**5100-95B November, 1998**Supercedes
5100-95A
June 1997

## U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

#### **SPECIFICATION**

#### LINERS, REPLACEABLE, FOR 5 AND 55 GALLON WATER BAGS

- 1. SCOPE AND CLASSIFICATION
- 1.1 <u>Scope</u>. This specification covers replaceable plastic liners to be used in 55 gallon drinking water bags and 55 gallon and 5 gallon suppression water bags.
- 1.2 Classification. The replaceable liners shall be of the following types, as specified (see 6.2):

Type I - for 55 gallon drinking water bag

Type II - for 55 gallon suppression water bag

Type III - for 5 gallon suppression water bag

- 2. APPLICABLE DOCUMENTS
- 2.1 Government documents.
- 2.1.1 <u>Specifications, standards, and handbooks</u>. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those in effect on the date of the solicitation.

#### **SPECIFICATIONS**

**FEDERAL** 

L-P-375 - Plastic Film, Flexible, Vinyl Chloride

**STANDARDS** 

**FEDERAL** 

FED-STD-123 - Marking for Shipment (Civil Agencies)

FED-STD-376 - Preferred Metric Units for Use By the Federal Government

Unless otherwise indicated, copies of federal specifications and standards are available from the Defense Automated Printing Service, Attn: DODSSP, Building 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094.

Beneficial comments (recommendations, additions, deletions) and any pertinent data that may be used in improving this document should be addressed to: USDA Forest Service, Missoula Technology and Development Center, Building 1, Fort Missoula, Missoula, MT 59804-7294 by using the Specification Comment Sheet at the end of this document or by letter.

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those in effect on the date of the solicitation.

#### **DOCUMENTS**

#### U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

21 CFR 174-182 - Food and Drugs

The Code of Federal Regulations is for sale on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325. Reprints of certain regulations may be obtained from the federal agency responsible for issuing them.

#### **DRAWINGS**

#### USDA FOREST SERVICE

MTDC-864 - Liner, 5 Gallon, Suppression Water Bag MTDC-888 - Liner, 55 Gallon, Drinking Water Bag MTDC-890 - Liner, 55 Gallon, Suppression Water Bag

Copies of Forest Service drawings are available from the preparing activity (see 6.6).

2.2 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those in effect on the date of the solicitation.

#### AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

ANSI/ASQC Z1.4 - Sampling Procedures and Tables for Inspection By Attributes

Copies are available from the American Society for Quality Control, 611 East Wisconsin Ave., Milwaukee, WI 53202.

#### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 882 - Tests for Tensile Properties of Thin Plastic Sheeting

D 1004 - Test for Initial Tear Resistance of Plastic Film and Sheeting

D 1790 - Test for Brittleness Temperature of Plastic Film by Impact

D 1974 - Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers

D 3951 - Standard Practice for Commercial Packaging

D 5118 - Standard Practice for Fabrication of Fiberboard Shipping Boxes

Copies are available from ASTM, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959.)

#### NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT

National Motor Freight Classification

Copies are available from the American Trucking Associations, Inc., 2200 Mill Rd., Alexandria, VA 22314.

Non-Government standards and other publications normally are available from the organizations that prepare and distribute the documents. These documents also may be available in or through libraries or other informational services.

2.3 <u>Order of precedence</u>. In the event of conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

#### 3. REQUIREMENTS

- 3.1 <u>First article</u>. Unless otherwise specified (see 6.2), sample(s) shall be subjected to first article inspection (see 6.3) in accordance with 4.3.
- 3.2 <u>Materials and components</u>. Materials and components shall be as specified herein and in the applicable drawing, MTDC-864, MTDC-888, or MTDC-890.

#### 3.2.1 Liners.

- 3.2.1.1 <u>Type I liner material</u>. The type I liner shall be fabricated from flexible polyolefin film formulated from virgin resin and nontoxic FDA listed materials complying with 21 CFR 174-182. The film shall have a suede emboss and shall measure  $0.0120 \pm 0.0012$  inch thick after embossing. Film density shall be 1.11  $\pm 0.04$  g/cc. The film shall conform in all respects to Achilles USA style no. CRT-165 (see 6.4). The polyolefin film shall have a green tint.
- 3.2.1.1.1 <u>Physical requirements</u>. The liner film shall conform to the physical requirements in table I when tested as specified in 4.5.1.

