Read the <u>Introduction</u> for more information on these standards, including where to direct comments, questions, and recommendations. As new items are introduced, current items are discontinued, and/or health and safety issues arise, these standards will be revised to provide updated information. Sort by Update Date to view recent changes.

## Waterbag Assembly - 5 gl, M2015 w/pump

**NFES Status** 

Active

NFES#

000909

Category

Water Handling

Updated

Fri, 02/01/2019 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

### Bag

- 1. Inspect vinyl, fabric, and webbing for any holes, cuts, tears, burns, or torn seams that are not economically repairable, if any dispose of.
- 2. Inspect plastic cap and fittings for cracks, breaks, missing gaskets or other damage.
- 3. If bag appears to be used, inflate bag with air (<10 psi), submerge in water and check for leaks. Dry vinyl and mark holes with black marker for patching in repair process.
- 4. Inspect for any missing fasteners or that does not provide adequate closure.
- 5. Inspect for excessive dirt or fuel stains that cleaning cannot eliminate, dispose of.
- 6. Inspect for any writings, drawings. Dispose of if cleaning cannot remove markings.
- 7. Return to stock if item does not show any signs of use and passes visual inspection.
- 8. Refurbish if damage detected is repairable.
- 9. Dispose of item if unable to repair.

### **Pump**

- 1. Inspect for obvious damage.
- 2. Inspect for burns and cracks if so dispose of.
- 3. Inspect for damaged threads, if beyond repair dispose of. Ensure tip is secured to wand with a 3"-4" length of ball chain.
- 4. Place hose in water and pump handle to validate that pump works properly.
- 5. Return item to stock if it shows no sign of use or damage.
- 6. Dispose of item if unable to repair.

## **Refurbishing Procedures**

## A. Cleaning

#### Bag

- 1. Remove straps and clean exterior of bag thoroughly with filler cap attached.
- 2. Support or hang bag, remove cap and fill with water to rinse out tank.
- 3. Replace cap and shake bag vigorously until all foreign matter is removed.
- 4. Drain completely.
- 5. Invert bag after removing cap and empty as much water as possible.
- 6. Let dry inverted for 1 hour in sun, if possible.
- 7. Clean the straps with mild detergent and stiff bristle brush, machine launder, or gently pressure wash. Hang to dry.

#### **Pump**

- 1. Wash and clean all items of foreign matter, such as mud, dirt, and grease.
- 2. Clean in mild detergent with brush or scouring pad as needed.
- 3. Rinse thoroughly.

## B. Repair

#### Bag

- 1. Patch any hole or tears. No more than 3 patches should be present on the bag. If more, dispose of bag. Small pin hole can be repaired with TEAR-AID® Type B or other similar material recommended by the tank manufacturer.
- 2. Larger holes can be repaired utilizing vinyl welding tools and techniques if available.
- 3. Holes in the seams may not be repairable.
- 4. Place patch on damaged area and apply pressure with roller or suitable device for at least 1 minute.

- 5. The filler neck and cap can be replaced following the instructions included in the Fedco Bag Filler Neck Service Kit, part #181874.
- 6. Repair or replace any damaged components on bag or straps.
- 7. Ensure bags are stenciled with "non-potable" or "suppression use only".

#### **Pump**

- 1. If pump pressure is not sufficient, remove pump unit and replace O-rings.
- 2. Ensure quick connection on pump has proper seating.
- 3. Check hose connection to pump for tightness; if loose, use a hose clamp.
- 4. Replace length of ball chain between wand and removable tip if missing.
- 5. Check supply hose on pump assembly for obstructions and tight connections, bent push rods, and clogged tips.
- 6. Check spring and ball bearing.
- 7. Lubricate slide with appropriate lubricant, e.g., Chevron NLGI2 or equivalent.

## C. Testing for Performance

- 1. Re-inspect any patches or repairs.
- 2. Fill with air (<10 psi). Spray patched area with soapy water and inspect for leaks.

## D. Repackaging

- 1. Place pump in the center and roll bag around pump as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 8 each in NFES 002006 carton (23" x 19" x 10").

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Waterbag - 5 gl, suppression, M2015

**NFES Status** 

Active

NFES#

000908

Category
Water Handling
Updated
Fri, 02/01/2019 - 12:00
Storage and Shelf Life Checks
None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect vinyl, fabric, and webbing for any holes, cuts, tears, burns, or torn seams that are not economically repairable, if any dispose of.
- 2. Inspect plastic cap and fittings for cracks, breaks, missing gaskets or other damage.
- 3. If bag appears to be used, inflate bag with air (<10 psi), submerge in water and check for leaks. Dry vinyl and mark holes with black marker for patching in repair process.
- 4. Inspect for any missing fasteners or that does not provide adequate closure.
- 5. Inspect for excessive dirt or fuel stains that cleaning cannot eliminate, dispose of.
- 6. Inspect for any writings, drawings. Dispose of if cleaning cannot remove markings.
- 7. Return to stock if item does not show any signs of use and passes visual inspection.
- 8. Refurbish if damage detected is repairable.
- 9. Dispose of item if unable to repair.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Remove straps and clean exterior of bag thoroughly with filler cap attached.
- 2. Support or hang bag, remove cap and fill with water to rinse out tank.
- 3. Replace cap and shake bag vigorously until all foreign matter is removed.
- 4. Drain completely.
- 5. Invert bag after removing cap and empty as much water as possible.
- 6. Let dry inverted for 1 hour in sun, if possible.
- 7. Clean the straps with mild detergent and stiff bristle brush, machine launder, or gently pressure wash. Hang to dry.

## B. Repair

- 1. Patch any hole or tears. No more than 3 patches should be present on the bag. If more, dispose of bag. Small pin hole can be repaired with TEAR-AID® Type B or other similar material recommended by the tank manufacturer.
- 2. Larger holes can be repaired utilizing vinyl welding tools and techniques if available.
- 3. Holes in the seams may not be repairable.
- 4. Place patch on damaged area and apply pressure with roller or suitable device for at least 1 minute.
- 5. The filler neck and cap can be replaced following the instructions included in the Fedco Bag Filler Neck Service Kit, part #181874.
- 6. Repair or replace any damaged components on bag or straps.
- 7. Ensure bags are stenciled with "non-potable" or "suppression use only."

### **C.** Testing for Performance

- 1. Re-inspect any patches or repairs.
- 2. Fill with air (<10 psi). Spray patched area with soapy water and inspect for leaks.

## D. Repackaging

1. 8 each in NFES 002006 carton (23" x 19" x 10")

Reference

Water Handling Equipment Guide, PMS 447-1

## Valve – Wye, Gated, Brass, 3/4" NH-F X 3/4" NF-M X 3/4" NH-M

**NFES Status** 

Active

NFES#

000904

Category

Water Handling

Updated

Wed, 07/01/2020 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for the following:
  - a. Handles-bent, broken, missing, too tight, too loose, expansion pins coming out or missing, handles correct (left and right) and positioned properly.
  - b. Male flange-flange missing, lock-ring and set-screws functional, damaged threads, smooth flat surface on flange, burrs on threads, or loose male flange.
  - c. Female coupling-Coupling spins freely, gasket present and in good condition, free of cracks, damage, or burrs on threads.
  - d. Casting (body)-Fire damage—look for further damage, O-rings in good condition, corrosion, cracks, and burrs.
  - e. Plastic sphere-Inspect sphere while turning handle; if pitted or rough, replace.
- 2. Return to stock if item is clean, passes inspection, and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high-pressure wash to remove foreign matter such as mud, dirt, or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrels in open position to drain water and dry.
- 4. Lubricate with appropriate type of lubricant.

### B. Repair

- 1. Replace missing or damaged O-rings and gaskets.
- 2. Replace broken, missing handles.
- 3. Repair or replace male flange if damaged is discovered on face or threads.
- 4. Replace female coupling or bearings if not spinning freely.

## C. Testing for Performance

1. Install valve on test pump.

- 2. Turn on water to pump and open valve to expel air then close valve.
- 3. Turn on pump
- 4. NFES #000259 and NFES #000231 test at 300 PSI for 3 minutes.
- 5. NFES #000904 test at 100 PSI for 3 minutes.
- 6. Inspect for leaks around the gasket, at the handles, and around flanges while on test pump.
- 7. If valve leaks, repair as necessary, or dispose of through local procedures.
- 8. Retest after repairs are made.

## D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Packaging:
  - Use NFES #008064 carton (10" x 8" x 6") for a standard pack of 50 EA.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Valve – Wye, Gated, 1" NPSH-F X 1" NPSH-M X 1" NPSH-M

**NFES Status** 

Active

NFES#

000259

Category

Water Handling

Updated

Mon, 07/28/2025 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Inspect for the following:

- a. Handles bent, broken, missing, too tight, too loose, expansion pins coming out or missing, handles correct (left and right) and positioned properly.
- b. Male flange flange missing, lock-ring and set-screws functional, damaged threads, smooth flat surface on flange, burrs on threads, or loose male flange.
- c. Female coupling Coupling spins freely, gasket present, and in good condition, free of cracks, damage, or burrs on threads.
- d. Casting (body) Fire damage—look for further damage, O-rings in good condition, corrosion, cracks, and burrs.
- e. Plastic sphere Inspect sphere while turning handle; if pitted or rough, replace.
- 2. Return to stock if item is clean, passes inspection, and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high-pressure wash to remove foreign matter such as mud, dirt, or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time, as detergent will corrode the metal.
- 3. Stand upright with barrels in open position to drain water and dry.

## B. Repair

- 1. Replace missing or damaged O-rings and gaskets.
- 2. Replace broken or missing handles.
- 3. Repair or replace male flange if damaged is discovered on face or threads.
- 4. Replace female coupling or bearings if not spinning freely. When replacing female couplings or bearings, ensure set screw is flush with inner diameter of body. This will prevent O-ring from tearing. Don't lubricate ball bearings; keep dry and free of debris.
- 5. Lubricate O-rings using a small amount of petroleum jelly or silicone base lubricants.

## C. Testing for Performance

- 1. Install valve on test pump.
- 2. Turn on water to pump and open valve to expel air, then close valve.
- 3. Turn on pump.

- 4. NFES #000259 and NFES #000231 test at 300 PSI for 3 minutes.
- 5. Inspect for leaks around the gasket, at the handles, and around flanges while on test pump.
- 6. If valve leaks, repair as necessary, or dispose of through local procedures.
- 7. Retest after repairs are made.

## D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Run jute twine through either valve body and tie.



#### 3. Packaging:

 $\circ$  Use NFES #000823 carton (15" x 15" x 10") for a standard pack of 20 EA.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Valve – Wye, Gated, 1 1/2" NH-F X 1 1/2" NH-M X 1 1/2" NH-M

**NFES Status** 

Active

NFES#

000231

Category

Water Handling

Updated

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for the following:
  - a. Handles bent, broken, missing, too tight, too loose, expansion pins coming out or missing, handles correct (left and right) and positioned properly.
  - b. Male flange flange missing, lock-ring and set-screws functional, damaged threads, smooth flat surface on flange, burrs on threads, or loose male flange.
  - c. Female coupling Coupling spins freely, gasket present, and in good condition free of cracks or damage, burrs on threads.
  - d. Casting (body) Fire damage—look for further damage, O-rings in good condition, corrosion, cracks, and burrs.
  - e. Plastic sphere Inspect sphere while turning handle; if pitted or rough, replace.
- 2. Return to stock if item is clean, passes inspection, and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high-pressure wash to remove foreign matter such as mud, dirt, or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrels in open position to drain water and dry.

## B. Repair

- 1. Replace missing or damaged O-rings and gaskets.
- 2. Replace broken, or missing handles.
- 3. Repair or replace male flange if damage is discovered on face or threads.
- 4. Replace female coupling or bearings if not spinning freely. When replacing female couplings or bearings, ensure set screw is flush with inner diameter of body. This will prevent O-ring from tearing. Don't lubricate ball bearings; keep dry and free of debris.

5. Lubricate O-rings using a small amount of petroleum jelly or silicone base lubricants.

## **C.** Testing for Performance

- 1. Install valve on test pump.
- 2. Turn on water to pump and open valve to expel air, then close valve.
- 3. Turn on pump.
- 4. NFES #000259 and NFES #000231 test at 300 PSI for 3 minutes.
- 5. Inspect for leaks around the gasket, at the handles, and around flanges while on test pump.
- 6. If valve leaks, repair as necessary, or dispose of through local procedures.
- 7. Retest after repairs are made.

### D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Run jute twine through either valve body and tie.



#### 3. Packaging:

○ Use NFES #000823 carton (15" x 15" x 10") for a standard pack of 10 EA.

#### Reference

Water Handling Equipment Guide, PMS 447-1

**NFES Status** 

Active

NFES#

000738

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for obvious damage including burrs and thread damage, gaskets missing or damaged, a female collar that must turn freely if applicable, and inspect for damage caused by fire exposure.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high pressure wash to remove foreign matter such as mud, dirt or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrel in open position to drain water and dry.

## B. Repair

• Replace missing or damaged gaskets or components that are serviceable.

## C. Testing for Performance

- 1. Install valve on test pump.
- 2. Turn on water to pump and open valve to expel air then close valve.
- 3. Turn on pump

- 4. NFES #001201 and NFES #001207 test at 300 PSI for 3 minutes.
- 5. NFES #000835 and NFES #000738 test at 100 PSI for 3 minutes.
- 6. Inspect for leaks around the gasket and at the handles while on test pump.
- 7. If valve leaks, repair as necessary or dispose of through local procedures.
- 8. Retest after repairs are made.

