

**METRIC**  
**A-A-20332D**  
**May 13, 2014**  
**SUPERSEDING**  
**A-A-20332C**  
**May 3, 2007**

## **COMMERCIAL ITEM DESCRIPTION**

### **WATER, DRINKING, EMERGENCY**

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

**1. SCOPE.** This 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. **Please note: This document is not associated with Federal nutrition assistance programs and does not guarantee purchase of this item by USDA.**<sup>1</sup>

#### **2. PURCHASER NOTES.**

##### **2.1 Purchasers *must 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. 7.1).
- When analytical requirements need to be verified (Sec. 7.2).
- Manufacturer's/distributor's certification (Sec. 10.3) or Government certification (Sec. 10.4).

##### **2.2 Purchasers *may specify* the following:**

- Food Defense (Sec. 10.1): Food Defense System Survey (FDSS) (Sec. 10.1.1), or Food Defense Addendum to Plant Systems Audit (PSA) (Sec. 10.1.2).
- Manufacturer's quality assurance (Sec. 10.2.1 or Sec. 10.2.2).
- Packaging requirements other than commercial (Sec. 11).

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

---

<sup>1</sup> For USDA purchase specifications please visit the following websites: [Commodity Purchase Specifications for Agricultural Marketing Service \(AMS\)](#) and [Commodity Purchase Specifications for Farm Service Agency \(FSA\)](#).

**A-A-20332D**

**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 (*as specified by the purchaser*)

**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 (*as specified by the purchaser*)

**Type III** - Other (*as specified by the purchaser*)

**Class 1** - Thermoprocessed (Type I)

**Class 2** - Ozone (O<sub>3</sub>)

**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 *must meet* the requirements of the:**

- Processing guidelines (Sec. 5).
- Salient characteristics (Sec. 6).
- Analytical requirements: *as specified by the purchaser* (Sec. 7).
- Manufacturer's/distributor's product assurance (Sec. 8).
- Regulatory requirements (Sec. 9).
- Quality assurance provisions: *as specified by the purchaser* (Sec. 10).
- Packaging requirements other than commercial: *as specified by the purchaser* (Sec.11).

**5. PROCESSING GUIDELINES.**

**5.1 Source.** Water used in processing this product must 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 concentration of any contaminant in the water must be in accordance with EPA regulations (40 Code of Federal Regulations (CFR) Parts 141 to 149), or the governmental agency having jurisdiction.

**5.3 Processing.** The water must be prepared, processed, and packaged in establishments meeting the requirements of Current Good Manufacturing Practices (21 CFR Part 110) and Processing and Bottling of Bottled Drinking Water (21 CFR Part 129). The water must be processed and packaged so that all requirements of these standards are met. The water quality criteria must be maintained 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. Type I, disposable pouch, Class 1, thermoprocessed.** Type I, Class 1 thermoprocessed disposable pouches must be processed in accordance with the methods in Thermally Processed Low Acid Foods Packaged in Hermetically Sealed Containers (21 CFR Part 113). The filled and sealed flexible pouches must be thermoprocessed until a sterilization assurance given by a value of (F<sub>0</sub>) of not less than 6.0 has been achieved.

**5.3.2 Type II, rigid plastic container.** Type II rigid plastic containers may be processed by any one of the following methods.

**5.3.2.1 Class 2, ozone (O<sub>3</sub>).** Ozone (O<sub>3</sub>) must be added in a manner consistent with Direct Food Substances Affirmed as Generally Recognized as Safe (21 CFR Part 184).

**5.3.2.2 Class 3, ultraviolet light.** The ultraviolet light must be operated and maintained in accordance with the manufacturer's directions.

**5.3.2.3 Class 4, hot fill.** The water must be not less than 82°C (180°F), or more than 93°C (200°F).

**5.3.2.4 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 Age requirement.** Unless otherwise specified in the solicitation, contract, or purchase order, the emergency drinking water must have been packaged within 90 days of delivery.

**5.5 Food security.** The emergency drinking water should be processed and transported in accordance with the Food and Drug Administration's (FDA's) *Guidance for Industry: Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance*.<sup>2</sup> This guidance identifies the kinds of preventive measures food manufacturers, processors, or handlers may take to minimize the risk that food under their control will be subject to tampering or other malicious, criminal, or terrorist actions. The implementation of enhanced food security preventive measures provides for the security of a plant's production processes and includes the storage and transportation of pre-production raw materials, other ingredients, and postproduction finished product.

