

No. 82

**THE PETROLEUM ORDINANCE**

(Ordinance 1 of 1976 as amended by Ordinance 26 of 2000)

**REGULATIONS MADE UNDER SECTION 9.**

In exercise of the powers vested in him by section 9 of the Petroleum Ordinance 1976<sup>(a)</sup> as amended by section 3 of the Petroleum (Amendment) Ordinance 2000<sup>(b)</sup>, the Administrator hereby makes the following Regulations:—

**Citation**

1. These Regulations may be cited as the Petroleum (Amendment) Regulations 2004.

**Amendments to the Petroleum Regulations**

2. The Petroleum Regulations<sup>(c)</sup> (hereinafter referred to as the “principal Regulations”) shall be amended in accordance with regulations 3 to 14 below.

**Insertion of Part IIA into the principal Regulations**

3. After regulation 17 of the principal Regulations there shall be inserted the following new Part—

**“PART IIA  
SPECIFICATIONS, DISPLAYING AND SAMPLING  
OF PETROLEUM**

**17A.**—(1) The specifications for each description of petroleum set out in Parts A to H respectively of the Third Appendix to these Regulations shall in each case correspond to the specification set out in relation to that description of petroleum in the relevant Part of that Appendix and no person shall store, keep or sell any such description of petroleum if its specification does not so correspond.

(2) The owner or person having charge of—

- (a) any receptacle containing any petroleum such as is referred to in subsection (1) above; or
- (b) any pump or other apparatus through or by which any such petroleum is provided or supplied,

shall display on such receptacle, pump or other apparatus the appropriate description of the petroleum contained therein or, as the case may require, thereby provided or supplied.

**17B.**—(1) A sampling officer appointed for the purposes of this regulation by the Chief Officer may—

- (a) enter without warrant any place or premises, other than a dwelling, where he has reasonable grounds to suspect that petroleum is being stored, kept, sold or exposed for sale in contravention of the Petroleum Ordinance or of these Regulations and

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(a) Ordinance 1/1976.

(b) Ordinance 26/2000.

(c) S.L. Vol. 1 as amended by P.I. 12/2000.

may take for analysis samples of any petroleum that he finds there, for which samples the owner or his agent may require payment;

- (b) take samples (on making payment if so requested as aforesaid) for analysis from any means of transport where such petroleum may be located:

Provided that a sampling officer shall have power to enter any dwelling for this purpose if a Court warrant has been issued authorising it.

(2) Where a sampling officer takes a sample in accordance with paragraph (1) above, he shall divide each sample into three parts and shall seal each part in the presence of the owner or his agent. One such part shall be given to the owner or his agent, a second part shall be given to the Chief Officer and the third part shall be sent to the Republic's General Laboratory with a request for an analysis of the sample in order to ascertain whether it conforms to the relevant specifications set out in the Third Appendix to these Regulations and for a report on the analysis.

(3) A copy of the report on the analysis shall be sent by the sampling officer to the owner of the petroleum or to his agent.

(4) The owner of any petroleum or his agent shall give all reasonable assistance to a sampling officer acting within his powers under paragraph (1) above, and where an owner or agent is convicted of an offence in connection with petroleum a sample of which has been analysed, the Court convicting him may order the person concerned to pay the costs of the analysis and report.”.

#### **Substitution of regulation 21 of the principal Regulations**

4. For regulation 21 of the principal Regulations there shall be substituted the following—

“**21.** Regulations 18 and 20 shall not apply in relation to petroleum—

- (a) contained in the tank of any motor car or of any other vehicle whose propelling power is obtained from petroleum or to petroleum which is carried on any such motor car or other vehicle as a reserve supply provided that such reserve supply does not exceed 8 gallons;
- (b) contained in the tank of any aeroplane or of a mechanically propelled ship, boat or other floating vessel.”.

#### **Substitution of regulation 23 of the principal Regulations**

5. For regulation 23 of the principal Regulations there shall be substituted the following—

“**23.** A person shall not keep class A petroleum in containers of a capacity exceeding four gallons elsewhere than in a store specially licensed for the purpose.”

