

Serial Number 1939/30.



THE PETROLEUM REGULATIONS 1939.

GALWAY, Governor-General.

ORDER IN COUNCIL.

At the Government Buildings at Wellington, this 15th day of March, 1939.

Present :

THE RIGHT HON. M. J. SAVAGE PRESIDING IN COUNCIL.

PURSUANT to the Petroleum Act, 1937, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, doth hereby make the following regulations.

REGULATIONS.

PRELIMINARY.

1. These regulations may be cited as the Petroleum Regulations 1939.
2. These regulations shall come into force on the day following notification in the *Gazette* of the making thereof.*
3. In these regulations, if not inconsistent with the context, words and expressions shall have the same meaning as in the Petroleum Act, 1937 (hereinafter referred to as the Petroleum Act); and, in addition, the term "well" means a borehole drilled for the purpose of prospecting for or obtaining natural gas or petroleum or a borehole producing natural gas or petroleum,

APPLICATIONS FOR LICENSES.

4. (1) Every application for a license shall be filed in the Head Office of the Mines Department at Wellington and shall be accompanied by the following fees:—

	£	s.	d.
(a) Application fee	0	10	0
(b) Registration fee	0	5	0
(c) License fee—			
(i) For a prospecting license	1	0	0
(ii) For a mining license	2	0	0

(2) If the application is not granted, the applicant shall be entitled to a refund of the amounts deposited as license fee and registration fee.

* See end note.

(3) The application shall be accompanied by a Lands and Survey Department lithograph on a scale of not less than 1 mile to 1 in. having the area applied for clearly delineated thereon to the satisfaction of the Under-Secretary. The area shall, in addition, be particularly described by words. The plan and description shall be certified as correct and as capable of reproduction on the ground by the Chief Surveyor of the land district within which the land is situated.

(4) The boundaries of each area applied for shall be accurately located by reference to a trigonometrical station or stations, or to natural defined boundaries, or to roads or title boundaries.

(5) Every applicant for a license shall, with his application, furnish to the satisfaction of the Minister evidence of his financial and technical qualifications and ability to comply with the terms and conditions of the Petroleum Act and these regulations.

(6) Every application for a renewal of a mining license shall be accompanied by the fees specified in clause (1) of this regulation.

(7) Every application shall contain the full name, address, and occupation of the applicant.

(8) Every application under section 14 of the Petroleum Act for an extension of the area comprised in a license shall comply with clauses (1) to (4) of this regulation.

REGISTRATION OF LICENSES AND INSTRUMENTS AFFECTING THEM.

5. Particulars of every license issued under the Petroleum Act shall be entered in a register to be kept for that purpose in the Head Office of the Mines Department at Wellington.

6. Every transfer or subletting of a license or of any interest therein shall be entered in the register of licenses. Such entry shall be made against the original entry of registration of the license affected, and a memorial of the transfer or subletting shall be endorsed on the original license and on the licensee's copy thereof. Before any transfer or subletting of a license is registered the licensee's copy of the license shall be produced to the Under-Secretary, together with a certified copy of the instrument of transfer or sublease.

7. There shall be payable in respect of the registration of any instrument other than a license a fee of 2s. for each separate registration entry in the register, and in respect of searches of the register a fee of 1s. in respect of each title searched.

8. The register may be searched between the hours of 9 a.m. and 12 noon and between the hours of 2 p.m. and 4 p.m., except on Sundays, Saturdays, and holidays.

GENERAL PROVISIONS AS TO LICENSES.

9. In every case where application is made pursuant to section 15 of the Petroleum Act for the written consent of the Minister to the transfer or subletting of a license, there shall be submitted with the application a copy of the proposed instrument of transfer or sublease, together with evidence to the satisfaction of the Minister of the transferee's or sublessee's financial and technical qualifications and ability to comply with the terms and conditions of the Petroleum Act and these regulations.

10. Every officer or person acting in the administration of the Petroleum Act or authorized by the Minister or the Under-Secretary shall at all times have full and free right of ingress, egress, and regress in respect of the land comprised in any license and the works thereon.

