

METRIC
A-A-20332C
May 3, 2007
SUPERSEDING
A-A-20332B
April 18, 2002

COMMERCIAL ITEM DESCRIPTION

WATER, DRINKING, EMERGENCY

The U.S. Department of Agriculture (USDA) has authorized the use of this Commercial Item Description.

1. SCOPE. This Commercial Item Description (CID) covers emergency drinking water, packed in commercially acceptable containers, suitable for use by Federal, State, local governments, and other interested parties; and as a component of operational rations.

2. PURCHASER NOTES.

2.1 Purchasers *shall specify* the following:

- Type(s), size(s), and class(es) of emergency drinking water required (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.2).
- Manufacturer's/distributor's certification (Sec. 9.1) or Government certification (Sec. 9.2).

2.2 Purchasers *may specify* the following:

- Packaging requirements other than commercial (Sec. 10).

3. CLASSIFICATION. The emergency drinking water shall conform to the following list which shall be specified in the solicitation, contract, or purchase order.

Types, sizes, and classes.

Type I - Disposable pouch

Size A - 118 ml (4.0 fl oz)

Size B - 125 ml (4.2 fl oz)

Size C - Other

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Type II - Rigid plastic container

Size A - 118 ml (4.0 fl oz)

Size B - 125 ml (4.2 fl oz)

Size C - 500 ml (16.9 fl oz)

Size D - Other

Type III - Other

Class 1 - Thermoprocessed (Type I)

Class 2 - Ozone (O₃)

Class 3 - Ultraviolet light

Class 4 - Hot fill

Class 5 - Other Methods of Disinfection

4. MANUFACTURER'S/DISTRIBUTOR'S NOTES. Manufacturer's/distributor's products shall meet the requirements of the:

- Salient characteristics (Sec. 5).
- Analytical requirements: *as specified by the purchaser* (Sec. 6).
- Manufacturer's/distributor's product assurance (Sec. 7).
- Regulatory requirements (Sec. 8).
- Quality assurance provisions: *as specified by the purchaser* (Sec. 9).
- Packaging requirements other than commercial: *as specified by the purchaser* (Sec.10).

5. SALIENT CHARACTERISTICS.

5.1 Source. Water used in processing this product shall originate from a source approved by the Environmental Protection Agency (EPA), or the governmental agency having jurisdiction.

5.2 Treatment. Any treatment, other than disinfection, to lower the Maximum Contaminant Levels (MCL) shall be in accordance with EPA regulations (40 CFR Parts 141 to 149), or the governmental agency having jurisdiction.

5.3 Processing. The water shall be prepared, processed, and packaged in establishments meeting the requirements of 21 CFR Part 129 - Processing and Bottling of Bottled Drinking Water. Additionally, Type I shall be processed in accordance with the methods in 21 CFR Part 113 - Thermally Processed Low Acid Foods Packaged in Hermetically Sealed Containers. The water shall be processed and packaged so that all requirements of these standards are met. The water shall remain pure and uncontaminated for a period of at least five years in storage at a temperature ranging from -30°C (-22°F) to +65°C (149°F).

5.3.1 Class 1, Thermoprocessed. Thermoprocessed filled and sealed flexible pouches shall be thermoprocessed until a sterilization assurance given by a value of (F_0) of not less than 6.0 has been achieved.

5.3.2 Class 2, Ozone (O_3). Ozone (O_3) shall be added in a manner consistent with 21 CFR Part 184.

5.3.3 Class 3, Ultraviolet light. The ultraviolet light shall be operated and maintained in accordance with the manufacturer's directions.

5.3.4 Class 4, Hot fill. The water shall be not less than 82°C (180°F), or more than 93°C (200°F).

5.3.5 Class 5, Other Methods of Disinfection. Other methods of disinfection may be used provided the water complies with EPA regulations (40 CFR Parts 141 to 149) and finished product requirements.

5.4 Finished product. The finished product shall be prepared and tested for commercial sterilization in accordance with the Good Manufacturing Practices as regulated by the Food and Drug Administration (FDA) under the Food and Drug Cosmetic Act. The product shall be palatable, potable, and free from visible sediment, turbidity, and have been processed in accordance with the methods in 21 CFR Part 129 and 21 CFR Part 113, according to the type of drinking water specified. The emergency drinking water shall conform to 21 CFR Part 165 - Requirements for Specific Standardized Beverages, be properly processed, odorless, colorless, and shall be hermetically sealed in a non-contaminating container.

