



Approval # 20030006

Environmental & Regulatory Services Division
Bureau of Petroleum Products and IBCs
201 West Washington Avenue
P.O. Box 7837
Madison, WI 53707-7837

Wisconsin COMM 10 Material Approval

Equipment: Trans Cube - Intermediate Bulk Container
(IBC) Fueling System for Portable and Fleet
Fueling

Manufacturer: Bundit
P.O. Box 71
Vesta, MN 56292

Expiration of Approval: December 31, 2008

SCOPE OF EVALUATION

The Trans Cube 132-gal. (500 Liter), 264-gal. (1000 Liter), 400-gal. (1500 Liter), and 528-gal. (2000 Liter) Intermediate Bulk Container (IBC) Fueling System for portable and fleet fueling as manufactured by Bundit, has been evaluated in accordance with the NFPA 30-2000 edition, NFPA 30A-2000 edition, and the current edition of Chapter Comm 10, the Wisconsin Flammable and Combustible Liquids Code.

This approval has been based upon Commerce evaluation of information submitted by the manufacture, and third party evaluation. Specific IBC or manufacturer design data is considered confidential. Specific technical information relating to evaluating or qualifying the technical and engineering information submitted should be made to the manufacturer or submitter.

This evaluation summary is condensed to provide the specific installation, application and operation parameters necessary to maintain the subject systems in compliance with the Wisconsin Administrative Code – Comm 10.

DESCRIPTION AND USE

The Trans Cube is a metal Intermediate Bulk Container (IBC) designed to the requirements of 49CFR178 - U.S. DOT Hazardous Materials Regulations, and Chapter 6 of the United Nations Recommendations on the Transport of Dangerous Goods. The IBC construction is of double wall steel composed of a steel primary IBC shell encapsulated by a steel secondary IBC shell. All of the primary pipe penetrations, sight gauges, vents and dispensing equipment are contained within the containment area of the secondary IBC shell. Collision protection is integral to the design of the secondary IBC shell.

Relief protection is provided to the primary IBC through a fusible pressure relief cap located on the filler pipe of the IBC and through a pressure/vacuum relief vent. The relief protection for the secondary IBC is provided by self-venting of the access hatch and secondary containment cover.

The IBC interstitial space is monitored for leaks through the secondary containment access hatch. This monitoring method is acceptable for detecting a leak from anywhere in the primary portion of the IBC.

This approval is based on a review of the information provided by Bundit, including the tank design and a description of the intended use of the IBC system. In addition, a review of the appropriate sections of the Comm 10 code and the NFPA 30, 30A and 385-2000 edition codes was performed.

This approval is granted based on the following considerations:

- The secondary containment is of adequate size and has been designed with integral collision protection.
- Performance testing of the IBC is to a more rigorous standard than the standard UL testing for a UL 142 tank.
- Access is restricted to the primary tank components and dispensing equipment by means of a locking cover.
- Components used shall be supplied by the manufacturer; Bundit.
- Design testing and certification is performed annually in accordance with 49CFR178 - U.S. DOT Hazardous Materials Regulations.
- Production leakproofness testing is performed in accordance with 49CFR178.813.

TESTS AND RESULTS

Bundit's Trans Cube 528-gal. (2000 Liter) Intermediate Bulk Container (IBC) has been third party evaluated for conformance with the requirements of 49CFR178 - U.S. DOT Hazardous Materials Regulations, and Chapter 6 of the United Nations Recommendations on the Transport of Dangerous Goods. By complying with these standards, the design also conforms to the NFPA 30-2000 Chapter 4 requirements. The third party package-testing agency, TEN-E Packaging Services, Inc., certified that the Trans Cube IBC has passed the required vibration, bottom lift, top lift, stack, leak proofness, hydrostatic, and drop tests. The smaller size IBCs, (132, 264, and 400-gal.) are encompassed within the scope of the testing and approval of the 528-gal. IBC.

LIMITATIONS / CONDITIONS OF APPROVAL

- The design and operation of the IBC shall be in accordance with the information provided in the Description and Use section of this material approval, and the specific Limitations/Conditions of Approval listed in this section.
- The double wall IBC's are approved for compliance with the secondary containment requirements of **ss. COMM 10.345 (1)** and **10.415 (7)(b)** and may be used without a dike except in the case of public-access waste oil collection. Tanks for public-access waste oil collection shall be provided with a dike in accordance with **s. COMM 10.33**.
- An IBC may be transported with product in the primary IBC, provided all of the United States Department of Transportation (USDOT) requirements are satisfied. This approval does not address whether or not these requirements have been met.
- Enclosure of the IBC by fencing is not required if the secondary containment access cover is locked.
- Additional vehicle collision protection, such as posts or rails in accordance with **s. Comm 10.415 (8)** are not required provided the IBC is fastened with anchor bolts or cables (fixed installations only); and shear valves, flexible connectors, or other protective devices are installed on product and/or electrical lines to assure adequate system flexibility should the system be displaced by collision.

Unusual or heavy traffic patterns may require additional visual warning or collision protection.

- The use of the IBCs is limited to the fueling of vehicles and equipment that are dedicated to the operation of the specific businesses, facilities or applications as listed:
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 - Fleet fueling operations.
 - Landfill, mine and quarry operations.
 - Highway construction including associated material processing plants.
 - Construction sites for buildings and structures.
 - Logging and wood cutting operations.

- De-watering operations.
 - Farming operations.
 - Trail grooming.
 - Fueling of heating or cooling units on semi-trailers.
 - Recycling and refuse centers.
 - Portable power generating stations.
 - Short-term use during fuel storage equipment changeovers.
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- IBC's shall be used for Class II or Class III liquids only.
 - IBC's may not be used for retail fueling of vehicles.
 - Fleet Vehicle fueling is allowed only in well lighted areas.
 - The dispensing nozzle shall be a listed, automatic-closing type without a latch open device.
 - The IBC shall be installed to allow full visual inspection of the secondary containment system. IBC foundations shall be designed to minimize the possibility of uneven settling of the IBC and to minimize corrosion in any part of the IBC resting on the foundation. IBC supports must be placed on a prepared flat smooth solid surface.
 - Access to all connections between the IBC and the piping, venting, and appurtenances that require maintenance or replacement shall be provided. The means of access shall be sufficient in size to allow installation, maintenance, and inspection of all system appurtenances.
 - Access to fill openings and dispensing equipment shall be limited to authorized personnel only; general public access is prohibited.
 - The IBC system operator is required to maintain the system components according to the respective manufacturer's guidelines.
 - This material approval does not waive any of the applicable Comm 10 or NFPA 30/30A code requirements relating to aboveground storage tanks (ASTs) and vehicle fueling that are not specifically addressed in this material approval.
 - This material approval does not take the place of any required inspection or permit functions. All permits required by the state or local municipality shall be obtained prior to commencement of operation.

This approval will be valid through December 31, 2008, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified in this document.

Reviewed by: _____

Greg Bareta, P. E.
Engineering Consultant
Bureau of Petroleum Products and IBCs

Approved by: _____ Date: _____