11. The holder of a license shall not as such holder—

- (a) Have any riparian rights in respect to any watercourse on or adjoining the land comprised in the license ; nor
- (b) Have any right or remedy whatsoever against any person in respect of the discharge of tailings, debris, or waste water into any watercourse by such person in the lawful carrying-on of his mining operations under the Mining Act, 1926 ; nor
- (c) Have any right or remedy whatsoever which would prevent any person from freely using for the purpose of transit any natural waterway on or adjoining the land comprised in the license, but so nevertheless that such user does not unduly interfere with any operations lawfully carried on in the waterway by the licensee ; nor
- (d) Have any right or remedy whatsoever which would prevent any person from freely using, with or without horses and vehicles, at all reasonable hours, such portion of the surface of the land comprised in the license as is not being actually occupied by the holder of the license as a site for his plant, buildings, or works, or as is not being actually used by him for his operations under the license.

12. The fact of fees being payable under a license shall not be deemed to confer upon the licensee any estate in the land comprised in the license.

13. All statements of crude petroleum and casinghead spirit produced and natural gas sold that are furnished under section 12 (7) of the Petroleum Act shall be in the form numbered 1 in the Schedule hereto.

WORKMEN.

14. (1) No person under the age of eighteen years and no female person shall be employed in the drilling of any well.

(2) Nothing in this regulation shall apply to persons engaged solely in clerical employment or to persons engaged solely as nurses or charwomen.

15. A copy of the Petroleum Act and of every amendment thereof and of all regulations for the time being in force thereunder shall be kept in a clearly legible condition at some convenient place near every well, and any workman may at all reasonable times inspect the same.

HEALTH AND SAFETY OF WORKERS AND EMPLOYEES.

16. The licensee shall comply with any instructions from time to time given by the Inspector in writing for securing the health and safety of persons employed in or about any works or operations connected therewith. In the event of any dispute arising between the licensee and the Inspector, the matter shall be referred to the Minister, whose decision shall be final.

FIRST AID.

17. (1) The licensee shall at all times keep and maintain in some suitable place, free of expense and immediately accessible to the employees and workmen,—

- (a) A suitably constructed stretcher :
- (b) A box containing a sufficient supply of suitable splints and bandages, adhesive plaster, boric vaseline, cotton-wool, suitable sterilized burn dressings, and tincture of iodine or other suitable antiseptic solution.

(2) Such materials shall be kept and maintained in good condition readily available for use at every well while drilling is being carried on, at every pumping plant and boiler-room, and at each centre or place of employment where five or more men are employed.

SERVICE PERMITS.

18. (1) No person shall have charge of the drilling of any well unless he is the holder of a service permit granted by the Board of Examiners appointed under the Mining Act, 1926.

(2) A service permit shall not be granted unless the applicant satisfies the Board—

- (a) That he is for the time being resident in New Zealand ; and
- (b) That he has had in the aggregate at least three years' practical experience in various capacities at wells where gas and oil have been dealt with ; and
- (c) That he is a person of ability, sobriety, and good conduct, and over twenty-three years of age.

(3) The fee for a service permit shall be £2 2s., and such fee shall accompany each application.

(4) The aforesaid ~~Board of Examiners~~ shall have power to refuse to grant a service permit or to cancel at any time any permit granted as aforesaid.

(5) If a person in charge of the drilling of a well is at any time incapacitated from performing his duties, or is about to be absent from the well for more than three working-days, he or the licensee shall appoint some person, approved in writing by the Inspector, as deputy during such incapacity or absence ; but no such deputy shall act for more than fourteen working-days at any one time unless authorized to do so by an Inspector.

(6) The holder of a service permit granted under the regulations under the Mining Act, 1926, shall not by reason of being the holder of such permit be entitled to have charge of the drilling of any well. Such holder shall, however, have the right at any time to exchange his permit for a service permit under these regulations. No fee shall be payable for such exchange.

OFFICER IN CHARGE OF FIELD OPERATIONS.

19. (1) The licensee shall, before commencing any drilling operations on the area comprised in his license, furnish to the Under-Secretary and the Inspector the name and address of the person in the field under whose supervision such operations are to be carried on.

(2) In every case the person in charge of drilling operations shall reside in the vicinity of the well.

(3) Any notice which is in accordance with the provisions of the Petroleum Act or these regulations required to be served on the licensee shall be sufficiently served if it is delivered or sent by post to such person at such address and a copy thereof is forwarded to the licensee.

NOTICE OF THE SITE AND COMMENCEMENT OF WELLS.

20. As soon as the site of any well has been decided, the licensee shall notify the Under-Secretary and Inspector in writing of the situation of the well and of the number assigned to it, and the well shall be described by that number in the plans and records which the licensee is required to furnish under these regulations.

COMMENCEMENT OF DRILLING.

