

PORT OF KANDLA PETROLEUM RULES, 1990

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PORT OF KANDLA PETROLEUM RULES, 1990

Notification No. MR/FB/ 1802/IV. published in Gujarat Gazette. Pt. IV-C. dt. 27-12 1990. P. No. 3148. -In super cession of Port of Kandla Petroleum Rules, 1955 and in pursuance of sub-section (2) of section 124 of the Major Port Trust Act, 1963 (38 of 1963), the Board of Trustees of the Port of Kandla (Kandla Port Trust) hereby publish the following. Regulations, made by it in exercise of the powers conferred by section 123 of the Major Port Trusts, Act, 1963 (38 of 1963):

1. Short title. :-

(1) These regulations may be called Port of Kandla Petroleum Rules. 1990.

2. Definition. :-

In these regulations, unless the context otherwise, requires :-

(1) 'Act' means the Major Port Trusts Act. 1963:

(2) 'Board' means the Board of trustees of the Port of Kandla as constituted under the Act;

(3) 'Bulk Oil Vessel' means a vessel licenced to carry petroleum in bulk as cargo:

(4) 'Chairman'. 'Deputy Chairman', 'Vessel', Master'. 'Owner' and 'Goods' have the same meaning assigned to them in the Major Port Trusts Act. 1963:

(5) 'Deputy Conservator' mean the officer in charge of the Marine department and include the Harbour Master and any other officer or officers acting under the authority of the Deputy Conservator:

(6) 'Excluded petroleum' means petroleum having its flash point not below ninety three degree centigrade

(7) 'Flash Point' of any petroleum means the lowest temperature at which it yields a vapour which will give a momentary flash when ignited.

(8) 'Fuel Oil' means petroleum having a flash point of not less than sixty five degree centigrade.

(9) 'Gas Free Certificate' means a certificate granted by an officer appointed by the Central Government in this behalf to the effect that a vessel has been thoroughly cleaned and freed from petroleum and inflammable vapour:

(10) 'Motor Vehicle' means vehicle propelled by mechanical means:

(11) 'Petroleum' means any liquid hydro carbon or mixture of hydro-carbons and any inflammable mixture (Liquid viscous or solid) containing any liquid hydro carbon: but it does not include any oil ordinarily used for lubricating purposes and having its flashing point at or about 93.3Z C Thermometer

(12) 'Petroleum Class A' means petroleum having a flash point below twenty-three degrees centigrade:

(13) 'Petroleum Class B' means petroleum having a flash point of twenty three degree Centigrade and above but below sixty-five degree centigrade:

(14) 'Petroleum Class C' means petroleum having a flash point of sixty-five degree Centigrade and above but below ninety-three degrees centigrade:

(15) 'Port' means the Major Port of Kandla.

(16) 'Petroleum Vessel' means a vessel carrying petroleum of Class 'A', 'B' and 'C' excluding bunkers:

(17) 'Traffic Manager' means the Officer-in Charge of the Traffic Department and includes the deputies and assistants to the Traffic Manager and any other officers or officers acting under authority of the Traffic Manager:

(18) Flammable : Capable of being ignited and of burning in air. The term 'Flammable' has is used to mean a vapour/air mixture within the flammable range.

(19) 'Vehicle' means any cart, carriage, lorry, truck or other wheeled contrivance, used for the transportation by road of human beings or of property.

(20) Bonding :- The connecting together of metal parts to ensure electrical continuity

(21) Bunkers :- Fuel for burning in the tankers own boilers or engines.

(22) Bunker Tanks :-Tanks in which ship's bunker fuel can be carried.

(23) Gas :-Hydrocarbon and other vapours from petroleum as well as their mixture with air.

(24) Cargo/Ballast Tanks : Tanks used changeably for bulk cargo or ballast.

SCHEDULE 1

GENERAL

1 Board not responsible for any act of or default of. Port Officials. The Board shall not be responsible for any act or default of any Port Officer or Deputy Conservator or Harbour Master or of any deputy or assistant of any of the authorities aforesaid, or of any person acting under the control or direction of any such authority, deputy or assistant or for default, of any pilot, or for any damage sustained by any vessel in consequence of any defect in any of the moorings, hawsers or other things belonging to the Board which may be used by the vessel. 2. Nothing in these Rules shall apply to a bulk oil vessel granted a Gas-Free Certificate by a Surveyor or an officer appointed in this behalf by Government which has carried Petroleum since such certificate was issued. 3. Nothing in these Rules shall apply to vessels carrying fuel oil which has a flash point of not less than 65.6 C unless the vessel carries or has carried other petroleum in bulk since obtaining a gas free certificate.

ADMISSION OF VESSELS INTO PORT (A) Petroleum Vessels : 1. Hoisting of flag on arrival.-The Master of every vessel carrying petroleum Class 'A'. Petroleum Class 'B' or Petroleum 'C' in bulk or in cases as cargo on board shall on arrival at the Port. hoist flag 'B' of the International Code of Signals at the fore and shall during the day keep such flag flying and during the night exhibit a red light visible all-round the compass the fore or where it can best be seen. 2. Exhibition of red flag by harbour craft or a craft under Harbour craft licence.-Every harbour craft carrying petroleum shall exhibit during the day, a large squares red flag in such a position as may be visible all round the Compass and during the night a red light visible all round the compass. 3. The Master of every vessel carrying petroleum shall on reaching the pilot station deliver to the pilot a written declaration over his signature stating : (a) What quantity of petroleum the vessel is carrying. (b) Whether any and, if so, what quantity of it is and Certificated Petroleum. (c) Whether any and, if so what quantity it is 'Dangerous Petroleum'. (d) Whether any and, if so, what quantity of it is petroleum having a flash point of not less than 65.60C. (e) What quantity of petroleum specifying whether any and, if so, what part of it belongs to each of the clauses (b), (c). (d) it is intended

