SECOND SUPPLEMENT TO THE GIBRALTAR GAZETTE

No. 3,215 of 22nd March, 2001

LEGAL NOTICE NO. 14 OF 2001

PETROLEUM ORDINANCE

PETROLEUM RULES (AMENDMENT) RULES 2001

In exercise of the powers conferred on me by section 7(a) to (L) and 15(1) of the Petroleum Ordinance and for the purpose of transposing into the law of Gibraltar Council Directive 94/63/EC, I have made the following Rules–

Citation and commencement.

1 These Rules may be cited as the Petroleum Rules (Amendment) Rules 2001

Amendment of the Petroleum Rules.

- 2.(1) The Petroleum Rules shall be amended in accordance with the provisions of this rule.
 - (2) Rule 2 shall be amended as follows-
 - (a) by deleting the definition of "petrol";
 - (b) by inserting the following definitions in the appropriate places—
 - " "Directive" means European Parliament and Council Directive 94/63/EC on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations;
 - "existing" motor fuel storage installations, loading installations, service stations and mobile containers means such installations, service stations and mobile containers which were in operation before, or for which a licence was granted before the coming into force of these rules;
 - "gantry" means any structure at a terminal at which motor fuel can be loaded on to a single road tanker at any one time;

- "intermediate storage of vapours" means the intermediate storage of vapours in a fixed roof tank at a terminal for later transfer to and recovery at another terminal: the transfer of vapours from one storage installation to another at a terminal shall not be considered as intermediate storage of vapour;
- "loading installation" means any facility at a terminal at which motor fuel can be loaded onto mobile containers. Loading installations for road tankers comprise one or more "gantries";
- "mobile container" means any tank, transported by road and used for the transfer of motor fuel from one terminal to another or from a terminal to a service station;
- "new" in relation to motor fuel storage installations, loading installations, service stations and mobile containers means such installations, service stations and mobile containers which are not "existing" motor fuel storage installations, loading installations, service stations and mobile containers:
- "service station" means any installation where motor fuel is dispensed to motor vehicle fuel tanks from stationary storage tanks;
- "storage installation" means any stationary tank at a terminal used for the storage of motor fuel;
- "target reference value" means the guideline given for the overall assessment of the adequacy of technical measures in Schedules 2 to 5 and is not a limit value against which the performance of individual installations, terminals and service stations will be measured:
- "terminal" means any facility which is used for the storage and loading of motor fuel onto road tankers, rail tankers, or vessels, including all storage installations on the site of the facility;
- "throughput" means the largest total annual quantity of motor fuel loaded from a storage installation at a terminal or from a service station into mobile containers during the three preceding years;

- "vapours" means any gaseous compound which evaporates from motor fuel;
- "vapour-recovery unit" means equipment for the recovery of motor fuel from vapours including any buffer reservoir systems at a terminal;
- "vessel" means an inland waterway vessel which is not a sea-going vessel and having a dead weight of 15 tonnes or more.
- (3) For rule 31 there shall be substituted the following rule-

"Storehouse for petroleum spirit or motor fuel in bulk.

- 31. Where a person desires to have petroleum spirit or motor fuel stored in bulk, the premises at which such petroleum or motor fuel is stored shall be licensed in accordance with these rules.".
- (4) For rule 32 there shall be substituted the following rule-

"Conditions for issue of licence under rule 31.

- 32.A licence shall not be granted for the storage in bulk of petroleum spirit or motor fuel unless the licence contains the following conditions—
 - (a) a condition requiring that the storehouse is fireproofed to such an extent as the licensing authority may deem necessary having regard to the position of such storehouse;
 - (b) a condition requiring that provision shall be made by excavation or by the erection of retaining walls to prevent outflow of the petroleum spirit or motor fuel in the event of fire, if such outflow would be likely to endanger life or cause damage to the property of others;
 - (c) a condition requiring that the Chief Fire Officer be allowed to inspect the storehouse at any reasonable time;

- (d) in the case of storage in bulk of motor fuel at a service station, terminal or storage installation, a condition requiring that the relevant technical provisions contained in Schedules 2, 3 and 4 relating respectively to storage installations at terminals, and loading and unloading at service stations and terminals where the intermediate storage of vapour is carried out, are complied with."
- (5) For rule 34, there shall be substituted the following rule–

"Tank wagons etc.

