




16710
CG-CVC Policy Letter
13-03
MAY 21 2013

From: 
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COMDT (CG-CVC)

To: Distribution

Subj: INTERNATIONAL MARITIME SOLID BULK CARGOES CODE – PORT STATE CONTROL GUIDANCE

Ref: (a) International Maritime Solid Bulk Cargoes Code
(b) Title 46 Code of Federal Regulations (CFR) Parts 97 and 148

1. PURPOSE. To provide policy for compliance verification of the requirements in references (a) and (b) during Port State Control examinations.
2. ACTION. District and Sector Commanders shall use the guidance in this policy letter to ensure compliance with references (a) and (b).
3. DIRECTIVES AFFECTED. MOC Policy Letter 01-01 is cancelled.
4. BACKGROUND. The International Maritime Solid Bulk Cargoes (IMSBC) Code adopted by International Maritime Organization (IMO) Resolution MSC.268 (85) is a comprehensive set of requirements for the safe loading, unloading and carriage of solid bulk cargoes by vessel. The IMSBC Code replaced the Code of Safe Practice for Solid Bulk Cargoes (BC Code) which was first developed in 1965. The 2012 edition of the IMSBC Code became mandatory under Chapters VI and VII of the International Convention for the Safety of Life at Sea, 1974, as amended, (SOLAS) on 1 January 2013 and contains provisions for all solid bulk cargoes, hazardous and non-hazardous alike, other than grain. The implementing regulations, which are promulgated under 46 U.S.C. § 3306, 46 U.S.C § 5111, 49 U.S.C. § 5101 *et seq.*, and other authorities, are contained in 46 CFR parts 97 and 148 (75 FR 64586) and became effective as of 1 January 2011.
5. DISCUSSION.
 - a. Hereafter, for the purpose of this policy, the IMSBC Code is referred to as the Code and it applies to the loading, unloading, and carriage of solid bulk cargoes by vessel. Solid bulk cargoes consist of particles, granules, or larger pieces of material generally uniform in composition, which is loaded directly into cargo spaces or the hold of a vessel without any intermediate form of containment. The cargoes are typically poured into the hold of a vessel using a chute or dropped into the hold using a grab bucket.

- b. The Code applies to all ships subject to SOLAS and to cargo ships less than 500 gross tons. Regardless of whether a vessel's flag State is signatory to SOLAS, reference (b) applies to all domestic and foreign vessels in the navigable waters of the United States that transport solid bulk cargoes, except an unmanned barge on a domestic voyage carrying a Potentially Dangerous Material (PDM) found in Table 148.10 of 46 CFR Part 148. The Code does not apply to grain. Grain cargo shipments must follow the International Code for the Safe Carriage of Grain in Bulk (Grain Code).
- c. In addition to Code requirements, there are several SOLAS regulations that may also apply to vessels carrying dangerous solid bulk cargo. Cargo ships of 500 gross tonnage and over constructed on or after 1 September 1984 and cargo ships of less than 500 gross tonnage constructed on or after 1 February 1992, subject to SOLAS Chapter II-2/19.4, must have a document of compliance *when carrying dangerous goods in solid form* in bulk except class 6.2 and class 7. Those cargo ships carrying cargoes classified as PDM or Materials Hazardous Only in Bulk (MHB) also do not require a document of compliance. Refer to SOLAS Chapter II-2/1 for specific applicability.
- d. Due to the complexities associated with the requirements of bulk cargo carriage, enclosure (1), IMSBC Code Guidance, is included to assist port state control officers (PSCOs) in understanding terms and certain procedures regarding the Code. Refer to Section 13 of the Code for information concerning relevant regulations in SOLAS and other IMO instruments that are applicable.