to land at this port or at any other Port in India. Provided that no such declaration by the Master of the vessel shall be necessary if, in anticipation of her arrival, the Agent for the vessel delivers to the Deputy Conservator and to the Traffic Manager a written declaration as aforesaid over his signature or in the case of fuel oil carried as fuel for the vessel, that it is covered by General Guarantee in accordance with Appendix 'A' filled in Port Office. 4. If any petroleum to be landed at Kandla Port be certificated petroleum the Master or/Agent of the vessel in which it is carried shall deliver to the pilot or Deputy Conservator, as the case may be, alongwith his declaration the certificate relating to such petroleum. unless such certificate shall previously have been forwarded direct from the Port of shipment. 5. Every certificate and declaration delivered to a pilot under rules shall be made over by him without delay to the Deputy Conservator and all certificate and declarations received by the Deputy Conservator shall with all convenient dispatch be forwarded by him to the Chief Customs Officer. 6. Every vessel having petroleum other than fuel oil on board as cargo while moored in the Port shall keep the end of wire hawser having any eye, paid out to the water's edge at the bow and stern to enable tug to take hold in cases of emergency. 7. (i) Ever vessel having petroleum other than fuel oil on board as cargo when discharging or loading or while hatches are open shall have her fire houses connected and all fire extinguishing appliances ready for immediate used and if the petroleum being loaded or discharged or stowed in the holds is dangerous petroleum all awnings shall be furled. No smoking shall be allowed on board and no other vessel with lights or fire or person smoking on board shall be allowed within 91.440 meters of a vessel loading or discharging dangerous petroleum. (ii) Vessels which have no arrangements, for working fire hoses. while discharging or leading petroleum in the harbour shall have adequate fire extinguishing appliance so disposed that they can be put into immediate use, if the petroleum is dangerous, petroleum shall have their awnings furled. Note.-The fire extinguishing appliances shall be of a pattern approved by officer appointed under rule 30 of the Petroleum Rules. 1937 and shall be fitted in positions approved by him. 8. No bulk oil vessel carrying petroleum or fuel oil for discharge shall be taken alongside the oil jetty until permission to discharge the same has been received from the Chief Customs Officer (Customs Collector) and the Traffic Manager. The Traffic Manager shall not issue the permit unless the Customs permit is produced. 9. No fire or naked lights shall be allowed on board any bulk oil vessel when in the Port until the vessel has been cleaned inside from petroleum and vapour of petroleum, and if loading or discharging dangerous petroleum the condition laid down in Rule 32 of these rules must be complied with. 10. Every hulk oil vessel shall wait in the tanker anchorage until taken alongside the oil jetty to discharge if jetty is not ready for occupation and also after discharging the petroleum until the vessel is cleaned or proceeds direct to sea, provided that bulk oil vessel, on completion of the discharge of all dangerous petroleum in excess or 90.919 liters retained in Ship's tores, may be placed alongside cargo jetty to discharge or load general cargo in accordance with the provisions of Port by-laws on her Master Certifying that all tanks which contained dangerous petroleum have been steamed out and ventilated and that the hatches of all such tanks are closed down gas-tight. The Deputy Conservator may. in his discretion allot special anchorage to bulk oil vessel carrying dangerous petroleum, if he considers that in the interest of the Port and the vessel such a berthing is necessary. 11. The Master of every bulk Oil vessel shall observe the following precautions regarding oil tanks, namely :- (i) So long as there is petroleum, or dangerous vapour in a tank. he shall keep the