5.4.1 Flavor and odor. The emergency drinking water shall be free from objectionable foreign flavors and odors (see Sec. 6.1.7).

5.4.2 Color and turbidity. The emergency drinking water shall be colorless and have a Nephelometer Turbidity Unit (NTU) less than or equal to 1.

5.5 Age requirement. Unless otherwise specified in the solicitation, contract, or purchase order, the emergency drinking water shall not be more than 90 days old at time of delivery.

5.6 Foreign material. The emergency drinking water shall be clean and free from foreign material including, but not limited to, packaging materials, adhesives, organic particles, or artifacts due to processing.

6. ANALYTICAL REQUIREMENTS.

6.1 Analytical and microbiological requirements. Unless otherwise specified in the solicitation, contract, or purchase order, the analytical and microbiological requirements for the emergency drinking water shall be as follows:

6.1.1 pH. The pH value of the emergency drinking water shall be not less than 6.0 nor more than 8.0.

6.1.2 Sodium content. The sodium content of the emergency drinking water shall be not more than 160 mg/L Sodium (Na).

6.1.3 Chloride content. The chloride content of the emergency drinking water shall be not more than 250 mg/L of Chloride (Cl).

6.1.4 Coliforms. The total *coliform* count shall be not more than 0 per 100 milliliters.

6.1.5 Standard plate count. The standard plate count shall be not more than 200 per milliliter.

6.1.6 Turbidity. Not to exceed 1 NTU.

6.1.7 Foreign odor. Odor of the emergency drinking water shall not exceed 3 Threshold Odor Numbers (T.O.N.).

6.2 Product verification. When USDA or other designated governmental agency verification of analytical and microbiological requirements is specified in the solicitation, contract, or purchase order, the following procedures will be followed.

6.2.1 Sampling procedures for pH, sodium, chloride, and turbidity analysis. Analysis for pH, sodium, chloride, and turbidity shall be performed on a composite sample. The composite sample shall be 3.8 liters (1 gallon) prepared from five randomly selected subsamples. Subsamples shall be a minimum of one pouch/container and shall contain the appropriate number of pouches/containers to yield a 3.8 liter (1 gallon) sample when composited.

6.2.2 Sampling procedures for Coliforms, standard plate count, and foreign odor. Analysis for *Coliforms*, standard plate count, and foreign odor shall be performed on five individual samples.

6.3 Analytical and microbiological testing. When specified in the solicitation, contract, or purchase order, the analyses shall be made in accordance with the following methods from the Official Methods of Analysis of the AOAC International, the Standard Methods for the

Examination of Water and Wastewater (SM), or the U.S. EPA Drinking Water Methods for Chemical Contaminants:

<u>Test</u>	<u>Method 1/</u>	<u>Additional methods 2/</u>
pH	973.41	SM 4500H-B, EPA 150.1
Sodium	973.54	EPA 200.7
Chloride	SM 4500-Cl-B	SM 4110B, EPA 300.0
Total <i>Coliforms</i>	SM 9221B	SM 9222B, SM 9223B
Standard plate count	SM 9215 A, B	-----
Turbidity	-----	SM 2130B, EPA 180.1
Foreign odor	-----	SM 2150B Recommend 40°C (10°F)

1/ Methods used by the USDA for testing of emergency drinking water.

2/ Additional methods listed may be used when performed by a lab accredited by the National Environmental Laboratory Accreditation Program (NELAP).

6.4 Test results. The test result for pH shall be reported to the nearest 0.1 value. The test results for sodium and chloride shall be reported to the nearest mg/L. The test result for *Coliforms* shall be reported to the nearest unit per 100 milliliters. The test result for standard plate count shall be reported to the nearest unit per milliliter. The test result for turbidity shall be reported to the nearest NTU. The test result for foreign odor shall be reported to the nearest T.O.N. Any result not conforming to the finished product requirements shall be cause for rejection of the lot.

7. MANUFACTURER’S/DISTRIBUTOR’S PRODUCT ASSURANCE. The manufacturer/distributor shall certify that the emergency drinking water provided shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same emergency drinking water offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

8. REGULATORY REQUIREMENTS. The delivered emergency drinking water shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of emergency drinking water within the commercial marketplace. Delivered emergency drinking water shall comply with all applicable provisions of the EPA, the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder.