### D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Packaging:
  - $\circ$  Use NFES #008066 carton (12" x 9" x 10") for the following: NFES #001201, #001207 standard pack of 20 EA per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000835}$  standard pack of 50 EA per carton.
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000738 standard pack of 10 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Valve – Shut Off, Brass, Ball, 3/4" NH

**NFES Status** 

Active

NFES#

000835

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- Inspect for obvious damage including burrs and thread damage, gaskets missing or damaged, a female collar that must turn freely if applicable, and inspect for damage caused by fire exposure.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high pressure wash to remove foreign matter such as mud, dirt or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrel in open position to drain water and dry.

## B. Repair

• Replace missing or damaged gaskets or components that are serviceable.

## **C.** Testing for Performance

- 1. Install valve on test pump.
- 2. Turn on water to pump and open valve to expel air then close valve.
- 3. Turn on pump
- 4. NFES #001201 and NFES #001207 test at 300 PSI for 3 minutes.
- 5. NFES #000835 and NFES #000738 test at 100 PSI for 3 minutes.
- 6. Inspect for leaks around the gasket and at the handles while on test pump.
- 7. If valve leaks, repair as necessary or dispose of through local procedures.
- 8. Retest after repairs are made.

## D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Packaging:

- $\circ$  Use NFES #008066 carton (12" x 9" x 10") for the following: NFES #001201, #001207 standard pack of 20 EA per carton.
- $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES #000835 standard pack of 50 EA per carton.
- $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000738 standard pack of 10 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Valve – Shut Off, 1"

**NFES Status** 

Active

NFES#

001201

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

- 1. Inspect for obvious damage including burrs and thread damage, gaskets missing or damaged, a female collar that must turn freely if applicable, and inspect for damage caused by fire exposure.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high pressure wash to remove foreign matter such as mud, dirt or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrel in open position to drain water and dry.

### B. Repair

• Replace missing or damaged gaskets or components that are serviceable.

## C. Testing for Performance

- 1. Install valve on test pump.
- 2. Turn on water to pump and open valve to expel air then close valve.
- 3. Turn on pump
- 4. NFES #001201 and NFES #001207 test at 300 PSI for 3 minutes.
- 5. NFES #000835 and NFES #000738 test at 100 PSI for 3 minutes.
- 6. Inspect for leaks around the gasket and at the handles while on test pump.
- 7. If valve leaks, repair as necessary or dispose of through local procedures.
- 8. Retest after repairs are made.

### D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Packaging:
  - $\circ$  Use NFES #008066 carton (12" x 9" x 10") for the following: NFES #001201, #001207 standard pack of 20 EA per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000835}$  standard pack of 50 EA per carton.
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000738 standard pack of 10 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## **Valve – Shut Off, 1 1/2"**

**NFES Status** 

Active

NFES#

001207

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for obvious damage including burrs and thread damage, gaskets missing or damaged, a female collar that must turn freely if applicable, and inspect for damage caused by fire exposure.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if deficiencies are discovered during the inspection process and item requires cleaning.
- 4. Dispose of item if damages are not repairable or item has sustained damage caused by fire.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in a mild detergent with brush and scouring pad or use parts washer or high pressure wash to remove foreign matter such as mud, dirt or grease. Rinse thoroughly.
- 2. Do not soak for extended periods of time as detergent will corrode the metal.
- 3. Stand upright with barrel in open position to drain water and dry.

## B. Repair

• Replace missing or damaged gaskets or components that are serviceable.

## C. Testing for Performance

1. Install valve on test pump.

- 2. Turn on water to pump and open valve to expel air then close valve.
- 3. Turn on pump
- 4. NFES #001201 and NFES #001207 test at 300 PSI for 3 minutes.
- 5. NFES #000835 and NFES #000738 test at 100 PSI for 3 minutes.
- 6. Inspect for leaks around the gasket and at the handles while on test pump.
- 7. If valve leaks, repair as necessary or dispose of through local procedures.
- 8. Retest after repairs are made.

## D. Repackaging

- 1. Ensure item is completely dry prior to packaging.
- 2. Packaging:
  - $\circ$  Use NFES #008066 carton (12" x 9" x 10") for the following: NFES #001201, #001207 standard pack of 20 EA per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES #000835 standard pack of 50 EA per carton.
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES # $\frac{000738}{000738}$  standard pack of 10 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Valve - Pressure Relief, 1 1/2" NH-F

**NFES Status** 

Active

NFES#

000229

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for damage to threads, missing or damaged parts, and missing or damaged handles.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if cleaning is required or deficiencies are discovered in the inspection process.
- 4. Dispose of item if it is damaged beyond repair or has damage caused by fire exposure or fails Testing for Performance and cannot be repaired.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Wash with water and mild detergent. Brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.

## B. Repair

Replace missing or damaged handle.

## C. Testing for performance

- 1. Pressure testing.
  - a. Install valve on test pump.
  - b. Close handle.
  - c. Attach cap or nozzle for testing.
  - d. Test for leaks at 300 PSI.
  - e. Inspect for leaks around female coupling.
  - f. Inspect for leaks under top of handle shaft.
  - g. Inspect for leaks on bottom end of handle shaft.
  - h. Inspect for leaks in casing.
- 2. Retest after repairs are made.

## D. Repackaging

- 1. Ensure item is completely dry before packaging.
- 2. 10 EA in NFES #008105 carton (12" x 12" x 8").

Water Handling Equipment Guide, PMS 447-1

### Valve – Foot, 2" NPSH, w/Strainer

**NFES Status** 

Active

NFES#

000906

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for missing parts (screws, screen and adaptor) and damaged threads and gaskets. Inspect spring on check valve for smooth operation.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if item was used and requires refurbishment.
- 4. Dispose of item if it is damaged beyond repair or sustained damage due to fire exposure.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash with water and mild detergent.
- 2. Rinse thoroughly and stand upright to dry.

## B. Repair

- 1. Replace missing or cracked gaskets.
- 2. Repair or replace missing or damaged components.

## C. Testing for performance

• Ensure that valve assembly functions.

## D. Repackaging

• 10 EA in NFES #008064 carton (10" x 8" x 6").

Reference

Water Handling Equipment Guide, PMS 447-1

### Valve – Foot, 1 1/2" NH-F w/Strainer

**NFES Status** 

Active

NFES#

000212

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for missing parts (screws, screen and adaptor) and damaged threads and gaskets. Inspect spring on check valve for smooth operation. Ensure valve disc screw is secured with self-locking nut(NYLOCK ¼-20.)
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if item was used and requires refurbishment.
- 4. Dispose of item if it is damaged beyond repair or sustained damage due to fire exposure.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash with water and mild detergent.
- 2. Rinse thoroughly and stand upright to dry.

### **B.** Repair

- 1. Replace missing or cracked gaskets.
- 2. Repair or replace missing or damaged components.
- 3. Replace plain hex nut with a self-locking nut (NYLOCK 1/4-20).

## C. Testing for performance

• Ensure that valve assembly functions.

### D. Repackaging

• 10 EA in NFES #008064 carton (10" x 8" x 6")

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Valve – Automatic Check and Bleeder 1 1/2" NH-F

**NFES Status** 

Active

NFES#

000228

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- Inspect for missing parts (valves, plugs, and gaskets). Inspect for missing or damaged handle, damaged threads and fire exposure damage.
- 2. Return to stock if item is clean, passes inspection, and is in unused condition.
- 3. Refurbish if item exhibits damage that is repairable and item passes testing.
- 4. Dispose of item if damaged beyond repair, fails Testing for Performance and cannot be repaired, or show signs of fire damage.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Wash with mild soap, brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.
- 3. Lubricate female coupling with appropriate dry lubricant such as graphite. Wipe off excess.

## B. Repair

- Replace missing or cracked gaskets and handle.
- 2. Lubricate female coupling with dry lubricant such as graphite.

### **C.** Testing for Performance

- 1. Install valve on test pump.
- 2. Fill with water; close handle.
- 3. Attach caps or nozzle for testing.
- 4. Test for leaks at 300 PSI for 3 minutes.
- 5. Inspect for leaks around female coupling, the male flange, under the top of the handle shaft, on the bottom end of the handle shaft, and in the casing.
- 6. Remove from test pump and ensure the check valve (flapper is operational).
- 7. Retest valve after any repairs are made.

## D. Repackaging

- 1. Dry completely prior to packaging.
- 2. NFES #008018 CARTON (12"X12"X8") 10 PER CARTON

Water Handling Equipment Guide, PMS 447-1

## Tip – Nozzle, Straight Stream, 3/8" NH, For 1" Nozzle

**NFES Status** 

Active

NFES#

000638

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

• Replace gaskets as necessary.

## C. Testing for performance

• Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

### D. Repackaging

#### Local cache option

- Recommended:
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000635}$  standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Tip - Nozzle, Straight Stream, 3/16" NH, For 1" Nozzle

**NFES Status** 

Active

NFES#

000637

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

• Replace gaskets as necessary.

### C. Testing for performance

Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES #000635 standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

#### Reference

## Tip – Nozzle, Straight Stream, 1/8" NH

**NFES Status** 

Active

NFES#

000094

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

Replace gaskets as necessary.

### C. Testing for performance

• Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000635}$  standard pack of 40 EA per carton. NFES # $\underline{000636}$ , # $\underline{000637}$ , # $\underline{000638}$  standard pack of 60 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Tip - Nozzle, Straight Stream, 1/4" NH, For 1" Nozzle

**NFES Status** 

Active

NFES#

000737

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.

- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

• Replace gaskets as necessary.

## C. Testing for performance

• Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES #000635 standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Tip – Nozzle, Fog, 5-7 GPM NH, for 1" Nozzle

Active

NFES#

000636

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

#### B. Repair

• Replace gaskets as necessary.

## C. Testing for performance

Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

Local cache option

#### • Recommended:

- Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
- $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES #000635 standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Tip - Nozzle, Fog, 2-4 GPM NH, for 1" Nozzle

**NFES Status** 

Active

NFES#

000635

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

• Replace gaskets as necessary.

## C. Testing for performance

• Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000635}$  standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

Reference

Water Handling Equipment Guide, PMS 447-1

## Tip - Applicator, 3 GPM

**NFES Status** 

Active

NFES#

000735

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

## Initial Inspection/Disposal Criteria

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

## Refurbishing Procedures

## A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

### **B.** Repair

Replace gaskets as necessary.

## C. Testing for performance

Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737
     standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000635}$  standard pack of 40 EA per carton. NFES #000636, #000637, #000638 standard pack of 60 EA per carton.

## Tip – Applicator, 15 GPM

**NFES Status** 

Active

NFES#

000736

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burns, cracks, and damaged threads. Inspect for missing, damaged or improper gaskets. Inspect tips for foreign matter obstructions.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish item if gaskets can be replaced, or any damage is easily repairable.
- 4. Dispose of item if it fails inspection with damages beyond repair.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Wash and clean all items of foreign matter (i.e., mud, dirt, and grease).
- 2. High-pressure wash or clean in mild detergent with a brush or scouring pad as needed.
- 3. Soaking in detergent for extended periods will corrode the aluminum.
- 4. Rinse thoroughly and stand upright to dry.

## B. Repair

Replace gaskets as necessary.

## C. Testing for performance

• Attach to water source, turn on water and ensure that adequate flow and pattern are attained.

## D. Repackaging

#### Local cache option

- Recommended:
  - $\circ$  Use NFES #008076 carton (8" x 4" x 4") for the following: NFES #000735, #000736, #000737 standard pack of 20 per carton.
  - $\circ$  Use NFES #008064 carton (10" x 8" x 6") for the following: NFES # $\underline{000635}$  standard pack of 40 EA per carton. NFES # $\underline{000636}$ , # $\underline{000637}$ , # $\underline{000638}$  standard pack of 60 EA per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Tee - Hoseline, w/Valve, 1 1/2" NH-F X 1 1/2" NH-M X 1" NPSH-M

**NFES Status** 

Active

NFES#

000230

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Inspect for burrs, gaskets, and fire damage. NFES # 000230 ONLY: Ensure that 1" valve waterway is 0.50 inches in diameter is seated properly with O-rings in place.

- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if damaged components are replaceable, if burrs can easily be filed down and if gaskets can be replaced.
- 4. Dispose of item if it fails inspection, fails Testing for Performance, or has fire damage.

## **Refurbishing Procedures**

## A. Cleaning

- 1. Powerwash with mild soap, using a stiff brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.

## B. Repair

- 1. Replace missing or cracked gaskets.
- 2. File burrs from threads if practical.

## **C.** Testing for Performance

- Check threads function by using appropriate female fitting. Additional Testing for Performance (NFES # 000230 ONLY).
- 2. Install tee on pump.
- 3. Open handle on valve.
- 4. Turn on water.
- 5. Close handle.
- 6. Turn on pump to 300 PSI and hold for 3 minutes.
- 7. Inspect for leaks:
  - Gasket
  - Under valve handle

## D. Repackaging

- Stand upright and dry completely prior to packaging.
  - Use NFES #008064 (10"x 8 x 6") 10 per carton (see photos below for suggested packaging pattern).