## Revocation of regulations 24, 25 and 26 of the principal Regulations

6. Regulations 24, 25 and 26 of the principal Regulations shall be revoked.

## Amendment of regulation 86 of the principal Regulations

7. Regulation 86 of the principal Regulations shall be amended by inserting after the word “observed” the words “in relation to tanks which were installed or erected at any time before the day that regulation 86A below comes into force”.

## Insertion of regulation 86A into the principal Regulations

8. There shall be inserted after regulation 86 of the principal Regulations the following new regulation to be numbered regulation 86A—

“**86A.** In relation to tanks which are installed or erected on or after the day that this regulation comes into force, regulation 86 above shall have effect as if for the words from “(1) Between tanks” to the end of the third table there were substituted the following—

“(1) Between tanks

Capacity of Tank	Class A	Class B	Class C
Up to 100 tons.....	6.50 metres	4.00 metres	2.00 metres
Over 100 tons and up to 500 tons	10.00 metres	6.00 metres	4.00 metres
Over 500 tons and up to 2000 tons	15.00 metres	10.00 metres	6.00 metres
Over 2000 tons .....	20.00 metres	15.00 metres	8.00 metres

(2) Between tanks and any building

Capacity of Tank	Class A	Class B	Class C
Up to 100 tons .....	5.00 metres	3.00 metres	2.00 metres
Over 100 tons and up to 500 tons	6.50 metres	5.00 metres	3.00 metres
Over 500 tons and up to 2000 tons	15.00 metres	10.00 metres	5.00 metres
Over 2000 tons.....	20.00 metres	15.00 metres	7.00 metres

(3) Between tanks and the boundaries of the installation

Capacity of Tank	Class A	Class B	Class C
Up to 300 tons.....	6.50 metres	5.00 metres	3.50 metres
Over 300 tons and up to 2700 tons	15.00 metres	10.00 metres	5.00 metres
Over 2700 tons and up to 5500 tons	20.00 metres	15.00 metres	5.00 metres
Over 5500 tons and up to 8250 tons	25.00 metres	25.00 metres	5.00 metres
Over 8250 tons.....	30.00 metres	30.00 metres	7.00 metres”

## Amendment of regulation 88 of the principal Regulations

9. Regulation 88 of the principal Regulations shall be amended by inserting after the words “Each tank or group of tanks” the words “which was installed or erected before regulation 88A below comes into force”.

### Insertion of regulation 88A into the principal Regulations

10. There shall be inserted after regulation 88 of the principal Regulations the following new regulation to be numbered regulation 88A—

“88A. Each tank or group of tanks which is installed or erected on or after the day that this regulation comes into force shall be surrounded by an enclosure for the purpose of containing the petroleum in case of leakage. The following provisions shall apply in relation to such an enclosure—

- (a) except where paragraph (b) below applies, the volumetric capacity of an enclosure shall not be less than the maximum volume of petroleum which may be discharged from the largest tank within the enclosure on the assumption that that tank is full. In calculating the capacity of an enclosure which surrounds more than one tank there shall be subtracted the capacity of such part of each tank within the enclosure, other than that of the largest such tank, as is below the level of the top of the enclosure;
- (b) the volumetric capacity of an enclosure surrounding a tank or group of tanks with solid roofs containing crude oil, shall not be less than the volume of the tank or group of tanks within the enclosure on the assumption that all those tanks are full. In calculating the capacity of an enclosure which surrounds more than one tank there shall be subtracted the capacity of such part of each tank as is below the level of the top of the enclosure;
- (c) an enclosure shall be constructed from earth, steel, concrete or solid stone which shall be impervious and resistant to full hydrostatic altitude. Earthen walls of over one metre in height shall have a top level section of not less than 60 centimetres in width. The slope of an earthen wall shall be in accordance with the angle of the deposited material of which it is constructed;
- (d) the height of the walls of an enclosure on the inside of the enclosure shall not exceed two metres;
- (e) where provision is made for the drainage of water from an enclosure, such drainage shall be effected by means of a gradient of not less than one in a hundred (1.0%) from the tanks towards the system of separation of the petroleum which shall be as far away as practicable from the tanks. Such drainage shall be tested regularly so as to prevent inflammable liquids entering into natural streams of water or into public sewers or drains. It must be possible to carry out an inspection of such drainage under fire conditions;
- (f) the presence of inflammable materials or empty or full receptacles within an enclosure is prohibited;
- (g) a single enclosure surrounding two or more tanks shall be subdivided wherever possible by a drain canal or by intermediate partitions for the purpose of preventing a discharge from any tank endangering other tanks within the enclosure as follows—