---

<sup>2</sup> <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/FoodDefense/ucm083075.htm>

## 6. SALIENT CHARACTERISTICS.

**6.1 Finished product.** The product must be palatable, potable, and free from visible sediment, turbidity, and have been processed in accordance with the methods in Processing and Bottling of Bottled Drinking Water (21 CFR Part 129) and Thermally Processed Low Acid Foods Packaged in Hermetically Sealed Containers (21 CFR Part 113) according to the type of drinking water specified. The emergency drinking water must conform to Requirements for Specific Standardized Beverages (21 CFR Part 165), be properly processed, odorless, colorless, and must be hermetically sealed in a non-contaminating container made from materials approved by NSF-International for contact with drinking water.

**6.1.1 Flavor and odor.** The emergency drinking water must be free from objectionable flavors and odors.

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

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

## 7. ANALYTICAL REQUIREMENTS.

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

**7.1.1 pH.** The pH value of the emergency drinking water must be not less than 6.0 and not more than 8.0.

**7.1.2 Sodium content.** The emergency drinking water must not contain greater than 160 mg/L Sodium (Na).

**7.1.3 Coliforms.** The total coliform count must be less than 1.1 Most Probable Number (MPN) per 100 ml or less than 1.0 Colony Forming Unit (CFU) per 100 ml.<sup>3,4</sup>

**7.1.4 Heterotrophic plate count.** The heterotrophic plate count must be not more than 500 CFU per ml.

**7.1.5 Turbidity.** Not to exceed 1 NTU.

---

<sup>3</sup> When SM 9223B is used, the total coliform count must be less than 1.8 MPN per 100 ml or if Presence-Absence Broth is used report as present or absent in 100 ml.

<sup>4</sup> Findings indicate zero colonies (CFU) per plate or zero tubes producing gas for MPN.

**7.2 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 must be followed.

**7.2.1 Sampling procedures for pH and sodium.** Analysis for pH and sodium must be performed on a composite sample. The composite sample must be 1.9 L (64 oz) prepared from five randomly selected subsamples. Subsamples must be a minimum of one pouch/container and must contain the appropriate number of pouches/containers to yield a 1.9 L (64 oz) sample when composited.

**7.2.2 Sampling procedures for turbidity.**<sup>5</sup> Analysis for turbidity must be performed on a composite sample. The composite sample must be 1.9 L (64 oz) prepared from five randomly selected subsamples. Subsamples must be a minimum of one pouch/container and must contain the appropriate number of pouches/containers to yield a 1.9 L (64 oz) sample when composited.

**7.2.3 Sampling procedures for coliforms and heterotrophic plate count.** Analysis for coliforms and heterotrophic plate count must be performed on five randomly selected individual pouches or containers.

**7.3 Analytical and microbiological testing.** When specified in the solicitation, contract, or purchase order, the analyses must be made in accordance with the following methods from the AOAC International Official Methods of Analysis (OMA), the Standard Methods for the Examination of Water and Wastewater (SM), or the U.S. EPA Drinking Water Methods for Chemical Contaminants:

<b><u>Test</u></b>	<b><u>Method</u></b> <sup>6</sup>	<b><u>Additional methods</u></b> <sup>7</sup>
pH	973.41	SM 4500H <sup>+</sup> -B, EPA 150.1
Sodium	973.54	EPA 200.7
Total coliforms	SM 9221B	SM 9222B, SM 9223B
Heterotrophic plate count	SM 9215 A, B	-----
Turbidity	-----	SM 2130B, EPA 180.1

**7.4 Test results.** The test result for pH must be reported to the nearest 0.1 value. The test results for sodium must be reported to the nearest mg/L. The test result for total coliforms must be reported to the nearest CFU per 100 ml or to the nearest MPN per 100 ml. The test result for heterotrophic plate count must be reported to the nearest 10 CFU per ml. The test result for turbidity must be reported to the nearest 0.1 NTU. Any result not conforming to the finished product requirements must be cause for rejection of the lot.

<sup>5</sup> Analysis for turbidity must be conducted by a lab accredited by the National Environmental Laboratory Accreditation Program (NELAP). A separate sample from that identified in 7.2.1 must be selected.

<sup>6</sup> Methods used by the USDA for testing of emergency drinking water.

<sup>7</sup> Additional methods listed may be used when performed by a lab accredited by the NELAP.

## A-A-20332D

**8. MANUFACTURER'S/DISTRIBUTOR'S PRODUCT ASSURANCE.** The manufacturer/distributor must certify that the emergency drinking water provided will 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.