#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tee - Hoseline, w/Cap & Chain, 1" NPSH-F X 1" NPSH-M X 3/4" NH-M

**NFES Status** 

Active

NFES#

001809

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for burrs, gaskets, and fire damage. NFES # <u>000230</u> ONLY: Ensure that 1" valve waterway is 0.50 inches in diameter is seated properly with O-rings in place.
- 2. Return to stock if item is clean, passes inspection and is in unused condition.
- 3. Refurbish if damaged components are replaceable, if burrs can easily be filed down and if gaskets can be replaced.
- 4. Dispose of item if it fails inspection, fails Testing for Performance or has fire damage.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Powerwash with mild soap, using a stiff brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.

### B. Repair

- 1. Replace missing or cracked gaskets.
- 2. File burrs from threads if practical.

#### **C.** Testing for Performance

- Check threads function by using appropriate female fitting. Additional Testing for Performance (NFES # 000230 ONLY)
- 2. Install tee on pump.
- 3. Open handle on valve.
- 4. Turn on water.
- 5. Close handle.
- 6. Turn on pump to 300 PSI and hold for 3 minutes.
- 7. Inspect for leaks:
  - Gasket
  - Under valve handle

### D. Repackaging

- Stand upright and dry completely prior to packaging.
  - $\circ$  Use NFES #008017 carton (18" x 12" x 10") for each of the following: NFES #000230 and # 000731 standard pack of 60 per carton.
  - $\circ$  Recommended use NFES #008064 carton (10" x 8" x 6") for each of the following: NFES # $\underline{001809}$  and #002240 standard pack of 20 per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tee - Hoseline, W/Cap & Chain, 1" NPSH-F X 1" NPSH-M X 1" NPSH-M

**NFES Status** 

Active

NFES#

002240

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Return to stock if item is clean, passes inspection, and is in unused condition.
- 2. Refurbish if damaged components are replaceable, if burrs can easily be filed down and if gaskets can be replaced.
- 3. Dispose of item if it fails inspection, fails Testing for Performance or has fire damage.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Powerwash with mild soap, using a stiff brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.

### B. Repair

- 1. Replace missing or cracked gaskets.
- 2. File burrs from threads if practical.

### **C.** Testing for Performance

1. Check threads function by using appropriate fitting.

### D. Repackaging

- Stand upright and dry completely prior to packaging.
  - $\circ$  Recommended use NFES #008064 carton (10" x 8" x 6") for each of the following: NFES #001809 and #002240 standard pack of 20 per carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tee - Hoseline, 1 1/2" NH-F X 1 1/2" NH-M X 1" NPSH-M w/Cap

**NFES Status** 

Active

NFES#

000731

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burrs, gaskets, and fire damage.
- 2. Return to stock if item is clean, passes inspection, and is in unused condition.
- 3. Refurbish if damaged components are replaceable, if burrs can easily be filed down and if gaskets can be replaced.
- 4. Dispose of item if it fails inspection, fails Testing for Performance, or has fire damage.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Powerwash with mild soap, using a stiff brush if necessary.
- 2. Rinse thoroughly and stand upright to dry.

### B. Repair

- 1. Replace missing or cracked gaskets.
- 2. File burrs from threads if practical.

### **C.** Testing for Performance

1. Check threads function by using appropriate female fitting.

#### D. Repackaging

- Stand upright and dry completely prior to packaging.
  - Use NFES #008017 carton (18" x 12" x 10") 60 EA

#### Reference

Water Handling Equipment Guide, PMS 447-1

### **Tank – Snap, 1500 GL**

Active

NFES#

007700

Category

**Water Handling** 

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for all parts and components to form a complete tank; 8 vertical legs, 16 snap support bars, 1 liner, 1 carrying bag and one 3" plug. Inspect for broken or bent legs and support bars. Inspect liner and carrying case for rips, tears, or punctures. Check threads on plug and flange assembly for damage.
- 2. Return to stock if all components are accounted for and tank is clean and in unused condition.
- 3. Refurbish if damaged or dirty components are repairable and, can be replaced or cleaned. Refurbish liner if economically feasible. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 4. Dispose of damaged components or complete tank if damage is excessive.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Dismantle and wipe all metal parts with a damp cloth.
- 2. Power wash liner and clean bag with mild soap, using a stiff brush if necessary.

#### B. Repair

- 1. Replace missing or broken parts of frame.
- 2. File all burrs smooth on metal components.
- 3. Suspend tank and mark any holes or damage needing repair.
- 4. Patch all marked damaged areas. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer

utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.

- 5. Replace all damaged hose couplings and drain plugs.
- 6. Stencil correct NFES # of item on collar of tank if missing or unreadable.
- 7. Ensure all locking buttons snap into place and lubricate as necessary.

### C. Testing for performance

• None

### D. Repackaging

• Local cache option.

Reference

Water Handling Equipment Guide, PMS 447-1

### **Tank – Snap, 1000 GL**

**NFES Status** 

Active

NFES#

007614

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Inspect for all parts and components to form a complete tank; 8 vertical legs, 16 snap support bars, 1 liner, 1 carrying bag and one 3" plug. Inspect for broken or bent legs and support bars. Inspect liner

- and carrying case for rips, tears, or punctures. Check threads on plug and flange assembly for damage.
- 2. Return to stock if all components are accounted for and tank is clean and in unused condition.
- 3. Refurbish if damaged or dirty components are repairable and, can be replaced or cleaned. Refurbish liner if economically feasible. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 4. Dispose of damaged components or complete tank if damage is excessive.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Dismantle and wipe all metal parts with a damp cloth.
- 2. Power wash liner and clean bag with mild soap, using a stiff brush if necessary.

### B. Repair

- 1. Replace missing or broken parts of frame.
- 2. File all burrs smooth on metal components.
- 3. Suspend tank and mark any holes or damage needing repair.
- 4. Patch all marked damaged areas. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 5. Replace all damaged hose couplings and drain plugs.
- 6. Stencil correct NFES # of item on collar of tank if missing or unreadable.
- 7. Ensure all locking buttons snap into place and lubricate as necessary.

### C. Testing for performance

None

### D. Repackaging

• Local cache option.

### Tank – Folding, 1500 GL (5678.1L), w/Frame

**NFES Status** 

Active

NFES#

000664

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect frame for broken or bent parts, cracks or separations in the welds. Inspect the liner for pin holes, tears, or rips and missing grommets. Inspect for frayed or damaged rope or missing nylon ties securing liner to frame.
- 2. Return to stock if item is clean and in unused condition.
- 3. Refurbish item if able to clean and repair. For repairs requiring materials or skills not found at the local cache, contact manufacturer to determine if it is economically feasible to have manufacturer repair tank.
- 4. Dispose of item if damages are not economically feasible to repair.

# **Refurbishing Procedures**

#### A. Cleaning

- 1. Clean tank liner and frame, inside and outside, with soapy water and a brush or high-pressure wash and rinse.
- 2. Allow to air dry on both sides.

#### B. Repair

#### **Frame**

- 1. Straighten frame.
- 2. Weld all cracked or broken welds on frame.
- 3. Remove rust. Paint as needed.
- 4. Lubricate hinges with appropriate lubricant.

#### Liner

- 1. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEARAID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 2. Replace any missing grommets. If two or more grommets are missing in succession and new grommets cannot be installed, replace liner.
- 3. The use of cable ties or ¼" nylon rope is recommended for securing the liner to the frame. Ensure that ties or ropes are secure. Replace or tighten as necessary. When using cable ties, use one per grommet and utilize large cable ties at corner and midpoints. Use smaller ties in all other grommets. When using rope, secure one end to the frame. Using a lacing motion, go through the grommet, over the frame and through the next grommet. Continue this motion until entire liner is attached to frame. Secure end.
- 4. Stencil correct NFES # of item on side of tank if missing or unreadable.

### C. Testing for performance

- 1. Verify hinges operate smoothly.
- 2. Check all patches to insure they are secure and there are no loose edges.

### D. Repackaging

- 1. Fold the tank ensuring that liner is not pinched during process. Only a minimum, if any, amount of liner is to extend outside the metal frame.
- 2. Band 1,000GL tank near ends, Band 1,500GL tank near ends and in the middle.
- 3. Secure on pallet.

### Tank - Folding, 1000 GL (3785.4L) w/Frame

**NFES Status** 

Active

NFES#

000661

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect frame for broken or bent parts, cracks or separations in the welds. Inspect the liner for pin holes, tears, or rips and missing grommets. Inspect for frayed or damaged rope or missing nylon ties securing liner to frame.
- 2. Return to stock if item is clean and in unused condition.
- Refurbish item if able to clean and repair. For repairs requiring materials or skills not found at the local cache, contact manufacturer to determine if it is economically feasible to have manufacturer repair tank.
- 4. Dispose of item if damages are not economically feasible to repair.

## **Refurbishing Procedures**

#### A. Cleaning

- 1. Clean tank liner and frame, inside and outside, with soapy water and a brush or high-pressure wash and rinse.
- 2. Allow to air dry on both sides.

#### B. Repair

#### **Frame**

- 1. Straighten frame.
- 2. Weld all cracked or broken welds on frame.
- 3. Remove rust. Paint as needed.
- 4. Lubricate hinges with appropriate lubricant.

#### Liner

- 1. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEARAID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 2. Replace any missing grommets. If two or more grommets are missing in succession and new grommets cannot be installed, replace liner.
- 3. The use of cable ties or ¼" nylon rope is recommended for securing the liner to the frame. Ensure that ties or ropes are secure. Replace or tighten as necessary. When using cable ties, use one per grommet and utilize large cable ties at corner and midpoints. Use smaller ties in all other grommets. When using rope, secure one end to the frame. Using a lacing motion, go through the grommet, over the frame and through the next grommet. Continue this motion until entire liner is attached to frame. Secure end.
- 4. Stencil correct NFES # of item on side of tank if missing or unreadable.

### C. Testing for performance

- 1. Verify hinges operate smoothly.
- 2. Check all patches to insure they are secure and there are no loose edges.

### D. Repackaging

- 1. Fold the tank ensuring that liner is not pinched during process. Only a minimum, if any, amount of liner is to extend outside the metal frame.
- 2. Band 1,000GL tank near ends, Band 1,500GL tank near ends and in the middle.
- 3. Secure on pallet.

### Tank - Dip, 15,000 GL (Heliwell)

**NFES Status** 

Active

NFES#

000669

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Observe condition prior to take down or after setting up unit following manufacturer's assembly procedures.
  - Look at rim covers and inspect attached webbing.
  - Remove rim covers and inspect top of tank for abrasions or tears.
  - Look in tank for slices or holes and mark with felt pen if repairs needed.
  - o Inspect panels to ensure they are not bent or misshapen and attached clips are functional.
  - Inspect turn buckles and cables for frays and burrs.
- 2. Return to stock if unused.
- 3. Refurbish item, if repairs are extensive, refer to SEI Industries website.
- 4. Dispose of irreparable components and replace as necessary.

# **Refurbishing Procedures**

### A. Cleaning

1. Clean tank liner and panels, inside and outside with soapy water and a brush or highpressure wash and rinse.

- 2. Rinse well with clean water from high-pressure washer.
- 3. Allow to air dry on both sides.

### B. Repair

- 1. Weld all cracked or broken welds on aluminum panels.
- 2. Patch any damaged areas marked in liner. All patches should be welded with patch material that is recommended by the manufacturer.
- 3. Rivet rim covers if missing.
- 4. Straighten panels and replace clips if needed.
- 5. File off burrs on turn buckles.
- 6. Replace any missing or damaged fittings, valves, adapters or caps.

### C. Testing for performance

• Verify panels are close together by inspecting placement.

#### D. Repackaging

- 1. Fold tank liner into a shape that fits underneath one panel. See Heliwell operator's manual on SEI website.
- 2. Place folded liner on a pallet and stack panel atop tank.
- 3. Box other components together and place on pallet.
- 4. Strap down tank, panels, and boxed components securely.

Reference

**SEI Industries** 

Water Handling Equipment Guide, PMS 447-1

### Tank - Collapsible, 6000 GL (22,712.5L)

**NFES Status** 

Active

NFES#

006031

Category
Water Handling
Updated
Sat, 05/01/2021 - 12:00
Storage and Shelf Life Checks
None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

#### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.

- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

#### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tank - Collapsible, 4800-5000 GL

**NFES Status** 

Active

NFES#

006030

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

#### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tank - Collapsible, 3000 GL (11,356.2L)

**NFES Status** 

Active

NFES#

000568

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.

6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

#### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

#### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### **Tank – Collapsible, 1800 GL (6813.7L)**

**NFES Status** 

Active

NFES#

000668

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

#### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

Reference

Water Handling Equipment Guide, PMS 447-1

### **Tank – Collapsible, 1500 GL (5678.1L)**

**NFES Status** 

Active

NFES#

000589

Category

Water Handling

Updated

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Tank - Collapsible, 1200 GL (4542.5L), Free Standing

**NFES Status** 

Active

NFES#

000090

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.

- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").