6. PROCEDURES.

- a. *General.* During regularly scheduled Port State Control examinations on bulk carriers, the scope of the exam should follow existing guidance as outlined in Marine Safety Manual Volume II Section D. For vessels carrying dangerous solid bulk cargo, this includes verification that the document of compliance is valid and the Dangerous Cargo Manifest (SOLAS Chapter VII/7-2.2 as applicable) is complete and accurate. Documents of compliance issued before 1 January 2011 remain valid until their next renewal. The relevant shipping schedule in Appendix 1 to the Code should be consulted during the examination as specific requirements depend on the cargo carried and its hazards. Specific instructions should be sought from Commandant (CG-ENG-5) if a vessel is operating under the conditions of a cargo exemption or equivalent measure under the Code that has not been approved in the U.S., as such exemptions or equivalents (except for non-hazardous solid bulk cargoes) must be approved by Commandant (CG-ENG-5) in order for the cargo to be imported.
- b. *Shipping Papers.* In accordance with Section 4 of the Code, 46 CFR 97.12-3 and 46 CFR 148.60, the shipper or loading terminal must supply the vessel master or a representative of the master with cargo information sufficiently in advance of

- loading to enable precautions to be taken to ensure that the cargo is properly stowed and can be safely carried. This information is normally included with shipping papers. PSCOs should verify the shipping papers are on board and that the appropriate information for the cargo carried is available. Enclosure (1) provides more detailed information regarding shipping papers.
- c. *Loading Certificate.* A loading certificate is a document that is issued after the vessel has been loaded and surveyed by an independent or third party surveyor. Although not required by regulation, the loading certificate is used by Protection & Indemnity (P & I) clubs. In the U.S., the National Cargo Bureau (NCB) is authorized to assist the Coast Guard by issuing these certificates at the request of the principals involved with the shipment. In accordance with 46 CFR 148.12, certificates issued by the NCB may be accepted as evidence of compliance with the Code and 46 CFR part 148. If a vessel has a loading certificate issued by the NCB or other competent authority (for loaded vessels arriving in the U.S.), the scope of the cargo compliance portion of the PSC exam may be reduced (see enclosure (3)).
 - d. *SOLAS Exemption.* If a SOLAS exemption certificate has been issued under SOLAS Chapter II-2/10.7 for the required fire extinguishing system, PSCOs should ensure the cargo to be carried meets the criteria for the exemption (see enclosures (1) and (2)). An exemption from SOLAS Chapter II-2/10.7 may only be issued to vessels fitted with steel hatch covers and effective means of closing all ventilators and other openings leading to the cargo spaces.
 - e. *SOLAS Equivalency.* Flag Administration approved equivalencies to the fixed gas fire extinguishing requirements per SOLAS Chapter II-2/10.7 should be accepted based on the vessel having a valid Cargo Ship Safety Equipment Certificate (see enclosure (1)). If there is concern regarding the equivalency, the PSCO should request confirmation from the vessel's Flag Administration that the equivalency was communicated to the IMO. Contacts for Flag Administrations can be found on the IMO's Global Integrated Shipping Information System, <http://gisis.imo.org>, under the Contact Points module.
 - f. *Emergency response and medical first aid.* PSCOs should verify a copy of the instructions on emergency response and medical first aid relevant to incidents involving dangerous goods in solid form in bulk is on board. Also refer to the Medical First Aid Guide for Use in Accidents involving Dangerous Goods (MSC/Circ.857).
 - g. *Expanded exam.* The examination may be expanded as necessary if "clear grounds" exist to indicate that a vessel is not in compliance with applicable portions of 46 CFR parts 97 and 148, the Code or applicable parts of SOLAS. Examples of "clear grounds" are:

- Absence of cargo information required by Section 4; Shipping papers, Test Certificate.
 - Non-compliance with required safety measures for the carried cargo.
 - Required documents and/or certificates missing/expired including document of compliance, dangerous cargo manifest, and Stability/Loading info.
 - Carrying unauthorized cargo – vessel has SOLAS exemption certificate for firefighting system but cargo is not considered “low fire risk”.
 - Required equipment missing/outdated including personal protective equipment and test equipment.
 - Crew unfamiliar with emergency procedures and medical first aid for carried cargo.
- h. *Deficiencies.* Enclosure (3) provides some recommended actions if non-compliance is noted; however every situation is not covered. When evaluating deficiencies to determine the appropriate “action codes” for the Port State Control Report of Inspection – Form B or if Captain of the Port control actions are necessary, it is important to review cargo certificates and consider the cargo’s hazards and if the cargo is being loaded or discharged. Each case should be evaluated based on the totality of the circumstances. In some cases it may be safest to stop cargo loading operations pending compliance whereas for a vessel already discharging cargo, it may be best to continue discharging and require the non-compliance be resolved prior to departure or prior to the vessel’s next U.S. voyage.
- i. *Checklist.* For vessels carrying dangerous goods, the checklist included in enclosure (3) may be used to guide the PSCO through an exam. It is not necessary to complete every item on the checklist unless an expanded exam is required.