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

**10. QUALITY ASSURANCE PROVISIONS.** *Purchaser must specify 10.3, or 10.4; purchaser may specify 10.1.1 or 10.1.2, and 10.2.1 or 10.2.2.*

**10.1 Food defense.** When required in the solicitation, contract, or purchase order, a FDSS must be conducted by USDA, Agricultural Marketing Service (AMS), Fruit and Vegetable Program (FV), Specialty Crops Inspection (SCI) Division. Food defense requirements include a documented and operational food defense plan that provides for the security of a plant's production processes and includes the storage and transportation of pre-production raw materials and other ingredients and postproduction finished product. The plan must address the following areas: (1) food security plan management; (2) outside and inside security of the production and storage facilities; (3) slaughter, when applicable, and processing, including all raw material sources; (4) shipping and receiving; (5) storage; (6) water and ice supply; (7) mail handling; (8) personnel security; and (9) transportation, shipping, and receiving.

**10.1.1 FDSS.** When required in the solicitation, contract, or purchase order, a FDSS must be conducted by USDA, AMS, FV, SCI Division. The FDSS verifies that operators of food establishments have implemented measures to minimize the risk of tampering or other criminal actions against the food under their control. *(An AMS, FDSS verifies the participating company's adherence to the FDA's "Guidance for Industry - Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance.") For further information, see Sec. 13.*

**10.1.2 Food defense addendum to PSA.** When required in the solicitation, contract, or purchase order, a food defense addendum must be conducted by USDA, AMS, FV, SCI Division auditors. This verifies that operators of food establishments have implemented measures to minimize the risk of tampering or other criminal actions against the food under their control. *(An AMS, FDSS, PSA verifies the participating company's adherence to the FDA's "Guidance for Industry - Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance.") For further information, see Sec. 13.*

**10.2 Manufacturer's quality assurance.** When required in the solicitation, contract, or purchase order, the product manufacturer must be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid or no later than 10 business days from the date of the awarding of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for cause.

**10.2.1 PSA.** A PSA conducted by USDA, AMS, or other audit performed by a third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS PSA verifies the manufacturer's capability to produce products in a clean sanitary environment in accordance with 21 CFR Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food, and verifies that the manufacturer has in place an internal quality assurance program.)*

**10.2.2 Plant survey.** A plant survey conducted by USDA, AMS, or other survey performed by a third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean sanitary environment in accordance with 21 CFR Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)*

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

**10.4 Government certification.** When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the SCI Division, FV, AMS, USDA, or designated government agency must be the certifying program. Inspectors must certify the quality and acceptability of the emergency drinking water in accordance with SCI Division or designated government agency procedures, which include selecting random samples of the 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 must examine the emergency drinking water for conformance to the U.S. Standards for Condition of Food Containers (7 CFR Part 42) in effect on the date of the solicitation.

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

**12. USDA INSPECTION NOTES.** When Sec. 10.4 is specified in the solicitation, contract, or purchase order, government certification must include evaluation of the quality and condition of samples of emergency drinking water and compliance with requirements in the following areas:

## A-A-20332D

- Processing guidelines (Sec. 5).
- Salient characteristics (Sec. 6).
- Analytical and microbiological requirements *when specified in the solicitation, contract, or purchase order* (Sec. 7). When analytical and microbiological testing is specified, inspection personnel must select samples and submit them to the USDA, Science and Technology Program (S&TP) laboratory or a laboratory accredited by the NELAP for analysis.
- Packaging requirements (Sec. 11 or *as specified in the solicitation, contract, or purchase order*).

### 13. REFERENCE NOTES.

#### 13.1 USDA services.

**13.1.1 USDA certification.** For a USDA certification contact the Associate Director, Inspection Operations, SCI Division, FV, AMS, USDA, Room 1536 South Building, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0240, telephone (202) 720-2482, fax (202) 720-0393, or via E-mail: [Nathaniel.Taylor@ams.usda.gov](mailto:Nathaniel.Taylor@ams.usda.gov).

**13.1.2 USDA FDSS, Plant Survey, and PSA.** For a USDA FDSS, Plant Survey, and PSA contact the Chief, Auditing Services Branch, Inspection Operations, SCI Division, FV, AMS, USDA, Room 1536 South Building, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0240, telephone (202) 720-5021, fax (202) 260-8927, or via E-mail: [fvaudits@ams.usda.gov](mailto:fvaudits@ams.usda.gov).