Table I - Physical requirements for type I liner material

Characteristic Requirement
Tensile strength 2300 psi minimum

100% Modulus

Minimum 500 psi Maximum 700 psi

Elongation

Minimum 500% Maximum 800%

Graves tear 230 lb/inch minimum

Cold crack -60°F

- 3.2.1.1.2 <u>Quality of drinking water</u>. The liner film shall be pre-approved by the preparing activity (see 6.6) as one that imparts no objectionable odor or taste to the water. Once such approval is granted, the contractor shall certify that the liners have been fabricated using the pre-approved formulation (see 4.3.2).
- 3.2.1.2 Type II and type III liner material. The type II and type III liners shall be fabricated from general purpose calendered polyvinyl chloride film conforming to type I, class 1 of L-P-375 except that the film shall have a taffeta emboss, the plasticizer shall be 52 parts  $\pm 1$  part per 100 parts resin, and tear resistance (Graves) shall be 3.4 pounds minimum each direction. The following testing is not required: Clark stiffness, extraction in soapy water, resistance to weathering, lacquer lifting, and crocking. The film shall be 0.0120  $\pm 0.0012$  inch thick after embossing (see 6.4). The color of the film shall be natural.
- 3.2.2 <u>Female fitment</u>. The female fitment for all three types shall be 95 durameter medical grade polyvinyl chloride. Fitments shall conform to Seattle Lighthouse for the Blind part no. LB 0051 (see 6.4). Minor discontinuities in the internal thread are permitted so long as a watertight seal is created when the fitment cap is firmly in place.
- 3.2.3 <u>Stabilizing ring</u>. The stabilizing ring shall be 6061-T6 aluminum tubing dimensioned as shown in the referenced drawings.
- 3.2.4 Fitment caps.
- 3.2.4.1 <u>Fitment cap for type I and type II liners</u>. The fitment cap shall be a high density polyethylene in a natural color conforming to Rieke part no. PPA-53-DBO (6.4).
- 3.2.4.2 <u>Fitment cap for type III liner</u>. The fitment cap for the type III liner shall conform to Seattle Lighthouse for the Blind part no. LB 0052 (see 6.4).
- 3.2.5 Gasket. The gaskets for the liners shall be Rieke part no. GK-093-W (6.4).
- 3.2.6 <u>Plug, 3/4 inch</u>. Plugs for the type I and type II liners shall be 3/4 inch (national pipe thread) polyethylene plastic. Plugs shall conform to Reike part no. PPA-11 (6.4).
- 3.3 <u>Liner construction</u>. The construction shall conform in all respects to drawings MTDC-864, MTDC-888, or MTDC-890 as applicable, and as specified herein. Figures of each type of liner (figs. 1-3) are included for information purposes only.
- 3.3.1 Type I liner. The type I liner shall measure 48 by 50 inches  $\pm 1/2$  inch in either dimension. Edge seals of the liner shall be radio frequency (RF) dialectric heat sealed 1/4 to 1/2 inch wide. The liner shall be fabricated with the suede emboss to the inside of the finished liner. During fabrication, sufficient heat shall be used to ensure complete seals. The finished seals shall not be brittle. The finished liner shall be clean, well finished and free from dirt, oil, foreign matter, rough or sharp edges, scratches, scuffs, cracks, creases, tears, cuts, holes, and blisters. The finished liner shall impart no objectionable odor or taste to the water (see 3.2.1.1.2).

- 3.3.2 Type II liner. The type II liner shall measure 48 by 50 inches  $\pm 1/2$  inch in either dimension. Edge seals of the liner shall be RF dialectric heat sealed 3/8 to 1/2 inch wide. The liner shall be fabricated with the taffeta emboss to the inside of the finished liner. During fabrication, sufficient heat shall be used to ensure complete seals. The finished seals shall not be brittle. The finished liner shall be clean, well finished, and free from dirt, oil, foreign matter, rough or sharp edges, scratches, scuffs, cracks, creases, tears, cuts, holes, and blisters.
- 3.3.3 Type III liner. The type III liner shall measure 20-1/2 by 24-1/2 inches  $\pm 1/2$  inch in either dimension. Edge seals of the liner shall be RF dialectric heat sealed 3/8 to 1/2 inch wide. The liner shall be fabricated with the taffeta embossed to the inside of the finished liner. During fabrication, sufficient heat shall be used to ensure complete seals. The finished seals shall not be brittle. The finished liner shall be clean, well finished, and free from dirt, oil, foreign matter, rough or sharp edges, scratches, scuffs, cracks, creases, tears, cuts, holes, and blisters.
- 3.3.4 <u>Integrity of seals</u>. For each liner type, edge seals and the female fitment/liner bond shall show no evidence of leakage when tested in accordance with 4.5.2.1.

