breathing Apparatus - SCBA**

#### **1) Usage:**

SCBA's will be used at the following alarms, or any alarm or situation that the officer or senior firefighter in charge feels necessary to protect the health of the firefighters; structure fires, vehicle fires, dumpster fires, odor of gas, reports of spills or leaks of substances, hazardous or unknown material calls, and any possible condition where the atmosphere may be immediately dangerous to life and health. An Integrated PASS (Personal Alert Safety System) is supplied with the SCBA.

#### **2) Selection:**

The SCBA will be supplied by the Polson Fire Department and will be of the positive pressure with donning switch only style acceptable and recognized for use by the Fire Service. The Scott Fifty 4.5 Pressure Demand Air Mask with Pak-Alert SE Distress Alarm (Integrated PASS) which provides complete respiratory protection and is approved by the Mine Safety and Health Administration (MSHA) and National Institute for Occupational and Safety Health (NIOSH) as a "1/2 hour duration" unit. This apparatus can be used as at temperatures down to -25 degrees F, however, a mask must be used at temperatures below +32 degrees F. The air mask also provides an alarm that activates when approximately 20-25% of the rated service time remains. When the alarm begins ringing during use, it's loud warning signal indicates its time to return to fresh air, there is approximately six (6) minutes breathing supply left. See "Service Life" statements for factors, which affect service life. The Pressure Demand Regulators spring loaded to provide a positive pressure in the face piece during inhalation and exhalation in order to reduce the possibility of inward leakage. The use of any other type of SCBA will require the person in charge to approve prior to being used, to assure that it will provide adequate respiratory protection against the particular hazard for which it is used. All members will receive annual fit testing and be issued their own SCBA Mask. Any member requiring any special options must request those options in writing. (i.e. spectacle kit

### **3) Preparation For Use:**

The following consecutive steps should be followed in putting on the apparatus before entering a toxic atmosphere.

A. Check the pressure gauge in the cylinder valve to insure that the cylinder is full at 4500 PSI. If there is less pressure, the service life will be reduced accordingly.

B. Put on the apparatus using either of the following methods:

1. When Riding in the Jump Seats of Apparatus: sit in the jump seat with your back against the jump seat. Make sure that the shoulder straps are extended fully and place one arm in at a time through your respective shoulder strap, and adjust each strap accordingly by pulling down, and then fasten waist belt accordingly by pulling outward. Then place your AV-2000 Mask (mask) on your head over your face. Place the mask on before your Nomex hood; pull the face straps back so the mask is snug on your face. Then place your hand over the regulator opening and breathe in to insure complete seal. After this is done, place the Nomex hood over the head harness assembly leaving no skin exposed.

2. Off the Side of the Truck: pull the SCBA out of the bracket of the truck. Extend narrow shoulder straps. Don the apparatus like a vest. While bending over, tighten the shoulder straps snugly. Then stand up straight and fasten waist belt and pull snugly. Follow the mask procedure in Section 1 above, to ensure a complete seal.

3. From the SCBA Case: Open the lid of the case and extend the shoulder straps to their full length. Lean forward; grasp the cylinder and backplate firmly with both hands, between the cylinder clamp and waist belt. Lift the apparatus straight up and over your head and rest it on your back. The shoulder straps will fall into place over the shoulders. While bending over, pull downward on the shoulder straps until snug. Stand straight and fasten waistbelt snugly. Should further adjustment be necessary, lean forward and adjust straps and follow the procedure in Section 1 for proper donning of the mask.

4. Open the cylinder valve hand wheel fully (at least three turns). Be sure that alarm sounds when first turned on to ensure that the alarm is functional and the Pak-Alert SE Distress Alarm is functioning. Be sure that the purge valve and air saver switches are off. Observe the remote reading pressure gauge located on the left shoulder strap to ensure cylinder pressure. This gauge indicates the pressure in the cylinder and should read full (indicating that the cylinder is full, 4500 PSI). If there is less pressure in the cylinder the service life will be reduced accordingly. Turn off the cylinder valve and watch it for pressure loss. There should be no drop in pressure if the equipment is leak tight and if there is no noticeable deflection of the needle. The equipment should be checked and the leak corrected before entering a toxic atmosphere. Check the connections from the cylinder to make sure that they are tightened properly and re-do Procedure 4.

5. The Mask is Then Put On Using the Following Method: Pull out the facepiece head band straps so that the ends are at the full length, and grip the face piece between thumb and finger. Insert the chin into the face piece and pull head harness assembly back over the head. To obtain a firm and comfortable fit against the face at all points, adjust the two side straps by pulling backward.

- A. See that straps lie flat against the head.
- B. Tighten "side" straps snugly.
- C. Place the palm of your hand over the breathing regulator opening and breathe in. This is to ensure that no leakage is found around the mask.
- D. If leakage is found, readjust and repeat letter "C".

Any member with a beard, sideburns or facial hair that may cause a leakage will not be allowed to wear a mask (face piece).

6. Then bring the breathing regulator to the mask and attach in the hole provided in the mask and turn until locking mechanism locks.

7. Test the complete system for airflow from the cylinder to face piece by breathing normally. The regulator should follow the normal breathing pattern.

8. Test the Purge Valve (red knob) by opening it briefly. With the purge valve is open, a rush of air should be delivered to the face piece. If the rush of air is delivered, the apparatus is ready for use. Close the purge valve (red knob).

9. Breathe normally as the apparatus automatically satisfies breathing requirements.

#### **4. INSTRUCTIONS AND TRAINING:**

Prior to anyone using a SCBA, they will have to be certified by the Fire Department Physician for interior fire fighting and certification received stating it. Any member of the Polson Fire Department who is under 18 years of age, or who has not completed his/her Basic Firefighting or equivalent class, shall not wear an SCBA for interior firefighting. The users will be provided training in handling the SCBA's, proper fitting, mask to face seal, wear it in normal atmosphere. An instructor of competency will provide these instructions for SCBA's. All members certified in SCBA use will have to complete the mask confidence course on a department level each year, have watched the video on Operation and Maintenance of the Scott Fifty 4.5 Pressure Demand Air Mask with Pak-Alert SE Distress Alarm (Integrated PASS) and all members certified to wear a SCBA must have a minimum of two hours in service training yearly to continue their certification

## **5. INSPECTIONS AND MAINTENANCE:**

The Polson Fire Department inspection and maintenance frequency is After Every Use, Bi-Weekly, and Monthly as per Scott Aviation guidelines for inspection and maintenance of the Scott Fifty 4.5 Pressure Demand Air Mask with Pak-Alert SE Distress Alarm (Integrated PASS). They are to be followed and any areas of deficiency shall require the SCBA to be removed from service, tagged, and reported to the Chief, Assistant Chief or Captain. Repairs to any SCBA must be done by a qualified person as required by Scott Aviation. Repairs will be performed as stated by Scott Aviation.

After each air mask is used, or found to be dirty, it must be sanitized per Scott Aviation recommendations this procedure is attached to the SCBA Inspection Book. The SCBA is then placed back to the location of removal in each piece of apparatus.

A sample of the inspection reports is enclosed and a copy for each SCBA and Cylinders is kept in the SCBA Inspection Book on the desk near the radio in the station. A complete copy of the Scott Fifty 4.5 Pressure Demand Air Mask with Pak-Alert SE Distress Alarm (Integrated PASS) Operating and Maintenance Instructions Book is also kept in the SCBA Inspection Book.