Division 02

Apparatus and Equipment

Chapter 31 – SCBA Sanitizing and Maintenance

February 2009

POLICY

This General Order shall set forth a policy and procedure to govern the proper maintenance and cleaning of Self Contained Breathing Apparatus (SCBA), which is paramount to the proper operation of the equipment. The responsibility for checking and cleaning breathing apparatus falls on everyone in the fire service.

DEFINITIONS

N/A

PROCEDURES

1. General Provision

All SCBA shall be checked daily for leaks, proper operation and cleanliness. These daily checks are to include air level in cylinders, hydrostatic inspection dates, and service life of individual cylinders.

If any deficiencies are found, the breathing apparatus is to be removed from service until the deficiencies are corrected. If the unit requires cleaning only, it is to be cleaned at that time and placed back in-service.

When the breathing apparatus requires repair, it is to be cleaned, a shop ticket properly filled out, and the unit forwarded to Apparatus Maintenance for repair.

When breathing apparatus is utilized on an emergency scene, the individual using the unit is responsible for ensuring it is ready for use again. This entails refilling the cylinder, cleaning the breathing apparatus, and disinfecting the individual's personal facepiece and regulator.

Regarding infectious disease control, <u>Scott</u> <u>Multi-Wash General Cleaner and Disinfectant</u> shall be used in compliance with the attached instruction sheet distributed by Scott Aviation. <u>Multi-Wash</u> is to be applied after every use of a piece of SCBA. Its use requires no special training and is now a requirement for all personnel utilizing Self Contained Breathing Apparatus.

All personnel are to ensure that once <u>Multi-Wash</u> is applied to any breathing apparatus according to the attached directions, the SCBA is to be thoroughly rinsed with clean water. This step will help alleviate any adverse skin reactions people may develop when in contact with the cleaner.

<u>Multi-Wash</u> has a one (1) year shelf life, so stations should not keep excessive amounts on hand. The spray bottles needed for application are obtainable through stores (Stores Stock No. 7930-000-0833), and replacement Multi-Wash can be obtained by contacting Apparatus Maintenance.

REFERENCES

N/A

FORMS/ATTACHMENTS

Scott Aviation Multi-Wash General Cleaner and Disinfectant Instruction Sheet



USING SCOTT MULTI-WASH MINI TO CLEAN AND DISINFECT SCOTT MASK MOUNTED REGULATORS AND ALL SCOTT FULL FACEPIECES

WARNING

THESE PROCEDURES ARE INTENDED TO BE USED ON RESPIRATORS WHICH MAY SUPPORT HUMAN LIFE IN HAZARDOUS ATMOSPHERES. FAILURE TO CAREFULLY FOLLOW THESE INSTRUCTIONS OR FAILURE TO CHECK THE REGULATOR AS INSTRUCTED HEREIN MAY RESULT IN SERIOUS INJURY OR DEATH.

PROCEDURE FOR CLEANING AND DISINFECTING THE MASK MOUNTED REGULATOR

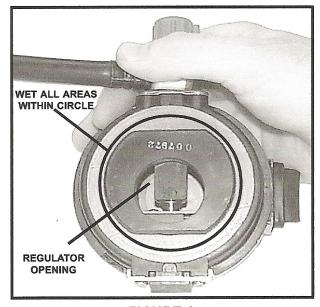
Supplies needed:

- SCOTT Multi-Wash Mini in 16 oz. spray bottle
- Drinking (potable) water running or in a spray bottle
- Air supply of lubricant free, dry breathing air, maximum 30 psig, for drying

NOTE

AFTER CLEANING THE REGULATOR, VERIFY THAT ALL MOISTURE HAS BEEN REMOVED FROM THE REGULATOR AS DESCRIBED IN THE **REGULATOR CHECK** SECTION OF THIS INSTRUCTION.

- Remove the breathing regulator from the facepiece by rotating the regulator 1/4 turn clockwise as described in the OPERATING AND MAINTENANCE Instructions supplied with the respirator.
- 2. Remove any obvious dirt from the external surfaces of the regulator using SCOTT Multi-Wash Mini with a sponge or soft cloth.
- Inspect the inside of the regulator assembly through the regulator opening (see Figure 1). If excessive dirt or soil is present, forward regulator assembly to SCOTT trained authorized personnel for thorough cleaning.
- 4. Depress the donning/air saver switch, close the purge knob by turning fully clockwise and spray a minimum of 6 full pumps of SCOTT Multi-Wash Mini into the regulator opening. Make sure to also wet the immediate area around the opening (see FIGURE 1). Swirl to completely cover internal components. Turn regulator opening face down and shake excess liquid out. ALLOW FOR 10 MINUTES OF CONTACT TIME TO DISINFECT PRIOR TO RINSING.