#### 3.3.5 Liner components

- 3.3.5.1 <u>Female fitment</u>. Each female fitment shall be positioned on the liner as shown in the relevant drawing and shall be RF dialectric heat sealed in place. The heat seal shall be 3/8 to 1/2 inch wide. Sufficient heat shall be used to ensure a complete seal between fitment and liner without excessive heat that could cause the seal to become brittle.
- 3.3.5.1.1 <u>Stabilizing ring</u>. To improve the integrity of the female fitment, each such fitment shall be banded by a stabilizing ring (see 3.2.3).
- 3.3.5.2 <u>Fitment cap, gasket, and 3/4 inch plug</u>. Fitment caps for the type I and type II liners shall have 3/4 inch plugs threaded tightly in place. All three types of liners shall have the fitment caps, gaskets and plugs (except for type III liners which do not have plugs), threaded hand tight into each female fitment to keep liner interiors clean, sanitary, and free of foreign matter.

#### 3.4 Marking.

- 3.4.1 <u>Type I liner</u>. The words "DRINKING WATER ONLY" shall be printed on each liner on the same side as the fitments in a black marking medium compatible with the liner film in letters 1/2 inch high minimum.
- 3.4.2 <u>Type II and type III</u>. The words "NOT FOR DRINKING" shall be printed on each liner on the same side as the fitments in a black marking medium compatible with the liner film in letters 1/2 inch high minimum.
- 3.5 <u>Deviations and waivers</u>. Deviations and waivers to the materials or construction specified herein shall not be allowed unless authorized in writing by the contracting officer.
- 3.6 <u>Workmanship</u>. Liners shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the applicable quality levels. There shall be no defects that affect use, appearance, or serviceability.

- 3.7 <u>Metric products</u>. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch/pound units, provided they fall within the tolerances specified using conversion tables contained in the latest revision of FED-STD-376, and all other requirements of this specification are met.
- 3.8 <u>Recovered materials</u>. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation.

#### 4. QUALITY ASSURANCE PROVISIONS

- 4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations or tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his/her own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.
- 4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in this specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection as part of manufacturing operations is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.
- 4.1.2 <u>Responsibility for dimensional requirements</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for ensuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point or at all points in the manufacturing process necessary to ensure compliance with all dimensional requirements.
- 4.1.3 <u>Certificate of compliance</u>. Unless otherwise specified, certificates of compliance supplied by the manufacturer of the item, component, or material, listing the specified test method and test results obtained, may be furnished in lieu of actual lot by lot testing performed by the contractor (see 4.3.2). When certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certificate.
- 4.2 <u>Sampling for inspections and tests</u>. Sampling for inspections and tests shall be made in accordance with ANSI/ASQC Z1.4. The inspection level and acceptable quality level (AQL) shall be as specified. All liners of a given type manufactured at one time shall be considered a lot for purposes of acceptance inspection and test. A sample unit shall be one complete liner with fitment caps and plugs attached. (Plugs are required only on the type I and type II liners.)

- 4.3 <u>Quality conformance inspection</u>. Each end item lot shall be sampled and inspected as specified in 4.3.4.1 and 4.3.4.2. The packaging shall be inspected as specified in 4.4. Unless otherwise specified (see 6.2), the first articles submitted in accordance with 3.1 shall be inspected as specified in 4.3.4.1 and 4.3.4.2, except that packaging is not required when first articles are presented. The presence of any defect or failure to pass any test shall be cause for rejection of the first article.
- 4.3.1 <u>Component and material inspection</u>. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.
- 4.3.2 <u>Certification</u>. Unless otherwise specified (see 6.2), as part of first article presentations and lot inspections, it shall be acceptable for the contractor to provide certificates of compliance for all materials and components in lieu of lot by lot testing except as specified in 4.3.2.1. In addition, when the contractor changes component or material suppliers, a new certification based on actual test results shall be required. All certificates of compliance shall include:

Product description, including specification, type, class, and form when applicable Quantity purchased
Date of manufacture
Purchase source, address, and telephone number
Purchase date
Lot number traceable to materials used in production
Contract number

For the type I liner, the contractor shall provide certification that liners are manufactured using CRT-165 film or equivalent Forest Service approved materials that impart no odor or taste to the water (see 3.2.1.1.2).