- (i) in the case of the storage of petroleum in the form of liquid fuels in vertical tanks with a conical roof constructed with a system of mechanically fastened flexible waterproof membranes, or where crude oil is stored in areas of production in any type of tank, there shall be one partition for every tank of a capacity exceeding 15,000 tons and one partition for every group of tanks (none of which shall exceed 15,000 tons in capacity) and which group shall have a total capacity not exceeding 22,500 tons;
- (ii) in the case of the storage of petroleum in the form of liquid fuels in tanks not falling within subparagraph (i) above, there shall be one partition for every tank of a capacity exceeding 375 tons and one partition for every group of tanks (none of which shall exceed 375 tons in capacity) and which group shall have a total capacity not exceeding 565 tons;
- (iii) in the case of the storage of liquid gas in any type of tank, there shall be one partition for every tank, except in the case of tanks installed in accordance with the drainage requirements prescribed in internationally recognised specifications of Systems of Preventing Fires by Water Showers, in which case no partition in relation to such tanks shall be necessary; and
- (iv) the drainage canals or the intermediate partitions shall be placed between the tanks in such a way that all available space in relation to the capacity of each tank can be utilised. The height of an intermediate partition shall not be less than 50 centimetres”.

### **Insertion of part XA into the principal Regulations**

**11.** After regulation 110 of the principal Regulations there shall be inserted the following new Part—

#### **“PART XA CONVEYANCE OF PETROLEUM INTO AND OUT OF THE AREAS BY TANKER OR OTHER VESSEL**

**110A.** Any person responsible for any discharge, leakage or effusion of any petroleum or of any liquid containing petroleum on the foreshore or in the territorial waters of the Areas during its conveyance into or out of the Areas by tanker or other vessel shall be guilty of an offence.

**110B.** Any person responsible for or involved in the conveyance of any petroleum into or out of the Areas by tanker or other vessel, shall at all times take all the measures necessary to prevent any discharge, leakage or effusion of petroleum or any liquid containing petroleum on the foreshore or in the territorial waters of the Areas.”.

### **Substitution of regulation 111 of the principal Regulations**

**12.** For regulation 111 of the principal Regulations there shall be substituted the following—

**“111.—**(1) Before commencing the erection of any installation or building, or any alteration to, or any adaptation of, any installation or building, or of any other structure or any electrical or mechanical works for the storage of petroleum, the owner or other person concerned, shall obtain the approval of the Chief Officer and for this purpose he shall submit an application accompanied by—

- (a) six copies of topographical plans to a scale of not smaller than 1:1000, on which the position of tanks and other installations shall be indicated;
- (b) six copies of ground plans of the proposed installations, to a scale of not less than 1:1000, on which the position of tanks, piping and other installations shall be indicated;
- (c) six copies of detailed construction drawings, with a full description of the materials to be used;
- (d) six copies of detailed working drawings or sketches; and
- (e) six copies of detailed drawings, of all piping to be used for the filling and emptying of the tanks, and any piping for the loading or unloading of tankers or other vessels.

(2) The Chief Officer may approve or reject such drawings or may require such amendments to them as he considers to be necessary for the safe construction and operation of the installation.”.

### **Insertion of regulation 115A into the principal Regulations**

**13.** After regulation 115 of the principal Regulations there shall be inserted the following new regulation to be numbered regulation 115A—

**“115A.** A licence for the storage of petroleum may not be issued or renewed unless the applicant—

- (a) produces to the Licensing Authority a certificate of suitability relating to the installation in respect of which the application is made; and
- (b) pays the appropriate fee as specified in the Second Appendix to these Regulations.”.