- 34.(1) No tank-wagon or other vehicle so designed as to be capable of conveying a greater quantity of petroleum than 91 litres at any one time other than in separate containers shall be used for the purpose of conveying petroleum, and no mobile container shall be used for the purpose of conveying motor fuel, without a permit issued by the licensing authority.
- (2) A permit shall not be issued under this rule in respect of the conveyance of motor fuel in mobile containers unless the permit contains—
 - (a) a condition requiring that the technical requirements contained in Schedule 5 are complied with;
 - (b) a condition requiring that vacuum/pressure valves are periodically inspected for correct functioning; and
 - (c) (if the mobile container is a road tanker) a condition requiring that the road tanker be regularly tested for vapour tightness.
- (3) Without prejudice to sub-rule (2), every permit issued under this rule shall contain such other conditions as the licensing authority may deem expedient and shall, subject to such conditions, remain in force from the date of issue until the next following 31st day of March.".
- (6) The following rule shall be inserted after rule 38-

"Transitional provisions.

- 39.(1) In the case of existing installations, the requirements contained in Schedule 2 below apply—
 - (a) if the throughput loaded at a terminal is greater than 50,000 tonnes per year, from the date of coming into force of the Petroleum Rules (Amendment) Rules 2001;
 - (b) if the throughput loaded at a terminal is or is less than 50,000 tonnes per year but greater than 25,000 tonnes per year, from 31st December 2001;

otherwise, from 31st December 2004.

- (2) In the case of existing terminals, the requirements contained in Schedule 3 below apply—
 - (a) if the throughput is greater than 150,000 tonnes per year, from the date of coming into force of the Petroleum Rules (Amendment) Rules 2001;
 - (b) if the throughput is or is less than 150,000 tonnes per year but greater than 25,000 tonnes per year, from 31st December 2001;

otherwise, from 31st December 2004.

- (3) In the case of existing service stations, the requirements in Schedule 4 below apply–
 - (a) if the throughput is greater than 1000m³ per year or they are located under permanent living quarters or working areas from the date of coming into force of the Petroleum Rules (Amendment) Rules 2001;
 - (b) if the throughput is or is less than 1000m3 per year but greater than 500m³ per year, from 31st December 2001;
 - (c) otherwise, from 31st December 2004.

- (4) In the case of existing road tankers, the requirements contained in Schedule 5 below apply when retrofitted for bottom-loading in accordance with the specifications set out in Schedule 6.
- (5) Where, by virtue of this rule or any provision in Schedules 2 to 6 below, any requirements which do not apply at the time a licence or permit is issued or granted for any purpose begin to apply for that purpose before the licence or permit expires, the licence or permit shall have effect subject to those requirements, notwithstanding that they were not in force at the time of its issue or grant.
- (6) Nothing in this rule shall apply to installations, terminals, service stations or road tankers in operation or permitted after the coming into force for a period of one year from the date of coming into force of the Petroleum Rules (Amendment) Rules 2001.
- (7) For the purposes of this rule, "existing" means in operation or permitted prior to the coming into force of the Petroleum Rules (Amendment) Rules 2001.".
- (8) The Schedule shall be amended as follows-
 - (a) by re-designating the Schedule "Schedule 1";
 - (b) by inserting after Form D the following Forms-

"FORM E

LICENCE TO STORE MOTOR FUEL IN BULK AT A TERMINAL OR STORAGE INSTALLATION

Rule 31

Whereas [name] of [address] has applied for a licence to store motor fuel in bulk at a terminal or storage installation situated at [address];