- 5. Rinse regulator with drinking water using a spray bottle or softly running water.
- 6. Shake excess water out of regulator, Completely air dry the regulator before use.

NOTE

TO SPEED DRYING OF THE REGULATOR, GENTLY BLOW DRY WITH CLEAN, DRY BREATHING AIR OF 30 PSIG MAXIMUM. DO NOT USE SHOP AIR OR ANY OTHER AIR CONTAINING LUBRICANTS OR MOISTURE.

- If regulator was disconnected from air supply for cleaning, reconnect and open purge valve to remove any moisture from regulator spray bar. Close purge valve.
- 8. Perform REGULATOR CHECK as detailed below.

REGULATOR CHECK

NOTE

THIS REGULATOR CHECK IS NOT INTENDED TO BE A COMPLETE FUNCTIONAL CHECK OF THE RESPIRATOR. **PERFORM A REGULAR OPERATIONAL INSPECTION AS CONTAINED IN THE OPERATING AND MAINTENANCE INSTRUCTIONS SUPPLIED WITH EACH RESPIRATOR BEFORE NEXT USE**.

FOR SELF-CONTAINED BREATHING APPARATUS:

- 1. Check to make sure the respirator cylinder is at least 1/4 full.
- Check to make sure the donning/air saver switch is fully depressed.
- 3. Check to make sure the purge knob is closed.
- 4. Reattach the regulator to the air supply if removed for cleaning.
- 5. Slowly open the cylinder valve at least one (1) full turn.
- If air flow from the regulator is heard, close the cylinder valve, repeat steps 1, 2 and 3. If air flow is still heard, close the cylinder valve fully, tag unit for repair and remove from service.

On regulators equipped with the Vibralert[®] alarm or Beacon AlarmTM, the alarm will actuate immediately after the cylinder valve is turned on, if the alarm does not actuate, tag unit for repair and remove from service.

WARNING

IF THE VIBRALERT OR BEACON ALARM FAILS TO ACTUATE OR DOES NOT STOP AFTER A BRIEF INTERVAL, DO NOT USE THE RESPIRATOR. REMOVE IT FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL.

NOTE

IF THE CYLINDER IS APPROXIMATELY 1/4 FULL OR LESS, THE VIBRALERT OR BEACON ALARM MAY CONTINUE TO OPERATE THROUGHOUT THIS PROCEDURE.

 Open the purge valve and observe the air flow from the regulator spray bar. Droplets of water indicate the regulator is not dry. Dry the regulator according to Step 6 of PROCEDURE FOR REGULATOR section and repeat the REGULATOR CHECK.

FIGURE 1

REGULATOR CHECK CONTINUED ON PAGE 2...

REGULATOR CHECK continued...

FOR AIRLINE RESPIRATORS:

- 1. Check to make sure the donning/air saver switch is fully depressed.
- 2. Check to make sure the purge knob is closed.
- 3. Reattach the regulator to air supply hose if removed for cleaning.
- 4. If air flow from the regulator is heard, detach from air supply, repeat steps 1, 2 and 3. If air flow is still heard, tag unit for repair and remove from service.
- Open the purge valve and observe the air flow from the regulator spray bar. Droplets of water indicate the regulator is not dry. Dry the regulator according to Step 6 of PROCEDURE FOR REGULATOR section and repeat the REGULATOR CHECK.

USE AT LOW TEMPERATURES

Respirators intended for routine use and respirators not routinely used but kept for emergency use shall be located in areas where the temperature is maintained above freezing (32° F / 0° C). Because the disinfecting procedure involves the use of liquids, respirators stored or used at cold temperature must be warmed before cleaning and disinfecting. Respirators being used at cold temperatures after cleaning and disinfecting must be completely dry. Seem the REGULATOR CHECK section of this instruction.

If it is necessary to keep the respirator at a temperature at or below freezing before next use, special care **MUST** be used to verify that all components of the respirator including the regulator are **THOROUGHLY DRIED**.

WARNING

USE OF A RESPIRATOR AT TEMPERATURES AT OR BELOW FREEZING (32° F / 0° C) WITHOUT FOLLOWING THE LOW TEMPERATURE OPERATION INSTRUCTIONS ABOVE AND THOSE PROVIDED IN THE OPERATING AND MAINTENANCE INSTRUCTIONS PROVIDED WITH THE RESPIRATOR MAY RESULT IN OBSCURED VISION AND/OR PARTIAL OR COM-PLETE BLOCKAGE OF THE AIRFLOW WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

EMERGENCY USE

It is strongly recommended that the regulator be thoroughly dry before use. However, in emergency circumstances the regulator may be used immediately after cleaning and rinsing as instructed above only if the following requirements are satisfied:

- Shake all excess water out of regulator. Reconnect to air supply and open purge valve to remove any moisture from the regulator spray bar. Close the purge valve.
- 2. Prevent exposure to temperatures below 32° F / 0° C while in storage and prior to use.
- Before entering hazardous environment, reattach regulator to facepiece and verify that the breathing apparatus is operating normally and that visibility is not impaired by fogging or condensation on the facepiece lens.