3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

Reference

Water Handling Equipment Guide, PMS 447-1

### Tank - Collapsible, 1000 GL (3785.4L)

**NFES Status** 

Active

NFES#

000588

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

## **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

Reference

Water Handling Equipment Guide, PMS 447-1

### Tank – Collapsible, 10,000 GL

**NFES Status** 

Active

NFES#

007744

Category

Water Handling

Updated

Sat, 05/01/2021 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Separate tanks by NFES number. Inspect for punctures, tears. Look for damaged couplings, and drain plugs. Inspect flanges and make sure threads are not damaged.
- 2. Ensure ball bearings on fitting are working properly. Repair or lube if necessary.
- 3. Inspect seal around flange. Replace to 2 ½" female flange if tank return is equipped with fittings other than.
- 4. Return to stock if unused.
- 5. Refurbish item if tears and holes are repairable with local equipment and expertise. Contact manufacturer for repairs requiring materials or skills not found at the local cache to determine if it is economically feasible to have manufacturer repair tank.
- 6. Dispose of item if unable to refurbish.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Elevate tank, securing the tank to lifting system with a chain or straps to bear the weight of the tank.
- 2. Clean tank, inside and outside, with soapy water and a brush.
- 3. Rinse well with clean water from high-pressure washer.
- 4. Allow to air dry on both sides.

#### B. Repair

- 1. While tank is suspended, mark any holes or damage needing repair.
- 2. Patch any hole or tears. Small pin hole can be repaired with manufacturer recommended TEAR-AID® Type B or other similar material recommended by the tank manufacturer. Larger holes should be patched with material recommended by the manufacturer utilizing a vinyl welding process. For extremely large holes, contact the tank manufacturer for recommended repair or replacement options.
- 3. Replace all damaged hose couplings and drain plugs.
- 4. Stencil correct NFES # of item on collar of tank if missing or unreadable.

### C. Testing for performance

- 1. Check all patches to insure they are secure and there are no loose edges.
- 2. Suspend tank again to spot holes while looking towards light.

### D. Repackaging

- 1. Fold or roll tank as tightly as possible, secure with plastic banding or rope to keep from unrolling.
- 2. 1 each of NFES #006030, #006031, #007744 in NFES #008158 carton (48" x 22" x 31").
- 3. 1 each of NFES #<u>000090</u>, #<u>000588</u>, #<u>000589</u>, #<u>000668</u>, #<u>000568</u> recommended in NFES #000500 carton (22" x 22" x 36").

#### Reference

Water Handling Equipment Guide, PMS 447-1

#### Strainer - Fish, 100 GPM

**NFES Status** 

Active

NFES#

000440

Category

Water Handling

Updated

Thu, 06/01/2023 - 12:00

Storage and Shelf Life Checks



# **Initial Inspection/Disposal Criteria**

- Visually inspect for missing or damaged components, or need for repair such as: straps, buckles, screen, springs.
- 2. Return to stock if in unused condition.
- 3. Refurbish if dirty or in need of repair.
- 4. Dispose of item if it fails inspection and/or is damaged beyond repair.

# **Refurbishing Procedures**

### A. Cleaning

- 1. **DO NOT POWER WASH.** This will damage the screen material.
- 2. Use a soft bristle brush and remove debris from screen.
- 3. Use a mild detergent and soft brush to clean mud off unit.
- 4. Use garden hose to rinse off.
- 5. Allow to air dry completely.

### **B.** Repair

- 1. Inspect mesh material for rips, tears, or holes. Anything larger than  $\frac{1}{4}$ ", the mesh screen must be replaced, if economical to do so.
- 2. Inspect the closure strap and buckle for fraying or damage. Ensure that the strap has not separated and damaged the mesh screen material. Repair or replace as needed. If sewing the strap damages the mesh, replace entire mesh bag.
- 3. Ensure that P cord is secured around mesh and tight against the internal plastic frame. Replace P cord as needed. (see photo below)

- 4. Visually inspect internal plastic frame, base plate and spring for damage. Replace if economical to do so. Do not attempt to repair these parts with adhesives or sealants.
- 5. Check all bolts and retainers to ensure they are tight. Do not over tighten bolts as they may crack plastic frame.

#### C. Tests for Performance

none

### D. Repackaging

- 1. Use strap and buckle to compress spring and reduce size of unit.
- 2. 10 each in a 15" X 15" X 10" carton (000823)



Reference

Zinvent.com

### Regulator – Water Pressure, R.V.,40-50 PSI, 3/4" M/F-H Brass

**NFES Status** 

Active

NFES#

000402

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

### B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Reducer - 3" NPSH-F TO 2 1/2" NH-M

**NFES Status** 

Active

NFES#

000685

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.

4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

### B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Reducer - 2" NPSH-F (11 1/2 TPI) TO 1 1/2" NH-M (9 TPI)

**NFES Status** 

Active

NFES#

000417

Category

Water Handling
Updated
Mon, 05/01/2017 - 12:00
Storage and Shelf Life Checks
None

# **Initial Inspection/Disposal Criteria**

- Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

### B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

Water Handling Equipment Guide, PMS 447-1

#### Reducer – 2 1/2" NPSH-F, 1 1/2" NH-M

**NFES Status** 

Active

NFES#

002229

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

### B. Repair

1. Replace any gaskets that are stiff, damaged, or missing.

2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

#### Reducer - 2 1/2" NH-F, 1 1/2" NH-M

**NFES Status** 

Active

NFES#

002230

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.

- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

# A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

## B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

## C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Reducer – 1" NPSH-F (11 1/2 TPI) TO 3/4" NH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000733

Category
Water Handling
Updated
Mon, 05/01/2017 - 12:00
Storage and Shelf Life Checks
None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

## C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

# D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

Water Handling Equipment Guide, PMS 447-1

# Reducer – 1 1/2" NPSH-F (11 1/2 TPI) TO 1" NPSH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000418

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

# D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Reducer – 1 1/2" NH-F (9 TPI) TO 1" NPSH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000010

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.

- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

# A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

## B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

## C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

### D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").
- 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Reducer – 1 1/2" NH-F (9 TPI) TO 1" NH-M (8 TPI)

**NFES Status** 

Active

NFES#

000009

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks in reducer body, damaged threads, dry, stiff, cracked, or worn gaskets, and any sign fire damage.
- 2. Return to stock if item is clean and appears to be unused.
- 3. Refurbish item if item passes inspection or minor repairs are easily completed.
- 4. Dispose of if the item does not pass inspection or Testing for Performance.

# **Refurbishing Procedures**

## A. Cleaning

- 1. Clean in mild detergent with a brush or scouring pad or high-pressure wash.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

- 1. Replace any gaskets that are stiff, damaged, or missing.
- 2. Use a triangular fire to remove burrs and dings from damaged threads.

### C. Testing for performance

• Ensure smooth fit with appropriate female adapter.

## D. Repackaging

- 10 each of NFES #000009, #000010, #000733 in NFES #008076 carton (8" x 4" x 4").
- 20 each of NFES #000685, #002229, #002230 in suggested NFES #008189 carton (16 x 8 x 8").
- 40 each of NFES #000417 in NFES #008064 carton (10" x 8" x 6").

• 60 each of NFES #000009, #000010, #000418, #000733 in NFES #008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Pump - Trombone, Backpack, Single Action

**NFES Status** 

Active

NFES#

000151

Category

Water Handling

Updated

Sun, 05/01/2022 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for obvious damage.
- 2. Inspect for burns and cracks. Dispose of if these are found.
- 3. Inspect for damaged threads. If beyond repair dispose of. Ensure tip is secured to wand with a 3-4 inch length of ball chain.
- 4. Place hose in water and pump handle to validate that pump works properly.
- 5. Return item to stock if it shows no sign of use or damage.
- 6. Dispose of item if unable to repair.

# **Refurbishing Procedures**

## A. Cleaning??

1. Wash and clean all items of foreign matter, such as mud, dirt, and grease.

- 2. Clean in mild detergent with brush or scouring pad as needed.
- 3. Rinse thoroughly.

## B. Repair

- 1. If pump pressure is not sufficient, remove pump unit and replace O-rings.
- 2. If suction hose is kinked, replace hose.
- 3. Ensure quick connection on pump has proper seating.
- 4. Check hose connection to pump for tightness; if loose, use a hose clamp.
- 5. Replace length of ball chain between wand and removable tip if missing.
- 6. Check supply hose on pump assembly for obstructions and tight connections, bent push rods, and clogged tips.
- 7. Check spring and ball bearing.
- 8. Lubricate slide with appropriate lubricant, e.g., Chevron NLGI2 or equivalent.

#### C. Tests for Performance

• Place end of hose in water and pump trombone. Ensure that it fills and discharges water properly without back feeding water out of the suction hose.

# D. Repackaging

- 1. Suggested packaging of NFES #000151, 10 each in NFES #000385 carton (7.25"  $\times$  9.25"  $\times$  26") or 25 each in NFES #002006 carton (23"  $\times$  19"  $\times$  10").
- 2. Ensure suction hose is not kinked when packaging.

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Pump - Backpack, Outfit, 5 1/2" X 15 1/2" X 19"

**NFES Status** 

Active

NFES#

001149

Category
Water Handling
Updated
Sun, 05/01/2022 - 12:00
Storage and Shelf Life Checks
None

# **Initial Inspection/Disposal Criteria**

#### Bag

- 1. Inspect fabric and webbing for any holes, cuts, tears, burns, or torn seams that are not economically repairable. If any found, dispose of.
- 2. Inspect for any fastener missing or that does not provide adequate closure.
- 3. Inspect for excessive dirt or fuel stain that cleaning cannot eliminate. Dispose of item if any found.
- 4. Inspect for any writings or drawings, and if found dispose of item.
- 5. Return to stock if item does not show any signs of use and passes visual inspection.
- 6. Refurbish if damage detected is repairable.
- 7. Dispose of item if unable to repair.

#### **Pump**

- 1. Inspect for obvious damage.
- 2. Inspect for burns and cracks. If any are found, dispose of item.
- 3. Inspect for damaged threads. If beyond repair dispose of item. Ensure tip is secured to wand with a 3"-4" length of ball chain.
- 4. Place hose in water and pump handle to validate that pump works properly.
- 5. Return item to stock if it shows no sign of use or damage.
- 6. Dispose of item if unable to repair.

# **Refurbishing Procedures**

# A. Cleaning

CLASS 2 CORDURA (MACHINE WASH OK)

#### Bag

- 1. Allow any mud or loose dirt to dry and remove using a stiff-bristle brush. If stains remain, wash as recommended below.
- 2. Remove light oil and dirt stains by brushing with a solution of warm water and a mild detergent, rinse thoroughly, and hang to dry. Mild detergents includes most home laundry detergents that contain no chlorine bleach or added scents.
- 3. For heavier oil or grease, soak in water-soluble biodegradable degreaser for at least 30 minutes. Brush with a bristle brush, rinse thoroughly, and hang to dry.
- 4. If machine washing, use only cold water on a gentle cycle and air dry.
- 5. Where no other method is cleaning the fabric, wash with pressure washer set at wide fan, warm water, and only allow nozzle close enough as necessary for cleaning, the further away the better for the fabric.

#### DO NOT MACHINE DRY. DO NOT USE BLEACH.

#### **Pump**

- 1. Wash and clean all items of foreign matter, such as mud, dirt, and grease.
- 2. Clean in mild detergent with brush or scouring pad as needed.
- 3. Rinse thoroughly.

## B. Repair

#### Bag

- 1. Replace nonfunctioning hardware.
- 2. Take new plastic liner (NFES #000597) out of pouch and replace old liner, insert a new liner into pouch.
- 3. Install rubber gasket on cap, to prevent leakage.
- 4. Replace O-ring.

#### **Pump**

- 1. If pump pressure is not sufficient, remove pump unit and replace O-rings.
- 2. If suction hose is kinked, replace hose.
- 3. Ensure quick connection on pump has proper seating.
- 4. Check hose connection to pump for tightness; if loose, use a hose clamp.
- 5. Replace length of ball chain between wand and removable tip if missing.
- 6. Check supply hose on pump assembly for obstructions and tight connections, bent push rods, and clogged tips.
- 7. Check spring and ball bearing.
- 8. Lubricate slide with appropriate lubricant, e.g., Chevron NLGI2 or equivalent.

#### C. Tests for Performance

• Place end of hose in water and pump trombone. Ensure that it fills and discharges water properly without back feeding water out of the suction hose.

# D. Repackaging

- 1. Ensure suction hose is not kinked when packaging.
- 2. Packaging is 6 each of NFES #001149 in NFES #002030 carton (24" x 16" x 12").
- 3. Suggested packaging of 10 each of NFES #001197 in NFES #002007 carton (24" x 16" x 16").
- 4. Suggested packaging of NFES #000151, 10 each in NFES #000385 carton (7.25" x 9.25" x 26") or 25 each in NFES #002006 carton (23" x 19" x 10").

Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle - Twin Tip, Combination, 1" NPSH-F

**NFES Status** 

Active

NFES#

000024

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for obvious damage, cracks, and large burrs.
- 2. Inspect for gasket and screen.
- 3. Inspect handle for damaged or missing screw. Ensure handle is in the correct position and turns freely into the proper positions.
- 4. Inspect for fire damage. Fire damage may cause failure in the future.
- 5. Inspect hose coupling threads for damage.
- 6. Return to stock if nozzle is clean and shows no sign of damage or use.
- 7. Refurbish if damage is repairable or if missing components are replaceable.
- 8. Dispose of item if damage is excessive, or if nozzle fails *Testing for Performance* and deficiencies are not correctable.

# **Refurbishing Procedure**

# A. Testing for Performance

- 1. Install nozzle on pump.
- 2. Open handle on nozzle.
- 3. Turn on water.
- 4. Inspect and operate straight stream tip and fog tip ensuring neither is clogged. Clear obstructions if present.
- 5. Close handle.