7. **DISCLAIMER.** This policy is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard’s current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements.

8 **QUESTIONS.** Questions or concerns regarding this policy may be directed to Commandant (CG-CVC-2) at (202) 372-1251 or emailed to CGCVC@uscg.mil.

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Enclosures: (1) IMSBC Code Guidance
(2) MSC.1/Circ. 1395
(3) Checklist: IMSBC Code Compliance Verification for a Vessel Carrying Dangerous Goods

Enclosure (1) to CG-CVC Policy Letter 13-03

INTERNATIONAL MARITIME SOLID BULK CARGOES CODE (IMSBC) CODE GUIDANCE

1. IMSBC Code Basics

Solid bulk cargoes are categorized into three distinct groups under the IMSBC Code:

- Group A: Cargoes that may liquefy
- Group B: Cargoes that possess chemical hazards
- Group C: Non-hazardous cargoes (cargoes that do not meet Group A or Group B)

Group B cargoes are further categorized as either dangerous goods (e.g., cargoes that have been assigned a UN number by the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods) or Materials Hazardous Only in Bulk (MHB).

- Dangerous goods are classified in accordance with the International Convention for the Safety of Life at Sea, 1974, as amended, (SOLAS) Chapter VII and the International Dangerous Goods (IMDG) Code.
- MHB means a material that does not meet the definition of dangerous goods as defined above but does present a significant danger when transported in bulk by vessel. MHB is equivalent to Potentially Dangerous Material (PDM) as defined in 46 CFR 148.3.

Each solid bulk cargo is assigned to Group A, B, C, or a combination thereof. Carriage requirements are assigned to solid bulk cargoes based on the group assignment and the specific properties and characteristics of the solid bulk cargo.

Note: The carriage of certain cargoes was not covered by the Code of Safe Practice for Solid Bulk Cargoes (BC Code) because these cargoes presented minimal risks in transportation. As of 1 January 2011, under the IMSBC Code, these cargoes must now follow loading, unloading, and carriage requirements regardless if they are or were generally considered non-hazardous.

2. Format of the Code

The IMSBC Code contains thirteen sections and four appendices. The majority of the provisions of the IMSBC Code are now mandatory. The terms “shall”, “should” and “may” when used in the Code, mean that the relevant provisions are “mandatory”, “recommended” and “optional” respectively. The following provisions are recommended:

- Section 11 – Security Provisions (except for subsection 11.1.1);
- Section 12 – Stowage factor conversion tables;

Section 13 – References to related information and recommendations;

Appendix 1 – Individual schedules of solid bulk cargoes – Appendix 1 is mandatory except for informational text contained under following sections of each individual shipping schedule: DESCRIPTIONS, CHARACTERISTICS, HAZARD, and EMERGENCY RESPONSE PROCEDURES;

Appendix 2 – Laboratory test procedures, associated apparatus and standards;

Appendix 3 – Properties of solid bulk cargoes; and

Appendix 4 – Index.

3. Sources of the IMSBC Code

A copy of the formatted version of the IMSBC Code can be purchased from the International Maritime Organization (IMO) directly or from an authorized vendor.

IMO Publishing

4 Albert Embankment

London SE1 7SR

United Kingdom

e-mail: sales@imo.org

Tel: + 44 (0)20 7735 7611

Fax: + 44 (0)20 7587 3241

Website: <http://www.imo.org/Publications/Pages/Home.aspx>

An unformatted electronic copy of the 2009 edition of the IMSBC Code can be found here:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=24840&filename=268\(85\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=24840&filename=268(85).pdf)

An unformatted electronic copy of the first amendment (01-11) to the 2009 edition of the IMSBC Code can be found here:

[http://www.imo.org/blast/blastDataHelper.asp?data_id=30651&filename=318\(89\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=30651&filename=318(89).pdf)

4. Amendments to the IMSBC Code

The IMSBC Code is updated every two years. The 2009 edition of the IMSBC Code, which replaced the BC Code, became mandatory on 1 January 2011. Amendment (01-11) to the 2009 edition of the IMSBC Code became mandatory on 1 January 2013. This amendment was largely unsubstantive and included minor editorial changes to existing individual cargo schedules and the addition of new schedules not included in the 2009 edition of the Code.