WARNING

FAILURE TO COMPLY WITH ALL OF THE EMERGENCY USE REQUIREMENTS MAY CAUSE OBSCURED VISION AND/OR PARTIAL OR COMPLETE BLOCKAGE OF THE AIRFLOW WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

Scott Health & Safety ISO 9001 REGISTERED P/N 89346-01 Rev. C 12/03



PROCEDURE FOR CLEANING

AND DISINFECTING FACEPIECE

Supplies needed:

- SCOTT Multi-Wash Mini in 16 oz. spray bottle
- Drinking (potable) water running or in a spray bottle
- Air supply of lubricant free, dry breathing air, maximum 30 psig, for drying
- With the regulator removed, carefully wash the facepiece assembly with SCOTT Multi-Wash Mini and thoroughly rinse in clean water. If the facepiece is heavily soiled, it may be necessary to first wash facepiece with warm (110° F / 44° C maximum) soap or detergent solution.

NOTE

A NOSECUP IS DESIGNED TO BE AN INTEGRAL PART OF THE FACEPIECE AND DOES NOT NEED TO BE DISASSEMBLED FOR CLEANING AND DISINFECTING.

 Disinfect the facepiece by spraying 3 full pumps of SCOTT Multi-Wash Mini on the regulator side of mask and 3 full pumps on the face side of the mask, wetting entire mask including all rubber and plastic areas. ALLOW A 10 MINUTE CONTACT TIME TO DISINFECT PRIOR TO RINSING.

NOTE

THE KEVLAR¹ AND NYLON HEAD HARNESSES ARE MADE OF POROUS MATERIAL. SCOTT MULTI-WASH MINI MAY NOT BE EFFECTIVE ON POROUS MATERIAL.

- 3. Rinse with drinking water using a spray bottle or running water.
- 4. Shake excess water off of facepiece and then dry with a dean, lint free cloth or gently blow dry with clean, dry breathing air of 30 psig or less pressure. Do not use shop air or any other air containing lubricants or moisture.

SCOTT Multi-Wash Mini is available in either a refillable 16 oz. spray bottle or a 1 gallon jug.

NOTE

SCOTT MULTI-WASH MINI IS NOT CONSIDERED A HAZARDOUS SUBSTANCE FOR DISPOSAL PURPOSES. SEE MSDS (MATERIAL SAFETY DATA SHEET) AVAILABLE FROM SCOTT OR SCOTT DIS-TRIBUTOR. DO NOT USE PAST EXPIRATION DATE PRINTED ON THE BOTTLE LABEL. STORE IN A DRY COOL PLACE AWAY FROM DIRECT SUNLIGHT. PROLONGED EXPOSURE TO DIRECT SUN-LIGHT MAY REDUCE THE EFFECTIVENESS OF THIS PRODUCT.

WARNING

KEEP SCOTT MULTI-WASH MINI OUT OF REACH OF CHILDREN. IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH THESE INSTRUCTIONS AND ITS LABELING. IMPROPER USE OR HANDLING OF THIS PRODUCT MAY RESULT IN SERIOUS INJURY OR DEATH.

¹ Kevlar is a registered trademark of E. I. du Pont de Nemours, inc.

Health & Safety Products Monroe Corporate Center PO Box 569 Monroe, NC 28111

Telephone 1-800-247-7257 FAX (704) 291-8330 www.scotthealthsafety.com

Material Safety Data Sheet SCOTT Multi-Wash Mini

Mfg. Name: Multi-Wash Medical Ltd. Address: P.O. Box 421 Ada, Michigan 49301 Phone: (616) 682-9220 Fax: (616) 682-9221 Product Code: 1-3-60927(000) Product Name: Multi-Wash Mini lodophor Date Prepared: January 1, 2001

SECTION 01 IDENTIFICATION

Multi-Wash Mini Iodophor Domestic Trade Name: Multi-Wash Mini Iodophor Export Trade Name: Multi-Wash Mini Iodophor CAS Registry No: 00011096-42-7 CAS Registry Name: Poly(oxy-1.2-othanediyl), alpha-(nonylphenyl)-omega-hydroxy-, compd. with iodine Synonym: Nonyphenoxypoly (ethyleneoxy) othanol iodine complex