- 6. Pressurize nozzle to 300 PSI. Test at pressure for 3 minutes.
- 7. Inspect for leaks:
- Gasket
- Under the handle
- At both tips

# **B.** Cleaning

- 1. Clean in a dish washing detergent with brush, scouring pad or high-pressure wash as needed. Do not soak for extended periods of time as the detergent will corrode the metal.
- 2. Rinse thoroughly, stand upright with handle in open position and allow to air dry.

## C. Repair

- 1. Replace handle and ball with a new kit if needed.
- 2. Replace tail gasket and/or screen if missing, cracked, or stiff. Nozzle will have a 3/16" straight-stream tip (NFES #000637) and a 2-4 gal/min fog tip (NFES #000635).
- 3. Apply silicone based 0-ring lubricant to O-rings if needed.

# D. Retesting

Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

# E. Repackaging

- 1. Stand upright and dry completely prior to repackaging.
- 2. Jute twine through valve and lower nozzle.
- 3. Package in units containing nozzle body with a 3/16" straight-stream tip, NFES #000637 and 2-4 gal/min fog tip, NFES #000635.
- 4. Package 20 each in NFES #008010 carton (16 3/8" x 13 5/8" x 7" w/ insert).

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle - Plastic, Fire Foam, 8 GPM

**NFES Status** 

Active

NFES#

000627

Category

**Water Handling** 

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection Disposal Criteria**

- 1. Inspect for worn or damaged threads. Inspect for missing, cracked, or damaged gasket.
- 2. Ensure nozzle barrel has no cracks in plastic, or fire damage.
- 3. Return to stock if item shows no sign of damage, and is clean.
- 4. Refurbish if item can be cleaned and repaired.
- 5. Dispose of item if damaged beyond repair.

# **Refurbishing Procedures**

# A. Cleaning

- 1. Wash and clean of foreign matter, such as mud, dirt, and grease.
- 2. Clean with scrub brush in water with dishwashing detergent or high pressure wash.
- 3. Rinse thoroughly.
- 4. Stand upright and air dry.

# B. Repair

• Replace gasket if necessary.

### **C.** Testing for Performance

None

## D. Repackaging

• Local cache option.

Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle – Plastic, 60 GPM, 1 1/2" NH-F X 4 3/4" Long

**NFES Status** 

Active

NFES#

000137

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

- 1. Inspect for burrs and cracks, broken plastic, or fire damage. Inspect gasket and replace if missing, cracked, or stiff. Inspect for screw and nylon washer. Inspect hose coupling threads for damage.
- 2. Barrel must turn freely.
- 3. Return to stock if nozzle functions properly, is free of damage and clean.
- 4. Refurbish if nozzle is repairable.
- 5. Dispose of any nozzle that is damaged beyond repair, has burn damage, or fails *Testing for Performance* and deficiencies cannot be corrected. Old style KK: Inspect threads inside of barrel; if they are damaged, dispose of nozzle.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect nozzles to pump or manifold. Confirm connection ends are not out of round and there is no damage to threads.
  - 1. Pressure Test:
    - i. Start pump.
    - ii. Make sure nozzles are open. Let all air escape. Shut nozzles.
    - iii. Pressurize to 300 PSI and hold for 3 minutes.
- 3. Inspect for leak:
  - · Around the gasket
  - Behind the barrel
  - The tip of the barrel

Note: Due to manufacturing processes a water tight shut-off seal on NFES #000137 and # 000138 is very difficult to attain. Minimal drips or slight mist spray from the tip are acceptable for RFI condition.

# **B.** Cleaning

- 1. All items will be washed and cleaned of foreign matter, such as mud, dirt, and grease. Clean in a mild detergent with brush and scouring pad, or high pressure wash as needed. Do not soak for extended periods of time as the detergent will corrode the metal.
- 2. Rinse thoroughly.
- 3. Stand upright with barrel in open position to drain water and dry.
- 4. Lubricate threads on back of the barrel with appropriate dry lubricant (graphite).

## C. Repair

- 1. Replace gaskets, washers or screws as needed.
- 2. If plastic nozzle is found defective, dispose (NFES #000137, #000138).

## D. Retesting

• Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

### E. Repackaging

- Stand upright and dry completely prior to repackaging.
  - Use NFES #008064 carton (10" x 8" x 6")
  - Use NFES #008018 carton (12" x 12" x 6") PACK 10 PER CARTON
  - Use NFES #008017 carton (18" x 12" x 10") PACK 60 PER CARTON

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Nozzle - Plastic, 35 GPM, 1" NPSH-F

**NFES Status** 

Active

NFES#

000138

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burrs and cracks, broken plastic, or fire damage. Inspect gasket and replace if missing, cracked, or stiff. Inspect for screw and nylon washer. Inspect hose coupling threads for damage.
- 2. Barrel must turn freely.
- 3. Return to stock if nozzle functions properly, is free of damage and clean.
- 4. Refurbish if nozzle is repairable.
- 5. Dispose of any nozzle that is damaged beyond repair, has burn damage, or fails *Testing for Performance* and deficiencies cannot be corrected. Old style KK: Inspect threads inside of barrel; if they are damaged, dispose of nozzle.

# **Refurbishing Procedures**

## A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect nozzles to pump or manifold. Confirm connection ends are not out of round and there is no damage to threads.
  - 1. Pressure Test:
    - i. Start pump.
    - ii. Make sure nozzles are open. Let all air escape. Shut nozzles.
    - iii. Pressurize to 300 PSI and hold for 3 minutes
- 3. Inspect for leak:
  - Around the gasket
  - Behind the barrel
  - The tip of the barrel

Note: Due to manufacturing processes a water tight shut-off seal on NFES #000137 and # 000138 is very difficult to attain. Minimal drips or slight mist spray from the tip are acceptable for RFI condition.

# **B.** Cleaning

- 1. All items will be washed and cleaned of foreign matter, such as mud, dirt, and grease. Clean in a mild detergent with brush and scouring pad, or high pressure wash as needed. Do not soak for extended periods of time as the detergent will corrode the metal.
- 2. Rinse thoroughly.
- 3. Stand upright with barrel in open position to drain water and dry.
- 4. Lubricate threads on back of the barrel with appropriate dry lubricant (graphite).

## C. Repair

- 1. Replace gaskets, washers or screws as needed.
- 2. If plastic nozzle is found defective, dispose (NFES #000137, #000138).

## D. Retesting

Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

# E. Repackaging

- Stand upright and dry completely prior to repackaging.
  - Use NFES #008064 carton (10" x 8" x 6")
  - Use NFES #008018 carton (12" x 12" x 6") 10 PER CARTON
  - Use NFES #008017 carton (18" x 12" x 10") 60 PER CARTON

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Nozzle - Garden Hose, 3/4" NH, Adjustable

**NFES Status** 

Active

NFES#

000136

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

- 1. Inspect for burrs and damaged threads. Inspect for missing, cracked, or damaged gasket.
- 2. Barrel should turn freely
- 3. Return to stock if item passes inspection, is clean and has not been used.
- 4. Refurbish if item passes inspection and repairs are economically feasible.
- 5. Dispose of item if burrs or damaged threads are found, if barrel does not turn freely, and if nozzle fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Pressure testing: Attach to high pressure pump and turn on pump to 100 PSI. There is no amount of time specified to conduct this test.
- 2. Inspect for leaks:
- 3. Around the gasket.
- 4. Behind the barrel.
- 5. The tip of the barrel.

# **B. Cleaning Procedures**

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in a mild detergent with brush or scouring pad or high-pressure wash.
- 3. Rinse thoroughly.

# C. Repair

- 1. Replace gasket as necessary
- 2. Chase threads and remove small burrs with small file if damage is minimal.
- 3. Stand upright and dry completely prior to repackaging.

## D. Retesting

1. Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

# E. Repackaging

- 1. Stand upright to drain water and dry.
  - o Package 60 EA in NFES#008064 carton (10"x8"x6"). BRASS and ALUMINUM.
  - Package 10 each, local cache option.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Nozzle – Fire Foam, 1 1/2" NH, 30 GPM, Plastic

**NFES Status** 

Active

NFES#

000629

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection Disposal Criteria**

- 1. Inspect for worn or damaged threads. Inspect for missing, cracked, or damaged gasket.
- 2. Ensure nozzle barrel has no cracks in plastic, or fire damage.
- 3. Return to stock if item shows no sign of damage, and is clean.
- 4. Refurbish if item can be cleaned and repaired.
- 5. Dispose of item if damaged beyond repair.

# **Refurbishing Procedures**

# A. Cleaning

- 1. Wash and clean of foreign matter, such as mud, dirt, and grease.
- 2. Clean with scrub brush in water with dishwashing detergent or high pressure wash.
- 3. Rinse thoroughly.
- 4. Stand upright and air dry.

# B. Repair

• Replace gasket if necessary.

### **C.** Testing for Performance

None

## D. Repackaging

• Local cache option.

Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle – Fire Foam, 1 1/2" NH, 16 GPM, Plastic

**NFES Status** 

Active

NFES#

000628

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection Disposal Criteria**

- 1. Inspect for worn or damaged threads. Inspect for missing, cracked, or damaged gasket.
- 2. Ensure nozzle barrel has no cracks in plastic, or fire damage.
- 3. Return to stock if item shows no sign of damage, and is clean.
- 4. Refurbish if item can be cleaned and repaired.
- 5. Dispose of item if damaged beyond repair.

# **Refurbishing Procedures**

### A. Cleaning

1. Wash and clean of foreign matter, such as mud, dirt, and grease.

- 2. Clean with scrub brush in water with dishwashing detergent or high pressure wash.
- 3. Rinse thoroughly.
- 4. Stand upright and air dry.

# B. Repair

• Replace gasket if necessary.

# **C.** Testing for Performance

None

# D. Repackaging

• Local cache option.

Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle – Combination, Barrel, KK 1½"

**NFES Status** 

Active

NFES#

001082

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burrs and cracks, broken plastic, or fire damage. Inspect gasket and replace if missing, cracked, or stiff. Inspect for screw and nylon washer. Inspect hose coupling threads for damage.
- 2. Barrel must turn freely.
- 3. Return to stock if nozzle functions properly, is free of damage and clean.
- 4. Refurbish if nozzle is repairable.
- 5. Dispose of any nozzle that is damaged beyond repair, has burn damage, or fails *Testing for Performance* and deficiencies cannot be corrected. Old style KK: Inspect threads inside of barrel; if they are damaged, dispose of nozzle.

# **Refurbishing Procedures**

## A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect nozzles to pump or manifold. Confirm connection ends are not out of round and there is no damage to threads.
  - a. Pressure Test:
    - i. Start pump.
    - ii. Make sure nozzles are open. Let all air escape. Shut nozzles.
    - iii. Pressurize to 300 PSI and hold for 3 minutes
- 3. Inspect for leak:
  - Around the gasket
  - Behind the barrel
  - Tip of barrel (in closed position)

# **B.** Cleaning

- 1. All items will be washed and cleaned of foreign matter, such as mud, dirt, and grease. Clean in a mild detergent with brush and scouring pad, or high pressure wash as needed. Do not soak for extended periods of time as the detergent will corrode the metal.
- 2. Rinse thoroughly.
- 3. Stand upright with barrel in open position to drain water and dry.
- 4. Lubricate threads on back of the barrel with appropriate dry lubricant (graphite).

# C. Repair

1. Replace gaskets, washers, or screws as needed.

2. Replace tip, screw, and O-ring, if needed (NFES #001081, #001082).

### D. Retesting

Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

# E. Repackaging

- Stand upright and dry completely prior to repackaging.
  - Use NFES CARTON 008064 (10" X 8" X 6") 20 per carton

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Nozzle – Combination, Barrel, KK 1"

**NFES Status** 

Active

NFES#

001081

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for burrs and cracks, broken plastic, or fire damage. Inspect gasket and replace if missing, cracked, or stiff. Inspect for screw and nylon washer. Inspect hose coupling threads for damage.
- 2. Barrel must turn freely.
- 3. Return to stock if nozzle functions properly, is free of damage and clean.

- 4. Refurbish if nozzle is repairable.
- 5. Dispose of any nozzle that is damaged beyond repair, has burn damage, or fails *Testing for Performance* and deficiencies cannot be corrected. Old style KK: Inspect threads inside of barrel; if they are damaged, dispose of nozzle.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect nozzles to pump or manifold. Confirm connection ends are not out of round and there is no damage to threads.
  - a. Pressure Test:
    - i. Start pump.
    - ii. Make sure nozzles are open. Let all air escape. Shut nozzles.
    - iii. Pressurize to 300 PSI and hold for 3 minutes
- 3. Inspect for leak:
  - Around the gasket
  - Behind the barrel
  - Tip of barrel (in closed position)

# **B.** Cleaning

- 1. All items will be washed and cleaned of foreign matter, such as mud, dirt, and grease. Clean in a mild detergent with brush and scouring pad, or high pressure wash as needed. Do not soak for extended periods of time as the detergent will corrode the metal.
- 2. Rinse thoroughly.
- 3. Stand upright with barrel in open position to drain water and dry.

# C. Repair

- 1. Replace gaskets, washers, or screws as needed.
- 2. Replace tip, screw, and O-ring, if needed (NFES #001081, #001082).

## D. Retesting

• Following completion of any repairs, retesting of nozzles must be completed following *Testing for Performance*, above.