And whereas the said terminal or storage installation conforms with the requirements of the Petroleum Rules;

Now therefore licence is hereby granted to [name] to use the said terminal or storage installation for the purpose of storing motor fuel in bulk subject to the following conditions—

- (a) not more than [] litres of motor fuel shall be stored or kept upon the said terminal or storage installation at any one time;
- (b) all motor fuel shall be kept or stored either in metal vessels or in an underground tank in accordance with the provisions of the Petroleum Rules;
- (c) chemical fire extinguishers of a manufacture approved by the licensing authority and ready for immediate use shall be kept on or in the premises in such positions as may be indicated by the Chief Fire Officer;
- (d) no gas heater or open stove shall be kept in or upon the said premises;
- (e) every artificial light used in or upon the said premises shall be so constructed as not to be liable to ignite any inflammable vapour arising from motor fuel stored in the said premises;
- (f) the licensee shall at all times comply with the provisions of the rules for the time being in force relating to the storage of motor fuel in bulk at a terminal or storage installation;
- (g) any other condition the licensing authority sees fit to impose;

The licensing authority may cancel this licence upon the licensee committing any breach of the conditions herein set forth or of the rules for the time being in force.

This licence shall, unless previously cancelled, remain in force until the $31^{\rm st}$ day of March next following the date of issue.

Dated.....

[Signed by licensing authority].

FORM F

PERMIT FOR A MOBILE CONTAINER

Rule 34

Permission is hereby granted to [name] of [address] to use [description of mobile container and the marks by which it can be identified] for the purpose of conveying motor fuel subject to the following conditions—

[Inscribe herein the conditions]

The licensing authority may cancel this licence upon the licensee committing any breach of the conditions herein set forth or of the rules for the time being in force.

This licence shall, unless previously cancelled, remain in force until the 31st day of March next following the date of issue.

Dated.....

[Signed by licensing authority].".

(7) The following Schedules shall be inserted after Schedule 1–

SCHEDULE 2

Rule 39(1).

REQUIREMENTS FOR STORAGE INSTALLATIONS AT TERMINALS

- 1.(1) Subject to sub-paragraph (2) below, the external wall and roof of tanks above ground must be painted in a colour with a total radiant heat reflectance of 70 per cent. or more. These operations may be programmed so as to be carried out as part of the usual maintenance cycles of the tanks within a period of three years.
- (2) Sub-paragraph (1) above shall not apply to a tank which is linked to a vapour recovery unit which conforms with the requirements set out in paragraph 3 of Schedule 3 below.

- 2. Tanks with external floating roofs must be equipped with a primary seal to cover the annular space between the tank wall and the outer periphery of the floating roof and with a secondary seal fitted above the primary seal. The seals should be designed to achieve an overall containment of vapours of 95 per cent. or more as compared to a comparable fixed-roof tank with no vapour-containment controls (that is a fixed-roof tank with only vacuum/pressure relief valve).
- 3. All new storage installations at terminals, where vapour recovery is required pursuant to article 4 of the directive and Schedule 3 below, must be—
 - (a) fixed-roof tanks connected to the vapour recovery unit in conformity with the requirements of Schedule 3 to these Rules; or
 - (b) designed with a floating roof, either external or internal, equipped with primary and secondary seals to meet the performance requirements set down in paragraph 2 above.
- 4. Existing fixed-roof tanks-
 - (a) must be connected to a vapour-recovery unit in conformity with the requirements of Schedule 3 to these Rules; or
 - (b) must have an internal floating roof with a primary seal which should be designed to achieve an overall containment of vapours of 90 per cent. or more in relation to a comparable fixed-roof tank with no vapour controls.
- 5. The requirements for vapour-containment controls mentioned in paragraphs 3 and 4 above do not apply to fixed-roof tanks at terminals where intermediate storage of vapours is permitted according to paragraph 1(2) of Schedule 3 below.