21. (1) Where any well is to be drilled to a greater depth than 100 ft. for the purpose of searching for petroleum or natural gas, the licensee shall, before commencing the work of drilling, give written notice to the Inspector of his intention to drill, and such notice shall contain the following information :—

- (a) The location and elevation above sea-level of the floor of the proposed derrick and drill rig :
- (b) The number and other designation (if any) by which the well is to be known :
- (c) The licensee's estimate of the depth of the point at which the first string of casing is to be set, together with the method by which the casing is to be cemented and the size and weight of casing to be used :
- (d) The licensee's estimate of the depth at which oil- or gas-producing sand or formation will be encountered.

(2) The foregoing provisions shall also apply so far as is practicable to the deepening or redrilling of any well, or any operation involving the plugging of any well, or any operations permanently altering in any manner the casing of any well.

LOG OF WELL.

22. (1) The log of every well shall be kept in the form numbered 2 in the Schedule hereto, or in such other form as the Minister in any case approves.

(2) In addition to the information required by section 31 of the Petroleum Act, every log shall show—

- (a) The character of water encountered from time to time (so far as it is ascertained), and the point at which the water is shut off ; and
- (b) The depth at which oil-bearing strata are encountered, and the depth and character thereof.

(3) A copy of the log shall be forwarded to the Under-Secretary as and when required by the Under-Secretary.

PLANS AND RECORDS.

23. The licensee shall furnish to the Under-Secretary on or before the fifth day of each month during the term of the license or any renewal thereof a record in a form from time to time approved by the Minister of his operations on the area comprised in the license. The record shall contain—

- (a) A statement of the depth drilled in each well ;
- (b) A statement of any petroleum, water, mine workings, or seams of coal or other minerals of economic importance encountered in the course of the said operations ; and
- (c) A statement of the areas in which any geological or geophysical work has been carried out.

24. Within two months after the 31st day of May in each year the licensee shall furnish to the Under-Secretary a record, in a form from time to time approved by the Minister, of the operations conducted in the licensed area during the twelve months ended on the 31st day of May aforesaid, together with a plan upon a scale approved by the Minister showing the situation of all wells. The licensee shall also indicate on the said plan all development and other works executed by him in connection with searching, boring for, and getting petroleum. Where a license expires on any day other than the 31st day of May in any year the foregoing particulars shall be furnished to the Under-Secretary within two months after the expiry of the license.

AVOIDANCE OF HARMFUL METHODS OF WORKING

25. (1) The licensee shall maintain all apparatus and appliances, and all wells which have not been abandoned, in good repair and condition, and shall execute all operations on or in connection with the area comprised in the license in a proper and workmanlike manner in accordance with methods and practice customarily used in good oilfield practice. Without prejudice to the generality of the foregoing provision, the licensee is hereby required to take all steps practicable in order—

- (a) To control the flow and to prevent the escape or waste of petroleum discovered in or obtained from the area comprised in the license ;
- (b) To conserve the area comprised in the license for productive operations ;
- (c) To prevent damage to neighbouring petroleum-bearing strata ;
- (d) To prevent, by means of casing of adequate strength, the entrance of water through wells to petroleum-bearing strata ; and
- (e) To prevent the escape of petroleum into any water-well, spring, stream, river, lake, reservoir, estuary, or harbour.

(2) The licensee shall comply with any instructions from time to time given by the Inspector in writing relating to any of the matters set out in clause (1) of this regulation. In the event of any dispute arising between the licensee and the Inspector, the matter shall be referred to the Minister, whose decision shall be final.

(3) It shall be the duty of the licensee after water has been shut off in any well to notify the Inspector of the steps taken to effect the shut-off.

(4) Every well in which boring has been suspended and which produces a considerable volume of gas shall have its outlets so constructed that gas may be conducted therefrom through pipes provided with suitable valves, and if the gas is issuing from the well at high pressure a proper gas-regulator shall be provided.

ABANDONMENT OF WELLS.

26. (1) It shall be the duty of the licensee, before abandoning any well or before removing the rig, derrick, or other operating structure therefrom, or removing any portion of the casing therefrom, to effectively and permanently shut off and exclude all water from all petroleum-bearing strata, mines, or workable seams of coal.

(2) All abandoned wells shall be plugged to the satisfaction of the Inspector.

(3) Notice of abandonment of any well in whole or in part, with details of the methods and materials to be employed in plugging, shall be submitted to the Inspector, and his written approval obtained before the work is commenced.

FIELD STORAGE TANKS, PIPES, PIPE-LINES, AND OTHER RECEPTACLES.

