

**RULES UNDER THE UPPER MYANMAR OIL-FIELDS REGULATION.**

**No. 28.**

**The 28th March 1911.**

**[ Amendment : 18.06.1989 ]**

No. 28.- In exercise of the power conferred by sections 5 and 6 of the Upper Myanmar Oil-Fields Regulation, 1910, the Lieutenant-Governor is pleased to make the following rules for the control of oil-winning operations and the prevention and extinction of fires in an oil-field. These rules will come into force on May 15th, 1911.

**CHAPTER I.**

**PRELIMINARY.**

1. Definitions.- In these rules, unless there is something repugnant in the subject or context-

- (a) "Warden" means the officer specially appointed by Government as warden of the oil-field.
- (b) A flowing well is said to be "out of control" when it is discharging gas into the air without the gas passing through the authorised channels.
- (c) A flowing well is said to be "brought out of control intentionally" when it is opened to clean, deepen or repair it, and "brought out of control unintentionally" when it is first drilled into the oil-sand or comes out of control owing to an accident.
- (d) A "site-receiving tank" means a tank into which crude oil flowing or being pumped from a well is discharged.
- (e) "Congested area" means an area notified and marked as such by the warden.  
Rules 10, 50, 51, 53, 56, 63, 65, 70, 75 and 79 shall apply to a congested area only.
- (f) "Extractor" for the purposes of these rules means any person extracting oil from the Yenangyaung oil-field by methods other than the ordinary native ones (i.e., than by hand-digging).
- (g) "Exporter" for the purposes of these rules means any person removing oil from the oil-producing area by pipe, whether the oil removed is won by the exporter or purchased by him, or taken over by him for transmission from the oil-field by pipe- line.
- (h) "Gauger" means an officer appointed to check the measurements of the oil and to carry out the duties laid down in these rules for a gauger.

- (i) "Measuring-tank" means a tank in which oil is measured for revenue purposes.
- (j) "Owner" includes a grantee or lessee and any person under whose control oil-winning operations are conducted.
- (k) "Fire-master" means a person appointed to be in charge of a fire-brigade.
- (l) "Field-manager" means the officer of a company who directly superintends the drilling operations of an oil-field.

**UNDER SECTION 5 (1).**

- 2. The warden or any officer superior to him or any person authorised by him shall have the right to inspect all boring and construction work connected with the storage, transport and exploitation of oil.
- 3. No person shall drill a well to a greater depth than 1,700 feet in the Twingon Reserve of the Yenangyaung oil-field or than 500 feet elsewhere until he shall have made due provision for the immediate removal and storage of all oil which may reasonably be expected to be obtained from such well. In the absence of such provision the warden may at his discretion prohibit the drilling of such well.
- 4. Every person before commencing any boring or construction operations within the reserves shall report to the warden the proposed location of the well and its necessary plant and machinery, and the qualifications of the driller whom he proposes to employ, and shall comply with any instructions received from him in these respects.

**UNDER SECTION 5 (2) (a).**

- 5. The warden shall have power to deal with any complaint formally submitted to him regarding disputes as to dangerous or injurious action on the part of any person working in the oil-field. Subject to the provisions of the regulation as to revision the orders of the warden shall be final. For the purposes of this rule the warden shall have the powers of a Civil Court to compel the attendance of witnesses and the production of documents. The parties shall be bound to obey the order as passed by the warden or as modified on revision as aforesaid until such time as the Civil Court shall have decided the matter if a suit be brought, and the matter be one in which a Civil Court has jurisdiction.

**CHAPTER II.**

**RULES UNDER SECTION 5 (2) (b) TO (f).**

Under (b).

6. Every owner of one or more drilled wells in the reserves who is not himself regularly resident on or near the field shall appoint a resident agent and field manager, and shall inform the warden of the name and address and of any change of the incumbent or incumbents of such positions.
7. Every transfer or devolution of a grant or lease shall be reported to the warden within ninety days of such transfer or devolution by the person acquiring any right under it.