SCHEDULE 3

Rule 39(2).

REQUIREMENTS FOR LOADING AND UNLOADING INSTALLATIONS AT TERMINALS

- 1.(1) Displacement vapours from the mobile container being loaded must be returned through a vapour-tight connection line to a vapour recovery unit for regeneration at the terminal; but this paragraph does not apply to top-loading mobile containers as long as that loading system is permitted.
- (2) At terminals with a throughput of less than 25,000 tonnes per year, intermediate storage of vapours may be substituted for immediate vapour recovery at the terminal.
- (3) All terminals with loading facilities for road tankers shall be equipped with at least one gantry which meets the specifications for bottom-loading equipment set out in Schedule 6 to these Rules.
- (4) As from 31st December 2004 the requirements for bottom-loading equipment contained in Schedule apply to all road tanker loading gantries at all terminals.
- 2.(1) The connection lines and pipe installations must be checked regularly for leaks.
- (2) Loading operations must be shut down at the gantry in the case of a leak of vapour. Equipment for such shutdown operations must be installed at the gantry.
- (3) Where top-loading of mobile containers is permissible, the outlet of the loading arm must be kept near the bottom of the mobile container, in order to avoid splash loading.
- 3.(1) Subject to sub-paragraph (2) below, the mean concentration of vapours in the exhaust from the vapour recovery unit corrected for dilution during treatment must not exceed 35 g/normal cubic metre (g/Nm³) for any one hour.
- (2) Until 31st December 2004 the limit value of 35 g/Nm³ for any one hour need not be required for vapour recovery units installed before 1st January 1993, provided that the installation meets a limit

value of 50 g/Nm³ for any one hour measured in accordance with paragraph 4 below.

- 4. The monitoring and analysis of the mean concentration of vapours in the exhaust from the vapour recovery unit shall satisfy the following requirements—
 - (a) measurements must be made over the course of one full working day (seven hours minimum) of normal throughput;
 - (b) measurements may be continuous or discontinuous, but if discontinuous measurements are employed, at least four measurements per hour must be made;
 - (c) the overall measurement error due to the equipment used, the calibration gas and the procedure used must not exceed 10 per cent. of the measured value;
 - (d) the equipment used must be capable of measuring concentrations at least as low as 3 g/Nm³₁ and the precision must be at least 95 per cent. of the measured value.
- 5. Where, in accordance with paragraph 1(2) above, intermediate storage of vapours is substituted for immediate vapour recovery at a terminal—
 - (a) vapours displaced by the delivery of motor fuel in fixed-roof tanks used for the intermediate storage of vapours must be returned through a vapour-tight connection line to the mobile container delivering the motor fuel;
 - (b) loading operations may not take place unless the arrangements are in place and properly functioning.

SCHEDULE 4

Rule 39(3).

REQUIREMENTS FOR LOADING AND STORAGE INSTALLATIONS AT SERVICE STATIONS AND TERMINALS WHERE THE INTERMEDIATE STORAGE OF VAPOURS IS CARRIED OUT

- 1. Subject to paragraph 3 below, vapours displaced by the delivery of motor fuel into storage installations at service stations and in fixed roof tanks used for the intermediate storage of vapours must be returned through a vapour-tight connection line to the mobile container delivering the motor fuel.
- 2. Subject to paragraph 3 below, loading operations may not take place unless the arrangements are in place and properly functioning.
- 3. Paragraphs 1 and 2 above shall not apply to service stations with a throughput of less than 100m³ per year.

SCHEDULE 5

Rule 39(4).