### E. Repackaging

- Stand upright and dry completely prior to repackaging.
  - Use NFES #008064 carton (10" x 8" x 6") for each of the following:
    - NFES #001081 STANDARD PACK 20 per carton

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Increaser - 3/4" NH TO 1" NPSH

**NFES Status** 

Active

NFES#

002235

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks, dents, bad threads, or obvious damage. Inspect for missing gasket and if gasket has cracking or stiffness.
- 2. Return to stock if item is clean, passes inspection and does not show indication of use.
- 3. Refurbish item if thread damage is repairable and if gasket can be replaced.
- 4. Dispose of item if cracked, dented or damaged beyond repair.

# **Refurbishing Procedures**

# A. Cleaning

- Clean in parts washer, high pressure wash, or clean in a sink with mild detergent using a brush or scouring pad.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

- 1. Replace gasket if stiff, cracked, or missing.
- 2. Inspect threads for damage. Use triangular file to "chase" threads.

## C. Testing for performance

• Check threads function by using appropriate female fitting.

## D. Repackaging

- 1. NFES #000416, package 10 each in NFES #008076 (8" x 4" x 4") or 60 each in NFES #008064 (10" x 8" x 6") and label accordingly.
- 2. NFES #000204, #000854, #002235 package 10 each or 60 each in carton (cache option) and label accordingly.

#### Reference

Water Handling Equipment Guide, PMS 447-1

# Increaser - 1" NPSH-F (11 1/2 TPI) TO 1 1/2" NH-M (9 TPI)

**NFES Status** 

Active

NFES#

000416

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks, dents, bad threads, or obvious damage. Inspect for missing gasket and if gasket has cracking or stiffness.
- 2. Return to stock if item is clean, passes inspection and does not show indication of use.
- 3. Refurbish item if thread damage is repairable and if gasket can be replaced.
- 4. Dispose of item if cracked, dented or damaged beyond repair.

# **Refurbishing Procedures**

# A. Cleaning

- Clean in parts washer, high pressure wash, or clean in a sink with mild detergent using a brush or scouring pad.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

### B. Repair

- 1. Replace gasket if stiff, cracked, or missing.
- 2. Inspect threads for damage. Use triangular file to "chase" threads.

# C. Testing for performance

Check threads function by using appropriate female fitting.

### D. Repackaging

- 1. NFES #000416, package 10 each in NFES #008076 (8" x 4" x 4") or 60 each in NFES #008064 (10" x 8" x 6") and label accordingly.
- 2. NFES #<u>000204</u>, #<u>000854</u>, #<u>002235</u> package 10 each or 60 each in carton (cache option) and label accordingly.

#### Reference

# Increaser – 1 1/2" NH-F (9 TPI) TO 2" NPSH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000854

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks, dents, bad threads, or obvious damage. Inspect for missing gasket and if gasket has cracking or stiffness.
- 2. Return to stock if item is clean, passes inspection and does not show indication of use.
- 3. Refurbish item if thread damage is repairable and if gasket can be replaced.
- 4. Dispose of item if cracked, dented or damaged beyond repair.

# **Refurbishing Procedures**

### A. Cleaning

- Clean in parts washer, high pressure wash, or clean in a sink with mild detergent using a brush or scouring pad.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

1. Replace gasket if stiff, cracked, or missing.

2. Inspect threads for damage. Use triangular file to "chase" threads.

## C. Testing for performance

• Check threads function by using appropriate female fitting.

# D. Repackaging

- 1. NFES #000416, package 10 each in NFES #008076 (8" x 4" x 4") or 60 each in NFES #008064 (10" x 8" x 6") and label accordingly.
- 2. NFES #000204, #000854, #002235 package 10 each or 60 each in carton (cache option) and label accordingly.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Increaser - 1 1/2" NH-F TO 2 1/2" IP-M

**NFES Status** 

Active

NFES#

000204

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks, dents, bad threads, or obvious damage. Inspect for missing gasket and if gasket has cracking or stiffness.
- 2. Return to stock if item is clean, passes inspection and does not show indication of use.
- 3. Refurbish item if thread damage is repairable and if gasket can be replaced.
- 4. Dispose of item if cracked, dented or damaged beyond repair.

# **Refurbishing Procedures**

## A. Cleaning

- Clean in parts washer, high pressure wash, or clean in a sink with mild detergent using a brush or scouring pad.
- 2. Rinse thoroughly.
- 3. Stand upright to drain and dry.

# B. Repair

- 1. Replace gasket if stiff, cracked, or missing.
- 2. Inspect threads for damage. Use triangular file to "chase" threads.

# C. Testing for performance

• Check threads function by using appropriate female fitting.

## D. Repackaging

- 1. NFES #000416, package 10 each in NFES #008076 (8" x 4" x 4") or 60 each in NFES #008064 (10" x 8" x 6") and label accordingly.
- 2. NFES #000204, #000854, #002235 package 10 each or 60 each in carton (cache option) and label accordingly.

#### Reference

Water Handling Equipment Guide, PMS 447-1

Hose – Synthetic, Type II, 1" NPSH X 100'

**NFES Status** 

Active

NFES#

000932

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Segregate by NFES number.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads.
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.
  - d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female

coupling, and along the length of the hose.

- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

## **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

## C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
  - e. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

# D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string).
- 3. Local cache option for storage.
- 4. Roll, secure, and place on pallet.

- NFES #<u>000932</u>, #<u>001238</u> Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
- NFES #<u>000933</u>, #<u>001239</u> Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
- o NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Hose - Synthetic, Type II,1 1/2" NH X 100'

**NFES Status** 

Active

NFES#

000933

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Segregate by NFES number.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

## A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads.
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.
  - d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

# **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

## C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.

- c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
- d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
- e. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

#### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string).
- 3. Local cache option for storage.
- 4. Roll, secure, and place on pallet.
  - NFES #000932, #001238 Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
  - NFES #<u>000933</u>, #<u>001239</u> Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
  - o NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose - Synthetic, Lined, 1" NPSH X 100'

**NFES Status** 

Active

NFES#

001238

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Segregate by NFES number.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads.
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.
  - d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

#### **B.** Cleaning

1. Clean excess dirt from hose.

- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

### C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
  - e. Following re-coupling, hose that has been repaired or re-coupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string).
- 3. Local cache option for storage.
- 4. Roll, secure, and place on pallet.
  - NFES #000932, #001238 Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
  - NFES #<u>000933</u>, #<u>001239</u> Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
  - o NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose – Synthetic, Lined, 1 1/2" NH X 100'

**NFES Status** 

Active

NFES#

001239

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Segregate by NFES number.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.

- d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

### **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

## C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
  - e. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string)
- 3. Local cache option for storage.

- 4. Roll, secure, and place on pallet.
  - NFES #000932, #001238 Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
  - NFES #<u>000933</u>, #<u>001239</u> Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
  - NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose - Suction,w/Strainer or Foot Valve

**NFES Status** 

Active

NFES#

000652

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

### **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag.
- 3. Apply a rubber protectant to prevent drying and cracking.

## C. Repair

• Replace gasket if necessary.

### D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

Reference

Water Handling Equipment Guide, PMS 447-1

## Hose – Suction, Rubber, 1 1/2" NH X 8'

**NFES Status** 

Active

NFES#

001808

Category

Water Handling

Updated
Thu, 03/01/2018 - 12:00
Storage and Shelf Life Checks
None

# Initial Inspection/Disposal Criteria

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

#### A. Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

## **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag.
- 3. Apply a rubber protectant to prevent drying and cracking.

### C. Repair

• Replace gasket if necessary.

#### D. Repackaging

1. Local cache option.

2. Protect male coupling threads.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose - Suction, 3" X 10'

**NFES Status** 

Active

NFES#

000613

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

## A. Testing for Performance

Service pressure test:

1. Start pump.

- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

## **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag. Pressure wash if needed.
- 3. Apply a rubber protectant to prevent drying and cracking.

## C. Repair

• Replace gasket if necessary.

## D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose – Suction, 2" NPSH X 8'

**NFES Status** 

Active

NFES#

000914

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

### **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag.
- 3. Apply a rubber protectant to prevent drying and cracking.

## C. Repair

• Replace gasket if necessary.

#### D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

## Hose - Suction, 1 1/2" NH X 10', Rubber

**NFES Status** 

Active

NFES#

000115

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

## **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag.
- 3. Apply a rubber protectant to prevent drying and cracking.

### C. Repair

• Replace gasket if necessary.

### D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Hose - Suction Flex, 3" X 25' w/Camlock

**NFES Status** 

Active

NFES#

007740

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Visually inspect for burns, cuts, and damaged fittings.

- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

### **B.** Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag.
- 3. Apply a rubber protectant to prevent drying and cracking.

### C. Repair

• Replace gasket if necessary.

#### D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose – Garden, Synthetic, 3/4" NH x 50'

**NFES Status** 

Active

NFES#

001016

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Recycle brass fittings from disposed hose.
- 3. Inspect gasket for cracks, if any replace.
- 4. Return to stock if hose is banded and in unused condition.
- 5. Refurbish if item passes initial inspection.
- 6. Dispose of hose if it fails initial inspection or fails Testing for Performance.

# **Refurbishing Procedures**

## A. Testing for Performance

- 1. Start pump.
- 2. Test hose at bib pressure, which should be at least 150 PSI.
  - a. Check bib pressure with pressure gauge.
  - b. Gauge can be purchased at any local hardware store.
- 3. Hold for 2 minutes and inspect hose for leaks.
- 4. Shut down pump and relieve water pressure from system.
- 5. Drain excess water from hose.

### **B. Cleaning Procedures**

- 1. Remove excess dirt from hose.
- 2. Wash hose with clean water, clean water with mild detergent or high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry thoroughly.

## C. Repair

• None

### D. Repackaging

- 1. Roll hose in single-roll configuration, male fitting in center of roll.
- 2. Secure roll with band.
- 3. Package 20 lengths in NFES #008017 carton (18" X 12" X 10").

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose – Cotton Synthetic Jacket, 1" NPSH X 100', Rubber Lined

**NFES Status** 

Active

NFES#

000966

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Segregate by NFES number.

- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.
  - d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

### **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

### C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
  - e. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string)
- 3. Local cache option for storage.
- 4. Roll, secure, and place on pallet.
  - NFES #<u>000932</u>, #<u>001238</u> Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
  - NFES #000933, #001239 Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
  - o NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose - Cotton Synthetic Jacket, 1 1/2" NH X 3', Rubber Lined

**NFES Status** 

Active

NFES#

000114

Category

Water Handling

Updated

Wed, 05/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Return to stock if hose is banded and in unused condition.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Inspect gasket for cracks, if any replace.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails Testing for Performance. Good couplings should be salvaged from hose that is not repairable.
- 6. Recycle brass fittings from disposed hose.

# **Refurbishing Procedures**

#### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads.
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.
  - d. Inspect hose for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).

- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

### **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

#### C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least **50 percent greater** than the service test pressure following *Testing for Performance* above.

### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string).
- 3. Local cache option for storage.
- 4. Roll, secure, and place on pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose – Cotton Synthetic Jacket, 1 1/2" NH X 100', Rubber Lined

**NFES Status** 

Active

NFES#

000967

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Segregate by NFES number.
- 2. Visually inspect for burns, cuts, damaged fittings.
- 3. Recycle brass fittings from disposed hose.
- 4. Inspect gasket for cracks, if any replace.
- 5. Return to stock if hose is banded and in unused condition.
- 6. Refurbish if item passes initial inspection.
- 7. Dispose of hose if it fails initial inspection or fails *Testing for Performance*. Good couplings should be salvaged from any hose not repairable.

# **Refurbishing Procedures**

### A. Testing for Performance

- 1. Replace gasket if necessary.
- 2. Connect female end of hose to pump or manifold:
  - a. Confirm connection ends are not out of round and there is no damage to threads.
  - b. All 1½" hose should be NH threads. All 1" hose should be NPSH threads.
- 3. Pressure Test:
  - a. Start pump.
  - b. Make sure nozzles are open. Let all air escape from hose. Shut nozzles.
  - c. Pressurize hose to 300 PSI and hold for 3 minutes.

- d. Walk the length of the hose inspecting for the following which indicate a need for repair or disposal: burns, cuts, or leaks between hose and couplings, at swivel portion of female coupling, and along the length of the hose.
- 4. Female and male couplings:
  - a. Inspect for leaks where hose goes into coupling.
  - b. Inspect for crooked coupling (easier to see when hose is charged).
- 5. Shut down pump and relieve water pressure from system.
- 6. Remove hose.
- 7. Stretch out good hose to drain.

### **B.** Cleaning

- 1. Clean excess dirt from hose.
- 2. Run hose through hose washer using clean water or clean water with a mild detergent or clean with high pressure wash.
- 3. If detergent is used, rinse with clean water.
- 4. Allow hose to drain and dry completely before rolling.

## C. Repair

- 1. Repaired hose shall result in lengths that are a minimum of 90 percent of original length.
- 2. Good couplings shall be salvaged from disposed hose.
- 3. Re-coupling procedures.
  - a. Remove old expansion ring and coupling from hose.
  - b. Remove unserviceable portion of hose, squaring end to be re-coupled.
  - c. Utilize expander machine to insert new expander and coupling. Follow specific machine operating instructions.
  - d. Refurbished hose shall result in hoses that are 90 to 100 foot in length.
  - e. Following re-coupling, hose that has been repaired or recoupled should be retested at a test pressure of at least 50 percent greater than the service test pressure following *Testing for Performance* above.

