(Official Emblem)

#### Ministerial Regulation

Hygienic Sewage Management B.E. 2561 (A.D. 2018)

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By virtue of the provisions of Section 5 paragraph one and Section 6 paragraph one of the Public Health Act, B.E. 2535 (A.D. 1992), the Minister of Public Health by advice of the Public Health Committee hereby issues this Ministerial Regulation as follows:

Clause 1. This Ministerial Regulation shall come into force after the expiration of sixty days from the date of its promulgation in the Government Gazette.

Clause 2. In this Ministerial Regulation,

"Sewage" means excrement or urine of human, or other substances that are contaminated with excrement or urine;

"Sewage management" means a process that commences from the systems of containing, collecting, hauling, to disposing sewage;

"Toilet" means a location arranged for excretion and shall include a system to contain sewage;

"Public toilet" means a toilet available for use by the general public in various locations, both with fees and without fees, and shall include a toilet available for use within a public or private agency;

"Mobile toilet" means a toilet installed to a vehicle or a raft;

"Temporary toilet" means a toilet that is not permanently built and shall include a prefabricated toilet;

"Sewage hauling" means transporting sewage from a septic tank or fixed sewage disposal system to a central sewage disposal system;

"Septic tank" means a watertight and non-permeable tank or pond which is used to contain sewage directed from a toilet prior to sewage hauling or disposal;

"Sewage disposal" means treatment, improvement, or transformation of sewage to remove contaminants, repulsive appearance, or causes of diseases for further usage or elimination; "Fixed sewage disposal system" means a process to dispose sewage for different types of buildings, such as households, condominiums, schools, hospitals, hotels, or building complexes;

"Central sewage disposal system" means a process to dispose sewage which is collected from fixed sewage disposal systems, mobile toilets, or different places for collective disposal;

"Sludge" means solid substances remained from sewage disposal;

"Person responsible for sewage management" means

- (1) Authorised local government according to Section 18 paragraph one;
- (2) Authorised local government in conjunction with other public agencies according to Section 18 paragraph two;
- (3) Authorised local government in conjunction with other local governments according to Section 18 paragraph two;
- (4) Persons entrusted by authorised local government according to Section 18 paragraph three;
  - (5) Licensee according to Section 19.

Clause 3. Sewage collection, hauling, and disposal shall be in accordance with criteria, procedures, and conditions set forth herein.

Clause 4. In case there is an event of entertainment, festival, product exhibition, demonstration, public demonstration, or other similar activities which take three hours or more for the operations, the organiser, or the person responsible for the operations, shall provide a sufficient number of hygienic toilets, public toilets, mobile toilets, or temporary toilets according to Clause 7, Clause 8, or Clause 9, as the case may be.

Once fulfilling the provision under paragraph one, in the case where there is an installation of mobile or temporary toilets, it prescribes that the organiser, or the person responsible for the event, shall demolish and completely and hygienically adjust soil conditions within the area. In this case, it prescribes that local authorities or public health officials shall be responsible and authorised to monitor such demolition and area adjustment. Should it be found unhygienic, said local authorities or public health officials shall issue an order requiring the organiser, or the corresponding person, to correct its action.

Clause 5. In the case where there is a disaster as delineated in the Disaster Prevention and Mitigation Act, or an emergency incident, it prescribes that the local government, or public agencies shall provide hygienic mobile toilets or temporary toilets according to Clause 8 or Clause 9, as the case may be, for use as deemed appropriate to the situation. In this regard, it

shall be in accordance with the criteria, procedures, and conditions promulgated by the Minister by advice of the Committee in the Government Gazette.

# Chapter 1 Toilet Hygiene

Clause 6. The owner or possessor of a residential house, building, or place that has a toilet shall procure a fixed sewage disposal system or connect a drainage pipe to a central sewage disposal system according to Clause 14 paragraph one (2).

In the case where the sewage disposal system under paragraph one is a fixed sewage disposal system, when such fixed sewage disposal system is full or unused, it is required to transport sewage for further disposal at the central sewage disposal system according to Clause 14 paragraph one (2).

In removing discharged water and sludge that have been removed of sewage from the sewage disposal system under paragraph one, the discharged water and sludge must meet the standards prescribed in Clause 15 paragraph one.

Clause 7. The owner or possessor of a building or a place that offers public toilet services shall carry out the followings to maintain such public toilets hygienic throughout its operating hours:

- (1) Keep the flooring, walls, ceiling, toilet seat, urinal bowl, and toilet and urinal bowl tap clean and provide maintenance to ensure that they are ready for use;
  - (2) Provide sufficient and clean consuming water for use;
- (3) Provide a wash basin together with soap or other hand cleaning products which are ready for use;
- (4) Provide a general waste receptacle that is hygienic, clean, in a good condition, and non-leakage within the wash basin area or in its close proximity;
- (5) Provide a clean and ready-to-use bidet sprayer, or toilet paper which is friable and easy to be torn apart when exposed to water and is flushable. In the case where the toilet paper is not flushable, or the sewage disposal system is unable to contain the toilet paper, it prescribes that used toilet paper shall be collected in a hygienic and clean waste receptacle which has a watertight lid, is in a good condition, and non-leakage, and shall be hauled for further hygienic disposal in order to prevent transmission of germs;

- (6) There must be good ventilation, or a ventilation system in toilets for good ventilation;
- (7) Toilet doors must be installed with a clean grip for opening and closing with an internal door lock that can be unlocked from outside. The door must be outswing, and be a swing door, sliding door, or other forms of doors which allow people outside to rescue a toilet user when he/she becomes unconscious;
- (8) Carry out other requirements as promulgated by the Minister by advice of the Committee in the Government Gazette.

