



Tonga

# **PETROLEUM REGULATIONS**

**Chapter 46.06.1**

**2016 Revised Edition**





# PETROLEUM REGULATIONS<sup>1</sup>

Commencement [29<sup>th</sup> January 1970

## PART I - PRELIMINARY

1. These regulations may be cited as the Petroleum Regulations.
2. For the purpose of these regulations “Controller of Customs” includes any person authorized by him.
3. In these regulations, unless the context otherwise requires —
  - “**approved container**” means a container of a type approved by the Minister of Police;<sup>2</sup>
  - “**approved tank**” means a tank of a type approved by the Minister of Police;
  - “**protected works**” includes buildings in which persons dwell or assemble, docks, wharves, timber yards, public roads and any other place not forming part of an installation which Cabinet may by order declare as protected works, but does not include the timekeeper's or administrative office of an installation.<sup>3</sup>

## **PART II - REGULATIONS TO BE OBSERVED UPON OR IN RESPECT OF ALL VESSELS CARRYING PETROLEUM**

4. All due precautions whether prescribed or not for the prevention of accidents by fire or explosion shall be taken, and no act shall be performed or permitted, which tends to cause fire or explosion, and is not reasonably necessary.
5. The master, owner, and agent of a vessel shall each be responsible for the due performance and observance of all regulations applying to such vessel, and in no case shall the responsibility of one relieve the other or others of his or their responsibility.
6. No petroleum or ballast water or water mixed with any petroleum shall be permitted to escape from or be discharged from any vessel into an inland or tidal water, and no liquid of any kind shall be discharged into any inland or tidal water from bilges, tanks, or other spaces which have contained any petroleum unless such tanks or spaces have been cleaned of petroleum, or such liquid has been freed from petroleum by means of a separating apparatus.
7. No petroleum in excess of 400 gallons shall be loaded or unloaded at any time unless notice has previously been given to the Controller of Customs.
8. No petroleum shall be conveyed, loaded, or unloaded on, into or from any vessel in tanks or packages unless such petroleum is contained in tanks or packages from which, in the opinion of the Controller of Customs, the petroleum cannot escape in the form of liquid and/or vapour.
9.
  - (1) No person shall ship or send in any vessel any motor driven vehicle, machine or boat using petroleum unless the tanks and all engine connexions thereof are empty and free from such liquid and/or vapour.
  - (2) No such vehicle, machine or boat shall have stored, placed or packed therein any petroleum whether enclosed in a separate container or otherwise.
  - (3) No master shall knowingly receive or carry on board his vessel any motor driven vehicle, machine or boat, in respect of which the requirements of this regulation have not been complied with.
10. In the event of any vessel being anchored, moored or berthed within one hundred feet of a vessel loading, unloading or carrying petroleum, such of the requirements of these regulations relating to vessels carrying petroleum as the harbour master

shall deem necessary in the interests of safety in the loading or unloading of such petroleum shall be complied with by the former vessel.

11.

- (1) Without the approval of the Controller of Customs —
  - (a) no vessel shall, at the same time as she is carrying passengers, carry any petroleum except on deck and away from passengers;
  - (b) no vessel shall, at the same time as she is carrying passengers, carry more than sixteen gallons of petroleum packed in cases for each ton net register:

Provided that if the petroleum so carried is packed in drums, 44 gallons so packed shall be deemed to be the equivalent of eight gallons packed in cases.
- (2) This regulation does not apply to petroleum carried solely for the purpose of fuelling such vessel.

12. No fires or lights (other than approved electric filament lamps or approved self-contained electric lamps) shall be permitted in the oil tanks of any vessel. In this regulation, “approved” means approved by the British Board of Trade or the American Bureau of Standards.

13. No person shall smoke in or on the vessel during the loading or unloading of petroleum.

14. No locomotive on which steam is generated by combustion in open fires shall be permitted on any railway track within fifty feet of any vessel carrying petroleum.

15. No vessel carrying petroleum as cargo shall be berthed alongside any wharf unless such vessel is ready to discharge and to continue to discharge such petroleum and arrangements have been made by the consignee immediately to receive such petroleum.

16. A responsible officer of the vessel shall be on duty day and night to give effect to these regulations.

17. No petroleum shall be loaded or unloaded on or from any vessel at any time between sunset and sunrise save with the written permission of the Controller of Customs.

18. Such fire extinguishers and other material as the harbour master may deem necessary shall be so provided and distributed about the vessel as to be available for throwing on any petroleum which may be spilled or ignited.