REQUIREMENTS FOR DESIGN AND OPERATION OF MOBILE CONTAINERS

- 1. Subject to paragraph 2 below, mobile containers shall be designed and operated in accordance with the following requirements-
 - (a) mobile containers shall be designed so that residual vapours are retained in the container after unloading of motor fuel;
 - (b) mobile containers which supply motor fuel to service stations and terminals shall be designed and operated so as to accept and retain return vapours from the storage installations at the service stations or terminals;
 - (c) except for release through the pressure relief valves, the vapours mentioned in paragraphs (a) and (b) above shall be retained in the mobile container until reloading takes place at a terminal.

- 2. Paragraph 1 does not apply to losses of vapours resulting from measuring operations using dipsticks in relation to—
 - (a) existing mobile containers; and
 - (b) new mobile containers, which come into operation during the period of four years beginning on 1st January 1996.

SCHEDULE 6

Schedule 3.

SPECIFICATIONS FOR BOTTOM-LOADING, VAPOUR COLLECTION AND OVERFILL PROTECTION OF EUROPEAN ROAD TANKERS

Couplings.

1(1) The liquid coupler on the loading arm must be a female coupler which must mate with a 4-inch API (101.6mm) male adapter located on the vehicle as defined by -API Recommended Practice 1004, Seventh Edition, November 1988

Bottom loading and vapour recovery for MC-306 tank motor vehicles (Section 2.1.1.1 Type of adapter used for bottom loading).

(2) The vapour-collection coupler on the loading-gantry vapour-collection hose must be a cam-and-groove female coupler which must mate with a 4-inch (101.6mm) cam-and-groove male adapter located on the vehicle as defined by -API Recommended Practice 1004, Seventh Edition, November 1988

Bottom loading and vapour recovery for MC-306 tank motor vehicles (Section 4.1.1.2 Vapour-recovery adapter).

Loading conditions.

2(1) The normal liquid-loading rate must be 2,300 litres per minute (maximum 2,500 litres per minute) per loading arm.

- (2) When the terminal is operating at peak demand, its loading gantry vapour collection system, including the vapour-recovery unit, is allowed to generate a maximum counter pressure of 55 millibars on the vehicle side of the vapour-collection adapter.
- (3) All approved bottom-loading vehicles will carry an identification plate which specifies the maximum permitted number of loading arms which may be operated simultaneously whilst ensuring that no vapours are released via the compartment P and V valves, when the maximum plant back pressure is 55 millibars as specified in sub-paragraph (2) above.

Connection of vehicle earth/overfill detection.

- 3.(1) The loading gantry must be equipped with an overfill-detection control unit which, when connected to the vehicle, must provide a fail-safe permission signal to enable loading, providing no compartment-overfill sensors detect a high level.
- (2) The vehicle must be connected to the control unit on the gantry via a 10-pin industry-standard electrical connector. The male connector must be mounted on the vehicle and the female connector must be attached to a flying lead connected to the gantry-mounted control unit.
- (3) The high-level detectors on the vehicle must be either 2-wire thermistor sensors, 2-wire optical sensors, 5-wire optical sensors or a compatible equivalent, provided the system is failsafe. Thermistors must have a negative temperature coefficient.
- (4) The gantry control unit must be suitable for both 2-wire and 5-wire vehicle systems.
- (5) The vehicle must be bonded to the gantry via the common return wire of the overfill sensors, which must be connected to pin IO on the male connector via the vehicle chassis. Pin 10 on the female connector must be connected to the control-unit enclosure which must be connected to the gantry earth.
- (6) All approved bottom-loading vehicles must carry an identification plate (see paragraph 2(3) above) which specifies the type of overfill-detection sensors installed (that is, 2-wire or 5-wire)

Location of the connections.

