

SP 6-98

COAST GUARD SPECIAL PERMIT 6-98

This Special Permit is issued pursuant to 46 CFR 148.01-9 of the U.S. Coast Guard (USCG) Carriage of Solid Hazardous Materials in Bulk Regulations to authorize bulk shipments of Direct Reduced Iron (DRI) pellets, lumps and cold molded briquettes under conditions as described herein. This permit does not relieve any shipper or carrier from compliance with any applicable requirement of 46 CFR 148 of the USCG Regulations, except as specifically provided for herein.

1. **BASIS** – TECO Barge Line letter of April 29, 2002.
2. **COMMODITIES** - Direct Reduced Iron (DRI) pellets, lumps, and cold molded briquettes.
3. **PROPER SHIPPING NAME** - DIRECT REDUCED IRON.
4. **REGULATION WAIVED OR AFFECTED** - 46 CFR 148.01-7.
5. **AUTHORIZED HOLDER** – TECO Barge Line, P.O. Box Drawer 790, Metropolis IL, 62960
6. **MODE OF TRANSPORTATION AUTHORIZED** - Unmanned Covered Barges.
7. **CLASSIFICATION** -

IMO: Material Hazardous Only in Bulk.
8. **PROPERTIES** –
 - (a) DRI may react with water and air to produce hydrogen and heat. The heat produced may be sufficient to cause ignition. Oxygen in enclosed spaces may be depleted.
 - (b) Description:

Cold molded briquettes are those which have been molded at a temperature of less than 650°C (1202°F) or which have a density of under 5.0 g/cm³. The approximate maximum dimensions of cold molded DRI briquettes are 35 mm to 40 mm. DRI lumps and pellets have an average particle size of 6 mm to 25 mm with up to 5% fines (under 4 mm).
9. **SPECIAL TRANSPORTATION REQUIREMENTS** -
 - (a) DRI must be loaded and unloaded at a designated waterfront facility that meets the requirements of 33 CFR 126.05(a) or a midstream anchorage acceptable to the cognizant Coast Guard Captain of the Port.
 - (b) The cognizant Coast Guard Captain of the Port must be informed at least 24 hours in advance of loading or unloading operations.

- (c) The loading operations must be supervised by a person familiar with the safety precautions and emergency procedures associated with handling DRI. The loading operators must be trained in the appropriate safety precautions and emergency procedures for handling DRI.
- (d) The shipper shall provide the person in charge of the tug or towing vessel with information on the safety precautions and emergency procedures associated with the shipment of DRI.
- (e) The shipper shall certify that the DRI conforms with the requirements of this special permit and the IMO Code of Safe Practice for Solid Bulk Cargoes, including the limitation of the amount of fines (less than 4 mm) to 5%.
- (f) Prior to shipment, DRI shall have been aged for at least 72 hours, or treated with an air passivation technique, or some other equivalent method that reduces the activity of the DRI to at least the level of the aged product.
- (g) DRI must be protected from contact with water at all times. DRI which is wet or known to have been wetted must not be accepted for carriage. DRI shall not be loaded or transferred from a vessel or barge to another during periods of rain or snow. Unloading under all weather conditions is acceptable. During a voyage, DRI must be protected from contact with water.
- (h) DRI should not be loaded if the product temperature is in excess of 65°C (150°F).
- (i) DRI shall be loaded in such a manner as to avoid a concentration of fines in localized areas in the cargo.
- (j) No smoking, burning, cutting, chipping or other source of ignition shall be allowed on or near barges containing DRI.
- (k) The unmanned covered barges used to transport DRI shall be provided with adequate natural ventilation.
- (l) Before DRI is loaded, holds shall be as dry and clean as reasonably practicable, and free of residues of previous cargoes, loose dunnage, debris and combustible material of any kind.
- (m) Precautions must be taken to prevent the penetration of hydrogen gas into adjacent cargo compartments, voids, bilges, and wells, and behind ceiling boards.
- (n) After loading, the hatches must be closed at all times until the barge arrives at the unloading port, except as provided in paragraph 9.p.
- (o) During unloading, a fine spray of fresh water may be used to control dust.
- (p) If at any time a cargo compartment of a barge containing DRI must be entered, the hatch covers must be opened for a sufficient length of time to dissipate any accumulated gases. Before any person enters a cargo compartment of a barge containing DRI, it must be checked with an oxygen monitor to determine that there is an adequate oxygen concentration.
- (q) After unloading, the barge shall be cleaned thoroughly before loading a different cargo.

- (r) Each bill of lading, shipping order, or other shipping paper issued in connection with DRI under the terms herein, must bear the notation "USCG Special Permit 6-98."
- (s) When DRI is transported by barge, a copy of this permit must be on board the tug or towing vessel. When the barge is moored, the shipping paper and a copy of this Special Permit must remain on the barge in a suitable protected location.

10. **REPORTING REQUIREMENTS** - Any incident or casualty occurring while shipping under the terms of this permit shall be reported in accordance with 49 CFR 171.15, and a copy of the written report forwarded to the Commandant (G-MSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001 at the earliest practicable moment. In addition, a record of experience under the terms of this special permit including any casualties or difficulties encountered must be sent to the Commandant (G-MSO-3) upon request for renewal.

11. **EXPIRATION DATE** – June 30, 2006.

Authorized by:

E. P. PFERSICH
Acting Chief, Hazardous Materials Standards Division
By direction of the Commandant

June 27, 2002
DATE