**13.1.3 Analytical testing and technical information.** For USDA technical information on analytical testing, contact a member of the Laboratory Approval and Testing Division, S&TP, AMS, USDA, STOP 0272, 1400 Independence Avenue, SW, Washington, DC 20250-0272, telephone (202) 690-0621 or via E-mail: [KerryR.Smith@ams.usda.gov](mailto:KerryR.Smith@ams.usda.gov).

#### 13.2 Sources of documents.

##### 13.2.1 Sources of information for nongovernmental documents are as follows:

Copies of the AOAC International OMA may be obtained from: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877-2417, telephone (301) 924-7077. Internet address: <http://www.aoac.org> for nonmembers and <http://www.eoma.aoac.org> for members and AOAC OMA subscribers.

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 2439, Weatherford, TX 76086, telephone (817) 598-1624. Internet address: <http://www.nelac-institute.org/accred-labs.php>.**

Information on materials approved by NSF International for contact with drinking water may be obtained from: **NSF International, P.O. Box 130140, 789 North Dixboro Road, Ann Arbor, MI 48105, telephone (734) 769-8010. Internet address: <http://www.nsf.org/>.**

### **13.2.2 Sources of information for governmental documents are as follows:**

Applicable provisions of the U.S. Standards for Condition of Food Containers are contained in 7 CFR Part 42, 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 979050, St. Louis, MO 63197-9000. Credit card (Visa, MasterCard, Discover/ NOVUS, and American Express) purchases may be made by calling the Superintendent of Documents on (866) 512-1800, (202) 512-1800. These documents may also be obtained free of charge on the Internet at: <http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>.**

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/publications.aspx>**

Copies of Guidance for Industry - Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance is available online from: **FDA, Center for Food Safety and Applied Nutrition (CFSAN) on the Internet at: <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/FoodDefense/ucm083075.htm>**

Copies of the FDA Technical Bulletin Number.5 - Macroanalytical Procedures Manual, Chapter V, 1984; Electronic Version 1998 may be obtained from: **Internet address: <http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm2006953.htm>**

Copies of this CID and the U.S. Standards for Condition of Food Containers (7 CFR Part 42) are available from: **Chief, Standardization Branch, SCI Division, FV, AMS, USDA, Riverside Business Park, 100 Riverside Parkway, Suite 101, Fredericksburg, VA 22406, telephone**

A-A-20332D

(540) 361-1130, Fax (540) 361-1199, via E-mail: [CIDS@ams.usda.gov](mailto:CIDS@ams.usda.gov) or on the Internet at: [www.ams.usda.gov/CommercialItemDescription](http://www.ams.usda.gov/CommercialItemDescription).

Copies of this CID are also available online at: ASSIST Online (<https://assist.dla.mil>) or ASSIST Quick Search (<http://quicksearch.dla.mil>) or from the Standardization Documents Order Desk, Defense Logistics Agency (DLA) Document Services, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: **DLA Troop Support, ATTN: DLA-FTSA, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or Fax (215) 737-2963, or via E-mail: [dscpsubswweb@dlamail](mailto:dscpsubswweb@dlamail).**

**MILITARY INTERESTS:**

**CIVIL AGENCY COORDINATING ACTIVITIES:**

**Custodians**

Army - GL  
Navy - SA  
Air Force - 35  
DLA - SS

DOJ - BOP  
HHS - FDA  
USDA - FV

**Review Activities**

Army - MD, QM  
Navy - MC

**PREPARING ACTIVITY:**

DLA - SS  
(Project No. 8960-2013-001)

**NOTE:** The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.

**Non-Discrimination Policy:** The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the bases of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.) **To File an Employment Complaint:** If you wish to file an employment complaint, you must contact your agency's [EEO Counselor](#) (PDF) within 45 days of the date of the alleged discriminatory act, event, or in the case of a personnel action. Additional information can be found online at [http://www.ascr.usda.gov/complaint\\_filing\\_file.html](http://www.ascr.usda.gov/complaint_filing_file.html). **To File a Program Complaint:** If you wish to file a Civil Rights program complaint of discrimination, complete the [USDA Program Discrimination Complaint Form](#) (PDF), found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at [program.intake@usda.gov](mailto:program.intake@usda.gov). **Persons with Disabilities:** Individuals who are deaf, hard of hearing or have speech disabilities and you wish to file either an EEO or program complaint please contact USDA through the Federal Relay Service at (800) 877-8339 or (800) 845-6136 (in Spanish). Persons with disabilities who wish to file a program complaint, please see information above on how to contact us by mail directly or by email. If you require alternative means of communication for program information (e.g., Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).