27. The licensee shall use methods and practice customarily used in good oilfield practice for confining the petroleum and natural gas obtained from the licensed area in tanks, gasholders, pipes, pipe-lines, or other receptacles constructed for that purpose. No petroleum shall, save as a temporary measure during an emergency, be placed or kept in an earthen reservoir.

PROTECTION OF MINES AND COAL-SEAMS.

28. Where any well drilled within the area comprised in the license penetrates any mine or any workable seam of coal the licensee shall case the well in such manner as to prevent any water or petroleum in the well from entering the mine or workable seam of coal.

DISPOSAL OF WASTE OIL, SALT WATER, AND REFUSE.

29. The licensee shall drain all waste oil, salt water, and refuse from tanks, gasholders, and wells into proper receptacles erected and maintained by him for that purpose at a safe distance from the tanks, gasholders, and wells, and from any buildings or structures, whether situate on the area comprised in the license or not, and shall dispose of the waste oil, salt water, and refuse in manner from time to time approved by the Inspector. The licensee shall not cause or permit any waste oil, salt water, or refuse to flow into or over or to be deposited upon any land, whether situate within the area comprised in the license or not.

THE SURFACE.

30. If required by the Inspector, that part of any drilling area containing the derricks and engines and boilers shall be fenced. Sufficient gates shall be provided to give free egress for the workmen in case of emergency. Holes, abandoned wells, or other excavations

shall be filled up level with the surrounding surface and, where necessary, shall be adequately protected. Wells which are only stopped temporarily, water-wells, and mud, oil, and residue pits shall be adequately protected. The moving parts of all machinery shall be so guarded as to afford adequate protection to all persons working the machinery and to all persons who may be in the vicinity of the machinery.

31. Mud and oil from a well shall be collected in suitably arranged tanks or pits. All tanks or pits for oil, or for mud containing oil, shall be suitably fenced.

32. The removing of oil from any tank shall be carried out in such a manner that the spilling of oil over the surface of the ground is prevented. Any surface earth which has been saturated with oil shall be covered with dry earth.

33. No hot iron, naked light, matches, or other appliances for the production of fire or for smoking shall be taken into the derrick and buildings connected therewith, or into places in which oil or natural gas is exposed, used, or handled.

34. The use of firearms, the making of open fires, and the stacking of inflammable material shall not be permitted within the fenced area of well operations, or in any building or enclosed places used in connection therewith.

35. No artificial light, other than an electric safety-lamp of a type permitted by the Inspector, shall be taken into the buildings where oil is handled, treated, or distilled.

36. There shall be provided and maintained at all productive well operations and in the vicinity of oil intended for sale or commercial use fire-extinguishing appliances, and also shovels, axes, sand, and water, immediately available to extinguish fire. Where steam is available, provision shall be made for utilizing it readily for fire-extinguishing purposes.

THE DERRICK AND ADJOINING BUILDINGS AND INSTALLATIONS.

37. All derricks and buildings connected therewith shall be constructed of metal and shall be strongly and securely erected. Wooden frames only, however, may be used in the construction of a building if no part of the wood is exposed. No other building but that covering the drill plant and drilling-engines shall be attached to or in close proximity to a derrick.

38. Every derrick shall be securely guyed by strong wire rope or otherwise adequately supported.

39. Where drilling-rods are used, platforms shall be constructed on the derrick. Ladders leading to the platforms shall be constructed, and shall be of adequate strength, strongly secured, and maintained in good repair.

40. Every well shall, at all times while drilling is being carried on, be equipped with such safety devices as may be necessary to ensure satisfactory control of the flow of oil or gas, and the licensee shall use every effort to effectually prevent blow-outs, explosions, and fires.

41. Where cable tools are used the walking-beam shall be so balanced that it may be lowered easily by hand after the cable has been released. Under the walking-beam on the well side of the drill there shall be fixed a post to protect the workmen in the event of the breakage of the pitman.

42. The brake-bands of the rig shall be of suitable dimensions, and shall be manufactured in such a way that with ordinary care sparks will not be produced. For this purpose the brake-bands shall be lined with vulcanized fibre or other material which will not emit sparks :

Provided that if an iron brake-band be used upon a wooden wheel suitable provision shall be made for an adequate supply of water to be applied to the brake-band.

BUILDINGS AND MACHINERY.

43. Adequate light and ventilation shall be maintained in all derricks and buildings connected therewith, and in all working-places.

