



**MINISTERIAL REGULATIONS**  
**FUEL OIL VAPOUR RECOVERY**  
**B.E. 2550**

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By virtue of Sections 5 and 7 (1), (3), (5) and (7) of the Fuel Oil Vapour Recovery Act, B.E. 2542 which provides for action to be taken pursuant to the law, the Minister of Energy hereby issues the Ministerial Regulations, as follows:

1. In these Ministerial Regulations:

“Fuel Oil Vapour” means vapour of benzene oil including those of other fuels as announced by the Minister.

“Vapour Recovery System Stage I” means a system of protection against release of fuel oil vapour into atmospheric surroundings during the process of oil transfer between storage tanks and oil trucks, or from trucks into underground storage tanks inside a fuel service station.

“Vapour Recovery System Stage II” means a system of ..... against release of oil Vapour into atmospheric surroundings during the process of oil transfer from oil distributing nozzles into oil trucks inside a fuel service station.

“Vapour Recovery Unit” means systems of pipelines, tanks and equipment used in the process to convert oil vapour into liquids.

“Fuel Oil Transport Truck” means vehicle used to transport fuel oil by land, excluding railway, which has an oil tank affixed to the upper part of its body.

**Chapter 1**  
**Fuel Oil Vapour**  
**Recovery System**

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2. A system for vapour recovery shall be installed in the manner and in areas and within premises, as follows:

(1) Vapour Recovery System Stage I:

(A) Within areas of Bangkok Metropolis and the provinces of Samutprakarn, Nonthaburi, Pathumthani and other areas as designated by the Minister.

1. Petrol service stations under Category A (Gor).
2. Fuel oil depots.
3. Oil storage premises where oil intake/ouptake are made via oil transportation trucks.
4. Premises where oil intake/ouptake is made by oil pipeline transportation system and distributed onwards to oil trucks within the above premises.
5. Other premises as prescribed by the Minister.

(B) In areas throughout the country:

1. Petrol service stations under Category B (Kor).
2. Other premises as prescribed by the Minister.

(2) Vapour Recovery System Stage II:

(A) Within areas of Bangkok Metropolis and provinces of Samutprakarn, Nonthaburi, Pathumthani and other areas as designated by the Minister.

1. Petrol service stations under Category B (Kor).
2. Other premises as prescribed by the Minister.

(B) In areas throughout the country as prescribed by the Minister:

1. Areas designated by the Minister in the Notification.

3. Oil trucks which are not equipped with vapour recovery system Stage 1 are not allowed to accept or distribute oil containing oil vapour within premises listed in Clause 2 even though such premises may have a vapour recovery system, stage I already installed.

## Chapter 2

### Vapour Recovery Unit

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4. Vapour recovery units must be equipped with safety equipment as well as necessary components pursuant to standards set by the Department of Energy Businesses as published in the Government Gazette.

Vapour recovery units under the preceding paragraph must be capable of controlling oil vapour releases pursuant to standards prescribed by laws governing promotion and preservation of the country's environment.

5. Vapour recovery units must be installed in the following premises:

(1) Oil depots.

(2) Oil storage premises where oil intake/outtake are made via oil transportation trucks.

(3) Premises where oil intake/outtake are made by oil pipeline transportation system and where oil is distributed to oil trucks.

6. Vertical oil storage tanks with internal floating roofs must be equipped with vapour recovery units.

7. Vertical oil storage tanks with fixed roofs or horizontal oil storage tanks must be equipped with a vapour pipeline system extending from oil tanks to premises of oil intake/outtake, or equipped with vapour recovery units or any other

means capable of eliminating fuel oil vapour in the manner which is up to the standards of a vapour recovery unit.

8. Action must be taken by operators of controlled businesses to ensure that the system of vapour recovery units are constantly checked and tested in order to contain the release of vapour within the parameters and standards prescribed by laws governing the promotion and preservation of the country's environment.

If it is found during such checks/tests in the preceding paragraph, that the value of vapour releases exceed mean standards set by laws governing the promotion and preservation of the country's environment, adjustment must be made without delay by the operator of such controlled business on its vapour recovery unit to ensure that the ventilated air is kept in line with standards prescribed by laws governing the promotion and preservation of the country's environment.

9. Drawings of the vapour recovery unit must at least give the following details:

(1) Unit drawing

(2) Side-view drawing

(3) Cross-section drawing

(4) Foundation drawing

(5) Drawings showing details of the pipeline system, tanks and various equipment which may be checked.

Use a scale of not less than 1 : 50 for drawings under (1), (2), (3) and (4).

10. The oil intake/outtake system must be such which supports the bottom-line loading process and, at least, give the following details:

(1) Plan drawing

(2) Side-view drawing

(3) Cross-section drawing

(4) Foundation drawing

(5) Drawings showing details of installation of fuel oil intake/outtake platforms including pipeline system and equipment used to control such activities which may be checked.

Use a scale of not less than 1 : 50 for drawings under (1), (2), (3) and (4).

11. Vapour storage tanks in the vapour recovery unit must be placed at a distance of not less than 8.00 metres from boundary lines of premises under Clause 5, and not less than 20.00 m distance from houses or inflammable items.

12. If a vapour recovery unit is equipped with auto-ignition temperature devices, they must be kept at least 20.00 metres away from oil tanks.

13. Connectors of the fuel oil intake/outtake platforms shall be designed and tested on the following criteria:

(1) They must be of the type for specific use with fuel oil and designed in such a way to at least support 517 kPa (75 lb per sq. in.) operating pressure and at least 1.5 times the designed pressure.

(2) With at least 101.6 mm (4 inches) diameter.

(3) Where there are several connectors, distance between the surface level of the central point of each connector shall be distanced at not less than 254 mm (10 inch) and not more than 1.83 m (6 ft) from one another.

(4) They must be installed at a height between 0.458 metre (1.5 ft) to 1.22 metre (4 ft) above the ground.

14. The diameter of the vapour recovery unit's conduit system must not be less than 101.6 mm (4 inch), and the end of the conduit must be equipped with a connector with the same diameter of 101.6 mm (4 inch) as well.

15. Distribution platform equipment of the outtake control system must be designed in accordance with the following particulars:

(1) The system of control of fuel oil distribution, stage I, must consist of meter valves to control the volume of outflow.

(2) The system of control of fuel oil distribution, stage II, must consist of a signal system from the fuel-level measuring meter inside the fuel transportation tank to prevent fuel overflow from the tank during any filling-up process.