hatches of such tank locked otherwise fastened in a manner satisfactory to the Deputy Conservator, provided that, subject to the provisions of clause (2) of these rules, he may cause them to be opened for the purpose of taking on board or discharging petroleum, for cleaning, the tanks or for other sufficient reason (ii)j He shall not allow any person to enter a petroleum tank unless .- (a) such person wears a safety helmet of a description approved by the Government: or (b) a Surveyor or other officer appointed by the Government of India in this behalf, having examined the tank with the aid of a vapour-testing instrument has certified it to be free from dangerous vapour. 12. During the time that any bulk oil vessel is in the Port a responsible officer and engineer must always be on board night and day to carry out and give effect to the provisions of these rules. In the absence of the Master, the responsible officer is the senior Deck Officer on Board. When loading or discharging is proceeding or about to be started it is absolutely essential that the Master or Chief Officer and either the Chief or second Engineer must be on board and see that every necessary precaution is taken for the safety of the vessel and her cargo, and during all such time the engines, boilers and machinery shall be maintained in working order so that the vessel may be moved (in case of a vessel loading or discharging dangerous petroleum as soon as steam can be raised) if so required by the Deputy Conservator. 13. If so required by the Deputy Conservator, a bulk oil vessel alongside an oil berth shall at any time be removed to the anchorage appointed for bulk oil vessels and when the petroleum has been discharged, the vessel shall, as soon as possible leave the oil berth and be taken to the appointed anchorage and remain there till cleaned. unless she is proceeding to sea: provided that if she has discharged her petroleum cargo she may, with permission from the Deputy Conservator cleanse her tanks alongwith the oil berth subject to precaution being taken to prevent the discharge of oil, oily water or refuse on to the shore or into the Harbour. 14. No bulk oil vessel shall be taken amongst the other shipping. unless proceeding to an oil berth (or in the case of a vessel carrying fuel oil only, into the Port) until her Master produces a certificate from a Surveyor or an officer appointed in this behalf by Government that he has examined the tanks with aid of vapour testing instruments and that the vessel has been found entirely clear of petroleum and vapour of petroleum and is in a fit state to enter the Port. 15. Any tanker in ballast coming alongside cargo jetties for loading or unloading any type of inflammable substance/toxic and hazardous chemicals etc.. her Master should give in writing the following details before the vessel is brought alongside cargo jetties to the Deputy Conservator well in advance :- (i) The vessel had not carried any dangerous petroleum in her tanks since last 3 voyages. (ii) Explosive Inspector or any other officer appointed by the Government in this behalf has examined all the tanks with the aid of vapour testing instrument and that the vessel has been found entirely clear of petroleum and vapour of petroleum and is in a fit state to go alongside cargo jetty. (iii) During her stay at alongside cargo jetty. Master should keep a responsible officer on duty on deck round the clock to supervise the loading/discharging and for safety measures (iv) A continuous fire watch to be maintained. All the Fire fighting equipments on board the vessel be kept in readiness. (v) However, permission for berthing of such type of vessel shall be at the discretion of the Deputy port Conservator. 16. If the quantity of petroleum declared dangerous on board a vessel does not exceed 181.838 liters and there is no other petroleum on board except that comprised in the vessel's stores, manifested as such and not of an unreasonable cargo amount, or the aggregate quantity of petroleum on board, not being fuel oil as bunkers, including petroleum declared dangerous does not exceed. 18 1.838 liters, the said petroleum

may be forthwith landed and the vessel may proceed to any anchorage. 17. When petroleum is discharged or loaded in bulk, its removal from or to the vessel shall be effected by means of a hose and a metal pipe, suitable and prepared for the purpose and it shall be pumped into storage tanks. Except in the case of dangerous petroleum and in cases where discharge is interrupted to shift berth in accordance with order from the competent authority the discharge or loading of petroleum in bulk shall be continuous, day and night, until completed weather and appliances permitting. In case of the dangerous petroleum discharging or loading day and night, the provisions of Rule 31 of these rules be strictly observed. 18. When pumping petroleum at night, electric light only shall be used: and when the vessel has finished discharging or loading dangerous petroleum or non-dangerous petroleum having a flash point below 65 C the pipe to the storage tanks shall immediately be emptied of petroleum by the vessel's pump flushing water at least so far as the boosting pump on the shore. If for any cause the discharge or loading of petroleum is at any time. suspended arrangement must be made by means of a valve for effectively preventing any of the oil left in the pipe from escaping 19. A vessel discharging dangerous petroleum under sub rule 19 may be allowed to leave the berth after flushing the pipeline for a period of 2 hours if it has to make way for another vessel waiting for berthing immediately provided the latter vessel undertakes to flush and to clear the pipeline of dangerous petroleum as laid down in rule 19. 20. In the case of vessel which is not equipped with its own power for discharging or loading petroleum and is also not discharging or loading with the assistance of the Booster pumping station on the shore, such vessel has finished loading or unloading petroleum other than fuel oil, the pipeline and flexible hoses engaged shall be immediately emptied of petroleum by passing water through line. The oily water shall be collected in the tanks of such vessel or in drums, and in the latter case the drums with their contents shall be immediately removed from the port area. All due precautions shall be taken at all times to prevent any escape of petroleum or oily water into the Kandla harbour waters. 21. The flexible armored hoses and metal pipes engaged in loading or discharging dangerous petroleum in bulk shall be disconnected after flushing. And all due precaution shall be taken to avoid the spillage of oil or oil mixed water on the wharves, jetties and landing places or in the Kandla harbour waters. Note.-Rule 22 shall not apply to those vessels which discharge or load dangerous petroleum through pipeline by means of their own power and which flush the pipe lines in conformity with Rule 19 of these rules. 22. It shall be obligatory on the part of bulk oil vessels to employ the services of the booster pump on the shore to accelerate the rate of pumping. However, in special cases, the Conservator may permit a bulk, oil vessel to discharge the petroleum under its own power. The port Administration does not. however, accept any liability for the non-supply of the booster pump due to circumstances beyond its control. 23. Bulk oil vessel while discharging non-dangerous petroleum shall be permitted simultaneously to load and unload general cargo in accordance with the Provisions of Port bye-laws. 24. A bulk oil vessel, when carrying out but while discharging or loading dangerous petroleum, may load or unloaded general cargo provided that :- (a) the vessel is berthed at the oil jetty or in the special anchorage set apart from the purpose: and (b) the master certifies in writing that the General cargo held is separated from the oil space by an isolating cofferdam and no tank lids whatever are open. also that the general cargo held has been thoroughly ventilated and rendered free from inflammable vapour. 25. (a) A bulk oil vessel will not be permitted to berth for the purposes of discharging bulk petroleum through the port pipeline unless the consignee furnishes a certificate to the Deputy