Amendment (02-13) to the 2009 edition of the IMSBC Code may be used on a voluntary basis as of 1 January 2014 and will become mandatory on 1 January 2015. This amendment is more substantial than Amendment (01-11) in that hazard classification procedures related to MHB are completely re-written and highly technical edits are included for multiple schedules, in addition to minor editorial amendments and new cargo schedules.

5. Documentation

In accordance with Section 4 of the IMSBC Code and 46 CFR 148.60, the shipper or loading terminal must supply the vessel master or a representative of the master with cargo information sufficiently in advance of loading to enable precautions to be taken to ensure that the cargo is properly stowed and can be safely carried. All solid bulk cargo shipments must be accompanied with shipping papers that contain the following information:

- An authorized Bulk Cargo Shipping Name (BCSN);
- The cargo group(s);
- The hazard class, if applicable;
- The UN number, if applicable; and
- The total quantity of cargo offered.

In addition to the information above, other information may also be required to accompany the shipment depending on the specific provisions for the cargo as contained in Appendix 1 of the IMSBC Code and as contained 46 CFR part 148. This information is mainly used during the loading of the vessel and during carriage and also appears in Appendix 1 to the IMSBC Code. When required in Appendix 1, vessels carrying solid bulk cargoes in the U.S. must have this information on board prior to departure. The additional information is as follows:

- The stow factor;
- Information on the need for trimming and trimming procedures;
- Information on the likelihood of shifting and the angle of repose;
- Information on the moisture content and the transportable moisture limit (TML);
- Information on the likelihood of the formation of a wet base;
- Information on toxic or flammable gases that may be generated;
- Information on flammability, toxicity, corrosiveness and oxygen depletion;
- Information on self-heating properties;
- Information on the emission of flammable gas when in contact with water;
- Information on radioactive properties; and
- Any other information required by national authorities.

Solid bulk cargoes that are classified as dangerous goods must also be accompanied by dangerous cargo manifest (DCM) setting forth the location of the dangerous goods on board in accordance with SOLAS Chapter VII/7-2.2 and Section 4.8 of the IMSBC Code. A DCM is not required for MHB and PDM cargoes.

In addition, solid bulk cargoes may be required to be accompanied by certain certificates as indicated in the individual shipping schedules of Appendix 1 to the IMSBC Code. For instance, a bulk shipment of SEED CAKE is required to be accompanied by a certificate stating the oil and moisture levels of the cargo. This requirement can be found in the shipping schedules for SEED CAKE as contained in Appendix 1 of the IMSBC Code and in 46 CFR 148.310(d).

The above information may be presented in the form of a shipping paper or it can be available to the master electronically using Electronic Data Processing (EDP) or Electronic Data Interchange (EDI) techniques.

6. Unlisted Cargo Authorizations

In accordance with IMSBC Code Section 1, Regulation 1.3, before carriage (in U. S. waters), solid bulk cargoes that are not listed in the IMSBC Code must be authorized for carriage as follows:

Non-hazardous cargo –For loading in a U.S. port, cargo authorizations will be issued by USCG HQ Hazardous Materials Division (CG-ENG-5) when requested. Vessels arriving with (unlisted) cargo onboard are required to have received competent authority approval from the port state of loading. Written approval should be available on board the vessel.

Hazardous cargo – Approval from the port state of loading, flag state of the vessel, and the port state of discharge is required. CG-ENG-5 will review and approve such cargoes prior to loading. Written documentation should be available on board the vessel.

7. Cargo Exemptions and equivalent measures under the Code

A competent authority may grant an exception from or authorize equivalent measures to some or all of the carriage requirements for certain solid bulk cargoes in accordance with IMSBC Code Section 1, Regulation 1.5. Exemptions or equivalent measures granted by other competent authorities must be approved by CG-ENG-5 prior to carriage in the U.S. in accordance with 46 CFR 148.55(b)(3) and will be in the form of a letter. In the event that a vessel is operating under the conditions of an exemption that has not been approved in the U.S., specific instructions should be sought from CG-ENG-5. However, if the exemption was issued to the vessel in relation to a Group C cargo (non-hazardous), then the foreign exemption may be accepted without further instruction from CG-ENG-5.