### Chapter 3

#### Vapour Recovery by Class A (Gor) Petrol Service Stations And Class B (Kor) Petrol Service Stations

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16. Petrol Service Stations, Class A (Gor) and Class B (Kor) located in areas under Clause 2 (1) (a) and (b), are required to have Vapour Recovery System, Stage I in place. The manner, method of installation and testing of such system are as follows:

(1) Drawings of the Vapour Recovery System Stage I must give details concerning installation of the conduit system and vapour control/recovery equipment.

(2) Vapour conduits used in the vapour recovery system must be made of strong and stable materials which will not react with fuel oil. It can either be a single or double panelled conduit with a sloping gradient of not less than 1 : 100 towards underground fuel storage tank(s).

(3) Connectors of fuel oil conduits must be of the type which can prevent vapour leakages (quipped with dry break fitting) and must be covered with a cap when no intake/outtake activities are in progress.

(4) A device/equipment must be provided for overfill protection at the connector of fuel oil intake conduit or connector of the vapour conduit.

(5) A safety device/equipment for pressure and vacuum vent must be installed at the end of the fuel oil conduit with such features and testing methods as follows:

(a) Pressure ventilation must be activated by the safety device/equipment at a pressure of not less than the value of pressure generated while transferring oil from trucks into underground tanks which, however, must not exceed the tank's designed pressure. Vacuum ventilation must also be activated when there is a vacuum inside a tank with a vacuum pressure of not more than 2,000 Pa. (8 water inches).

(b) Such safety devices must be tested every two years.

(6) Vapour recovery units must be installed in accordance with any of the following conditions:

(a) Two Point Systems: there must be connector(s) for oil intake pipes and connectors for oil vapour pipes for each underground oil tank. Connectors of vapour pipes which are connected with the oil truck's flexible pipes to return the vapour back into oil transportation tanks must be larger than fuel pipes which are branched out to oil vapour recovery pipes to ensure ease of return of vapour flow back into the oil transportation tanks as illustrated in Drawing No. 1 attached hereto.

(b) Coaxial Systems: double-layer (coaxial) connectors must be provided to accept fuel oil supply and the return of oil vapour in the same pipe at each of the underground storage tanks, with coaxial delivery elbow branching out to the oil truck's flexible pipes as illustrated in Drawing No. 2 attached hereto.

(c) Manifoldded Systems: manifoldded vapour pipes must be provided for several underground storage tanks to cut down on the number of vapour connectors. Protection equipment against the flow of fuel oil into vapour pipes such as extractable ball float valve(s) must be provided at the connecting point of fuel oil pipes with manifoldded pipes to prevent oil from flowing into vapour pipes, as illustrated in Drawing No. 3 attached hereto. However, it will not be necessary to install equipment/devices to prevent oil flow into vapour pipes if manifoldded pipes are installed at a point higher than oil transportation tanks, as illustrated by Drawing No. 4 attached hereto.

(7) Once the vapour recovery unit, Type 1, are installed, the vapour control system must be tested before use with a pressure of not less than 0.70 kg. per cm<sup>2</sup> (1 lb/in<sup>2</sup>) After it is left for at least 30 mins., there must not be any sign of leakages. Or, another testing method can be used pursuant to the Department of Energy Businesses' Notification duly published in the Government Gazette.

(8) The Vapour Recovery Unit, Type 1, must be tested every two years with the use of inert gas with a pressure of not less than 0.07 kg per cm<sup>2</sup> (1 lb/in<sup>2</sup>) After it is left for at least 30 mins., there must not be any sign of leakage. Or, another method of test can be carried out pursuant to the Department of Energy Businesses' Notification duly published in the Government Gazette.

(9) Transfer of fuel oil from oil trucks into underground oil tanks installed with Vapour Recovery Unit Type 1 must be made with oil trucks duly equipped with Vapour Recovery Unit Type 1.

17. Arrangements must be made by fuel oil service stations, Type B, located in areas under 2 (2) (a) and (b) to have vapour recovery units, Type 2, installed for which their features, installation methods and tests are as follows:

(1) Vapour recovery unit Type 2 must show details of installation of the pipeline system, oil distribution box and vapour recovery units.

(2) The oil distribution box must be equipped with the following:

(a) double-layered oil distribution nozzle with an access door for oil outflow and a sleeve for oil vapour to flow back to underground oil tanks.

(b) Double-layered flexible pipes for filling oil with a sleeve for oil outflow and another for oil vapour to flow back to underground oil tanks.

(3) Vapour check valves must be installed at the vapour pipeline system to prevent vapour in the system from flowing back through oil distributing nozzles.

(4) Vapour pipes must be made of strong/stable materials which will not react with fuel oil. They may be single or double-layered with a sloping gradient of not less than 1 : 100 towards underground storage tanks.

(5) To connect each tank's vapour pipes together, a device must be installed to prevent oil from flowing into vapour pipes such as ball float valves or from flowing into other tanks while being transferred from oil trucks to underground storage tanks.

(6) Installation of vapour recovery unit, type 2, must be of the vacuum-assist system with vacuum pumps installed at the fuel distribution box or the vapour pipe systems capable of adjusting the force of suction to correlate with the rate of oil flow into the truck's oil tank to prevent it from being damaged as illustrated in Drawing No. 5 attached hereto.

(7) Once the vapour recovery unit, Type 2, have been installed, the vapour control system must be tested before use with a pressure of not less than 0.70 kg. per cm<sup>2</sup> (1 lb/in<sup>2</sup>). After it is left for at least 30 mins., there must not be any sign of leakage. Or, another method of test can be carried out pursuant to the Department of Energy Businesses' Notification duly published in the Government Gazette.

(8) The Vapour Recovery Unit, Type 2, must be tested every two years with the use of inert gas with pressure of not less than 0.07 kg per cm<sup>2</sup> (1 lb/in<sup>2</sup>). After it is left for at least 30 mins., there must not be any sign of leakage. Or, another method of test can be carried out pursuant to the Department of Energy Businesses' Notification duly published in the Government Gazette.

## Chapter 4

### Control of Oil Transportation Trucks' Oil Vapour

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18. Oil transportation trucks for fuel service stations Type A and B, oil depots, premises for storage of oil with oil intake/outtake by means of oil transportation trucks or by means of pipeline transportation system and from

which fuel oil are distributed to oil trucks in areas under 2 (1) (a) and (b), must be trucks with bottom-loading intake/outtake capabilities and installed with vapour recovery unit, type 1.