### D. Repackaging

- 1. Roll in a single roll configuration with male coupling in center of roll.
- 2. Secure roll (plastic band, string)
- 3. Local cache option for storage.

- 4. Roll, secure, and place on pallet.
  - NFES #<u>000932</u>, #<u>001238</u> Cache option. Recommended quantity per pallet 1" X 100' length/pallet.
  - NFES #<u>000933</u>, #<u>001239</u> Cache option. Recommended quantity per pallet 1½" X 100' length/pallet.
  - NFES #000966, #000967 Cache option quantity per pallet.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Hose - Collapsible, 3" X 25'

**NFES Status** 

Active

NFES#

000621

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for burns, cuts, and damaged fittings.
- 2. Inspect gasket for cracks or damage, if any replace.
- 3. Return to stock if hose is banded, clean, and in unused condition.
- 4. Refurbish if item passes initial inspection.
- 5. Dispose of hose if it fails initial inspection or fails *Testing for Performance*.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Remove excess dirt from hose.
- 2. Clean with damp rag. Pressure Wash if needed.
- 3. Apply a rubber protectant to prevent drying and cracking.

### B. Repair

• Replace gasket if necessary.

### **C.** Testing for Performance

Service pressure test:

- 1. Start pump.
- 2. Test for 3 minutes at 50 PSI.
- 3. Inspect hose for leaks.
- 4. Shut down pump.
- 5. Drain hose completely.

### D. Repackaging

- 1. Local cache option.
- 2. Protect male coupling threads.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Coupling – Double Male, 1" NPSH TO 1" NPSH

**NFES Status** 

Active

NFES#

000916

Category

Water Handling

Updated
Sat, 06/01/2024 - 12:00
Storage and Shelf Life Checks
None

# **Initial Inspection/Disposal Criteria**

- 1. Visual Inspects on male couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Ensure that rocker lugs are not stripped.
- 2. Return to stock if item is clean and unused.
- 3. Refurbish if coupling has been used, is dirty, and/or needs minor repair.
- 4. Dispose of item if it fails inspection or can't be repaired.

## **Refurbishment Procedures**

### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash, or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

## B. Repair

- 1. Male coupling if threads are damaged, try to file with a triangular file.
- 2. Lubricate with a dry lubricant, i.e. graphite.

#### **C.** Testing for Performance

- 1. Re-inspect male threads that have been repaired or "chased."
- 2. Male coupling attach to female coupling to ensure that threads operate smoothly.

### D. Repackaging

1. 60 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000710, #000916.

Water Handling Equipment Guide, PMS 447-1

### Coupling – Double Male 1 1/2" NH-M (9-TPI)

**NFES Status** 

Active

NFES#

000856

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visual Inspects on male couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Ensure that rocker lugs are not stripped.
- 2. Return to stock if item is clean and unused.
- 3. Refurbish if coupling has been used, is dirty, and/or needs minor repair.
- 4. Dispose of item if it fails inspection or can't be repaired.

### **Refurbishment Procedures**

### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash, or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

### B. Repair

1. Male coupling — if threads are damaged, try to file with a triangular file.

### **C.** Testing for Performance

- 1. Re-inspect male threads that have been repaired or "chased."
- 2. Male coupling attach to female coupling to ensure that threads operate smoothly.
- 3. Female coupling ensure that threads operate smoothly.

### D. Repackaging

1. 20 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000856, #000855 and #000857.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### Coupling – Double Female, 3/4" GHT

**NFES Status** 

Active

NFES#

007618

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

1. Visual Inspects on male couplings:

- a. Inspect for worn or damaged threads.
- b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
- c. Ensure that rocker lugs are not stripped.
- 2. Visual Inspects on female couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Inspect for gaskets.
  - d. Ensure that swivel operates properly.
  - e. Ensure that rocker lugs are not stripped.
- 3. Return to stock if item is clean and unused.
- 4. Refurbish if coupling has been used, is dirty and/or needs minor repair.
- 5. Dispose of item if it fails inspection or can't be repaired.

## **Refurbishment Procedures**

### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

### B. Repair

- 1. Male coupling--if threads are damaged, try to file with a triangular file.
- 2. Female coupling--replace gaskets if necessary.
- 3. Lubricate with a dry lubricant, i.e. graphite.

## C. Testing for Performance

- 1. Re-inspect male threads that have been repaired or "chased."
- 2. Male coupling-- attach to female coupling to ensure that threads operate smoothly.
- 3. Female coupling--ensure that threads operate smoothly.

### D. Repackaging

1. 20 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000856, #000855 and #000857.

- 2. 60 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000710, #000916.
- 3. Use local cache option for NFES #007618.

#### Reference

Water Handling Equipment Guide, PMS 447-1

### **Coupling – Double Female, 1" NPSH (11 1/2 TPI)**

**NFES Status** 

Active

NFES#

000710

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visual Inspects on female couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Inspect for gaskets.
  - d. Ensure that swivel operates properly.
  - e. Ensure that rocker lugs are not stripped.
- 2. Return to stock if item is clean and unused.
- 3. Refurbish if coupling has been used, is dirty, and/or needs minor repair.
- 4. Dispose of item if it fails inspection or can't be repaired.

## **Refurbishment Procedures**

### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash, or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

### B. Repair

1. Female coupling — replace gaskets if necessary.

### **C.** Testing for Performance

1. Female coupling — ensure that threads operate smoothly.

### D. Repackaging

1. 60 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000710, #000916.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Coupling – Double Female 1 1/2" NH-F (9 TPI)

**NFES Status** 

Active

NFES#

000857

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visual Inspects on female couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Inspect for gaskets.
  - d. Ensure that swivel operates properly.
  - e. Ensure that rocker lugs are not stripped.
- 2. Return to stock if item is clean and unused.
- 3. Refurbish if coupling has been used, is dirty, and/or needs minor repair.
- 4. Dispose of item if it fails inspection or can't be repaired.

### **Refurbishment Procedures**

#### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

### B. Repair

1. Female coupling — replace gaskets if necessary.

### C. Testing for Performance

- 1. Re-inspect male threads that have been repaired or "chased."
- 2. Male coupling attach to female coupling to ensure that threads operate smoothly.
- 3. Female coupling ensure that threads operate smoothly.

#### D. Repackaging

1. 20 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000856, 000855 and 000857.

### Coupling – Double Female 1 1/2" NPSH (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000855

Category

Water Handling

Updated

Sat, 06/01/2024 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visual Inspects on male couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Ensure that rocker lugs are not stripped.
- 2. Visual Inspects on female couplings:
  - a. Inspect for worn or damaged threads.
  - b. Inspect coupling to ensure it has not been smashed, bent, or cracked.
  - c. Inspect for gaskets.
  - d. Ensure that swivel operates properly.
  - e. Ensure that rocker lugs are not stripped.
- 3. Return to stock if item is clean and unused.
- 4. Refurbish if coupling has been used, is dirty and/or needs minor repair.
- 5. Dispose of item if it fails inspection or can't be repaired.

### **Refurbishment Procedures**

### A. Cleaning Procedures

- 1. Wash and clean of mud, dirt, and grease.
- 2. Clean in parts washer, high pressure wash or clean in a sink with dishwashing detergent using a brush or scouring pad.
- 3. Rinse thoroughly and let dry.

### B. Repair

- 1. Female coupling replace gaskets if necessary.
- 2. Lubricate with a dry lubricant, i.e. graphite.

### **C.** Testing for Performance

1. Female coupling — ensure that threads operate smoothly.

## D. Repackaging

- 1. 20 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000856, #000855 and #000857.
- 2. 60 Each in NFES #008064 carton (10" x 8" x 6") for the following NFES: #000710, #000916.
- 3. Use local cache option for NFES #007618.

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Clamp – Hose, Shut-off, 1" - 1 1/2" Hoses

**NFES Status** 

Active

NFES#

000046

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for obvious/damage.
- 2. Inspect metal components for cracks or deformation.
- 3. Inspect metal components for burn marks.
- 4. Inspect all pins for excessive wear (very loose fittings). Replace the pins or dispose of.
- 5. Return to stock if item does not show any signs of use and passes visual inspection.
- 6. Refurbish if item has been used and/or damage is repairable.
- 7. Dispose of item if it fails initial inspection.

# **Refurbishing Procedures**

### A. Cleaning

• Clean with a parts washer, high pressure washer, or with a mild detergent and scrub with a brush or scouring pad.

### B. Repair

• Replace worn or broken pins

#### **C.** Testing for Performance

None

### D. Repackaging

None

#### Reference

Water Handling Equipment Guide, PMS 447-1

Bag - Slingable, Water, Suppression, 55 GL

**NFES Status** 

Active

NFES#

000437

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Dispose of Cordura outer bag if there are:
  - Any holes, cuts, tears, burns, or torn seams not economically repairable.
  - Any zipper or Velcro closures that do not close properly.
  - Unsightly dirt or fuel stain that cleaning cannot eliminate.
  - Buckle does not function properly (repair, replace or dispose).
  - Fill and drain hardware.
    - o Inspect fill and drain fittings for proper function and tight seal.
    - Replace or repair any part missing or damaged.
  - Liners:
    - Remove and dispose of any used liners.
    - Inspect condition of spare liner. Unless the integrity of the liner is in question, do not remove from the sealed bag to make this inspection.
  - Return to stock if all components are accounted for and the bag is clean and unused.
  - Refurbish if dirty or used and repairs can be made.
  - Dispose of item if it fails inspection or is damaged beyond repair.

### A. Cleaning- CLASS 2 CORDURA (MACHINE WASH OK)

- 1. Allow any mud or loose dirt to dry, and remove using a stiff-bristle brush. If stains remain, wash as recommended below.
- 2. Remove light oil and dirt stains by brushing with a solution of warm water and a mild detergent, rinse thoroughly, and hang to dry. "Mild detergents" includes most home laundry detergents that contain no chlorine bleach or added scents.

- 3. For heavier oil or grease, soak in water-soluble biodegradable degreaser for at least 30 minutes, brush with a bristle brush, rinse thoroughly, and hang to dry.
- 4. If machine washing, use only cold water on a gentle cycle and air dry.
- 5. Where no other method is cleaning the fabric, wash with pressure washer set at wide fan, warm water, and only allow nozzle close enough as necessary for cleaning, the further away the better for the fabric.

#### DO NOT MACHINE DRY. DO NOT USE BLEACH.

Fill and drain hardware:

• For NFES #000437 wash fill and drain hardware thoroughly, rinse and dry completely, reseal, place in plastic storage bag and put in zipper pocket.

### B. Repair

- 1. Repair holes, cuts, tears, and broken seams.
- 2. Replace nonfunctioning buckles.
- 3. Replace Velcro or zipper if it does not adhere and/or it does not operate smoothly and if it is economical to do so.
- 4. Replace used liners: for NFES #000437 use NFES #000438.

### C. Testing for Performance

• Test any replacement buckle, zipper, Velcro or fitting.

#### D. Repackaging

• Use NFES #008070 carton (18" x 15" x 5.5").

Reference

Water Handling Equipment Guide, PMS 447-1

#### Bag - Slingable, Water, 72 GL, Non-Potable

**NFES Status** 

Active

NFES#

000426

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- Visually inspect for missing components, or need for repair such as: straps, hoses, spigot, cap, and gasket.
- 2. Return to stock if in unused condition.
- 3. Refurbish if dirty or need repair.
- 4. Dispose of item if it fails inspection and/or is damaged beyond repair.

## **Refurbishing Procedures**

#### A. Cleaning

- 1. Clean exterior of tank thoroughly with filler cap attached.
- 2. Support or hang tank with spigot closed, remove cap and fill with water to rinse out tank.
- 3. Replace cap and shake bag vigorously until all foreign matter is removed.
- 4. Drain completely through hose and spigot.
- 5. Invert bag after removing cap, open spigot and empty as much water as possible.
- 6. Let dry inverted for 1 hour in sun, if possible.

### B. Repair

- 1. Fill with air and look for leaks, visually inspect bags for rips, tears, or obvious defects.
- 2. Use a black permanent marker to indicate damage, keeping all markings simple and professional.
- 3. In a well ventilated area clean area around damaged spot with lacquer thinner or other suitable cleaner.
- 4. Apply suitable glue (manufacturer's recommendation) to both surfaces (patch and tank).
- 5. Let dry until tacky.
- 6. Place patch on damaged area and apply pressure with roller or suitable device for at least 1 minute.

- 7. Repair or replace any damaged components.
- 8. Ensure bags are stenciled with NFES number and "non-potable" or "suppression use only".

### **C.** Testing for Performance

- 1. Re-inspect any patches or repairs.
- 2. Fill with air to test for leaks.

#### D. Repackaging

- Ensure that tank is stenciled visibly with the words "NON-POTABLE" or SUPPRESSION USE ONLY" and proper NFES # is stenciled on tank.
  - Use NFES #008070 carton (18" x 15" x 5.5") for NFES #000426.
  - o For NFES #006017 and #006021, use local cache option for carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

#### Bag – Slingable, Water, 360 GL, Non-Potable

**NFES Status** 

Active

NFES#

006021

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for missing components, or need for repair such as: straps, hoses, spigot, cap, and gasket.
- 2. Return to stock if in unused condition.
- 3. Refurbish if dirty or need repair.
- 4. Dispose of item if it fails inspection and/or is damaged beyond repair.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean exterior of tank thoroughly with filler cap attached.
- 2. Support or hang tank with spigot closed, remove cap and fill with water to rinse out tank.
- 3. Replace cap and shake bag vigorously until all foreign matter is removed.
- 4. Drain completely through hose and spigot.
- 5. Invert bag after removing cap, open spigot and empty as much water as possible.
- 6. Let dry inverted for 1 hour in sun, if possible.