8. Fixed gas fire-extinguishing systems

In accordance with SOLAS Chapter II-2/10.7.2, a cargo vessel engaged in the carriage of dangerous goods in any cargo spaces shall be provided with a fixed carbon dioxide, an inert gas fire-extinguishing system or with a fire-extinguishing system that provides equivalent protection that is approved by the vessel's flag administration. Approved equivalencies must be reported by the flag administration to the IMO per SOLAS Chapter I/5.

Table 2 in MSC.1/Circ.1395 (enclosure 2) contains a list of solid bulk cargoes for which a fixed gas fire-extinguishing system may be ineffective. Vessels carrying these cargoes should have a fire extinguishing system that provides an equivalent level of protection for the cargo spaces. For foreign vessels, the vessel's flag administration will approve equivalencies. For U.S. port state control purposes, the only documentation required to

be on board a foreign vessel with an approved equivalency referred to in this paragraph is a Cargo Ship Safety Equipment Certificate issued pursuant to SOLAS Chapter I.

Per SOLAS Chapter II-2/10.7.1.4, certain cargo vessels may be exempt from the fixed-gas fire extinguishing system requirements if they are constructed and solely intended for the carriage of ore, coal, grain, unseasoned timber, non-combustible cargoes or cargoes that constitute a “low fire risk.” Table 1 in MSC.1/Circ.1395 contains a list of low fire risk cargoes. Other cargoes may be deemed a low fire risk for purposes of an exemption under SOLAS Chapter II-2/10.7.1.4. CG-ENG-5 will review and approve all “low fire risk” determinations for cargoes loaded in the U.S. that are not listed in Table 1.

Vessels authorized to carry low fire risk cargoes without a fixed gas fire-extinguishing system must have a SOLAS exemption certificate in accordance with SOLAS Chapter I/12(a)(vii).

9. Key Differences between U.S. Regulations and the IMSBC Code

Environmentally Hazardous Substances – The IMSBC Code does not contain any provisions related to the protection of the marine environment. In the waters of the U.S., the Environmental Protection Agency (EPA) under section 101(4) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) classifies certain materials as “hazardous substances.” Hazardous substances are subject to all applicable laws and regulations, as well as specific documentation and release mitigation requirements during transport and reporting requirements if released into the environment. If the solid bulk cargo to be carried is determined to be a hazardous substance, then the requirements contained in 46 CFR 148.150 and 148.270 must be followed in addition to the provisions of the IMSBC Code. This applies to all U.S. and foreign vessels on waters of the United States and in U.S. ports.

Non-hazardous cargoes are cargoes assigned to Group C of the IMSBC Code and are not subject to U.S. law and regulation under 46 CFR part 148 and the Hazardous Materials Transportation Act (although other laws and regulations may apply).

Enclosure (2) to CG-CVC Policy Letter 13-03



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MSC.1/Circ.1395
15 June 2011

LISTS OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING SYSTEM MAY BE EXEMPTED OR FOR WHICH A FIXED GAS FIRE-EXTINGUISHING SYSTEM IS INEFFECTIVE

1 The Maritime Safety Committee, at its sixty-fourth session (5 to 9 December 1994), agreed that there was a need to provide Administrations with guidelines regarding the provisions of SOLAS regulation II-2/10 concerning exemptions from the requirements for fire-extinguishing systems.

2 Consequently, the Committee approved MSC/Circ.671 whereby it agreed to:

- .1 a list of solid bulk cargoes, for which a fixed gas fire-extinguishing system may be exempted (table 1) and recommended Member Governments to take into account the information contained in table 1 when granting exemptions under the provisions of SOLAS regulation II-2/10.7.1.4; and
- .2 a list of solid bulk cargoes for which a fixed gas fire-extinguishing system is ineffective (table 2), and recommended that cargo spaces in a ship engaged in the carriage of cargoes listed in table 2 be provided with a fire-extinguishing system which provides equivalent protection. The Committee also agreed that Administrations should take account of the provisions of SOLAS regulation II-2/19.3.1 when determining suitable requirements for an equivalent fire-extinguishing system.