19. Vapour recovery unit, Type 1, for oil trucks, must be equipped with safety equipment and necessary accessories pursuant to standards prescribed by the Department of Energy Businesses and published in the Government Gazette as well as installed in accordance with the approved plans.

20. Properties of connectors used for bottom-loading intake/outtake of oil must be as follows:

(1) poppet valves with a diameter of 101.6 mm (4 inch.) which can be opened to a depth of 50.87 mm (2 inch), measured from the front-most surface pursuant to the standards of API RP 1004 Bottom Loading and Vapour Recovery for MC-306 Tank Motor Vehicles.

(2) designed for use at a pressure of not less than 517 kPa (75 lb/in<sup>2</sup>) and capable of withstanding a testing pressure of at least 1.5 times the functional pressure.

(3) designed for minimum loss of fuel oil during use such that when connectors are removed, fuel loss will not exceed 10 cm<sup>3</sup> per removal as averaged out from three disconnections.

(4) designed for all residue oil in the tank to be completely discharged after fuel oil transfer.

(5) lid provided to keep off dusts and capable of preventing oil leakages between connectors as well.

21. Oil transportation tanks and connector accessories for bottom-loading fuel oil intake/outtake must comply with the following requirements:

(1) connectors for oil intake/outtake must be installed on the left-hand side of the oil truck.

(2) Where there are several connectors for oil intake/outtake, the distance at horizontal plane from the centre of the connectors must not be less than 254 mm (10 inch) and not more than 1.83 m (6 ft) from one another. The front part of the connector must be vertical and located by not more than 152.4 mm (6 inches) deep from the widest part of the truck's body.

(3) Connectors for oil intake/outtake must be installed at a height of not more than 1.22 metres (4 ft.) above ground when the oil tank is empty, and not less than 0.458 metres (1.5 ft) above ground when it is fully-loaded.

(4) Oil transportation truck's pipeline system and equipment must be designed to be used at a pressure of not less than 517 kPa (75 lb/ in<sup>2</sup>) and able to withstanding a testing pressure of not less than 1.5 times the functional pressure. If any device/equipment cannot withstand such pressure, it shall be separated from the bottom-loading oil intake/outtake system.

(5) Oil transportation tanks must be installed with pressure- and vacuum-assist safety systems to prevent them from being damaged as the result of pressure changes while oil are being transferred.

22. Oil trucks' transportation tanks must be installed with meters to measure oil levels in each oil container to prevent overfill, which may be any of the following systems:

(1) Termistor System: which check on changes of temperatures. When this device is high and dry in the air, the temperature will be higher than when it is immersed into fuel oil. When oil comes into contact with the meter, the meter's temperature will drop which will cause the meter's electric resistance value to change and send out electrical signals to the oil distribution station. Oil level in the tank will be checked by the Control System at the oil distribution station and order made for the distributing valve to be shut to prevent any overfill.

(2) Optical System: which check on reflection of light inside the meter. When this device is airborne, light may be reflected back to the photo detector and

when the meter comes into contact with oil, light rays will not be reflected back to the photo detector and electrical signals will be sent to the oil distribution station. Oil level in the tank will then be checked by the Control System at the oil distribution station and order made for the distributing valve to be shut to prevent any overfill. Devices in this optical system must be located from ventilating valves to reduce hazy mists from being formed which may interfere with the meters' functions.

23. Receptacles used with oil level meters installed on oil trucks under 22 must be located at a distance of not more than 2.134 m (7 ft) from oil intake/outtake connectors and must not be located in a way which would cause obstruction to oil transfer work.

24. Vapour recovery unit, Type 2, must have a pipeline system with the pipe's cross-section area of not less than 101.6 mm (4 inch) with a vapour pipe connector of 101.6 mm (4 inch) size installed at the end of the pipe. The pipeline system connecting oil storage sectors to vapour recovery unit must have a cross-section area of not less than the pipe's cross-section area of 76.2 mm (3 inch).

25. Fuel pipeline connector under 24 must be of the fast insertion type according to the API RP 1004 bottom Loading and Vapour Recovery Standards for MC-306 Tank Motor Vehicles. Connectors for oil intake/outtake may not be used as connectors for oil vapour.

26. Fuel oil connectors must be located in any of the following positions:

(1) along the lines of the diameter of the connector used for oil intake/outtake underneath oil transportation tanks and must be located at not more than 2.134 m (7 ft) distance from oil intake/outtake connectors located underneath oil storage tanks.

(2) In areas around the head of oil transportation tank at the end of an oil truck.

## INTERIM PROVISIONS

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(3) Vapour pipe connector must not be more than 1.524 m (5 ft) above-ground when the oil transportation tank is empty, and not less than 0.609 m (2 ft) when the tank is fully-loaded.

27. Vapour recovery unit, Type 1's equipment which are installed above oil transportation tanks must be located at a point below the level of the truck's overturn protective guard.

28. Prior to its first usage, vapour recovery unit, type 1 must be tested to ensure that it will be capable to control vapour recovery. Such test will be conducted with a pressure of 4,500 Pa (18 water inch) and vacuum pressure of 1,500 Pa (6 water inch) for 5 minutes, with a variable pressure of not more than 750 Pa (3 water inch). Tests on vapour recovery unit, type 1 on such properties must be conducted by this method every two years or by other methods prescribed by the Department of Energy Businesses as published in the Government Gazette.

### Chapter 5

#### Standards of Equipment and Testers of Vapour Recovery Units

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29. As far as equipment to control distribution of oil by oil distribution platforms pursuant to Clause 1 are concerned, equipment of vapour recovery unit, Type 1, under 16 and equipment of vapour recovery unit, Type 2, under 17, shall be in accordance with standards prescribed by the Department of Energy Businesses as published in the Government Gazette.

30. Tests to be conducted on vapour recovery unit systems under 8, vapour recovery unit, type 1 under 16 and vapour recovery unit, type 2 under 17, must be undertaken by the Department of Energy Businesses or testers duly qualified pursuant to Ministerial Regulations issued by virtue of Section 7 (4).