#### B. Repair

- 1. Fill with air and look for leaks, visually inspect bags for rips, tears, or obvious defects.
- 2. Use a black permanent marker to indicate damage, keeping all markings simple and professional.
- 3. In a well ventilated area clean area around damaged spot with lacquer thinner or other suitable cleaner.
- 4. Apply suitable glue (manufacturer's recommendation) to both surfaces (patch and tank).
- 5. Let dry until tacky.
- 6. Place patch on damaged area and apply pressure with roller or suitable device for at least 1 minute.
- 7. Repair or replace any damaged components.
- 8. Ensure bags are stenciled with NFES number and "non-potable" or "suppression use only".

#### C. Testing for Performance

- 1. Re-inspect any patches or repairs.
- 2. Fill with air to test for leaks.

#### D. Repackaging

• Ensure that tank is stenciled visibly with the words "NON-POTABLE" or SUPPRESSION USE ONLY" and proper NFES # is stenciled on tank.

- Use NFES #008070 carton (18" x 15" x 5.5") for NFES #000426.
- ∘ For NFES #006017 and #006021, use local cache option for carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

#### Bag – Slingable, Water, 270 GL, Non-Potable

**NFES Status** 

Active

NFES#

006017

Category

**Water Handling** 

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Visually inspect for missing components, or need for repair such as: straps, hoses, spigot, cap, and gasket.
- 2. Return to stock if in unused condition.
- 3. Refurbish if dirty or need repair.
- 4. Dispose of item if it fails inspection and/or is damaged beyond repair.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean exterior of tank thoroughly with filler cap attached.
- 2. Support or hang tank with spigot closed, remove cap and fill with water to rinse out tank.

- 3. Replace cap and shake bag vigorously until all foreign matter is removed.
- 4. Drain completely through hose and spigot.
- 5. Invert bag after removing cap, open spigot and empty as much water as possible.
- 6. Let dry inverted for 1 hour in sun, if possible.

#### B. Repair

- 1. Fill with air and look for leaks, visually inspect bags for rips, tears, or obvious defects.
- 2. Use a black permanent marker to indicate damage, keeping all markings simple and professional.
- 3. In a well ventilated area clean area around damaged spot with lacquer thinner or other suitable cleaner.
- 4. Apply suitable glue (manufacturer's recommendation) to both surfaces (patch and tank).
- 5. Let dry until tacky.
- 6. Place patch on damaged area and apply pressure with roller or suitable device for at least 1 minute.
- 7. Repair or replace any damaged components.
- 8. Ensure bags are stenciled with NFES number and "non-potable" or "suppression use only".

#### C. Testing for Performance

- 1. Re-inspect any patches or repairs.
- 2. Fill with air to test for leaks.

#### D. Repackaging

- Ensure that tank is stenciled visibly with the words "NON-POTABLE" or SUPPRESSION USE ONLY" and proper NFES # is stenciled on tank.
  - Use NFES #008070 carton (18" x 15" x 5.5") for NFES #000426.
  - For NFES #006017 and #006021, use local cache option for carton.

#### Reference

Water Handling Equipment Guide, PMS 447-1

#### Bag – Backpack Pump, with 2 Liners and Couplings

Active

NFES#

001197

Category

Water Handling

Updated

Thu, 03/01/2018 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

#### Bag

- 1. Inspect fabric and webbing for any holes, cuts, tears, burns, or torn seams that are not economically repairable, if any dispose of.
- 2. Inspect for any fastener missing or that does not provide adequate closure.
- 3. Inspect for excessive dirt or fuel stain that cleaning cannot eliminate, dispose of.
- 4. Inspect for any writings, drawings, and if so dispose of item.
- 5. Return to stock if item does not show any signs of use and passes visual inspection.
- 6. Refurbish if damage detected is repairable.
- 7. Dispose of item if unable to repair.

#### **Pump**

- 1. Inspect for obvious damage.
- 2. Inspect for burns and cracks if so dispose of.
- 3. Inspect for damaged threads, if beyond repair dispose of. Ensure tip is secured to wand with a 3"-4" length of ball chain
- 4. Place hose in water and pump handle to validate that pump works properly.
- 5. Return item to stock if it shows no sign of use or damage.
- 6. Dispose of item if unable to repair.

## **Refurbishing Procedures**

#### A. Cleaning

• CLASS 2 CORDURA (MACHINE WASH OK).

#### Bag

- 1. Allow any mud or loose dirt to dry, and remove using a stiff-bristle brush. If stains remain, wash as recommended below.
- 2. Remove light oil and dirt stains by brushing with a solution of warm water and a mild detergent, rinse thoroughly, and hang to dry. "Mild detergents" includes most home laundry detergents that contain no chlorine bleach or added scents.
- 3. For heavier oil or grease, soak in water-soluble biodegradable degreaser for at least 30 minutes, brush with a bristle brush, rinse thoroughly, and hang to dry.
- 4. If machine washing, use only cold water on a gentle cycle and air dry.
- 5. Where no other method is cleaning the fabric, wash with pressure washer set at wide fan, warm water, and only allow nozzle close enough as necessary for cleaning, the further away the better for the fabric.

#### DO NOT MACHINE DRY. DO NOT USE BLEACH.

#### **Pump**

- 1. Wash and clean all items of foreign matter, such as mud, dirt, and grease.
- 2. Clean in mild detergent with brush or scouring pad as needed.
- 3. Rinse thoroughly.

#### B. Repair

#### Bag

- 1. Replace nonfunctioning hardware.
- 2. Take new plastic liner (NFES #000597) out of pouch and replace old liner, insert a new liner into pouch.
- 3. Install rubber gasket on cap, to prevent leakage.
- 4. Replace O-ring.

#### **Pump**

- 1. If pump pressure is not sufficient, remove pump unit and replace O-rings.
- 2. Ensure quick connection on pump has proper seating.
- 3. Check hose connection to pump for tightness; if loose, use a hose clamp.
- 4. Replace length of ball chain between wand and removable tip if missing.
- 5. Check supply hose on pump assembly for obstructions and tight connections, bent push rods, and clogged tips.
- 6. Check spring and ball bearing.
- 7. Lubricate slide with appropriate lubricant, e.g., Chevron NLGI2 or equivalent.

#### C. Tests for Performance

• None

#### D. Repackaging

- 1. Packaging is 6 each of NFES #001149 in NFES #002030 carton (24" x 16" x 12").
- 2. Suggested packaging of 10 EA of NFES #001197 in NFES #002007 carton (24" x 16" x 16").
- 3. Suggested packaging of NFES #000151, 10 each in NFES #000385 carton (7.25" x 9.25" x 26") or 25 each in NFES #002006 carton (23" x 19" x 10").

Reference

Water Handling Equipment Guide, PMS 447-1

#### Applicator – Water, 2-Piece, 3/4" NH, 48" Long

**NFES Status** 

Active

NFES#

000720

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks and large burrs.
- 2. Inspect for fire damage, burn marks or melted areas.
- 3. Inspect threads for damage, if threads are crossed or show signs of excessive wear (loose fitting or hard to connect to other fittings).
- 4. Return to stock if item passes inspection, is clean and shows no sign of use.
- 5. Refurbish if dirty, gasket is missing or needs replacing.
- 6. Dispose of item if unable to repair.

## **Refurbishing Procedures**

#### A. Cleaning

- 1. All items will be washed and cleaned of mud, dirt, and grease.
- 2. Clean with a mild detergent with bristle brush or scouring pad; pressure wash as needed.
- 3. Rinse in thoroughly and let dry.

#### B. Repair

• Replace gaskets if missing, cracked, damaged, or stiff.

#### C. Testing for Performance

• Assemble 2-piece applicator.

#### D. Repackaging

• Suggested packing 18 each in NFES #000385 carton (7.25" x 9.25" x 26").

#### Reference

Water Handling Equipment Guide, PMS 447-1

Adapter -1 1/2" NH-F, (9 TPI) TO 1 1/2" NPSH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000006

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks and large burrs.
- 2. Inspect for fire damage, burn marks or melted areas.
- 3. Inspect threads for damage, if threads are crossed or show signs of excessive wear (loose fitting or hard to connect to other fittings).
- 4. Return to stock if item passes inspection, is clean and shows no sign of use.
- 5. Refurbish if dirty, gasket is missing or needs replacing and/or damage is superficial.
- 6. Dispose of item if it fails inspection or is unable to repair.

### **Refurbishing Procedures**

#### A. Cleaning

- Clean in parts washer or high pressure wash with warm water and a mild detergent using a brush or scouring pad.
- 2. Rinse in clean water and let dry.

#### B. Repair

- 1. Replace gasket if missing, cracked, damaged, or stiff.
- 2. If male threads are damaged try using a triangle file to remove small burrs or dings. If it doesn't fit smoothly, dispose of.

### **C.** Testing for Performance

None

### D. Repackaging

- 1. Package to protect threads.
- 2. Pack 60 each in NFES # 008064 carton (10" x 8" x 6").

#### Reference

Water Handling Equipment Guide, PMS 447-1

## Adapter – 1" NPSH-F,(11 1/2 TPI) TO 1" NH-M(8 TPI)

**NFES Status** 

Active

NFES#

000003

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks and large burrs.
- 2. Inspect for fire damage, burn marks or melted areas.
- 3. Inspect threads for damage, if threads are crossed or show signs of excessive wear (loose fitting or hard to connect to other fittings).
- 4. Return to stock if item passes inspection, is clean and shows no sign of use.
- 5. Refurbish if dirty, gasket is missing or needs replacing and/or damage is superficial.
- 6. Dispose of item if it fails inspection or is unable to repair.

# **Refurbishing Procedures**

### A. Cleaning

- 1. Clean in parts washer or high pressure wash with warm water and a mild detergent using a brush or scouring pad.
- 2. Rinse in clean water and let dry.

#### B. Repair

- 1. Replace gasket if missing, cracked, damaged, or stiff.
- 2. If male threads are damaged try using a triangle file to remove small burrs or dings. If it doesn't fit smoothly, dispose of.

### **C.** Testing for Performance

None

### D. Repackaging

- 1. Package to protect threads.
- 2. Pack 60 each in NFES # 008064 carton (10" x 8" x 6").

Reference

Water Handling Equipment Guide, PMS 447-1

#### Adapter – 1" NH-F,(9 TPI) TO 1" NPSH-M (11 1/2 TPI)

**NFES Status** 

Active

NFES#

000004

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

## **Initial Inspection/Disposal Criteria**

- 1. Inspect for cracks and large burrs.
- 2. Inspect for fire damage, burn marks or melted areas.
- 3. Inspect threads for damage, if threads are crossed or show signs of excessive wear (loose fitting or hard to connect to other fittings).
- 4. Return to stock if item passes inspection, is clean and shows no sign of use.
- 5. Refurbish if dirty, gasket is missing or needs replacing and/or damage is superficial.
- 6. Dispose of item if it fails inspection or is unable to repair.

## **Refurbishing Procedures**

### A. Cleaning

- Clean in parts washer or high pressure wash with warm water and a mild detergent using a brush or scouring pad.
- 2. Rinse in clean water and let dry.

### B. Repair

- 1. Replace gasket if missing, cracked, damaged, or stiff.
- 2. If male threads are damaged try using a triangle file to remove small burrs or dings. If it doesn't fit smoothly, dispose of.

#### C. Testing for Performance

None

### D. Repackaging

- 1. Package to protect threads.
- 2. Pack 60 each in NFES # 008064 carton (10" x 8" x 6").

Reference

### Adapter - 1 1/2" NPSH-F, (11 1/2 TPI) TO 1 1/2" NH-M (9TPI)

**NFES Status** 

Active

NFES#

000007

Category

Water Handling

Updated

Mon, 05/01/2017 - 12:00

Storage and Shelf Life Checks

None

# Initial Inspection/Disposal Criteria

- 1. Inspect for cracks and large burrs.
- 2. Inspect for fire damage, burn marks or melted areas.
- 3. Inspect threads for damage, if threads are crossed or show signs of excessive wear (loose fitting or hard to connect to other fittings).
- 4. Return to stock if item passes inspection, is clean and shows no sign of use.
- 5. Refurbish if dirty, gasket is missing or needs replacing and/or damage is superficial.
- 6. Dispose of item if it fails inspection or is unable to repair.

## **Refurbishing Procedures**

#### A. Cleaning

- 1. Clean in parts washer or high pressure wash with warm water and a mild detergent using a brush or scouring pad.
- 2. Rinse in clean water and let dry.

#### B. Repair

- 1. Replace gasket if missing, cracked, damaged, or stiff.
- 2. If male threads are damaged try using a triangle file to remove small burrs or dings. If it doesn't fit smoothly, dispose of.

## **C.** Testing for Performance

• None

### D. Repackaging

- 1. Package to protect threads.
- 2. Pack 60 each in NFES # 008064 carton (10" x 8" x 6").

Reference

Water Handling Equipment Guide, PMS 447-1