Conservator and the Traffic Manager that they have at their disposal sufficient licenced tank storage capacity available to accommodate the total quantities of the individual petroleum products for discharge at Kandla. The particular licenced tank storage into which the bulk oil is to be discharged and the capacity available must be specified and the quantities to be discharged must be stated on the certificate. Should it appear, during the course of discharge, that for any reason the particular licenced tank storage capacity is insufficient to accommodate the quantities manifested to this Port, the vessel may be stopped from discharging through the Port's pipeline and will be liable to be removed from the berth at the discretion of the Deputy Conservator and the Traffic Manager. (b) A bulk oil vessel berthed at the oil jetty for the purpose of discharging petroleum, shall with the assistance of the booster station on the shore discharge such charge at rate not less than the following. Through 306 mm pipeline 4000 liters per minute. Through 354 mm pipeline 5000 liters per minute. Through 406 mm pipeline 7000 liters per minute. Through 508 mm pipeline 10000 liters per minute. Failure to discharge charge at the above rates will render the vessel liable to be removed from the berth at the discretion of the Deputy Conservator or Traffic Manager. Notes.-(1) The flow velocity at the tank inlet not to exceed one meter per second until inlet is completely submerged. (2) In case of stoppage of discharge under this rule, the Master of the vessel may be required to flush the pipeline in accordance with Rule (18), (19) and Rule (20). PART-II 26. Repairs involving hot work on board-tankers.-For the purpose of this rule :- (a) 'EXPLOSION PROOF' means electrical equipment or apparatus as defined and certified as explosion proof or flame proof when enclosed in a case which is capable of withstanding and explosion of a flammable hydrocarbon vapour air mixture, or other specified flammable vapour, which may occur within it and of preventing the ignition of hydrocarbon or other specified vapour surrounding the enclosure by spark, flashes or explosion of vapour with on. It must operate at such an external temperature that surrounding flammable atmosphere will not be ignited thereby. (b) 'FLAMMABLE' means capable of being ignited and of burning in air. The term 'Flammable gas' is used to mean a vapour air mixture within the flammable range. (c) 'GAS' means hydrocarbon and other vapours from petroleum as well as their mixture with air. (d) 'GAS FREE' means that a tank, compartment or container has been tested using an appropriate gas indicator and found to be sufficiently free at the time of the test of toxic or explosive gases for a specified purpose. (e) 'GAS VENT LINES' means the piping systems fitted in tanker to relieve pressure or vacuum in cargo tanks. (f) 'HAZARDOUS AREA' is one in which an explosive (flammable) atmosphere may be present continuously or intermittently or be present due to an abnormal or transient condition. (g) 'HOT WORK' means any work which involves welding, burning, soldering, brazing, sand blasting and chipping by spark producing tools and use of certain power driven tools non-flame proof electrical equipment with internal combustion engines and includes any other work which is likely to produce sufficient heat capable of igniting inflammable gases. 27. HOT WORK CERTIFICATE means a certificate given by the Controller of Explosives certifying that he has in an adequate and suitable manner tested for the presence of inflammable vapour the oil tank compartment, space, or other part of the vessel specified on the certificate and found to be free there from and that having regard to all the circumstances in the case including likelihood or otherwise of the atmosphere being inflammable the use of naked lights, fires, lamps may in his opinion be permitted in the oil tank, compartment, space or other part of vessel specified in the certificate. 28. Repairs to receptacles.-No person shall cause to be repaired or repair by hot work any tank or container which

has last contained petroleum unless it has been thoroughly cleaned and is free from petroleum or petroleum vapour or otherwise prepared for safely carrying out such hot repair. In all such cases, certificate, as per appendix. 'A' shall be obtained from the competent authority and shall be preserved by the repairer for a period of 3 months from the date of issue and produced to an inspector on demand.'

29. Responsibilities of the Master of Vessel.-The Master or other officer-in-charge of any vessel which has last carried petroleum on board, whether as a cargo or as a fuel. or any vessel licensed under petroleum rule shall see that :- (a) All due precautions are taken for the prevention of accidents due to ignition of petroleum or petroleum vapour. (b) So long as there is petroleum vapour or oil in a tank all opening from the tank to the atmosphere except the gas escape line are kept closed and locked or otherwise fastened in a satisfactory manner, and when it is necessary to take dip or samples, the allege plugs or sighting parts are closed immediately after this has been done : Provided that subject to the provisions of clause (c) such Master or Officer-in-charge a may cause the necessary openings to be opened or unlocked for the purpose of taking on board or unloading petroleum Class B. or petroleum Class C for cleaning the tanks, or for other sufficient reasons. (c) No persons shall enter a tank or an enclosed space which had or suspected to have contained petroleum without wearing breathing apparatus of a type approved by the Chief Controller. He shall get the concerned tank or space examined by an officer appointed by the Central Government in this behalf with the aid of an approved petroleum vapour testing instruments and obtains certificate as per Rule 27. (d) The vessel does not undergo repair by 'hot work' to any of its tanks parts or fitting which are likely to contain petroleum vapour or petroleum unless he gets each such part or fittings as the case may be examined by an officer appointed by the Central Government in this behalf with the aid on an approved petroleum vapour testing instruments and obtains a certificate as per Rule 27 to the effect that the said tanks, parts, or fitting are free from dangerous petroleum vapours or petroleum. (e) The vessel used for the carriage of petroleum in bulk as a cargo is not taken among other ships or to a dry dock unless the vessel is proceeding to an oil berth or a certificate as per Rule 29 is produced from an officer appointed by the Central Government in this behalf. together with a declaration from the Master that to the best of his knowledge there is no dangerous petroleum vapour present in any other part of the vessel not covered by the above certificate. (f) The officer granting a certificate required under clause (c), (d) and (e) may specify conditions and make recommendations to maintain the gas free condition of tanks, space or parts certified. (g) The vessel or any steamer or tug towing or otherwise attending on such vessel exhibits conspicuously :- (i) from Sun rise to Sun set a red flag not less than 90 Centimeters square with a white circular center 15 centimeter in diameter if petroleum Class A. is carried and a red flag not less than 90 centimeters square if petroleum Class-B is carried: and (ii) from Sun set to Sun rise such warning lights as may be required by the Conservator of the Port. Note.-The Authority for issue of final permission for purpose of clauses (c), (d), and (e) lies with Deputy Conservator even though the gas free certificate has been obtained from the Officer appointed by the Central Government in this behalf.