19. Iron or steel hammers or other instruments capable of causing a spark shall not be used for the purpose of opening or closing hatches or tank lids of a vessel carrying, loading or unloading petroleum. Chipping, scraping or hammering, of iron or steel on the vessel is prohibited when any hold which contains or has recently contained petroleum is open, or while there is any petroleum on deck except with the written approval of the harbour master.
20. A watchman shall be stationed at each gangway leading on to the vessel to prevent smoking, to prevent unauthorized access to the vessel, and to warn every person that petroleum is being loaded or unloaded by the vessel.
21. Notices, warning the crew and all persons on board or coming on board the vessel that smoking or any practice likely to cause fire is prohibited, shall be displayed in conspicuous positions on the vessel and on the gangways of such vessel.
22. Proper and efficient ventilation for the place of stowage shall be provided and, when required, outlet ventilators passing through the deck and terminating just below such deck, and inlet ventilators extending to the bottom of the holds from above the upper deck shall be fixed. All outlet and inlet ventilators shall be covered with wire gauze.
23. All holds containing petroleum in packages shall be thoroughly ventilated before, and during, the time such petroleum is being unloaded.
24. All holds from which petroleum in packages has been unloaded shall be thoroughly ventilated, and no fire or unauthorized light shall be permitted at or near a hold which recently contained petroleum until such hold has been thoroughly ventilated and made free from inflammable vapour.
25. All petroleum loaded on the vessel shall be properly and securely stowed.
26. A permit in writing shall be obtained from the Controller of Customs to load or unload general cargo after sunset into or from a vessel carrying petroleum and the following precautions shall be taken —
  - (a) every hold containing petroleum shall be securely battened down;
  - (b) no cargo shall be loaded into or unloaded from any hold unless such hold is separated by watertight and gastight bulkheads, decks, battened down hatchways or other means from all places on such vessel where vapour from petroleum is likely to be.
27. The loading or unloading of petroleum from a vessel shall not commence until a barricade efficient to prevent access to the vessel by any unauthorized person has been erected to the satisfaction of the harbour master and until a watchman has been

- stationed within the barricade to prevent the entrance of any unauthorized person and to take charge of all matches from all persons entering the barrier.
28. In addition to having a responsible officer on duty as required by these regulations, a crew to assist such officer and a competent member of the engine room staff shall be on duty at all times when petroleum is on board to be available in case of emergency to operate the fire pumps or other fire extinguishing appliances.
  29. From the time the tanks or holds of tank vessels carrying petroleum are first unsealed or opened for the purpose of loading or unloading petroleum until such tanks or holds have been closed and sealed down, no fires or lights, other than fires or lights approved by the harbour master, shall be lit or used, either on board the vessel or on shore, within 50 feet of any place at which petroleum is being loaded or unloaded. Where, however, the harbour master is satisfied that the construction of the vessel and the situation of the fires are such that no serious hazard will be created thereby, the use of boiler fires for the purpose of supplying power, necessary for working the machinery or appliances for the loading, or unloading of petroleum, and also for heating galley appliances, may be authorized.
  30. Wire gauze shall be fitted over all openings of tanks that contain, or have recently contained, petroleum in bulk except during inspection or when samples or ullage measurements are being taken.
  31. Pipes, hoses, pumps and other appliances used for the transferring of petroleum in bulk shall be maintained free from leakage and gastight, and, on the completion of loading or unloading, all gear shall be thoroughly freed from petroleum and the hoses disconnected from the shore pipe lines.
  32. The following precautions in the loading or unloading of petroleum in bulk shall be taken —
    - (a) hoses, constructed to be resistant to petroleum and maintained in good order, shall be used for connecting from vessel to shore installation;
    - (b) a non-return valve shall be placed immediately behind the connexion between hose and shore installation pipe, or at the shore end of the installation pipe;
    - (c) when pumping ceases temporarily the valves on the vessel and on the shore pipe shall be closed;
    - (d) all openings in the tanks shall be closed and made gastight immediately on completion of loading or unloading.
  33. Such measures as are necessary shall be taken to free the tanks from inflammable vapours before any repairs or alterations are made to tanks on tank vessels in which petroleum is or has been conveyed, involving such operations as welding, cutting,

boring, soldering, or hammering, which may produce heat or be liable to cause the ignition of inflammable vapours.