- 4.3.2.1 <u>Test values</u>. To verify conformance with specification requirements as part of first article inspections, the contractor shall provide actual test values from the liner film supplier for the characteristics of the type I liner (see 3.2.1.1.1). When lot by lot testing is required, test reports traceable to each lot of film material used in production of the type I liners shall be maintained at the inspection point specified in the contract. Copies of these test reports shall be made available to the Government representative upon request.
- 4.3.3 <u>In-process inspection</u>. Inspection shall be made at any point or during any phase of the manufacturing process to determine whether liners or liner components are in accordance with specified requirements. Whenever nonconformance is noted, corrections shall be made to the parts affected and lot in process. Components that cannot be corrected shall be removed from production.
- 4.3.4 End item examination.
- 4.3.4.1 End item visual examination. The end items shall be examined for the defects listed in table II on a lot by lot basis. The lot size shall be expressed in units of complete water bag liners of each type. The inspection level shall be II, and acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0 for major defects and 15.0 for combined major and minor defects. Unless otherwise specified, defects shall be scored on an individual basis, i.e., each seam, each dimension, etc.

TABLE II. End item visual defects

|                                |   | Classific    | cation   |
|--------------------------------|---|--------------|----------|
| <u>Examine</u>                 | <u>Defect</u>   | <u>Major</u> | Minor    |
| Liner material                 | Wrong type or class   | X            |          |
|                                | Material not as specified Color not as specified  | Χ            | Χ        |
|                                | Emboss pattern missing or not as specified  | Χ            |          |
| Components and                 | Any component part omitted or not as specified, or any  |              |          |
| assembly                       | operation omitted or not as specified   | Χ            |          |
| Finished liner                 | Improper or brittle seals   | Χ            |          |
|                                | Any damage that could result in leakage   | Χ            |          |
|                                | Interior contaminated with dirt, oil, or foreign matter   | Χ            |          |
|                                | Not clean or well finished  | Χ            |          |
|                                | Emboss pattern not to the inside  | Χ            |          |
|                                | Not free of scratches, scuffs, cracks, creases, tears,  |              |          |
|                                | cuts, holes, and blisters   | Χ            |          |
| Female fitment                 | Not properly bonded to liner or not specified material  | Χ            |          |
|                                | Not positioned correctly on liner   | Χ            |          |
|                                | Stabilizing ring missing or not as specified  | Χ            |          |
| Fitment cap                    | Missing, or not material specified  | Χ            |          |
|                                | Color not as specified  |              | Χ        |
|                                | Not threaded tightly on female fitment  |              | Χ        |
| 3/4 inch plug                  | Missing or not material specified   | Χ            |          |
| (type I and<br>II liners only) | Not threaded tightly on fitment cap   |              | Х        |
| Marking                        | Omitted, incorrect, illegible, misplaced, smeared, or size of <a href="mailto:characters">characters not as specified</a> | X            | <u>.</u> |

4.3.4.2 <u>End item dimensional examination</u>. End items shall be examined for the defects listed in table III on a lot by lot basis. Only those dimensions that can be evaluated without damaging or disassembling the end items shall be examined. The inspection level shall be S-3. An AQL, expressed in terms of defects per hundred units, shall be 6.5 for major defects and 15.0 for combined major and minor defects.

TABLE III. End item visual defects

|                                   |  | Classification |        |
|-----------------------------------|--|----------------|--------|
| <u>Examine</u>                    | <u>Defect</u>  | <u>Major</u>   | Minor  |
| Dimensions<br>(overall)           | Smaller than nominal dimensions less applicable minus tolerance indicated on drawings, but not smaller than nominal dimensions less twice the applicable minus tolerances  Smaller than nominal dimensions less twice the applicable minus tolerance  Larger than nominal dimensions and applicable plus tolerance | X              | X<br>X |
| Component and location dimensions | Not within specified tolerance   |                | X .    |

4.4 <u>Packaging inspection</u>. An examination shall be made to determine that packing and marking comply with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully packaged except that it shall not be palletized and it need not be closed. Shipping containers fully packaged that have not been palletized shall be examined for defects in closure. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 and the AQL shall be 2.5 defects per hundred units.