31. Fuel service stations, Categories A and B, located in areas under 2 which are authorized by virtue of the Fuel Oils Control Act, B.E. 2542 prior to enforcement of these Ministerial Regulations, or whose plan-drawings and construction plans have been approved by virtue of the Department of Public Works' Notification re: Safety Standards for Fuel Service Stations, Category 1 dated June 30<sup>th</sup>, B.E. 2538 or the Department of Public Works' Notification re: Safety Standards for Fuel Service Stations, Category 2 dated June 30<sup>th</sup>, B.E. 2538, prior to enforcement of these Ministerial Regulations, shall be exempted from the requirement to have overfill protection equipment installed pursuant to 16 (4), with the exception of tests to be conducted on underground oil storage tanks in accordance with the law when overfill protection equipment must be installed by these fuel service stations pursuant to 16 (4).

32. Fuel service stations, Category B, duly authorized by the Fuel Oils Control Act, B.E. 2542 prior to the date of enforcement of these Ministerial Regulations that already have vapour recovery units, Type 1 installed which, however, do not reach the standards as prescribed herein may continue to use such vapour recovery units although action must be taken, when any modification, expansion or change is made on these vapour recovery units to ensure that they are in line with the requirements of these Ministerial Regulations.

33. Subject to the provisions of 31 and 32, fuel service stations, Category A and B, oil depots, oil storage premises with oil intake/outtake by oil trucks and by oil transportation pipelines and distribution of oil by trucks in areas under 2 duly authorized by virtue of the Fuel Oils Control Act, B.E. 2542 prior to the enforcement of this Act, or whose plans, drawings and constructions plans have been approved pursuant to the Department of Public Works' Notification re: Safety Standards for Fuel Oil Service Stations, Category 1, dated June 30<sup>th</sup>, B.E. 2538,

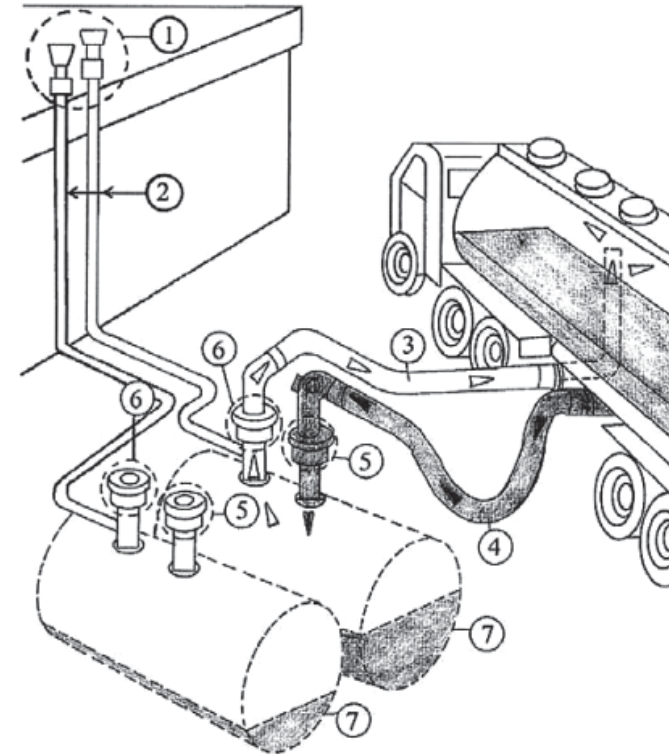


or the Department of Public Works' Notification re: Safety Standards for Fuel Oil Service Stations, Category 2, dated June 30<sup>th</sup>, B.E. 2538 which have not arranged to have vapour recovery system installed pursuant to these Ministerial Regulations, must arrange to have vapour recovery systems installed within one year from the date these Ministerial Regulations come into force.

34. Oil transportation trucks under 18 duly authorized by laws governing land transportation prior to the date these Ministerial Regulations come into force must arrange to have vapour recovery systems installed within one year from the date these Ministerial Regulations come into full force and effect.

Given on January 9<sup>th</sup>, 2007.

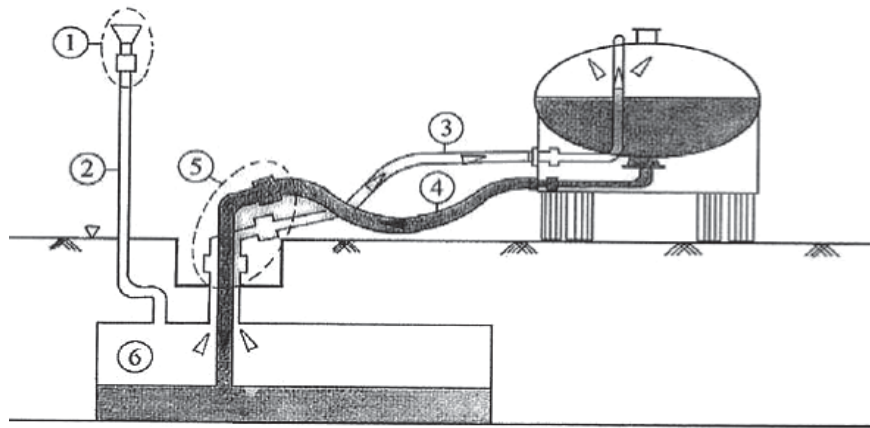
Piyaswasdi Amaranand  
Minister of Energy.



**Drawing No. 1 : Two Point System**

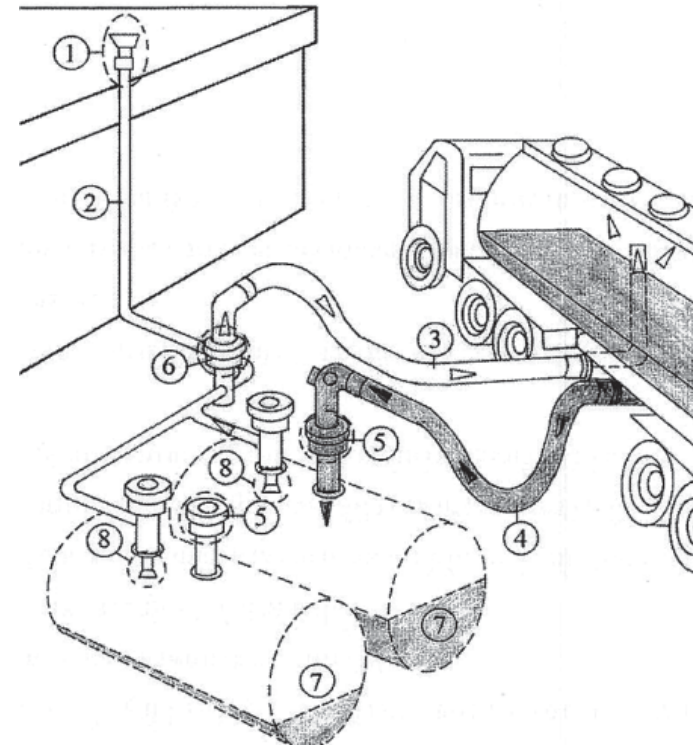
- ① Pressure - Vent and Vacuum Safety Equipment.
- ② Oil Vapour Ventilation Pipes
- ③ Flexible Vapour Pipes for return vapour flowing back into oil tank
- ④ Flexible pipe to fill oil into underground storage tanks
- ⑤ Connector of oil intake pipes
- ⑥ Connector of oil vapour pipes
- ⑦ Underground oil storage tanks