44. All buildings in the precincts of any well or oil-tank shall be covered with fireproof material ; and spark-arresters shall be placed on all gasoline and Diesel drilling and pumping engines and, where necessary, on all smithy chimneys.

45. No inflammable material shall be used for protecting or covering steam-pipes in the vicinity of well operations.

46. All pipes conveying gas or oil shall be of suitable material of adequate strength and jointed with material impervious to oil. All pipes after jointing shall be tested by hydraulic pressure to twice the maximum working-pressure. Care shall be taken that the flanges of valve chests, &c., are not unduly strained when the pipes are connected. All valves used in connection with oil or gas or fuel must be so constructed as to prevent the possibility of any cover being slacked back or loosened when operating the valves.

47. Workmen employed about any machinery shall not wear loose-fitting outer garments.

BOILER-HOUSES AND BOILERS.

48. Every boiler-house shall be situated at a safe distance from the well. There shall be two exits in the boiler-house ; one at each end of the house.

49. Boiler-houses shall be of adequate dimensions to permit safe and convenient access to all parts of the boiler.

50. In the event of a dangerous outburst of oil or gas the fire in the boiler shall be extinguished as quickly as possible. Withdrawal of the fire is prohibited. Where oil or gas is being used for fuel a throttle-valve to control the flow of the oil or gas shall be provided on the pipe-line outside of the boiler-house and at least 20 ft. from the wall thereof.

51. Ashes from any ash-box shall be completely extinguished before removal from the boiler-house.

HEATING OF STEAM BOILERS.

52. Gas-pipes shall be maintained in good repair and provided with valves or cocks, placed both within and without the boiler-house, in proximity to the gasometer. If there is any possibility of any valve controlling the flow of gas or oil to a boiler being confused with any other valve in an emergency it shall be painted a bright red colour to avoid such confusion.

53. The conveyance of gas direct from any well to a boiler is prohibited unless a suitable gas-regulator is fixed on the pipe-line leading from the well to the boiler.

54. Burners shall be disconnected and removed from furnaces immediately after every stoppage to preclude the entrance of gas or oil through leaking burner-valves.

55. Firebox fires shall not be lighted until steps have been taken to free the firebox of any accumulation of gas or vapour present.

56. Lighting torches shall be ready for use before the burner-valves are opened. The valve of the gas pipe-line shall be opened gradually. After lighting the burners the torches must not on any account be thrown away before they have been carefully extinguished by means of appliances provided for that purpose.

57. Where crude oil is used as a fuel a boiler-fuel tank shall be erected at a safe distance from the boiler-house.

58. Where oil is used as fuel save-alls are to be provided at firebox mouths to intercept oil escaping from the burners.

59. Oil-burners are to be arranged so that oil cannot be turned on to a burner unless it has been correctly coupled up.

60. Funnel dampers shall not as a rule be fitted, but where they are fitted they must be provided with a suitable device whereby they may be securely locked in the fully open position. Smoke-box doors must be shielded and well fitted and the uptake joints made airtight.

SCHEDULE.

[Form 1 (Reg. 13).

*Under the Petroleum Act, 1937.*The Under-Secretary, Mines Department,
Wellington.

MONTHLY RETURN OF CRUDE PETROLEUM AND CASINGHEAD SPIRIT PRODUCED AND NATURAL GAS SOLD.

Licensee :

Month of, 19..

No. of License.	Crude Petroleum produced.	Crude Petroleum unavoidably lost.	Crude Petroleum used in production.	Crude Petroleum on which Royalty payable.		Casinghead Spirit.	Casinghead Spirit unavoidably lost.	Casinghead Spirit used in production.	Casinghead Spirit on which Royalty payable.		Natural Gas sold.	
				Quantity.	Selling-value.				Quantity.	Selling-value.	Quantity.	Value.
	Gallons.	Gallons.	Gallons.	Gallons.	£ s. d.	Gallons.	Gallons.	Gallons.	Gallons.	£ s. d.	Cub. Ft.	£ s. d.

I hereby certify that the above figures are correct.

.....
Licensee or Authorized Agent.

[Form 2 (Reg. 22).

Under the Petroleum Act, 1937.

DRILL FIELD-LOG.

Log of No. well at for the period ended

Date.	Feet drilled.		Formation.	Casing used.		Remarks.
	From	To		Size.	Feet.	

C. A. JEFFERY,
Clerk of the Executive Council.

Issued under the authority of the Regulations Act, 1936.

Date of notification in *Gazette* : 23rd day of March, 1939.

These regulations are administered by the Mines Department.

(Mines N. 3/12/1.)