34. No person shall deposit any petroleum or cause or allow any petroleum to be deposited on any wharf or in any shed on any wharf or on or in any place within 50 feet of any wharf or on any vessel without the permission of the harbour master and no person shall deposit any petroleum or allow petroleum to remain on any such wharf or place at any time between sunset and sunrise. No greater quantity of petroleum than prescribed by the harbour master shall be placed on any wharf unless transport is available to remove the same immediately.
35. When petroleum is upon any wharf or in any place within 50 feet thereof, no person shall smoke or have in his possession or under his control, any fire, or means of ignition, or light other than an approved safety lamp within 50 feet of such petroleum.

### **PART III - REGULATIONS WITH REGARD TO THE STORAGE AND HANDLING OF PETROLEUM**

36. No person shall keep or store on unlicensed premises more than the following quantities of petroleum —
- (a) in houses and buildings, four gallons;
  - (b) in garages, outhouses or printing establishments not less than ten feet from a protected work —
    - (i) petroleum, twenty gallons;
    - (ii) fuel oil, forty-four gallons;
  - (c) in the open air and not less than 25 feet from a protected work in drums or barrels, fuel oil up to 5,000 gallons;
  - (d) on a farm or estate exceeding 10 acres for private use and not less than 40 feet from a public road or land boundary, petroleum 250 gallons.<sup>4</sup>
37. Notwithstanding the provisions of regulation 36 it shall be lawful to keep or store in a shop or garage not more than 44 gallons of petroleum where such petroleum is kept or stored in an approved tank.<sup>5</sup>
38. No person shall keep or store on licensed premises more than the following quantities of petroleum —
- (a) in packages not exceeding ninety gallons —
    - (i) in a fireproof compartment inside another building, 200 gallons;



- (ii) in a shed or outhouse not less than 30 feet from a protected work of fireproof construction including an iron building with timber frames, 200 gallons;
- (iii) in a properly constructed magazine where the walls are of brick, stone or concrete and not less than 10 feet from a protected work, 200 gallons;
- (iv) in a magazine not less than 25 feet from another building, boundary wall or protected work, unlimited;
- (b) in steel drums not exceeding 90 gallons capacity, in the open air —
  - (i) petroleum not less than 50 feet from the boundary or protected work, unlimited;
  - (ii) fuel oil not less than 25 feet from the boundary or protected work, unlimited;
- (c) in underground tanks —
  - (i) under another building with top of tank below floor level, 1000 gallons;
  - (ii) under another building with top of tank below all floor levels within 25 feet, 5000 gallons;
  - (iii) in open air, 10 feet from a protected work or boundary with top of tank below all floor levels within 25 feet, unlimited;
- (d) in above-ground tanks —
  - (i) in tank, 10 feet from boundary or a protected work, 12000 gallons;
  - (ii) in tank, 15 feet from boundary or a protected work, 24000 gallons;
  - (iii) in tank, 20 feet from boundary or a protected work, 30000 gallons;
  - (iv) in tank, 25 feet from boundary or a protected work, unlimited;

Provided that in the case of tanks containing only fuel oil the Minister of Police may authorize a reduced distance where in his opinion the public safety will not be unduly prejudiced thereby.

39.

- (1) Magazines if inside another building or designed to store more than 200 gallons must be provided with a fireproof well 3 feet deep or be surrounded by a wall or embankment two feet high.
- (2) Magazines shall be provided with adequate ventilation.
- (3) A clear space of at least 3 feet shall separate storage sheds.

40.

- (1) All underground tanks shall be provided with a vent pipe not less than one inch diameter protected by fireproof gauze of 28 or smaller mesh.
- (2) The end of this vent shall be 10 feet above ground and not less than 3 feet from any window, door or other opening.
- (3) All underground tanks shall have at least 12 inches of cover and be provided with secure gastight fittings.
- (4) All underground tanks if under another building shall be covered with reinforced concrete not less than 4 inches thick.

41.

- (1) The distance between above-ground tanks shall not be less than the following—

Capacity	
up to 18,000 gallons .....	3 feet
18,000 to 24,000 gallons .....	5 feet
24,000 to 75,000 gallons .....	10 feet
75,000 to 100,000 gallons .....	15 feet
100,000 to 250,000 gallons .....	30 feet
unlimited .....	50 feet

Provided that these distances may be halved in the case of tanks containing only fuel oil:

And provided further that the Minister of Police may authorize a further reduction in these distances in the case of such last mentioned tanks where in his opinion the public safety will not be unduly prejudiced thereby.