30. (1) Before any dangerous petroleum is landed or loaded the owner shall give due notice to the Deputy Conservator and the Traffic Manager. (2) Except as provided in Rule 14 of these Rules dangerous petroleum in bulk shall only be loaded or discharged at the oil jetty. (3) Before any dangerous petroleum contained in casks, barrels or other container is landed, the holds of a bulk oil vessel having on board such containers shall be thoroughly ventilated, and after all dangerous petroleum has been removed from any bulk oil

vessel the holds and tanks shall be rendered free from inflammable vapour : Provided that this rule shall not be deemed to require the tanks of a bulk of oil vessels to be free from inflammable vapour (4) Where adequate electric lighting is installed at the jetty and rule 915 of the petroleum rules 1937 is complied with or when the jetty is adequately lighted to the satisfaction of Deputy Conservator by the lights of the vessel the Deputy Conservator may authorise the owner or the master of the vessel to discharge petroleum into storage tanks on shore, or load his own tanks with dangerous petroleum, in bulk, as the case may be, subject to the following conditions :- (i) that the entire operation of discharge or loading of dangerous petroleum shall be carried out under the direct superintendence of the Master of the vessel and the representative of the oil company for who the cargo is to be discharged or loaded. (ii) that usual safety precautions as required by these rules shall be observed during the operation. Note.-Nothing in conditions (i) of this sub-rule shall be in derogation of the powers of superintendence vested in the Port Administration under rule 16 of this part. In bulk oil vessels conforming with I.R.S. or other approved classification society rules and having the cargo pump driven by electric motor, the electric motor shall be approved design and its connections, shall be isolated from the cargo pump by a gas tight bulk head of sufficient height to preclude the possibility of inflammable vapour entering the motor compartment. A gas tight gland shall be fitted where the driving shaft passes through the bulk head. (5) The use of electric power while loading or discharging dangerous petroleum is not permitted unless the vessel's electrical installation complies with I.R.S. or other approved societies' requirements for electric fittings for ships carrying oil having a flash point less than 65.6 C. (6) Every vessel discharging dangerous petroleum shall be fitted with a by pass valve on the discharge side of the pump having a connection back to the ship's tanks. (7) From the time when the holds on tanks of bulk oil vessels are first opened for the purpose of loading or landing dangerous petroleum until such time as all dangerous Petroleum shall have been loaded in to or removed from such holds or tanks and the holds or tanks shall have been securely closed down, and, in the case of landing, rendered free from inflammable vapour as required by this Rule there shall be no fire or artificial light on board such ship or at or near the place where the dangerous petroleum is being loaded or landed. And provided that this rule shall not prevent the use of lamps, heaters, cookers, or other similar type of safe apparatus, electric or otherwise, so designed, constructed and maintained as to be incapable of igniting inflammable vapour. (8) The owner shall take adequate stamps to prevent any persons under his control from smoking at or near the place where dangerous petroleum is being landed or loaded and to prevent any person engaged in such landing or loading from carrying fuses, matches, or any appliances whatsoever for producing ignition. (9) No dangerous petroleum contained in casks, barrels or other vessels shall be landed or loaded unless such vessels are staunch and free from leakage, and are of such strength and construction as not to be liable to be broken or to leak except in case of gross carelessness or extraordinary accident. (10) All pipes and other appliances used in the landing or loading of dangerous petroleum in bulk shall be free from leakage. (11) When the landing or loading of dangerous petroleum has been commenced such landing or loading shall be proceeded with, with due diligence (See Rule 25(a) Part-I), and if it is discontinued the tanks and holds of the Petroleum ships shall immediately be closed. (12) No dangerous petroleum contained in casks, barrels, or other vessels shall be landed at any quay until the ship or carriage by which the same is to be removed therefrom to be at the place in readiness to receive the same, and all dangerous Petroleum landed shall be