3 The Maritime Safety Committee, at its seventy-ninth session (1 to 10 December 2004), reviewed the above-mentioned tables and approved MSC/Circ.1146. The Committee decided that the annexed tables should be periodically reviewed and invited Member Governments to provide the Organization, when granting exemptions to ships for the carriage of cargoes not included in table 1, with data on the non-combustibility or fire risk properties of such cargoes. Member Governments were also requested to provide the Organization, when equivalent fire-extinguishing systems are required for the agreed carriage of cargoes not included in table 2, with data on the inefficiency of fixed gas fire-extinguishing systems for such cargoes.

4 The Maritime Safety Committee, at its eighty-ninth session (11 to 20 May 2011), noting the mandatory status of the IMSBC Code, reviewed the aforementioned lists of solid bulk cargoes to align certain names in the lists with those in the recent version of the IMDG Code, and approved them, as set out in tables 1 and 2 of the annex.

MSC.1/Circ.1395
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5 The purpose of this circular is to provide guidance to Administrations. It should not, however, be considered as precluding Administrations from their right to grant exemptions for cargoes not included in table 1 or to impose any conditions when granting such exemptions under the provisions of SOLAS regulation II-2/10.7.1.4.

6 This circular supersedes MSC/Circ.1146.

ANNEX

TABLE 1

LIST OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING
SYSTEM MAY BE EXEMPTED

- 1 Cargoes including, but not limited to, those listed in regulation II-2/10:
 - Ore
 - Coal (COAL and BROWN COAL BRIQUETTES)
 - Grain
 - Unseasoned timber
- 2 Cargoes listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code, which are not combustible or constitute a low fire risk, as follows:
 - .1 all cargoes not categorized into Group B in the IMSBC Code; and
 - .2 the following cargoes categorized into Group B in the IMSBC Code:
 - ALUMINIUM SMELTING BY-PRODUCTS, UN 3170
(Both the names ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS are in use as proper shipping name)
 - ALUMINIUM FERROSILICON POWDER, UN 1395
 - ALUMINIUM SILICON POWDER, UNCOATED, UN 1398
 - CALCINED PYRITES (Pyritic ash)
 - DIRECT REDUCED IRON (A) Briquettes, hot moulded
 - FERROPHOSPHORUS (including briquettes)
 - FERROSILICON, with more than 30% but less than 90% silicon, UN 1408
 - FERROSILICON, with 25% to 30% silicon, or 90% or more silicon
 - FLUORSPAR (calcium fluoride)
 - LIME (UNSLAKED)
 - LOGS
 - MAGNESIA (UNSLAKED)
 - PEAT MOSS
 - PETROLEUM COKE*
 - PITCH PRILL
 - PULP WOOD
 - RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY MATERIAL (LSA-1), UN 2912 (non fissile or fissile – excepted)
 - RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECT(S) (SCO-I or SCO-II), UN 2913 (non fissile or fissile – excepted)
 - ROUNDWOOD
 - SAW LOGS
 - SILICOMANGANESE
 - SULPHUR, UN 1350
 - TIMBER
 - VANADIUM ORE
 - WOODCHIPS, with moisture content of 15% or more
 - ZINC ASHES, UN 1435

* When loaded and transported under the provisions of the IMSBC Code.

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- 3 Solid bulk cargoes which are not listed in the IMSBC Code, provided that:
- .1 they are assessed in accordance with section 1.3 of the Code;
 - .2 they do not present hazards of Group B as defined in the Code; and
 - .3 a certificate has been provided by the competent authority of the port of loading to the master in accordance with 1.3.2 of the Code.

TABLE 2

**LIST OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING
SYSTEM IS INEFFECTIVE AND FOR WHICH A FIRE-EXTINGUISHING SYSTEM GIVING
EQUIVALENT PROTECTION SHALL BE AVAILABLE**

The following cargoes categorized into Group B of the IMSBC Code:

ALUMINIUM NITRATE, UN 1438
AMMONIUM NITRATE, UN 1942 (with not more than 0.2% total combustible material,
including any organic substance, calculated as carbon to the exclusion of any other
added substance)
AMMONIUM NITRATE BASED FERTILIZER, UN 2067
AMMONIUM NITRATE BASED FERTILIZER, UN 2071
BARIUM NITRATE, UN 1446
CALCIUM NITRATE, UN 1454
LEAD NITRATE, UN 1469
MAGNESIUM NITRATE, UN 1474
POTASSIUM NITRATE, UN 1486
SODIUM NITRATE, UN 1498
SODIUM NITRATE AND POTASSIUM NITRATE, MIXTURE, UN 1499