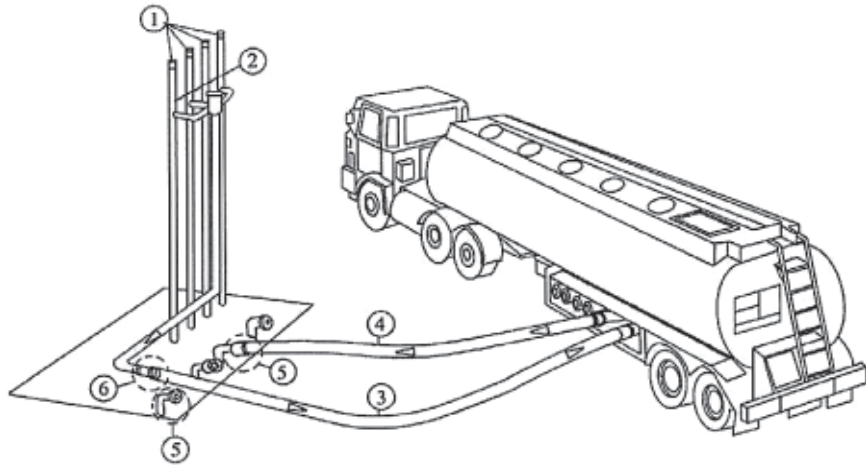
**Drawing No. 2 : COAXIAL Systems**

- ① Pressure - Vent and Vacuum Safety Equipment.
- ② Oil Vapour Ventilation Pipes
- ③ Flexible Vapour Pipes for return vapour to flow back into oil tank
- ④ Flexible pipe to fill oil into underground storage tanks
- ⑤ double-layered connector for oil intake and return vapour
- ⑥ Underground oil storage tanks



**Drawing No. 3 : Mamifolde Systems**

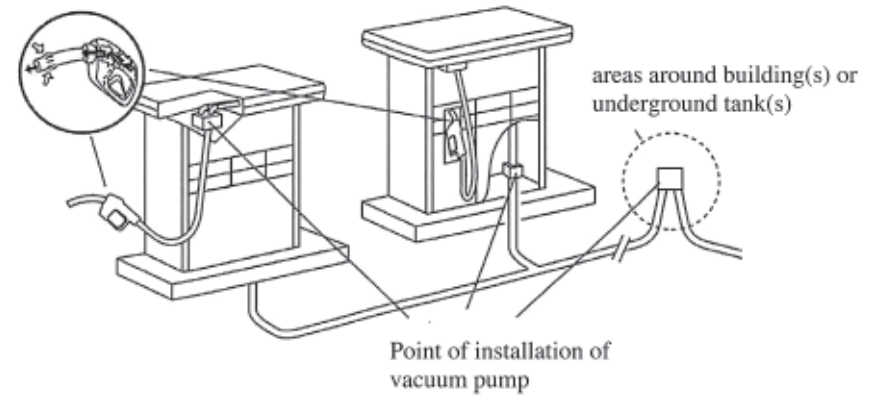
- ① Pressure - Vent and Vacuum Safety Equipment.
- ② Oil Vapour Ventilation Pipes
- ③ Flexible Vapour Pipes for return vapour to flow back into oil tank
- ④ Flexible pipe to fill oil into underground storage tanks
- ⑤ Connector of oil in take pipes
- ⑥ Connector of oil vapour pipes
- ⑦ Underground oil storage tanks
- ⑧ Protection equipment against fuel oil flowing into oil vapour pipes



**Drawing No. 4**

**Manifolded Systems with points of connection higher than oil transportation tanks**

- ① Pressure - Vent and Vacuum Safety Equipment.
- ② Oil Vapour Ventilation Pipes
- ③ Flexible Vapour Pipes for return vapour to flow back into oil tank
- ④ Flexible pipe to fill oil into underground storage tanks
- ⑤ Connector of oil intake pipes
- ⑥ Connector of oil vapour pipes
- ⑦ Underground oil storage tanks



**Drawing No. 5 : Vacuum System**

**Remarks:**

Rationale for enactment of these Ministerial Regulations:

Currently, as there are no criteria governing the control of oil vapour stored in premises of fuel oil storage, fuel oil service stations, oil depots and oil transportation trucks with ensuing problems of increased air-pollution, it is necessary, therefore, that these Ministerial Regulations be issued in order to prevent and solve these problems.



## NOTIFICATION OF THE MINISTRY OF ENERGY

**Re: Determination of Areas to be installed with  
Vapour Recovery System  
B.E. 2550 (2007)**

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By virtue of Sections 2 (1) (a) of the Ministerial Regulations governing vapour recovery units issued by virtue of the Fuel Oils Control Act, B.E. 2542, the Minister of Energy hereby issues this Notification, as follows:

1. This Notification shall come into force after a lapse of two years from its publication in the Government Gazette.
2. Vapour recovery systems, Type 1, shall be installed in the following areas:
  - (1) Province of Cholburi
  - (2) Province of Ayudhaya
  - (3) Province of Rayong
  - (4) Province of Songkhla
  - (5) Province of Samutsakorn
  - (6) Province of Saraburi
  - (7) Province of Suratthani

Given on April 23<sup>rd</sup>, 2007.

Piyaswasdi Amaranand  
Minister of Energy.