forthwith removed therefrom or to some duly licenced place of storage. (13) No dangerous petroleum shall be brought to the place of loading until the petroleum ship into which it is to be loaded is in readiness to receive the same. (14) No dangerous petroleum shall be discharged or allowed to escape into the waters of the Harbour. (15) The Master or owners shall take all due precautions for the prevention of accident by fire in landing or loading dangerous Petroleum. (16) (1) Iron or steel hammers or other instruments capable of causing a spark shall not be used for the purpose of opening or closing the hatches or tank covers or for connecting and disconnecting the flexible armored hoses and metal pipes for shall any chipping of iron rust or paint be carried on in the vicinity during the loading or discharge of dangerous petroleum. (2) Foot-wear which expresses any iron or steel shall not be worn on the deck of any vessel while the loading or discharging of dangerous Petroleum is proceedings. (17) FIRE AND LIGHTS NOT TO BE USED ON QUAY Fires and lights other than electric filament lamps and or self-contained electric lamps, heaters, cookers or other similar type safe apparatus, so designed, constructed and maintained as to be incapable of the igniting inflammable vapour shall not be used upon the quay upon which dangerous petroleum, is being landed or loaded or upon which dangerous petroleum is living: Only intrinsically safe V.H.F. hand hold Walkie Talkies may be used on the ship or jetty. (18) RED FLAG OR RED LIGHT EXHIBITED ON OIL JETTY PIER.-Whilst a bulk oil vessel is actually engaged in discharging or loading dangerous petroleum or cleaning her tanks or ventilating vapour from opened tanks at the oil jetty a red flag by day or red light visible alround by night shall be exhibited from the Mast and also on the flat staff near the landing steps. No steam launch or vessel having fires, lights or persons smoking on board shall be allowed, within 91.44 meters of such Bulk oil vessel or alongside the pier while this signal is exhibited. (19) DISTANCE BETWEEN SHIPS.-Two or more petroleum, ships shall not. except for purpose of transshipment, lie within 30.48 meters of one and another unless in the opinion of the Deputy Conservator it is impracticable to maintain such distance. (20) SUPERINTENDENCE.-For the safer loading and unloading of dangerous petroleum and for the prevention of accident by fire or explosion the Port Administration may appoint a person or persons to superintend and enforce the observance of these rules during the discharge or loading of dangerous petroleum and the owner of the vessel shall be liable to pay to the Port the reasonable expenses of such superintendence. Such superintendence shall not attach any legal liability to or constitute the acknowledgment by the Port that the rules have been observed and shall not release the owner Master of the vessel from responsibility for failing to observe the rules. (21) INSPECTION.-The owner shall, when so required by the Deputy Conservator, or other official authorised by the authority. afford even' reasonable facility to enable such person to ascertain whether these rules are duly observed. 31 (1). Cleaning the tanks of oil tankers shall not be carried out within the port limits except with permission in writing of the Deputy Port Conservator. During such cleaning the Master of the oil tanker shall take particular care to ensure that no oil/oily refuse/oily water is discharged into the sea or on the shore. 31 (2). If necessary, the tankers may use the reception facilities provided ashore for discharging oil/oily refuse/oily water, subject to obtaining the permission to do so from the Trusts Deputy Conservator. 31 (3). The Deputy Conservator may grant such permission only after making sure that sufficient space is available in the reception tank for receiving such oil/oily waste. 31 (4). Oil tankers shall not carry out any repairs within the Port limits without the permission in writing of the Deputy Port Conservator. If considered necessary the Deputy Port Conservator shall require the Master

of the oil tanker to produce a gas-free certificate of the type indicated, before permission for carrying out any repairs granted. 31 (5). Power shall be maintained at least to work the oil tanker's anchor cables and mooring lines throughout the time an oil tanker remains within the Port limits. 31 (6). Landing/loading of petroleum in bulk: before any petroleum in bulk is discharged from or loaded into any oil tanker the owner of the cargo or the Agents of the oil tanker shall obtain permission to do so from the Deputy Port Conservator. 31 (7). All safety devices and equipment incorporated in to or carried by oil tankers in accordance with Lloyds or other approved Societies' specifications shall remain in good working condition throughout the period that such tankers remain within the port limits. All pipes and appliances used for landing/loading petroleum in bulk shall be free from leakage. 31 (8). Discharging/Loading of petroleum shall commence only after all such safety devices and equipment are inspected and tested by a competent ship's officer and found to be in good working condition. If any of these devices/equipment become defective or otherwise ineffective at any time while discharging/loading of petroleum is in progress, the oil tanker, shall immediately stop discharging/loading. Discharging/loading shall thereafter resume only after such defective device/equipment has been restored to working condition. 31 (9). A certificate signed by the Master and oil company representative of the oil tanker/bulk liquid chemical tanker/Bulk liquefied gases tanker as per check list Appendix-'d' should be handed over before commencement of cargo loading or unloading. 31 (10). Throughout the period that petroleum is being discharged/loaded, connections on the oil tanker and/or the pipelines shall be under the constant supervision by a responsible officer of the oil tanker. 31 (11). No person engaged in landing/loading of petroleum and/or operations connected therewith shall carry matches, lighters or any other material liable to cause fire/ignition/explosion. 31 (12). Open fires, smoking of tobacco and the use of non-safety light shall be prohibited at all times on any part of the oil jetty. 31 (13). During discharging/loading of petroleum Class-A open fires smoking of tobacco and the use of non-safety lights shall be forbidden on the oil tanker and on floating craft lying alongside or remaining within 300 meters of the tanker. 31 (14). During discharging/loading of petroleum Class-B, this safety distance may, however, be limited to 30 meters in so far as it applies to floating craft. 31 (15). Harbour craft proceeding within 300 meters of oil tankers discharging/loading petroleum Class-A and within 30 meters of oil tankers discharging/loading petroleum Class-B shall ensure that galley fires, other naked flames and non-safety lights are either damped down or extinguished. 31 (16). Boats/Floating craft which are not employed for any work connected with oil tankers operations shall not be allowed within 30 meters of the oil tanker. The agent/Master of the oil tanker utilising the services of any boat for tanker work shall ensure that the boatmen do not contravene any of the measures stipulated in this rule. 31 (17). Any oil tanker may discharge/load any grade of petroleum (Class A, B and C) at the oil jetty. There will not be any time limit regarding/loading of even petroleum Class-A may commence at any time during day or night. 31 (18). Use of Tools.- No hammering, chipping or sand blasting should take place or any power tool be used outside the boiler or engine rooms on a tanker or on a jetty at which a tanker is berthed without joint agreement being reached between the terminal representative and the officer responsible. In all cases the terminal representative and the responsible officer should jointly satisfy themselves that the area is gas free, and remains so while the tools are in use. 31 (19). Approval of work. -Where such work is to be done outside the boiler or engine rooms on a tanker at a berth the officer responsible should discuss the position with the terminal