### **Addition of Third Appendix to the principal Regulations**

**14.** After the second Appendix to the principal Regulations there shall be added the following new Appendix to be numbered the Third Appendix—

**“THIRD APPENDIX**  
(Regulation 17A)

**PART A. SPECIFICATIONS FOR LIQUIFIED  
PETROLEUM GAS**

**Physical/Chemical Values:**

1. Pressure of steam at 38°C in Kg/cm <sup>2</sup> :		
(a) For household use . . . . .	Max.	10
(b) For other uses . . . . .	Max.	15
2. Temperature for 95% evaporation at °C . .	Max.	2
3. Pentanes and Higher Hydrocarbons % per volume of water . . . . .	Max.	2.0
4. Erosion of copper sheet . . . . .	Max. ASTM No. 1	
5. Sulphur, in mg/m <sup>3</sup> at 15°C and 760 mm Hg	Max.	360
6. Water . . . . .		Nil
7. Odour . . . . .		Perceptible

**PART B. SPECIFICATIONS FOR PREMIUM PETROL  
FOR MOTOR VEHICLES**

**Physical/Chemical Values:**

		Period	
		<u>May - Oct.</u>	<u>Nov. - April</u>
1. Special Weight at 15/15°C . . . . .	Max.	0,750	0,750
2. Distillation:			
10% distilled at °C . . . . .	Max.	75	55
50% distilled at °C . . . . .	Max.	125	115
90% distilled at °C . . . . .	Max.	180	180
Final Point of Boiling at °C . . .	Max.	205	205
Residue of Distillation % per volume . . . . .	Max.	2	2
3. Pressure of steam per REID at 38 °C in Kg/cm <sup>2</sup> . . . . .	Max.	0.55	0.70
4. Sulphur, % per weight . . . . .	Max.	0.20	0.20
5. Gummy substances, mg/100 cm <sup>3</sup> . .	Max.	4	4
6. Erosion of Copper Sheet . . . . .	Max. ASTM No.1		ASTM No.1
7. Stability in oxidisation, minutes . . .	Min.	240	240
8. Test DOCTOR or sulphur of mercaptane % per weight . . . . .	Max.	0.0015	0.0015
9. Lead in gm/m <sup>3</sup>	Max.	840	840
10. Octane Number (Investigative method F1)	Min.	98	98

**PART C. SPECIFICATIONS FOR REGULAR PETROL  
FOR MOTOR VEHICLES**

**Physical/Chemical Values:**

		Period	
		May - Oct.	Nov. - April
1. Special Weight at 15/15°C . . . . .	Max.	0,750	0,750
2. Distillation:			
10% distilled at °C . . . . .	Max.	75	55
50% distilled at °C . . . . .	Max.	125	115
90% distilled at °C . . . . .	Max.	180	180
Final Point of Boiling at °C . . .	Max.	205	205
Residue of Distillation % per volume . . . . .	Max.	2	2
3. Pressure of steam per REID at 38°C in Kg/cm <sup>2</sup> . . . . .	Max.	0.55	0.70
4. Sulphur, % per weight . . . . .	Max.	0.20	0.20
5. Gummy substances, mg/100 cm <sup>3</sup> . .	Max.	4	4
6. Erosion of Copper Sheet . . . . .	Max.	ASTM No.1	ASTM No.1
7. Stability in oxidation, minutes . . .	Min.	360	360
8. Test DOCTOR or sulphur % per weight . . . . .	Max.	0.0015	0.0015
9. Lead in gm/m <sup>3</sup> . . . . .	Max.	840	840
10. Octane Number (Investigative method F1) . . . . .	Min.	87	87

**PART D. SPECIFICATIONS FOR ILLUMINATING  
KEROSENE**

Physical/Chemical Values:

1. Special Weight at 15/15°C . . . . .	Max.	0,830
2. Colour SAYBOLD . . . . .	Min.	20
3. Point of Ignition, ABEL, °C . . . . .	Min.	38
4. Distillation:		
Distilled at 200°C per volume . . . . .	Min.	20
Distilled at 200°C per volume . . . . .	Max.	70
Final Point of Boiling at °C . . . . .	Max.	300
5. Sulphur, % per weight . . . . .	Max.	0.20
6. Erosion of Copper Sheet . . . . .	Max.	ASTM No. 1
7. Smoke Point mm . . . . .	Min.	25
8. Quantity of carbons, (Test oil lamp) mg/kg . . . . .	Max.	15