Molecular Formulas: (C2114O)n C151124Ox12

SECTION 02 PHYSICAL & HEALTH HAZARD INGREDIENTS

Hazardous Components (specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIII FLV	Other Limits
Ploy(oxy - 1, 2- Ethanediyl, & -(nonylphenyl)-			
omega - hydroxy -, compound & iodine.	NA	MA	NA
Iodine	0.1 ppm C	0.1 ppm C	0.1 ppm C
Phosphoric Acid	1 mg/m3	1 mg/m3	lmg/m3
	(3mg/m3 STEL)	(3mg/m3 STEL)	(3mg/m3 STEL)

C = ceiling, ppm = parts of contaminant per millions part of air, mg/m3 = milligrams of contaminant per cubic meter

SECTION 03 PHYSICAL & CHEMICAL CHARATERISTICS

Boiling Point: No data found Vapor Pressure: Not volatile Vapor Density (Air=1): Not volatile Water Solubility: Complete Melting/Freezing Point: No data found Appearance: Amber brown, free flowing, viscous liquid Specific Gravity. (Water=1): 1.066 Typical Percentage Volatiles: Not volatile Evaporation Rate: Not volatile pH of Solution: 2.5-3.50 10% solution Odor: No data found

SECTION 04 PHYSICAL HAZARD DATA

Flash Point: Not flammable Autoignition Temp: No data found Flammable Limits: No data found Fire Fighting Media: Use media proper to primary cause of fire Special Fire Fighting Procedures: None known Fire/Explosion Hazards: None known NFPA Hazards Codes -Health/ Flammability/ Reactivity: Not known HMIS Hazards Codes -Health/ Flammability/ Reactivity: 3 1 0 Flash Point: Not flammable

SECTION 05 REACTIVITY DATA

Stability: Stable Hazardous Polymerization: Will not occur Conditions To Avoid: None known Incompatible Materials: Strong oxidizing or reducing agents Hazardous Decomposition Products: Toxic fumes of iodine and iodine compounds emitted when heated to decomposition

SECTION 06 HEALTH HAZARD DATA

Acute Toxicity

Oral Toxicity: RAT (Intragastric Intubation) Id50: 1900 mg/kg Dermal Toxicity: No data found Inhalation Toxicity: No data found Skin Irritation: Rabbit primary irritation index: 1.25; mild irritant Eye Irritant: Rabbit; severe eye irritant when not followed by a washout; mild transient eye irritant when followed by a washout. Corneal, iridial and conjunctival effects. Sensitizer: No DOT Corrosive: No Primary Route(s) of Entry: Contact

Signs and Symptoms of Exposure

Symptoms of Ingestion: No effects of exposure expected

Symptoms of Inhalation: If misted, will cause irritation of mucous membranes, nose, eyes and throat, coughing, difficulty in breathing Symptoms of Sk in Contact: No effects of exposure expected due to contact. May possibly cause irritation or dermatitis in some individuals upon prolonged contact.

Symptoms of Eye Contact: Will cause painful burning or stinging of eyes and lids, watering of eyes, and inflammation or conjuctiva.

Emergency First Aid Procedures

First Aid for Ingestion: General precautionary measures suggest inducing vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mough to an unconscious person. Call a physician. First Aid for Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is

difficult, give oxygen. Call a physician.

First Aid for Skin Contact: For all foreign materials, wash after exposure First Aid for Eye Contact: Immediately flush eyes with water for at least 15 minutes. Call a physician. Medical Conditions Aggravated by Exposure: No data found Exposure Limits: See section 02 for physical & health hazard ingredients

Other Toxicity

Other Acute Toxicity: No data found Sub-chronic Oral Toxicity: No data found Sub-chronic Inhalation Toxicity: No data found Sub-chronic Miscellaneous Toxicity: No data found Aquatic Toxicity: No data found Tumorigenicity: No data found Mutagencity: No data found Reproductive Toxicity: No data found Miscellaneous Toxicity: No data found

SECTION 07 OCCUPATIONAL CONTROL PROCEDURES

Ventilation: Use with adequate ventilation for misting operations Respiratory Protection: NIOSH-approved respirator for organic vapor v.hen excess vapor is likely in breathing zone Eye Protection: Chemical goggles Skin Protection: None required Personal Hygiene: Wash thoroughly after handling Dot Shipping Name: Not regulated

PRECAUTIONS FOR SAFE HANDLING AND USE: Steps to be taken in case material is released or spilled. In case of spill, flood area with large quantities of water.

WASTE DISPOSAL METHOD: Rinse empty containers thoroughly with water and discard. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry clean area away from direct sunlight.

OTHER PRECAUTIONS: DO NOT MIX WITH BLEACH. MIX ONLY WITH WATER.

SECTION 08 TRANSPORTATION DATA

Domestic Data Dot Huzard Class: Not regulated Hazardous Ingredients(s): None UN Number: None Export Data Export Shipping Name: Not regulated Export Hazard Class: Not regulated Hazardous Ingredients(s): None UN Number: None