representative. Agreement should be reached upon the details of the work to be done and the safety precautions to be taken. A work permit should be issued and, depending upon the circumstances, it may also be necessary for a gas free certificate to be obtained before commencing such work either on a jetty or berth or on a tanker. 31 (20). Cargo Tank Lids.-During the handling of volatile petroleum and loading of non-volatile petroleum into non gas free tanks, and while ballasting after the discharge of volatile cargo, all cargo tank lids should be closed and secured. Tank lids of cargo tanks, no gas free should normally be kept closed unless gas freeing alongside by agreement. 31 (21). Tank washing opening. During tank cleaning or gas freeing operations tank washing covers should be removed only from the tanks where these operations are taking place. Other tank washing covers may be loosened in preparation, but they should be left in their fully closed position. 31 (22). Precautions whilst arms are connected. The ship's moorings should be frequently monitored by ship and shore personnel, and tended as necessary to restrict any movement of the ship to that acceptable by the metal arm operating envelope. If drift off or range alarms are actuated all transfer operations should be stopped and remedial measures taken. Arms should be free to move with the motion of the ship. Care should be taken to ensure that hydraulic or mechanical locks cannot be engaged. Arms should not foul each other. Excessive vibration should not be permitted. 31 (23). Fire Fighting equipments.-On the tanker, immediately before or on arrival at the terminal to load or discharge cargo, the ship's fire hoses should be connected to the fire main, one forward and one aft of the ship's manifold. If practicable a pump should maintain pressure on the ship's fire main while cargo or ballast is being handled. If this is not possible the fire pump should be in a standby condition and ready for immediate operation. In cold weather freezing of fire mains and hydrants should be avoided by continuously bleeding water over-board from hydrants at the extreme end of each fire main. Alternatively, all low points of the fire main may be kept drained. Monitors should be ready for use. Portable fire extinguishers, preferably of the dry chemical type, should be conveniently placed near ship's manifold. A check should be made to confirm that both ship and shore have an International Shore Fire Connection for the transfer of water fire fighting (See Appendix 'E'). On the terminal fire fighting appliances should all be ready for immediate use.

PART-III SPECIAL RULES TO REGULATE BUNKERING OPERATIONS

1. Bunkering operations shall be carried out only after giving at least 12 hours notice in writing to the Deputy Port Conservator and the Fire and Safety Officer.

2. Bunkering of vessels with fuel oil in the Port by means of Port's service pipelines, cargo boats, tank wagons or tank vehicle will be permitted subject to the conditions specified below :-

(a) The cargo boats for bunkering shall conform the specifications of Lloyds/IRS and have been approved and licenced by the Deputy Conservator under the Kandla Port Harbour Craft Rules may be in force from time to time.

(b) The tank wagons and tank vehicles used for bunkering shall conform to Petroleum Rules, 1976: and their type be approved in writing by the Chief Inspector of Explosive, New Delhi.

(c) During all such times as many vessels is receiving fuel oil into her tanks, the Master of such vessel shall be present on board: it shall be his duty to see that the conditions specified in this rules are complied with and that all reasonable precautions for safety are observed and taken.

(d) A ship's officer shall be on watch and an attendant shall be stationed alongside the flexible connection pipe while bunkering is in progress.

(e) (i) officers in charge of the vessel which receives fuel oil for bunkering shall be responsible for seeing that all valves in vessels tank or connection are properly regulated to receive the fuel oil and due warning shall always be