- (2) All above-ground tanks shall be surrounded by an embankment of brick, stone, concrete or earth forming an enclosure capable of holding a volume of petroleum not less than 110 per cent of the capacity of the largest tank.
- (3) All above-ground tanks shall be adequately ventilated with screened ventilation of 28 fireproof mesh.

42.

- (1) No magazine shall be within 25 feet of a line on which a locomotive operates, or of a foundry, forge or other fire.
- (2) No petroleum shall be allowed to escape into any drain, creek or outlet to the sea, stream or river.
- (3) No smoking shall be allowed within the boundaries of any premises in which a tank is situated at a distance less than 25 feet from the tank.

43.

- (1) All pumping mains and pipes connected with tanks shall be furnished with a means of stopping flow from such tanks in the event of any injury to the pipe lines.
- (2) Pumping mains from wharves or vessels shall be kept filled with water when not in use except where used exclusively for pumping fuel oil.

44.

- (1) The position of every pump shall be approved by the licensing officer.
- (2) A fire extinguisher of the foamite type having a capacity of not less than 2 gallons, shall be kept on the premises where the pump is situated.
- (3) The engine Of the motor vehicle being served shall not be left running. (4) No flame shall be brought within 10 feet during the process of delivery.

45.

- (1) The loaded weight of a tank waggon shall not exceed 100 cwts where the wagon has four wheels, 150 cwts where the waggon has six wheels or 200 cwts where the waggon has eight or more wheels.
- (2) Every tank waggon shall be provided with a 2 gallon fire extinguisher.
- (3) No delivery shall be made except by stout hose having a liquid and gastight connexion to the container into which delivery is made.
- (4) The engine shall be stopped during filling and emptying operations.
- (5) An electrical discharge line of 3/8 chain shall be provided touching the ground for 12 inches, ,
- (6) No lights or smoking shall be allowed within 25 feet of any tank waggon.
- (7) Every tank waggon shall be conspicuously marked "Danger Highly Inflammable" to a design approved by the Minister of Police.

46. Notwithstanding the provisions of regulation 45, for the purpose of filling or replenishing an approved tank with petroleum delivery may be made into an approved container, without a hose.<sup>6</sup>

47. Every bottle containing petroleum in quantity less than one gallon shall be conspicuously labelled or marked with the words "Danger Highly Inflammable".

48.

- (1) Every applicant for a licence shall specify —
  - (a) description, quantity and manner of storage;

- (b) name and locality of premises;
  - (c) quantity to be kept in each tank or magazine.
- (2) In any case where quantity exceeds 5000 gallons —
- (a) a plan shall be furnished showing all premises within 100 feet; and
  - (b) all particulars required by the Minister of Police shall be furnished.
- (3) The form of licence shall be as in the Schedule hereto.
- (4) The licensing officer shall be the Minister of Police or any person duly authorized by him. The issue of a license shall be in the discretion of the Minister of Police.
- (5) Should any person feel himself aggrieved by a refusal of the Minister to grant him a license he may appeal in writing to the Cabinet: The decision of Cabinet on any such appeal shall be final.

The fee for a licence shall be as follows—

all Government installations .....	\$	
		Free
		\$
tank or magazine with capacity of 200 gallons or under .....		50
tank or magazine with capacity of more than 200 gallons and not more than 1,000 gallons .....		1.00
tank or magazine with capacity of over 1,000 gallons .....		4.00

49. Any person who acts in contravention of or fails to comply with any of the provisions of these regulations shall be guilty of an offence and shall be liable to a fine not exceeding \$100.

**SCHEDULE**

(Regulation 48)

**LICENCE TO POSSESS PETROLEUM**

No.....Fee: .....

Licence is hereby granted to.....for the storage in the premises described below, of .....gallons of petroleum, subject to the conditions prescribed by the Petroleum Regulations.

This licence shall expire on the 31st of December next following the date of issue hereof, and may be renewed on application being made for this purpose not less than 15 days previous to the date of expiry.

Description of premises above referred to —

Date of issue:.....Licensing Officer.

This licence is issued subject to the provisions of the Petroleum Regulations, of which the holder admits cognizance.

**ENDNOTES**

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<sup>1</sup> Made by Her Majesty in Council on 29th January, 1960, G.S. 1 of 1960, 74 of 1961

<sup>2</sup> Added G.S. 74 of 1961

<sup>3</sup> Amended by Act 42 of 2010

<sup>4</sup> Added G.S. 74 of 1961

<sup>5</sup> Added G.S. 74 of 1961

<sup>6</sup> Added G.S. 74 of 1961