## NOTIFICATION OF THE MINISTRY OF ENERGY

**Re: Determination of Areas to be installed with  
Vapour Recovery System (No. 2)  
B.E. 2550 (2007)**

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By virtue of Sections 2 (2) (a) of the Ministerial Regulations governing vapour recovery units, B.E. 2550, issued by virtue of the Fuel Oils Control Act, B.E. 2542, the Minister of Energy hereby issues this Notification, as follows:

1. This Notification shall come into force after a lapse of two years from its publication in the Government Gazette.
2. Vapour recovery systems, Type 2, shall be installed within fuel oil service stations, Category A, in the following Districts of Bangkok Metropolis:
  - (1) Klongtoey
  - (2) Klongsan
  - (3) Jatujak
  - (4) Jomtong
  - (5) Dindang
  - (6) Dusit
  - (7) Thonburi
  - (8) Bangkok Noi
  - (9) Bangkok Yai
  - (10) Bangkholaem
  - (11) Bangsue

- (12) Bangplad
- (13) Bangrak
- (14) Pathumwan
- (15) Pomprab-satrupai
- (16) Phayathai
- (17) Phranakorn
- (18) Yannawa
- (19) Rajthevi
- (20) Rajaburana
- (21) Wattana
- (22) Sampantawong
- (23) Sathorn.

Given on June 25<sup>th</sup>, 2007

Piyaswasdi Amaranand  
Minister of Energy.



**NOTIFICATION OF THE DEPARTMENT OF  
ENERGY BUSINESSES**

**Re: Transfer of the Burden of Work on the Control of Fuel Oils  
Operations Pursuant to the Act defining Plans and Process  
of Decentralization to Local Administrative Bodies  
B.E. 2542**

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To ensure that decentralization and transfer of the burden of work on the control of fuel oils operations under the Fuel Oils Control Act, B.E. 2542 under the Department of Energy Businesses' jurisdiction, to local administrative authorities, be implemented as planned,

By virtue of Section 32 (2) of the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542, and plans to implement the decentralization process to local administrative bodies by which parameters have been set for the transfer of duties in the area of fuel oils control pursuant to the Fuel Oils Control Act, B.E. 2542 for 2003 to local administrative bodies, namely Bangkok Metropolis, Muang Pattaya, Municipalities, Class 1 and 2 Local Administrative Bodies, and by virtue of Section 4, paragraph nine of the Fuel Oils Control Act, B.E. 2542, this Notification is issued by the Department of Energy Businesses, as follows:

1. The scope of transfer of the burden of work and working procedures for 2003 by the Department of Energy Businesses to Bangkok Metropolis, Muang Pattaya, Municipalities and Administrative Bodies at the Level of Class 1 and Class 2 Sub-Districts (tambols) are hereby defined, as follows:

(1) Controlled Operations, Category 1 comprise inspection of operating premises.

(2) Controlled Operations, Category 2 comprise acceptance of notification of operations and inspection of operating premises.

(3) Controlled Operations, Category 3 comprise license to conduct operations and inspection of operating premises specifically fuel oil service stations excepting those in Category F.

These shall be implemented pursuant to criteria, procedure and terms attached hereto.

2. Assignment of authority is made by the Department of Energy Businesses' Director-General to those holding the following positions in the local administrative bodies to act as Licensee(s) under the Fuel Oils Control Act:

(1) Governor of the Bangkok Metropolitan Authority, for areas within Bangkok Metropolis.

(2) President of Muang Pattaya, for areas within Muang Pattaya.

(3) Mayor or Mayoress within areas of the municipality under his/her responsibility.

(4) President of the Sub-District Local Administrative Authority, within areas of the Sub-District Local Administrative Authority under his/her responsibility.

3. This Notification shall come into force as from today onwards.

Given on December 1<sup>st</sup>, 2003.

Virote Klungboonkrong

Director-General, Department of Energy Businesses.



**NOTIFICATION OF THE DEPARTMENT OF  
ENERGY BUSINESSES**

**Re: Transfer of the Burden of Work on the Control of Fuel Oils  
Operations Pursuant to the Act defining Plans and Process of  
Decentralization to Local Administrative Bodies  
B.E. 2542 (No. 2).**

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Further to the Department of Energy Businesses' Notification re: Transfer of the Burden of Work on the Control of Fuel Oils Operations pursuant to the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542 dated December 1<sup>st</sup>, 2003, whereby the scope of work pertaining to the transfer of the burden of work burden of fuel oil controlled operations pursuant to the Fuel Oils Control Act, B.E. 2542 for 2003 to local administrative bodies, namely Bangkok Metropolis, Muang Pattaya, Municipalities, Class 1 and 2 Sub-District Administrative Bodies (medium and small sizes), as well as assignment of the authority to grant licenses under the Fuel Oils Control Act, B.E. 2542 to the said local administrative bodies;

To ensure that decentralization and transfer of work burden on nthe control of fuel oils operations under the Fuel Oils Control Act, B.E. 2542 under the Department of Energy Businesses' jurisdiction, to local administrative authorities be smoothly implemented, by virtue of Section 32 (1) and Section 33, para two of the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542, and plans to implement the decentralization process to local administrative bodies by which the parameters of transfer of duties in the area of fuel oils control have been set out pursuant to the Fuel Oils Control Act, B.E. 2542 for

2004, namely Class 3 Sub-District Local Administrative Bodies, Class 4 Sub District Local Administrative Bodies and Class 5 Sub-District Local Administrative Bodies (medium and small Sub-District Local Administrative Bodies), and by virtue of Section 4, para nine of the Fuel Oils Control Act, B.E. 2542, this Notification is issued by the Department of Energy Businesses, as follows:

1. The scope of transfer of work and working procedures for 2004 are set by the Department of Energy Businesses for Class 3 Sub-District Local Administrative Bodies, Class 4 Sub-District Local Administrative Bodies and Class 5 Sub-District Local Administrative Bodies (medium and small Sub-District Local Administrative Bodies), as follows:

(1) Controlled Operations, Category 1 comprise inspection of operating premises.

(2) Controlled Operations, Category 2 comprise acceptance of notification of operations and inspection of operating premises.

(3) Controlled Operations, Category 3 comprise license to conduct operations and inspect operating premises specifically fuel oil service stations excepting those in Category F.

These shall be implemented pursuant to criteria, procedure and terms attached hereto.

2. Assignment of authority is made by the Department of Energy Businesses' Director-General to those holding the position of President of the local administrative bodies within the areas of his/her responsibility, to act as Licensee(s) under the Fuel Oils Control Act:

3. This Notification shall come into force as from today onwards.

Given on October 12<sup>th</sup>, 2004.