Under (c).

8. During drilling the agent shall forward weekly a copy of the drilling record to the warden, containing such particulars as may be called for. The record shall be kept as confidential, but the warden may communicate to any agent such portion of this record as refers to the location and thickness of the water-sands and as appears to the warden expedient for the protection of the field from flooding.

Under (d).

9. Every site shall be demarcated with an iron post of prescribed pattern at the cost of the owner which shall clearly show its number and be fixed in the centre of the site. On the erection of a derrick the demarcation post shall be removed and the plate bearing the number of the site shall be affixed to the derrick, which shall also bear the name of the owner or lessee (if any) and the serial number of his derrick.

Under (e).

10. Every hand-dug well shall be filled up with earth or covered up in a manner approved by the warden or protected by an iron fence round its mouth, which shall remain closed except when the well is being worked.

Under (f).

11. The warden shall have the power to order the removal or exclusion from the oil-field or any part of it of any person not employed on any work in the oil-field, or who appears to be present for any vexatious or unlawful object or purpose. Any person disobeying an order or committing a breach of a rule under this chapter shall be liable, on conviction by a magistrate, to a fine not exceeding one hundred rupees.

### CHAPTER III.

#### **RULES UNDER SECTION 5 (2) (g), FOR MEASUREMENT OF OIL REMOVED FROM THE OIL-PRODUCING AREA OF THE YENANGYAUNG OIL-FIELD.**

Erection of measuring tanks.

12. Every exporter shall erect one or more measuring tanks within the limits of the Yenangyaung oil-field in some place approved by the warden, provided that separate tanks shall be provided for the measurement of oil on which royalty is paid by the viss and that on which royalty is paid by the gallon.

Oil to be run into measuring tanks.

13. All oil won, with the exception of the oil used as fuel and that removed from the reserves by native methods, shall be run into a measuring tank in its crude state as it is obtained from the wells.

Dip-rods.

14. Each tank shall be provided with a metal dip-rod with a scale marked thereon or a wooden dip-rod fitted with a steel measuring tape marked for each quarter of an inch or any other apparatus approved by the warden for purposes of measurement, and a table showing the contents of each tank for each  $\frac{1}{4}$  inch of depth. This table shall be certified as correct by the Executive Engineer before the tank is brought into use for measuring purposes.

Gate-valves capable of being locked on pipes of tanks.

15. Every inlet and outlet pipe of each measuring tank shall be fitted with a gate-valve capable of being locked, and each gate-valve shall be provided with a chain and padlock supplied by Government at the cost of the exporter.

Keys of locks.

16. The gauger shall hold the keys of the padlocks securing the gate-valves, and they shall not be locked or unlocked except by him.

No oil to be removed until measured.

17. No oil shall be removed from a measuring tank until such oil has been measured by the gauger and the dip of the tank recorded by him in the prescribed form.

Water to be run to waste.

18. Water in deposit may be run out of the oil at any time before measurement, but in such cases the water must be run to waste and not stored in any way with a view to further extraction of oil from it.

Notice to gauger of intention to run oil out of or into a measuring tank.

19. Whenever an exporter intends running oil out of or into his measuring tanks he shall give notice of his intention to the gauger, who, on receipt of such notice, shall proceed as soon as possible to the tanks.

Procedure on running oil out of or into measuring tanks.

20. The procedure thereafter shall be as follows:-

**Running out.**

- (a) The inlet gate-valves shall be closed and locked.
- (b) The dip shall be taken and the quantity of oil in the tank recorded in a register.
- (c) The exit gate-valves shall then be unlocked but not opened, and the exporter may run the oil out of the tank at any time convenient to him.

**Running in.**

- (a) The exit gate-valves shall be closed and locked.
- (b) The dip shall be taken and the quantity of oil remaining in the tank recorded in the register.
- (c) The inlet gate-valves shall then be unlocked.