Examine Defect
 Markings Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.
 Materials Any component missing or not as specified.

 Any component damaged, affecting serviceability.

 Workmanship Inadequate application of components, such as:

 incomplete closure of container flaps, improper taping, loose strapping, inadequate stapling.
 Bulged or distorted container.

 Contents Number of liners per container is more or less than required.

#### 4.5 Tests.

4.5.1 <u>Component testing of type I liner film</u>. The physical characteristics of the type I liner film shall be tested using the test methods referenced in table IV. All test reports shall contain the individual values used in expressing the final result. The lot size shall be expressed in units of 1 yard. The sample unit for test purposes shall be 2 continuous yards full width of the finished liner film. The lot shall be unacceptable if one or more sample units fail to meet any of the test requirements specified. The sample size shall be in accordance with the following:

| Lot size (yards) | Sample size (units) |  |  |
|------------------|---------------------|--|--|
| 250 or less      | 2                   |  |  |
| 251 up to 750    | 3                   |  |  |
| More than 750    | 4                   |  |  |

Table IV - Test Methods

| Characteristic   | Specification | Reference   |
|------------------|---------------|-------------|
|                  | requirement   | test method |
| Tensile strength | 3.2.1.1.1     | ASTM D 882  |
| 100% Modulus     | 3.2.1.1.1     | ASTM D 882  |
| Elongation       | 3.2.1.1.1     | ASTM D 882  |
| Graves tear      | 3.2.1.1.1     | ASTM D 1004 |
| Cold crack       | 3.2.1.1.1     | ASTM D 1790 |

- 4.5.2 End item testing. Unless otherwise specified, the sample size for testing shall be S-2.
- 4.5.2.1 <u>Leak test</u>. The leak test to determine compliance with 3.3.4 shall be conducted as follows: Fill required number of liner samples of each type being tested with water to capacity (55 gallons for type I and II liners, 5 gallons for type III liner). Screw fitment cap firmly in place and let liners sit for 4 hours. Check each liner for evidence of leaks. Any leak on any sample shall be cause to reject the lot of liners represented by that sample.

#### 5. PACKAGING

5.1 <u>Preservation</u>. Preservation shall be in accordance with ASTM D 3951 and as specified in the contract or purchase order.

### 5.1.1 Folding.

- 5.1.1.1 <u>Type I and type II liners</u>. The complete liner shall be folded in thirds side to side, then folded in half and folded in half again. The approximate size of the folded liner shall be 17 by 12 by 2 inches.
- 5.1.1.1.1 <u>Unit pack</u>. Each type I and type II liner prepared in accordance with 5.1 and folded in accordance with 5.1.1.1 shall be inserted into a snug-fitting clear polyethylene film bag. Bag closure shall be effected by heat sealing, with the seal made as close as possible to the open end and excess air within the bag being expelled during the final heat-sealing closure operation.
- 5.1.1.2 <u>Type III liner</u>. The complete liner, with fitment cap threaded onto the female fitment shall be folded in thirds side to side and then folded in thirds top to bottom. The approximate size of the folded liner shall be 8 by 7-1/2 by 2 inches.
- 5.1.1.2.1 <u>Unit pack</u>. Ten folded liners of each type prepared in accordance with 5.1 and folded in accordance with 5.1.1.2 shall be placed into a snug-fitting flat clear polyethylene film bag. Bag closure shall be effected by heat sealing, with the seal made as close as possible to the open end and excess air within the bag being expelled during the final heat-sealing closure operation.

5.2 Packing. Each type I or type II liner, or ten (10) type III liners, prepared in accordance with 5.1.1.1 or 5.1.1.2 as applicable, shall be packed in a close-fitting fiberboard box, minimum burst strength 275 psi (minimum edge crush test 44 pounds per inch width). Boxes shall be type CF (variety SW) or type SF, class domestic, style RSC meeting the requirements of the latest version of ASTM D 5118. Five (5) boxes of type I or type II liners, or ten (10) boxes of the type III liners, shall be packed in a close-fitting fiberboard box, minimum burst strength 275 psi (minimum edge crush test 44 pounds per inch width). The boxes shall be in compliance with the National Motor Freight Classification. Each box shall be closed in accordance with the latest version of ASTM D 1974, except that the inspection shall be in accordance with 4.4. The number of total liners per shipping container shall be as follows:

Type I and Type II - 5 each
Type III - 100 each

- 5.3 <u>Marking</u>. In addition to any special marking required (see 5.3.1) by the contract or purchase order, unit packs and shipping containers shall be marked in accordance with FED-STD-123, except that the National Fire Equipment System (NFES) number for the liner type shall appear on a separate line just below the national stock number. For the type I liner, NFES 0436; for the type II liner, NFES 0438; for the type III liner, NFES 0597. Bar code marking is required.
- 5.3.1 <u>Special box marking</u>. In addition to the markings specified in 5.3, each shipping container shall be clearly marked "STORE IN COOL, DRY PLACE" in 1-inch high minimum lettering. For the type I liners, the box shall also be clearly marked in 1 inch high minimum lettering with the month and year of manufacture and the words "USE WITHIN 3 YEARS OF MANUFACTURING DATE".

#### 6. NOTES

- 6.1 <u>Intended use</u>. These replaceable plastic liners are to be used in nylon water bags that are designed to provide water to crews engaged in field work activities, including wildland firefighting and conducting controlled burning operations.
- 6.2 Acquisition requirements. Acquisition documents should specify the following:
  - a. Title, number, and date of the specification.
  - b. Specify type and quantity of each liner required.
  - c. When first article samples are not required (see 3.1, 4.3, and 6.3).
  - d. When lot by lot testing is required in lieu of certificates of compliance (see 4.3.2).
  - e. Preservation, packing, and marking required in addition to specification requirements (see section 5).
- 6.3 <u>First article</u>. When first articles are required, they shall be inspected and approved under the appropriate provisions of Federal Acquisition Regulation 52.209. The first article shall consist of three completely assembled liners of each type covered under this specification and shall be preproduction samples. The contracting officer should include specific instructions regarding arrangements for selection, inspection, and approval of the first articles.