given to suppliers by the ship's officer before any valves are closed to prevent the possibility of a sudden increase in pressure which may cause a burst in the flexible pipe or elsewhere and result in a consequent leakage of oil: (ii) master, owners and agents of vessels which receive fuel oil for bunkering and suppliers shall be jointly and severally responsible for seeing that bunkering operations are conducted with perfect cleanliness and in an orderly manner and any damage to property belonging to or in possession of the Port resulting from neglect of any precautions shall render them liable for the same; (iii) the master, owners or agents of the vessels receiving fuel oil shall also be liable for any such damage whatsoever caused by negligence or defect of failure of apparatus or appliances belonging to the vessel: (iv) before bunkering commence, the vessel's attendant, shall see that the telephone connection to the oil company's installation is in perfect working order. (v) an attendant shall be on duty at the pump through out the time of bunkering: (f) (i) suppliers of fuel oil for bunkering shall be liable for any damage whatsoever caused to the cargo or property belonging to or in charge of the Port by any leakage of such petroleum due to or arising from negligence or any defect in or failure of apparatus or appliances belonging to the suppliers: (ii) suppliers of fuel oil shall be responsible for seeing that before actual operations commence all flexible pipes armored hoses used for bunkering vessels are tested to a pressure at least 33% more than the working pressure and that all joints are oil tight, and that when flexible pipes armored hoses are dismantled, any unavoidable spillage on the quay is properly cleaned up with sand: (iii) no bunkering shall be commenced until the suppliers of fuel oil has delivered to the Port authorities a certificate to the effect that all flexible pipes to be used in the operation have been tested as required by sub-clause (ii) above:- (g) no cargo other than steel plates, iron rails and similar goods unaffected by oil shall be allowed on the wharf within 15.24 meters of the oil service pipes, tank wagons, tank vehicles or tank carts and shed doors immediately behind them shall be kept closed while bunkering is in progress: (h) no smoking, cooking, naked-lights or forges shall be allowed in the cargo boat or on the dock of the vessel while bunkering is in progress: (i) a suitable tray or other contrivance shall be placed under the connecting service pipe to prevent any oil or oily water from leaking on the wharf or into the Port scupper on the ship in the vicinity of bunkering area to be scaled. (j) the bilges of an oil cargo boat shall not be pumped when such cargo boat is in any confined waters or is alongside any bulk oil ship or tug: (k) the cargo boat shall carry an ample supply of buckets of sand: (l) no bunkering shall be commenced unless a portable dry chemical fire extinguisher of at least 10 Kg. capacity is on the spot of the supply pipe and the person supplying the bunker should be conversant with the operation of this extinguisher. 7. Vessels lying alongside the main cargo jetties will be permitted to bunker fuel oil from tank barges or Tank vessels on application to the Deputy Conservator provided a guarantee is given by the owner of the tank barges or tank vehicles, supplying the bunkers and also by the owner of the Steamer receiving bunkers indemnifying the Port from all damage and cost in respect of all accidents and injuries to any person or property caused by or during the bunkering of any vessel or vessels. PART-IV Special rules relating to vessels carrying packed petroleum other than bulk oil vessels. 1. Vessels arriving in Port with, or loading or discharging dangerous petroleum in tins, metal barrels or other containers, shall be anchored in the special anchorage, set apart for the purpose. 2. Vessels arriving in the Port with, or loading or discharging non-dangerous petroleum in tins, metal barrels or other containers shall be anchored in such place as the Deputy Conservator may direct. 3. General cargo and non-dangerous petroleum in tins, metal

barrels or other containers may be loaded or discharged simultaneously provided that they are contained in separate holds, but during the loading or discharge of dangerous petroleum no other cargo shall be loaded or discharged. 4. Under certain conditions, vessels having non-dangerous petroleum in tins, etc., and general cargo on board may be allotted berths at the cargo jetty of the Port where in addition to the provision of the Port Bye-laws, the following precautions must be strictly observed :- (i) That when general cargo is being loaded or discharged, the hatches or compartments in which non-dangerous petroleum is carried are kept securely closed and vice-versa. (ii) That special arrangements to maintain a through efficient watch and ward are made by the ship and all necessary precautions against fire and smoking are strictly observed whilst the vessel is at the Wharf/Berths. (iii) Every care is taken to safeguard the ships at the adjoining berths. 5. Subject to the provisions of the Port-Bye-laws, vessels which have discharged dangerous or non-dangerous petroleum in tins, metal barrels, or other containers, shall not be transported from the anchorage at which such discharge took place to the cargo jetties until the Master has certified in writing that the bilges of the holds from which such dangerous or non-dangerous petroleum was discharged are free of petroleum and petroleum vapour. The Port, however, the right to be furnished with a further certificate is a surveyor or an Officer appointed in this behalf by the Government that the holds or compartments in question are free of petroleum and petroleum vapour and that in his opinion the vessels is in a fit state to enter deck or come alongside cargo jetties.

PART-V SPECIAL RULES BELTING TO CARGO BOATS

1. No fire or light of any description other than lights required by the Port Rules or any detonating article or substance whatsoever or matches, shall be allowed on board any cargo boat while being used for the transport of or when loading or discharging dangerous petroleum. 2. Dangerous and non-dangerous petroleum shall not be transported at the same time on the same cargo boat. 3. Loaky tins containing dangerous petroleum shall not be loaded into a cargo boat containing sound tins. 4. The bilges of every cargo boat which has carried a cargo of petroleum shall, immediately after the cargo has been unloaded be thoroughly cleared of all traces of such petroleum and dried and the holds shall be thoroughly ventilated, provided that in the case of a cargo boat specially constructed and employed in carrying petroleum in bulk this precaution shall not be necessary until the cargo boat has completed its work on the whole consignment of petroleum which it has been engaged to carry. 5. Every cargo boat having any quantity of dangerous petroleum or other petroleum in bulk on board shall exhibit from sunrise to sunset a large square red flag from a mast not less than 4.75 metres above the deck and a red light visible alround during night. 6. The hatches of every cargo boat having dangerous petroleum on board shall be and remain buttoned down and covered with tarpaulins at all times except when actually loading or discharging petroleum. 7. No dangerous petroleum shall be loaded into or transported in cargo boats other than those complying in all respects with the requirements of MND/IRS or other approved classification society and approved by the Deputy Conservator. 8. Cargo boats used for the carriage of dangerous petroleum may be propelled by motors fitted to such cargo boats, provided :- (a) that such cargo boats are built in accordance with recognised rules for whip-building, such as Lloyds/IRS rules or those of the British Corporation, and under the supervision of a responsible surveyor: (b) that the propelling power is situated in the after part of the vessel the compartment in which it is fitted being separated from the hold used for cargo by a cofferdam extending the full width of the vessels and of one frame space in length. (c) that the propelling power is sufficient to enable

the vessel to travels the distance from the loading to the discharging station within two hours and under the ordinary conditions of weather. 9. Petroleum other than dangerous petroleum in bulk shall be transported in a cargo boat which complies with the specification of Loyds/IRS or other approved classification society/M.M.D. and is duly licensed for such service and has been approved by the Deputy Conservator.