Entry to be signed by exporter and gauger.

21. Every entry in the register maintained under Rule 20 will be signed by the exporter or person in charge of the tank and by the gauger in proof of its accuracy.

Return to be furnished by the extractor and exporter.

22. The extractor and exporter shall furnish such returns showing oil extracted and exported, the amount of revenue payable, and the labour employed, with such other information as may from time to time be required by the Financial Commissioner.

Oil won from upper sands and removed by other than native methods.

23. Excepting oil removed by native methods, all oil extracted from hand-dug wells, which is to be removed from the limits of the oil-fields other-wise than by oil flats or pipe lines, shall be run into separate measuring tanks.

Measurement of oil extracted from upper sands in reserves.

24. All oil extracted from the hand-dug wells in the reserves of Twingon and Beme and removed therefrom by native methods shall be measured and royalty shall be paid thereon in such manner as the Financial Commissioner shall prescribe.

25. Whoever, except in the case of fire or other urgent necessity or for oil-fuel, removes from an oil-field oil which has not been measured under the rules contained in this chapter, shall be punished, on conviction by a magistrate, with a fine which may extend to five hundred rupees; and if the removal is with the intent to evade payment of royalty, with imprisonment which may extend to six months or with a fine which may extend to one thousand rupees or with both.

**CHAPTER IV.**

**RULES UNDER SECTION 5 (2) (h), (i), (j).**

Under (h).

26. Every owner and occupier of any premises within an oil-field where any accident of the description referred to in section 8 of the regulation occurs, shall report such accident without delay to the warden or, in his absence, to the nearest magistrate.

Under (i).

27. All persons working in the field shall be bound so to arrange their constructions as not to interfere with the safety or convenience of their neighbours or with the lines of communication across the field.
28. No well shall be drilled in any position other than the centre of a site except with the written consent of the warden.

Under (j).

29. There shall be a right of way over all sites in the Twingon and Beme Reserves for the passage of persons and the transport of materials, tools and plant connected with the oil industry, and a right to lay pipes and wire above or below ground across any site with a right of access to the same hereafter. There shall be a right to lay pipes and fix wire, whether above or below ground, for purposes connected with the oil industry and a right of access to the same thereafter across all leased sites outside the reserves in the oil-fields. No persons shall exercise such rights except in the manner which will cause the least possible interference with the owners of the site. The decision of the warden as to the arrangement of constructions referred to in rule 27 or the exercise of a right referred to in this rule shall be final.
30. Whoever commits a breach of rule 26 or rule 29 shall be punished, on conviction by a magistrate, with a fine which may extend to one hundred rupees.

**CHAPTER V.**

**RULES UNDER SECTION 5 (2) (k) TO (m) FOR PREVENTION OF FLOODING OF OIL-SANDS.**

31. In the Twingon Reserve of the Yenangyaung oil-field these rules apply only to water-sands below 900 feet.
32. As soon as a bore strikes a water-sand the driller shall be bound to report the same to his field-manager, who shall, through his agent, apprise the warden without delay.
33. The agent shall report to the warden the depth and thickness of the water-sand, the nature of the underlying stratum, and the method proposed for shutting off the water.