Enclosure (3) to CG-CVC Policy Letter 13-03
IMSBC CODE Compliance Verification for a Vessel Carrying Dangerous Goods

		Cite	YES	NO	N/A	Recommended Actions
1	If the vessel requires a document of compliance due to the bulk cargo carried, is the document of compliance on board and valid? Applicable to cargo ships (carrying dangerous goods) of 500 gross tonnage and over constructed on or after 01 September 1984 and cargo ships of less than 500 gross tonnage constructed on or after 1 February 1992.	SOLAS II-2/19				If not, issue appropriate deficiency and detain the vessel.
2	Is the cargo carried authorized under the IMSBC Code? (If no, go to step 3; if yes, go to step 4)	IMSBC Code				If not, go to next step.
3	Does the cargo have a valid non-hazardous cargo authorization or a hazardous cargo approval on board? (complete only if answer to step 2 is no)	IMSBC Code 1.3				If not, see note #1.
4	If required, does the vessel have a Dangerous Cargo Manifest (DCM)?	SOLAS VII A-1/7-2				If not, issue appropriate deficiency and detain the vessel.
5	If a fixed CO2 or Inert Gas fire extinguishing system is not installed for the cargo holds, is a valid SOLAS Exemption Certificate on board?	SOLAS II-2/10.7.1.4				If not, see notes #2 & #3.
6	Does the vessel have a valid loading certificate? - If a loading certificate was issued in the U.S. by the National Cargo Bureau or another competent authority no further IMSBC Code compliance verification is necessary unless "clear grounds" exists to expand. If there is no such loading certificate, go to step 7.					No action necessary.

7	<p>Does the vessel possess proper documentation, certificates, and cargo information as required under the IMSBC Code and 46 CFR part 148?</p> <ul style="list-style-type: none"> - Shipping papers - For SEED CAKE and related cargoes, an oil and moisture certificate is required. - For wastes, the shipment must be accompanied by a waste movement document. - Weathering certificates, if applicable. - Other required competent authority authorizations as contained in the individual shipping schedules of the IMSBC Code. 	<p>IMSBC Code Section 4.2 SOLAS VI/2 VII/7-2 XII/10</p>				<p>If not, issue deficiency taking into account the type of information that is missing & whether the cargo is being loaded or discharged. See note #4.</p>
8	<p>For the cargo carried, were the specific requirements outlined in the relevant shipping schedule in Appendix 1 to the Code carried out?</p>	<p>SOLAS VII A-1/7-1 IMSBC Code 1.2</p>				<p>If not, issue deficiency and consider appropriate Captain of the Port (COTP) control action taking into account requirements not met & whether the cargo is being loaded or discharged. See note #4.</p>
9	<p>For the cargo carried, is there adequate information available to the crew for emergency response and medical first aid?</p>	<p>SOLAS VII A-1/7-1</p>				<p>If not, issue Code 17 deficiency and consider restricting cargo operations taking into account the cargo's hazards.</p>
10	<p>Does the vessel have proper personal protective equipment onboard?</p>	<p>SOLAS II-2/10.10; 19.3.6.1; 19.3.6.2 & FSS code CH3</p>				<p>If not, issue deficiency and consider appropriate COTP control action taking into account cargo specific requirements & whether the cargo is being loaded or discharged.</p>
11	<p>Does the vessel have proper monitoring equipment onboard for the cargo carried?</p> <ul style="list-style-type: none"> -Toxic and flammable gas detection equipment and log book, when applicable. -Temperature monitoring equipment and log book, when applicable. -Oxygen detection equipment. 	<p>SOLAS VI/3</p>				<p>Same.</p>
12	<p>Does the vessel have appropriate ventilation for the cargo carried?</p> <ul style="list-style-type: none"> -Natural ventilation -Mechanical ventilation 	<p>SOLAS II-2/9.7 & 19.3.4</p>				<p>Same.</p>

Notes:

1. If the cargo to be carried is not listed in the IMSBC Code and the vessel does not have the required authorizations for an unlisted cargo, additional investigation will be required to determine if the cargo is non-hazardous or if the cargo is hazardous and poses significant safety risk in transportation. The port state control officer (PSCO) should inspect the cargo information and shipping papers to see if the cargo is classified as dangerous goods or if the cargo has hazards consistent with other cargoes classified as Potentially Dangerous Material (PDM) or Materials Hazardous Only in Bulk (MHB). For example, if the information indicates that the cargo may self-heat or may react with water to generate flammable or toxic gases it would likely be considered a hazardous cargo (Group B) under 46 CFR part 148 and the IMSBC Code. In such cases, the vessel should be detained with consideration given to having the cargo off-loaded. If the cargo is found to be potentially subject to liquefaction (Group A), the vessel must have a valid moisture certificate and information on the Transportable Moisture Limit (TML). If the moisture certificate is missing, outbound vessels should be detained until moisture levels can be determined (also see note #3). If the cargo is found to be non-hazardous (Group C), vessel cargo operations need not be restricted.
2. If a SOLAS Exemption Certificate is not on board as required, the vessel should be detained with consideration given to having the cargo off-loaded. If the COTP is unsure if the cargo is noncombustible or constitutes a low fire risk, the COTP should request that Commandant (CG-ENG-5) assist with that determination.

If the cargo is listed in SOLAS Chapter II-2/10.7.1.4 or in Table 1 in MSC.1/Circ.1395 – “low fire risk” OR for a new cargo the vessel has an authorization from a Port State competent authority where the cargo was loaded; a Code 70 deficiency should be issued for the vessel to obtain a SOLAS Exemption Certificate per Chapter II-2/10.7.1.4. The vessel cargo operations should not be restricted.

3. If the cargo is listed in Table 2 in MSC.1/Circ. 1395, verify the equivalent fire protection measures are available. If there is concern regarding the equivalency, the PSCO should request confirmation from the vessel’s Flag Administration that the equivalency was communicated to the IMO.
4. Example Situations:
 - a. Vessel is loading ammonium nitrate (UN 1942) and the fuel tanks situated under the cargo spaces to be used for the transport of this cargo were not pressure tested to ensure that there is no leakage of manholes and piping systems leading to the tanks. Action - stop cargo ops, issue a code 17 deficiency to require compliance with the specific requirements per the cargo schedule in Appendix 1 of the Code; the COTP should assess the circumstances to determine if other actions are necessary, which may include an expanded international safety management (ISM) exam focusing on relevant section(s) of the safety management system (SMS) concerning cargo operations.
 - b. Same issue as above, however cargo is being discharged. Action - the COTP should assess the circumstances to determine if any control actions are necessary, unless there is objective evidence the cargo has fuel contamination, cargo operations can be permitted with an expanded ISM exam conducted focusing on relevant section(s) of the SMS concerning cargo operations.
 - c. If the shipping paper or other documentation has minor editorial issues, then this would likely only be a minor deficiency for inbound shipments. The cargo can be discharged ashore, but not loaded into a barge or another vessel until the documentation is corrected. For outbound this information must be corrected prior to departure.

- d. If a moisture certificate (when required) is missing but can be produced by the master or the moisture levels can be ascertained, this is a minor deficiency. For inbound, the cargo can be discharged ashore but should not be loaded into a barge or another vessel until the documentation is corrected. For outbound, the vessel should not be loaded until a certificate is provided. If the vessel is already loaded, a certificate should be provided before allowing the vessel to depart. In any case, for outbound or inbound, if the moisture levels of the cargo are above the TML, the cargo must be unloaded unless a specific authorization has been granted which allows shipping the cargo above the TML.

For additional information or guidance for:

- Specific cargoes, hazardous properties, and the IMSBC Code in general contact CG-ENG-5.
- Vessel stability contact CG-ENG-1.
- Fire safety and protection measures contact CG-ENG-4.
- Port State Control compliance contact CG-CVC-2.
- U.S. vessel compliance contact CG-CVC-1.

For additional information on grain and the loading and unloading of solid bulk cargoes contact the National Cargo Bureau, 17 Battery Place, Suite 1232, New York, NY 10004-1110, Tel: (212) 785-8300, Fax: (212) 785-8333, E-mail: ncbnyc@natcargo.org.