## 6.4 Suggested sources of supply.

Liner Film - Type I Liner Achilles USA, Inc. 1407 80th St., SW Everett, WA 98203

#### Liners

The Lighthouse for the Blind, Inc. 2501 South Plum St. Seattle, WA 98114

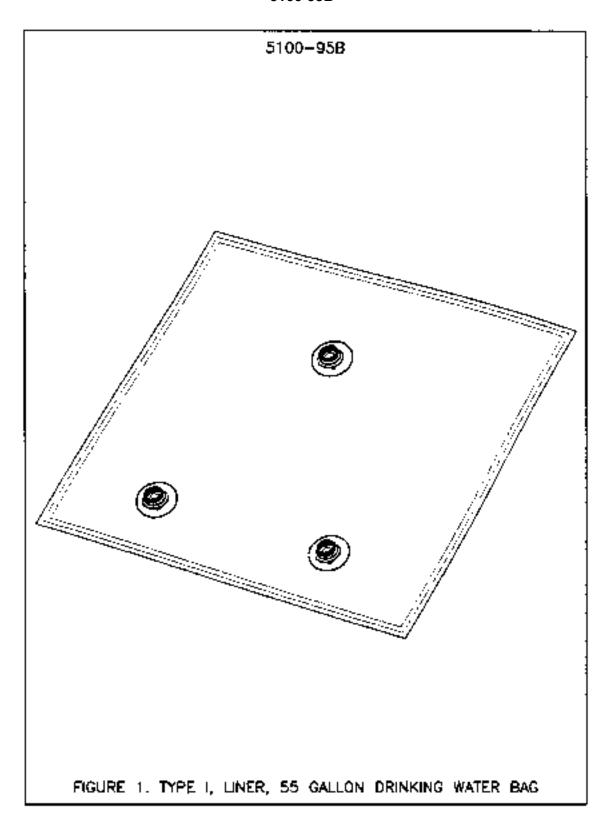
#### Female Fitments

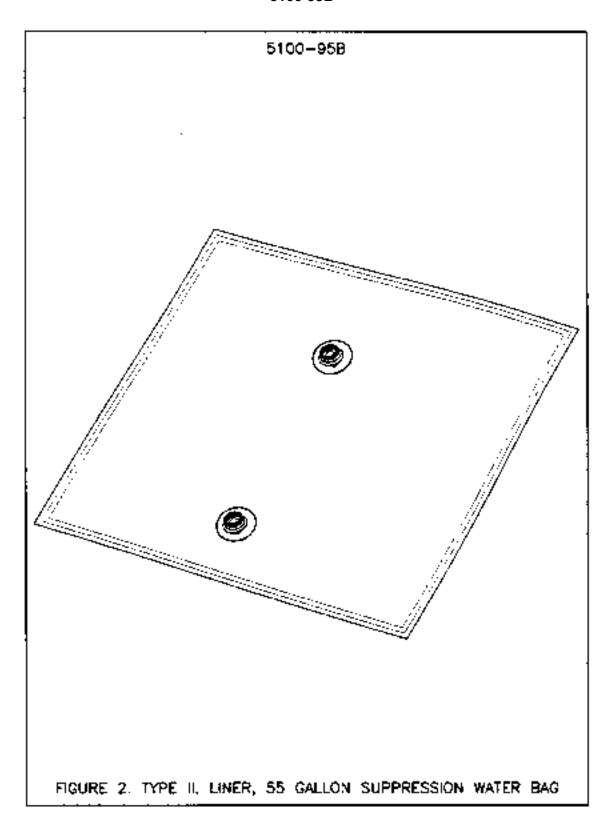
The Lighthouse for the Blind, Inc. 2501 South Plum St. Seattle, WA 98114

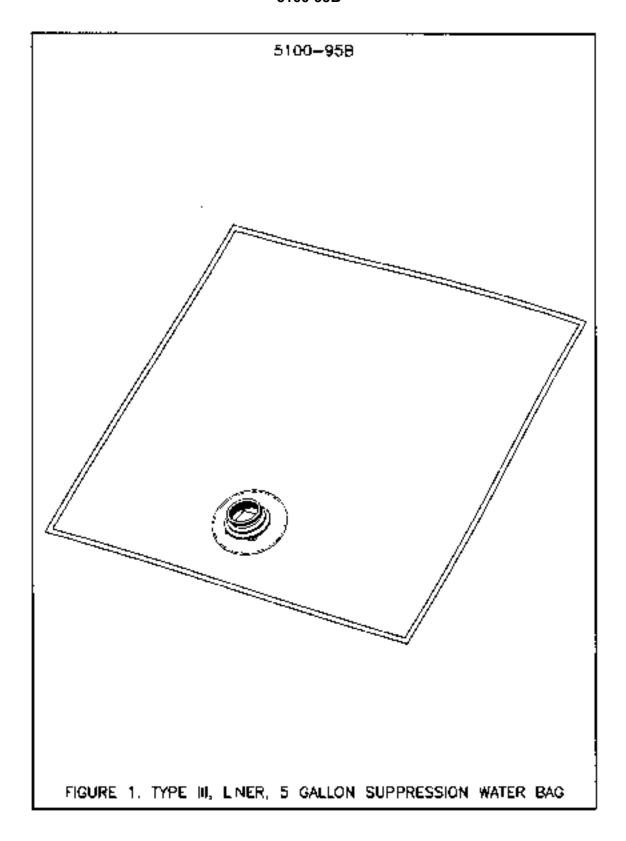
Fitment Caps and Plugs—Type I & II Liners Rieke Corp. 500 W. Seventh St. Auburn, IN 46706

<u>Fitment Caps</u>—Type III Liner The Lighthouse for the Blind, Inc. 2501 South Plum St. Seattle, WA 98114

- 6.5 <u>Notice</u>. When Government drawings, documents, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever.
- 6.6 <u>Preparing activity</u>. USDA Forest Service, Missoula Technology and Development Center, Building 1, Fort Missoula, Missoula, MT 59804-7294.







## USDA Forest Service

# Standardization Document Improvement Proposal

This form is provided to solicit beneficial comments that may improve this document and enhance it's use. Contractors, government activities, manufacturers, vendors, and users are invited to submit comments to:

> USDA Forest Service Missoula Technology and Development Center Bldg. 1, Fort Missoula Missoula, MT 59804-7294

Attach any additional pertinent information that may be of use in improving this document to this form and mail in a envelope. A response will be provided when the submitter includes their name and address.

NOTE: This form shall not be used to submit requests for waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the document, or to amend contractual requirements.

Document Identification: 5100-95B - LINERS, REPLACEABLE, FOR 5- AND 55-GALLON WATER BAGS

| Submitter's Name (Optional. Please print or type): Submitter's Organization and Address                                      | s: |
|--|----|
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