34. The warden may satisfy himself that the water has been effectually shut off, and may issue any such instructions as he considers necessary.
35. The field-manager shall be bound to see that these instructions are carried out to the satisfaction of the warden, and shall not allow drilling to go on till the warden has satisfied himself that the water has been shut off effectually.
36. If, when a well flows or is put to pumping, water is found mixed with the oil, or if water which has been cased off subsequently breaks into a well, the field-manager shall, through his agent, immediately report the matter to the warden, and shall carry out any instructions which the warden may pass with a view to shutting off the water.
37. The owner of every well which is not flowing is responsible for periodically pumping it for the purpose of ascertaining whether it is admitting water. And if the well is found to be admitting water, he is responsible for keeping it continually free of water by pumping.
38. If the warden considers it necessary to satisfy himself that the well is kept free of water, he may require the field-manager to have the well pumped in his presence and may pass orders to make any necessary repairs or replacements that may be required.
39. If the owner neglects to keep the well pumped free of water the warden may, unless he be shown reasonable grounds for concluding that the water is coming from the same sand as the oil, require him immediately to plug the well or shut off the water; and if he neglects to do so within a reasonable period the warden may cause it to be done, recovering the cost from the owner as if it were an arrear of revenue.
40. The owner of a well who desires to plug it shall give notice of his intention to the warden and obtain his permission to do so. The warden may require that the plugging shall be done under the supervision of some competent person to be nominated by him.
41. When it is not intended to recover the casing a well shall be plugged by filling in cement, puddled clay or other suitable material from the bottom up to a level which shall be fixed by the warden.
42. The process of plugging shall be carried out in accordance with the instructions and to the satisfaction of the warden.
43. Above the level fixed by the warden in accordance with rule 41 the hole shall be filled with earth, sand, stones or clay, as, may be convenient.
44. If the owner wishes to recover the casing the following additional precautions shall be taken:-

- (a) As each length or section of two or three lengths of the casing of smallest diameter is pulled up and unscrewed, puddled clay or other plugging material shall be filled in through the casing still left in the bore up to the level of the shoe of the casing which is being removed.
  - (b) When the well is filled in up to the level of the shoe of the next larger casing in the well, the smallest casing may be drawn and similar steps taken to plug the portion of the well cased with pipes of the next larger diameter, and so on till the level fixed by the warden under rule 41 is reached, after which all the casings, may be drawn and the hole filled with earth, sand, stones or clay, as may be found convenient.
  - (c) If, owing to the casing being tight, it is necessary to cut out and leave in the ground the bottom portion of the casing, the portion left in the ground shall be filled up as soon as it is certain that the lower portion has parted from the upper.
45. No well having reached a depth of 1,600 feet or such greater depth as may be notified from time to time by the warden shall be drilled or deepened more than 50 feet below the level of the bottom of the deepest well that may be within a horizontal distance from it of 300 feet except under the following restrictions:-
- (a) The agent shall give one week's previous notice of such intention to the warden; and
  - (b) He shall case off the oil-sands through which the well has passed as if they were water-sands, to the satisfaction of the warden.
46. If the sands deeper than the horizon referred to in rule 45 prove to be brine-sands or water-sands only, on ceasing drilling the owner shall securely plug the well either below the bottom of the lowest oil-sand or as near the bottom of the oil-sand as possible.
47. So long as the strata below the horizon referred to in rule 45 are proved to the satisfaction of the warden to be impervious or to be oil-bearing, the casing used to shut off the oil-sand in the upper horizon may be reamed down.
48. If, in the opinion of the warden, a well has, owing to an accident during drilling or subsequently, or to the use of bad materials or to bad workmanship, or other cause, become a source of danger from water, the warden may order that the well be partially or completely plugged or that further drilling be discontinued, unless the danger can otherwise be guarded against.
49. Whoever by any act or omission commits a breach of the rules under this chapter shall be punished, on conviction by a magistrate, with fine which may extend to five hundred rupees; and if such act or



omission causes damage to the oil-field, with imprisonment which may extend to six months or with fine not exceeding one thousand rupees or with both.

## CHAPTER VI.

### RULES UNDER SECTION 6 (2) (a) TO (s), FOR THE PREVENTION AND EXTINCTION OF FIRES IN THE OIL-FIELD.

Under (a).

50. After the expiration of four months from the commencement of the Upper Myanmar Oil-fields Regulation no lights other than vacuum electric lamps shall be permitted.

<Amendment 18.06.1989>

Under (b).