Virote Klungboonkrong  
Director-General, Department of Energy Businesses.



**NOTIFICATION OF THE DEPARTMENT OF  
ENERGY BUSINESSES**

**Re: Transfer of the Burden of Work on Controlled Fuel Oils  
Operations Pursuant to the Act defining Plans and Process of  
Decentralization to Local Administrative Bodies  
B.E. 2542 (No. 3)**

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To ensure that decentralization and transfer of the burden of work on controlled fuel oils operations under the Fuel Oils Control Act, B.E. 2542 under the Department of Energy Businesses' jurisdiction, to local administrative authorities, be implemented as targeted,

By virtue of Section 32 (1) of the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542, and plans to implement the decentralization process to local administrative bodies which set up parameters of transfer of duties in the area of fuel oils control pursuant to the Fuel Oils Control Act, B.E. 2542 for 2003 to local administrative bodies, and by virtue of Section 4, paragraph nine of the Fuel Oils Control Act, B.E. 2542, this Notification is issued by the Department of Energy Businesses, as follows:

1. This Notification shall be called "Notification of the Department of Energy Businesses re: Transfer of the Burden of Work on Controlled Fuel Oils Operations Pursuant to the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542 (No. 3)".

2. Clause 2 of the Notification of the Department of Energy Businesses re: Transfer of the Burden of Work on Controlled Fuel Oils Operations Pursuant to the Act defining Plans and Process of Decentralization to Local Administrative Bodies, B.E. 2542 dated December 1<sup>st</sup>, 2003 shall be forthwith repealed and superseded by the following:

“2. Assignment of authority is made by the Director-General of the Department of Energy Businesses to those holding the following positions in the local administrative bodies, to act as Licensee(s) under the Fuel Oils Control Act:

(1) Governor of the Bangkok Metropolitan Authority, for areas within Bangkok Metropolis, or District Directors in the Bangkok Metropolitan areas under their jurisdiction.

(2) President of Muang Pattaya, for areas within Muang Pattaya.

(3) Mayor or Mayoress within areas of the municipality under his/her responsibility.

(4) President of the Sub-District Local Administrative Authority, within areas of the Sub-District Local Administrative Authority under his/her responsibility.

3. This Notification shall come into force as from today onwards.

Given on October 30th, 2006.

Panit Pongpirodorn,  
Director-General, Department of Energy Businesses.



## NOTIFICATION OF THE DEPARTMENT OF ENERGY BUSINESSES

### **Re: Determination of the width of highways, public roadways or private roadways for Fuel Oil Service Stations Category A (Gor) and Category B (Kor)**

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By virtue of Sections 12 and 13 of the Ministerial Regulations which set out criteria, procedure and terms governing notification, license and rates of fees pertaining to the Conduct of Fuel Oil Operations, B.E. 2546, issued pursuant to the Fuel Oils Control Act, B.E. 2542, an act which contains some provisions concerning restriction of individual rights and freedom permitted by Section 29 in conjunction with Sections 35, 48 and 50 of the Constitution of the Royal Kingdom of Thailand by force of law, the Director-General of the Department of Energy Businesses hereby issue this Notification, as follows:

1. This Notification will be called: “Notification of the Department of Energy Businesses re: Determination of the width of highways, public roadways or private roadways for fuel oil service stations, Category A (Gor), and Category B (Kor)”.

2. This Notification shall come in to force from now onwards.

3. “The width of roads” means the distance measured from one side of the boundary to the boundary on the opposite side.



4. Fuel oil service station Category A must be located on land which is next to the boundary of a highway or public roadway with a width of not less than 12.00 m, or private roadway with a width of not less than 10.00 m.

5. Fuel oil service station Category B must be located on land which is next to the boundary of a public roadway with a width of not less than 12.00 m, or a private roadway with a width of not less than 10.00 m.

Given on September 18<sup>th</sup>, 2003.

Virote Klungboonkrong  
Director-General of the Department of Energy Businesses.



## NOTIFICATION OF THE DEPARTMENT OF ENERGY BUSINESSES

### **Re: Determination of Criteria, Checking Methods and Consideration to Extend/Renew the License to Conduct Controlled Operations under Category 3 B.E. 2546**

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By virtue of Section 32, paragraph two of the Ministerial Regulations which set out criteria, procedure and terms governing notification, license and rates of fees pertaining to the conduct of fuel oil operations, B.E. 2546, issued pursuant to the Fuel Oils Control Act, B.E. 2542, the Director-General of the Department of Energy Businesses hereby issue this Notification, as follows:

1. This Notification will be called: "Notification of the Department of Energy Businesses re: Determination of Criteria, Checking Methods and Consideration to Extend/Renew the License to Conduct Controlled Operations under Category 3, B.E. 2546".

2. This Notification shall come into force from now onwards.

3. On receipt of the application to extend/renew the License to Conduct Controlled Operations under Category 3 (Tor Por Nor 6 Form), various documentary evidences listed in the form in support of such application shall be checked to verify that they are correct and complete as otherwise the matter will be returned to the applicant within 7 days.

4. Checks shall be made on premises of operations and various structures by the officials/authorities in support of their consideration to renew the license. An allowance will be made for this action to be taken within 180 days

before the License expires. Criteria for such checks are as follows:

(1) Check on the operating premises and various structures to ensure that there are no modifications or changes in any details of the plans/drawings which had been originally approved.

(2) Check on the conditions of oil storage tanks, electrical oil intake/outtake systems to ensure that they can function in line with the prescribed capacity of the engine and are adequately safe.

(3) Check on the sanitary system, i.e. bathrooms/toilets, water drainage system, collection of waste oil, safety systems such as fire extinguishing equipment, danger-warning equipment and that conditions of the buildings and various structures are maintained in working conditions in accordance with prescribed criteria and are clean and orderly.

Once the results of such examination show that everything is correctly in line with the standard criteria prescribed, a report of examination will be prepared as evidence in support of consideration for license renewal. However, if it is found that any modification or change has taken place, the applicant shall be notified accordingly to correct them properly in accordance with those listed in the application, or otherwise file an application to make modification without delay.

5. Once documents under 3 and the report of examination under 4 are verified as correct and complete, consideration will be promptly given to renew the License to Conduct Controlled Operations under Category 3 pursuant to the Tor Por Nor 4 Form in which respect the applicant will be duly notified.

