



# Allowed Use of Intermediate Bulk Containers (IBCs) for Oil Storage

## What You Need to Know

As defined in Parts 100-199 of Title 49 of the Code of Federal Regulations, an intermediate bulk container (IBC) means a rigid or flexible portable packaging, other than a cylinder or portable tank, which is designed for mechanical handling. IBCs can be constructed of metal, plastic, or a composite of materials. Composite IBCs are commonly a combination of blow-molded plastic containers in a metal cage or a plastic bag in a corrugated box.

### Listed versus Unlisted IBCs

---

Per NFPA 30 – *Flammable and Combustible Liquids Code*, nonmetallic IBCs shall be listed and labeled in accordance with UL 2368 – *Standard for Fire Exposure Testing of Intermediate Bulk Containers for Flammable and Combustible Liquids*.

- Listed IBCs have been designed, built, and certified to last in a fire for at least 20 minutes and can be used for storing liquids with a closed cup flash point of 38 °C (100 °F) or greater. Such IBCs have a label or identifying mark certifying that the IBC meets the set performance standards in UL 2368.
- Unlisted IBCs have not been inspected or certified to provide any fire endurance and have been shown to fail quickly in a fire.

### Dos and Don'ts of Using an IBC for Oil Storage

---

- **DO** be aware of the serious fire hazard created by IBCs containing flammable and combustible liquids.
- **DO NOT** install IBCs (e.g., as a permanent storage tank) and **DO NOT** connect piping to IBCs.
- Because IBCs are not intended for permanent storage of oil, **DO NOT** include IBC volumes in the AST aggregate oil storage calculation for the facility.
- **DO NOT** install a dispenser on an IBC.
- **DO NOT** use plastic IBCs of any type (listed or unlisted) for the stationary storage of flammable liquids (flash point below 100 °F), such as ethanol and gasoline, including waste or off-spec gasoline.
- **DO NOT** use unlisted plastic IBCs for the stationary storage of combustible liquids (flash point 100 °F and higher), such as motor oil, used oil, lubricating oil, hydraulic oil, and mineral oil.



# Allowed Use of Intermediate Bulk Containers (IBCs) for Oil Storage

## What You Need to Know

- **DO NOT** use listed IBCs for the storage of combustible liquids **UNLESS** the following conditions are met:
  - The IBC is used in a **protected** facility as defined in NFPA 30 (Chapters 9 and 16);
  - The IBC is used **primarily** as a means for receiving and transporting oil within the facility (e.g., the oil was shipped to the facility in the IBC) and **NOT** for stationary storage of oil;
  - The IBC has a maximum oil holding capacity of **793 gallons** in accordance with NFPA 30; and
  - The IBC is metal, plastic, or a composite that is **listed and labeled** in accordance with UL 2368, and permanently marked with:
    - a) The manufacturer's name, tradename or trademark, or another descriptive marking that identifies the organization responsible for the IBC,
    - b) The model number or catalog designation,
    - c) "Intermediate Bulk Container" or "IBC",
    - d) The month and year of manufacture, and
    - e) When a manufacturer produces IBCs at more than one factory, each IBC is to have the manufacturing location marked.
- **DO** maintain IBCs in a containment area. Otherwise, in accordance with STI-SP001 – *Standard for the Inspection of Aboveground Storage Tanks*, portable containers without spill control shall either be discontinued from use or be DOT (Department of Transportation) tested and recertified (49 CFR Part 178 Subpart O - Testing of IBCs, 178.803 Testing and certification of IBCs) per the following schedule (retain the records for the life of IBC, and make available for MDE's inspection):
  - Plastic and composite IBCs - every 7 years
  - Steel IBCs - every 12 years
  - Stainless steel IBCs - every 17 years



# Allowed Use of Intermediate Bulk Containers (IBCs) for Oil Storage

## What You Need to Know

- **DO** inspect IBCs monthly in accordance with STI-SP001 – *Portable Container Monthly Inspection Checklist*, retain the monthly checklists for at least 36 months, and make the records available for MDE’s inspection upon request.

### Questions

---

For further information on the allowed use of IBCs for oil storage, contact the Oil Control Program at 410-537-3442 or 1-800-633-6101, ext. 3442.

To report oil spills, releases, or discharges please call 1-866-633-4686, available 24 hours a day.

### Reporting Requirements

---

Report the following conditions to the Department immediately, but not later than 2 hours after the detection, at **410-537-3442** during normal business hours, or **1-866-633-4686** 24 hours a day:

- An oil spill, release, or discharge
- A storage system is determined to be leaking
- There exists evidence of a spill, release, or discharge
- Visual detection of free product
- Unusual operating conditions such as sudden loss of a regulated substance, unexplained presence of water in the oil storage tank system, monitoring or inventory records indicate a spill, release or discharge may have occurred

Reports should not be made via voice messages to OCP case managers.

### \*\*DISCLAIMER\*\*

---

The storage of petroleum products and the installation, maintenance, and inspection of storage systems is a hazardous endeavor. This fact sheet has been provided for informational purposes. This document is not intended to be, nor should it be interpreted as, a regulation as defined in Section 10-101, State Government Article. MDE encourages you to read and understand the regulations that govern the operation of aboveground and underground storage systems found in Code of Maryland Regulations 26.10. “Oil Pollution and Tank Management.”