51. Smoking is prohibited except in such places as may be specially exempted by the warden.

Under (c).

52. Forges and open fires shall only be used in places approved of by the warden.

Under (d).

53. No drilling, deepening or cleaning of wells shall be carried out between sunset and sunrise.

54. No well shall intentionally be brought out of control at night, and all wells shall be brought under control before nightfall, if possible.

Under (e).

55. Before a well is brought out of control intentionally or when it is brought out of control unintentionally, all boiler-fires within 100 yards of the well out of control and all other boiler-fires the extinction of which may be directed by the fire-master, shall be extinguished. Such boiler-fires shall not be re-lighted until the driller in charge of the said well has certified that his well is under control.

Under (f).

56. After the lapse of such period as may be fixed by the Local Government no boiler fire shall be kept alight at night without the permission of the warden, and no internal combustion engine except an engine with electrical ignition shall be allowed.
57. Every boiler fire shall, in addition to the pipe for the supply of crude oil or gas, have a pipe for the supply of steam so arranged that the steam jet will quench any heated part of the fire-box as soon as the fuel feed is cut off.

58. Each drilling well shall be provided with a steam-pipe not less than one inch in diameter, which shall be laid from the boiler to the derrick and shall point directly to the top of the casing of the well and be about three feet distant from it. The stop-cock on the steam-pipe shall be as near the boiler as possible.

59. Whenever in any derrick the "Bull-wheel" is being worked arrangements shall be made to ensure a constant drip of water falling on the band brake.

Under (f) and (r).

60. Every flowing well shall be provided with a gate-valve or stop-cock which shall automatically close if the well to which it is attached goes on fire. If the well is likely to flow between the casings when the gate-valve or stop-cock is shut, the casings between which a flow is possible shall be shut by a stuffing box or similar appliance.

The gate-valve or stop-cock shall be securely protected to the satisfaction of the warden from damage likely to be caused by heavy weights falling from a derrick during a fire.

The connections for closing the automatic gate-valve or stop-cock should be on the side on which is the site-receiving tank; and if the well also have a non-automatic gate-valve or stop-cock fitted, it should be as far distant from the site-receiving tank as possible. Field-managers shall be responsible that the gate-valves or stop-cocks are frequently tested to see that they are in working order.

Under (g).

61. No house or hut and, within the boundaries of a fire-line, no construction of any kind, shall be erected without the permission of the warden who, in granting such permission, may prescribe the materials to be used, and may at any time after due notice order the removal of any house or hut, or from within the fire-line of any construction.

62. Every rig over a flowing well except rigs made of iron or other non-inflammable material, and except such as are specially exempted by the warden, shall be removed within one month of the day the well begins to flow; and, if the warden so order, either that part of the derricks over adjacent wells which is above the "walking beam" shall be removed within one month of the well beginning to flow or the derricks over adjacent wells shall be protected with non-inflammable material to the satisfaction of the warden within that period.

63. On removing a rig the owner shall demarcate the site formerly occupied by the rig, and any person placing any construction on the site thus demarcated shall immediately remove such construction on the written order of the warden.

64. No company shall erect more rigs than are necessary in the opinion of the warden for the proper conduct of its business, but a company may demarcate a site for a rig on any well-site belonging to it, and any person placing any construction on a site thus demarcated shall immediately remove such construction on the written order of the warden.

Under (h) and (i).

65. Every site-receiving tank shall be placed upon the ground or supported by a metal or masonry structure. Such tank shall have a gas-tight cover and shall be connected with some means for conveying the gas safely beyond the limits of the danger. If the gas be not led at once out of the congested area or be not consumed in approved internal combustion engines, it shall not be allowed to escape at a lower level than 20 feet above the surrounding ground. If, in the opinion of the warden, a chimney delivering gas at a height of 20 feet is insufficient to secure safety in any particular locality, he may direct that the height of the chimney be increased or that a site-receiving tank be not permitted in that locality.