- 4.(1) The design of the liquid-loading and vapour collection facilities on the loading gantry must be based on the following vehicle-connection envelope—
 - (a) the height of the centre line of the liquid adapters must be -
 - (i) maximum 1.4 metres (unladen);
 - (ii) minimum 0.5 metre (laden),
 - (iii) the preferred height being 0.7 to 1.0 metres;
 - (b) the horizontal spacing of the adapters must be not less than 0.25 metres (preferred minimum spacing is 0.3 metres);
 - (c) all liquid adapters must be located within an envelope not exceeding 2.5 metres in length;
 - (d) the vapour-collection adapter should be located preferably to the right of the liquid adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).
- (2) The earth/overfill connector must be located to the right of the liquid and vapour-collection adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metre (laden)
- (3) The above connections must be located on one side of the vehicle only.

Safety interlocks: Earth/Overfill detection.

5. Loading must not be permitted unless a permissive signal is provided by the combined earth/overfill control unit. In the event of an overfill condition or a loss of vehicle earth, the control unit on the gantry must close the gantry-loading control valve.

Safety interlocks: Vapour-collection detection.

6. Loading must not be permitted unless the vapour-collection hose has been connected to the vehicle and there is a free passage for the displaced vapours to flow from the vehicle into the plant vapour-collection system.".

Dated this 22nd day of March, 2001

K AZOPARDI

Minister for Trade and Industry.

EXPLANATORY MEMORANDUM

(This note does not form part of these Rules)

These Rules transpose into the law of Gibraltar Council Directive 94/63/EC on the control of volatile organic compound emissions resulting from the storage of petrol and its distribution from terminals to service stations.

These Rules amend the Petroleum Rules so as to make provision for the reduction of emissions of volatile organic compounds (VOCs). VOCs react with oxides of nitrogen in the presence of sunlight to form ground level ozone. In high concentrations, ozone is a damaging pollutant that adversely affects human health, interferes with plant growth and damages building materials. The main sources of VOCs are road transport, the solvent-using industries, and the oil and chemical industries. Since ozone can travel long distances and cross national frontiers, action needs to be co-ordinated internationally. Action at Community level is in the form of Directive 94/63/EC.

The Rules aim to reduce evaporative losses from the storage and distribution of petrol. The Rules require the establishment of a "closed" system of petrol storage and transportation, under which the petrol vapours are recovered and regenerated into petrol, instead of being vented to the air.

The Rules apply to all intermediate storage terminals, to all transport containers (road tankers, and barges) and to most petrol service stations and all other installations where petrol is dispensed to motor vehicles from stationery storage tanks, above 100m3 annual throughput.

Some stations below 500m3 will be exempt. The Rules require the following principal measures to be taken:

- storage tanks to be equipped with special seals on floating roofs, or linked to a vapour recovery unit which conforms to specifications, where there are fixed roofs;
- vapours displaced, during loading at terminals (except existing terminals below 10,000 tonnes annual throughput) from road and rail tankers and barges to be returned through a vapour-tight connection line to a vapour recovery unit for regeneration;
- the connection lines and pipework of loading installations to be checked regularly for leaks;
- loading operations at refineries and intermediate terminals to shut down in the case of a leak of vapour. Equipment to shutdown operations to be installed at the loading gantry.
- vapour recovery units to have a mean concentration of vapours in their exhaust not exceeding 35g/Nm3 for any one hour, with specified equipment fitted to enable measurement;
- all road tankers to be bottomed loaded;
- road tankers and barges to be designed and operated to retain residual and return vapours until reloading takes place at a terminal; this provision will not apply to losses of vapours from the use of dipsticks on existing road tankers or new tankers which come into operation during the first four years of implementation. In addition road tankers to be regularly pressure tested for vapour tightness;
- intermediate terminals to be equipped with loading arms which meet the specifications for bottom loading equipment set out in the Schedules;
- vacuum pressure valves on all transport containers to be periodically inspected;

- vapours displaced from the storage tanks at service stations to be returned through a vapour-tight connection line to the transport container delivering the petrol;

The Rules are intended to come into force progressively. Implementation dates for the requirements range through intermediate deadlines, to a final deadline of 31 December 2004 for all existing equipment to be retrofitted to the relevant standards.