9. QUALITY ASSURANCE PROVISIONS. *Purchaser shall specify 9.1 or 9.2.*

9.1 Manufacturer's/distributor's certification. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished emergency drinking water distributed meets or exceeds the requirements of this CID.

9.2 Government certification. When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the Processed Products Branch (PPB), Fruit and Vegetable Programs (FVP), Agricultural Marketing Service (AMS), USDA, or designated government agency shall be the certifying program. Inspectors shall certify the quality and acceptability of the emergency drinking water in accordance with agency procedures which include selecting random samples of the packaged emergency drinking water, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official agency score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, inspectors will examine the emergency drinking water for conformance to the United States Standards for Condition of Food Containers in effect on the date of the solicitation.

10. PACKAGING. Preservation, packaging, packing, labeling, and case marking shall be commercial unless otherwise specified in the solicitation, contract, or purchase order.

11. GOVERNMENT INSPECTION NOTES. When Section 9.2 is specified in the solicitation, contract, or purchase order, Government certification shall include evaluation of the quality and condition of samples of packaged emergency drinking water, and compliance with requirements in the following areas:

- Salient characteristics (Sec. 5).
- Analytical and microbiological requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.1). When analytical and microbiological testing is specified, inspection personnel shall select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory or a laboratory accredited by the NELAP for analysis.
- Packaging requirements (Sec. 10 or as specified in the solicitation, contract, or purchase order).

12. REFERENCE NOTES.

12.1 USDA certification contact. For USDA certification, contact the **Branch Chief, PPB, FVP, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: terry.bane@usda.gov.**

12.2 Analytical testing and technical information. For USDA technical information on analytical testing, contact the **Branch Chief, Technical Service Branch, S&TP, AMS, USDA, Room 306 Cotton Annex, 300 12th Street, SW, Washington, DC 20250-0272, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.**

12.3 Sources of documents.

12.3.1 Sources of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: **AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877, telephone (301) 924-7077. Internet address: <http://www.aoac.org>.**

Copies of the Standard Methods for the Examination of Water and Wastewater may be obtained from: **American Public Health Association, 800 I Street, NW, Washington, DC, 20001, telephone (202) 777-2742. Internet address: <http://www.apha.org>.**

Copies of the NELAP accredited laboratories may be obtained from: **The NELAC Institute, P.O. Box 822, Weatherford, TX 76086, telephone (817) 598-0458. Internet address: http://www.nelac-institute.org/content.aspx?page_id+0&club_id=869462.**

12.3.2 Sources of information for governmental documents are as follows:

Applicable provisions of the: Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503, the Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199 and the Environmental Protection Agency Act are contained in 40 CFR Parts 141 to 149. These documents may be purchased from: **Superintendent of Documents, New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents on (202) 512-1803 or on the Internet at: <http://www.gpoaccess.gov/nara/index.html>.**

Copies of National Primary Drinking Water Regulations are available from: **Office of Drinking Water, Environmental Protection Agency (EPA), WH550D, 401 M Street SW, Washington, DC 20460 or on the Internet at: <http://www.epa.gov/safewater/standards.html>.**

Copies of the U.S. EPA Drinking Water Methods for Chemical Contaminants may be obtained from: **National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, telephone (703) 605-6000. Internet address: <http://www.ntis.gov/products/types/publications.asp?loc=4-4-4>.**

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Copies of this CID and the United States Standards for Condition of Food Containers are available from: **Branch Chief, PPB , FVP, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: <http://www.ams.usda.gov/fv/fvqual.htm>.**

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: **Commander, Defense Supply Center Philadelphia, ATTN: DSCP-FTSA, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or Fax (215) 737-2963, or via E-mail: Sally.A.Gallagher@dla.mil.**

Military activities should submit requests for copies of this CID to: **Standardization Documents Order Desk, Document Automation and Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094 or on the Internet at: <http://assist.daps.dla.mil/quicksearch/>.**

MILITARY INTERESTS:

Custodians

Army - GL
Navy - SA
Air Force - 35

CIVIL AGENCY COORDINATING ACTIVITIES:

DOJ - BOP
HHS - NIH, IHS, FDA
USDA - FV
VA - OSS

Review Activities

Army - MD, QM
Navy - MC, AS

PREPARING ACTIVITY:

DLA - SS
(Project No. 8960-2006-001)

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