66. If the oil in a site-receiving tank be measured by the use of a dip-rod introduced through a hole in the cover, the hole shall not exceed three inches in diameter and shall be provided with a lid which automatically closes on the withdrawal of the dip-rod. This hole shall ordinarily be kept closed, and shall be open only for the purpose of introducing a dip-rod to measure the oil.

67. No site-receiving tank exceeding 5,000 gallons in capacity shall be erected or maintained without the written permission of the warden.

Under (l).

68. Every derrick shall be provided with fire-extinguishers to the satisfaction of the warden.

69. Every owner or occupier of a drilled well shall have on his water and steam pipe connections of standard sizes to be settled by the Warden.

Under (m).

70. All pipes for the conveyance of oil shall, as far as possible, be laid under ground.

Under (n).

71. No well shall be drilled to a greater depth than 1,700 feet in the Twingon Reserve of the Yenangyaung oil-field or than 500 feet elsewhere until arrangements have been made to the satisfaction of the warden for bringing the well under control as quickly as possible when oil is struck.

72. No well shall intentionally be brought out of control without giving the authorized agents of the owners of all wells within 100 yards twenty-four hours' notice of the intention to do so.

73. No well shall be allowed to be out of control longer than is reasonably necessary for the purpose of cleaning, deepening or repairing, or than may be necessary to bring it under control. When oil is being discharged from a well which is out of control, arrangements shall be made by the owner to collect the oil as speedily as possible and convey it to a safe place.

74. As soon as a well becomes intentionally or unintentionally out of control, the driller in charge shall warn the neighbouring drillers by a signal or other means approved by the warden.

75. On a well beginning to flow, further drilling shall be prohibited unless and until an "oil-saver" has been affixed to the cable carrying the tools.

Under (g).

76. The fire-brigade shall be under the general control of the warden.

Under (o), (p) and (q).

77. The warden shall determine what signal shall be used for giving an alarm of fire and what signal for notifying that the danger has ceased.

78. When a fire-alarm has been given no person other than the warden or some person authorized by him shall give the signal that danger has ceased.

79. As soon as a fire-alarm has been given the following rules shall come into force:-

- (a) Every worker on the field shall be bound to assist in putting out the fire or in taking measures to prevent its spread, and shall be required to act in accordance with the orders of the fire-master.
- (b) Every person in charge of a flowing well shall be responsible that the gate-valve or stop-cock of the well is shut to such an extent and for such length of time as he in his discretion considers safe.
- (c) Every person in charge of a water-pump shall forthwith start his water-pump working, and keep it working at full output until instructed to stop or till the signal that danger has ceased has been given.
- (d) Every person in charge of a drilled well of any description shall be responsible that the contents of the site-receiving tanks are, as far as possible, drawn off to tanks outside the congested area.
- (e) All persons working at an open well shall be responsible that the digger, if any working in the well, shall be brought to the surface without delay.
- (f) Every person in charge of a pumping well shall be responsible that pumping is stopped.

80. Every person employed on the field shall be bound to take all needful precautions against fire, whether such precautions are prescribed by rule or not.

Under (s).

81. The warden may demarcate and declare any portion of the oil-field in which well-sites have not been granted to any person or by agreement with the grantee any portion of the oil-field to be a fire-line, and may withdraw any such declaration.
82. Whoever commits a breach of any of the rules under this chapter shall be punished, on conviction by a magistrate, with a fine which may extend to five hundred rupees, and if injury or damage is caused thereby to person or property in an oil-field, with imprisonment which may extend to six months or with fine not exceeding one thousand rupees or with both.
83. Rules 32, 35, 36, 37, 39, 45, 46, 50, 65, 66, 67, 71, 72, 73 and 74 are rules for the breach of which the Local Government may revoke any grant or lease or take possession of any well or site under the provision of section 14 of the Upper Myanmar Oil-fields Regulation, 1910.

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