Given on October 29<sup>th</sup>, 2003

Virote Klungboonkrong

Director-General, Department of Energy Businesses.



## NOTIFICATION OF THE DEPARTMENT OF ENERGY BUSINESSES

### **Re: Determination of Forms of Application for License, Form of License, Application for Modification of Premises, Form of License for Modification, Form of Application for License Renewal, Replacement License and Application for Transfer of License governing the Conduct of Controlled Operations under Category 3, B.E. 2546**

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By virtue of Sections 25, para one, 27 para one, 28, 32 para one, 33 para one and 34 para one of the Ministerial Regulations determining the criteria, procedure and terms governing notification, license and rates of fees pertaining to the conduct of fuel oil operations, B.E. 2546, issued pursuant to the Fuel Oils Control Act, B.E. 2542, the Director-General of the Department of Energy Businesses hereby issue this Notification, as follows:

1. This Notification will be called: "Notification of the Department of Energy Businesses re: Determination of Forms of Application for License, Form of License, Application for Modification of Premises, Form of Application for License Renewal, Replacement License and Application for Transfer of License governing the Conduct of Controlled Operations under Category 3, B.E. 2546".
2. This Notification shall come in to force as from today onwards.
3. Forms of application for the License, License form, application for modification of premises, License for premises modification, application for

renewal of license, for replacement license and application for transfer of license shall be made pursuant to the attachments hereto, as follows:

(1) Application for the License to Conduct Controlled Operations under Category 3, use: Tor Por Nor 3 Form

(2) Application to Conduct Controlled Operations under Category 3, use Tor Por Nor 4 Form

(3) Application for Premises Modification, use Tor Por Nor 4 Form and write or stamp these words “MODIFIED” in red ink on the top part of the License.

(4) Application for Modification of premises conducting controlled operations under Category 3, use: Tor Por Nor 5 Form

(5) Application to renew the License to Conduct Controlled Operations under Category 3, use: Tor Por Nor 6 Form

(6) Application for Replacement License to Conduct Controlled Operations under Category 3, use: Tor Por Nor 7 Form

(7) Application to Transfer the License to Conduct Controlled Operations under Category 3, use: Tor Por Nor 8 Form

Given on October 29<sup>th</sup>, 2003

Virote Klungboonkrong  
Director-General, Department of Energy Businesses.



## NOTIFICATION OF THE DEPARTMENT OF ENERGY BUSINESSES

### **Re: Criteria and Procedure pertaining to Insurance Coverage to be Procured for Injured Parties as the Result of Dangers Ensuing from the Conduct of Controlled Operations under Category 3 B.E. 2549**

By virtue of Section 31 of the Ministerial Regulations which set out criteria, procedure and terms governing notification, license and rates of fees pertaining to the conduct of fuel oil operations, B.E. 2546, issued pursuant to the Fuel Oils Control Act, B.E. 2542, the Director-General of the Department of Energy Businesses hereby issue this Notification, as follows:

1. This Notification will be called: “Notification of the Department of Energy Businesses re: Criteria and Procedure Pertaining to Insurance Coverage to be Procured for Injured Parties as the Result of Dangers Ensuing from the Conduct of Controlled Operations under Category 3, B.E. 2549”.

2. This Notification shall come in to force as from the date following its publication in the Government Gazette.

3. In this Notification, the following terms shall have the meanings as defined below:

“Injured Party” means entity or legal entity who/which has suffered damages to lives, limbs or properties as the result of fire or explosion caused by controlled operations under Category 3, but excluding family members or people living under the same room with the Insured Party or its employees during their

course of employment, or individuals who are carrying out work, during the time of such incident(s) for the Insured Party under employment contract or training.

4. The party licensed to conduct controlled operations under Category 3 pursuant to the Fuel Oils Control Act, B.E. 2542 must take out insurance coverage against damages for those injured from fire or explosion as the result of the conduct of such controlled operations under Category 3.

5. Insurance coverage taken out for each location of operations shall have an insured sum covering damages incurred each time for the loss of lives, limbs, disabilities or for the costs of medical treatment and damages to properties belonging to the injured party for a sum of indemnification of not less than those listed below:

(1) For fuel oils storage premises, Category Three: the insured sum shall be Baht 1,500,000.

(2) For oil depots, the insured sum shall be: Baht 25,000,000.

(3) Fuel Oil Service Station, Category A or B: the insured sum shall be: Baht 2,000,000.

(4) For Oil Service Station, Category C, Type Two: the insured sum shall be: Baht 1,000,000.

(5) For Fuel Oil Service Station, Category E, Type Two: the insured sum shall be: Baht 500,000.

(6) For Fuel Oil Service Stations, Category F, their insured sums shall be as follows:

A. Fuel oil service stations, Category F, with fuel oils storage not exceeding 500,000 litres: the insured sum shall be Baht 1,500,000.

B. Fuel oil service stations, Category F, with fuel oils storage exceeding 500,000 litres: the insured sum shall be Baht 20,000,000.

6. As for insurance coverage for each accident under 5, indemnification for the injured parties shall be as follows:

(1) For medical expenses: payment to be paid per actual expenses incurred but not exceeding Baht 100,000 per person.

(2) In case of total physical disability or death: Bt 100,000/person.

(3) For damaged properties: payment payable per actuals but within the maximum limit of the insured sum under 5.

However, for (1) and (2) above, the aggregate sum must not exceed Baht 100,000 per person.

7. The term of the insurance policy: coverage will remain throughout such times that the controlled operations under Category 3 are conducted by the relevant operator(s).

8. Insurance coverage policy shall be taken out by the applicant for the License to Conduct Controlled Operations under Category 3, as prescribed herein, and copies of such insurance policy and the Insurance Schedule shall be sent to the Department of Energy Businesses before issuing the License.

9. The Licensee to Conduct Controlled Operations under Category 3 who have taken out insurance coverage under 4 must make an open display of such Schedule of the insurance policy where it can be seen easily at all of its operating premises as listed in the License to Conduct Controlled Operations under Category 3.

10. Licensees who have been authorized to conduct controlled operations under Category 3 before this Notification comes into force, must take action to have insurance coverage take out as prescribed by this Notification within one hundred and eighty days prior to the enforcement of this Notification.

Given on December 12<sup>th</sup>, 2006.

Mettha Banternasuk

Director-General, Department of Energy Businesses.