## PART E. SPECIFICATIONS FOR GAS OIL FOR MOTOR VEHICLES

### Physical/Chemical Values:

1. Special Weight at 15/15°C .....	Min.	0,820
.....	Max.	0,870
2. Colour ASTM .....	Max.	3
3. Point of Ignition per PENSKY MARTENS (closed receptacle), at °C .....	Min.	65
4. Distilled at 350 °C % per volume .....	Min.	85
5. Point of Turbidity, °C .....	Max.	-4
6. Sulphur, % per weight .....	Max.	1.0
7. Number of Cetane .....	Min.	50
8. Erosion of Copper Sheet .....	Max.	ASTM No. 1
9. Viscosity at 38°C, at C.S .....	Min.	1.6
10. Carbonic residue per CONRADSON .....	Max.	5.5
11. Water % per volume .....	Max.	0.05
12. Sediment % per weight .....	Max.	0.01
13. Ash % per weight .....	Max.	0.01
14. Acidity:		
Inorganic in mg KOH/gm .....		Zero
Total in mg KOH/gm .....	Max.	0.5

## PART F. SPECIFICATIONS FOR DIESEL FUEL FOR INTERNAL COMBUSTION ENGINES

### Physical/Chemical Values:

1. Special Weight at 15/15°C .....	Max.	0,920
2. Point of Ignition per PENSKY MARTENS (closed receptacle), at °C .....	Min.	65
3. Number of Cetane .....	Min.	35
4. Sticky, at 38°C, CS .....	Max.	10
5. Point of flow, at °C .....	Max.	-5
6. Sulphur, per weight .....	Max.	1.5
7. Carbonic Surplus per CONRADSON % per weight .....	Max.	1.0
8. Water, % per volume .....	Max.	0.25
9. Sediment, % per weight .....	Max.	0.02
10. Ash, % per weight .....	Max.	0.02
11. Acidity:		
Inorganic mg KOH/gm .....		Zero
Total .....	Max.	3

## PART G. SPECIFICATIONS FOR LIGHT FUEL OIL FOR INTERNAL COMBUSTION

### Physical/Chemical Values:

1. Special Weight at 15/15°C . . . . .	Max.	0,980
2. Point of Ignition per PENSKY MARTENS		
(closed receptacle), at °C . . . . .	Min.	65
3. Viscous, at 38°C, at C.S.:		
for the period Sept.-March . . . . .		50-90
for the period April-Aug . . . . .		80-150
4. Point of Flow, at °C:		
for the period Sept-March . . . . .		2
for the period April-Aug . . . . .		16
5. Sulphur, % per weight mgKOH/gm . . . . .	Max.	4
6. Water, 5 per volume . . . . .	Max.	0.75
7. Sediment, % per weight . . . . .	Max.	0.15
8. Acidity, Inorganic mgKOH/gm . . . . .		Zero

## PART H. SPECIFICATIONS FOR BITUMEN

<b>Form:</b>	60-70	80-100	120-150	180-220	S-125
<b>Physical/Chemical Values:</b>					
1. Penetration at 25°C 0.1 mm	60-70	80-100	120-150	180-220	-
2. Reduction in penetration after heating .....Max.	20	20	20	25	-
3. Point of Turbidity R & B, °C .....	48-56	45-52	40-48	37-43	
4. Ductility at 25°C, cm ..... Min.	100	100	100	100	-
5. Sticky, Moving, at 25 at St .....	-	-	-	-	3,000- 4,800
6. Dilution in carbon disulphide % ..... Min.	99	99	99	99	-
7. Point of Ignition, C.O.C. °C .....	250	225	220	220	50
8. Distilled at 225°C per volume ..... Max	-	-	-	-	2
Distilled at 320°C per volume ..... Max	-	-	-	-	5-15

Distilled at 360°C per volume ..... Max	-	-	-	-	20
Penetration at 25°C, 0.1 mm	-	-	-	-	100-350
Point of turbidity of sediment R & B, °C	-	-	-	-	30-50
Dilution of sediment in carbon disulphide ..... Min	-	-	-	-	99”.

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Dated this 5th day of May 2004.

By the Administrator's Command,  
P. D. Draycott,  
Chief Officer,  
Sovereign Base Areas.

(128/164/1)

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