Prescribing that Clause 6 shall be applied to public toilets *mutatis mutandis*.

Types of buildings or places offering public toilets which are required to comply with paragraph one and paragraph two shall be as promulgated by the Minister by advice of the Committee in the Government Gazette.

Clause 8. The owner or possessor of a vehicle or raft that has a mobile toilet shall ensure that the mobile toilet is hygienic throughout the operating hours by applying the hygienic practices under Clause 7 paragraph one *mutatis mutandis*, and shall proceed as follows:

- (1) Provide a septic tank that can contain a higher amount of sewage compared to a clean water tank. Drainage and septic pipes must be in a good condition, must not be rotten or falling into disrepair, and can prevent animals, insects, or vectors. In this regard, the septic tank must have a ventilating pipe which is installed above the roof of the vehicle or raft, or in a position that does not cause unpleasant odour;
- (2) When the septic tank is full or unused, it is required that the sewage must be transported for further disposal in a sewage disposal system that meets the standards prescribed in Clause 14;
- (3) In the case where a mobile toilet has a sewage disposal system, discharged water and sludge must be removed of sewage prior to being drained. In this regard, discharged water and sludge must meet the standards prescribed in Clause 15 paragraph one;
- (4) Carry out other requirements as promulgated by the Minister by advice of the Committee in the Government Gazette.

For a raft that is used for residential purposes on a regular basis, or a raft that has a mobile toilet which does not have a septic tank, or in which sewage cannot be removed from the septic tank for further disposal, it prescribes that such raft shall procure a toilet located on the ground by applying Clause 6 *mutatis mutandis*.

Clause 9. A person providing a temporary toilet shall locate such toilet at an area that is safe for life and property of users, and shall ensure that such temporary toilet is hygienic throughout the operating hours as follows:

- (1) The flooring, walls, roof, and door of the toilet, including sanitaryware, must be safe, durable, strong, and invulnerable to weight, and does not cause a danger or accident to users, and shall be maintained clean and ready-to-use at all times with good ventilation;
  - (2) Provide clean and sufficient water for use;
- (3) Provide a wash basin together with soap or other hand cleaning products which are ready for use;
- (4) Provide a clean and ready-to-use bidet sprayer, or toilet paper which is friable and easy to be torn apart when exposed to water and is flushable. In the case where the toilet paper is not flushable, or the sewage disposal system is unable to contain the toilet paper, it prescribes that used toilet paper shall be collected in a hygienic and clean waste receptacle which has a watertight lid, is in a good condition, and non-leakage, and shall be transported for further hygienic disposal in order to prevent transmission of germs;
- (5) Provide a sewage disposal system according to Clause 6 paragraph one, or provide a septic tank according to Clause 8 paragraph one (1), and when the septic tank is full, it is required that sewage shall be hauled for further disposal at a central sewage disposal system according to Clause 14 paragraph one (2);
- (6) After use, remaining sewage must be disposed correctly, and there shall be demolition and soil condition adjustment to recover the area to a condition that does not affect health of people;
- (7) Carry out other requirements as promulgated by the Minister by advice of the Committee in the Government Gazette.

### Chapter 2 Sewage Hauling Hygiene

Clause 10. The person responsible for sewage management shall haul sewage in a hygienic manner as follows:

(1) Provide a sewage hauling vehicle and necessary equipment as prescribed in Clause 12 sufficiently for the service;

- (2) Remove sewage at appropriate time with a preventive measure against odour caused during the removal in order to not cause disturbances, to an extent that they become nuisances, to people who live in the building or in a close proximity;
- (3) Clean the pipe used to remove sewage after finishing the removal by drawing clean water from a tank to clean inside of the pipe or vacuum hose, and clean outside surface of the pipe or vacuum hose which is in contact with sewage by using sterilisers;
- (4) In the case where sewage drops or leaks, it prescribes that germs must be destroyed by using sterilisers and cleaned with water;
- (5) Provide personal protective equipment which is suitable and in a ready-to-use condition for sewage removing and hauling staff, as well as providing equipment or devices to prevent accidents that are potentially caused by the operations. Moreover, use of such equipment or devices must be monitored and controlled. First aid kits shall be provided at the sewage hauling vehicle;
- (6) The sewage removing and hauling staff must wear clothes that entirely cover up their bodies, thick rubber gloves, facial mask, and calf boots with rubber insoles. Thick rubber gloves and calf boots with rubber insoles must be cleaned every time after operations;
- (7) It is required to clean the sewage hauling vehicle after operations, at least one time per day. Wastewater generated from such cleaning must go through a wastewater treatment or disposal system, or a cesspool. In this regard, the cesspool must be located at least ten metres from a river, brook, canal, or natural water resources;
- (8) It is required to provide a particular place of which the area is spacious enough to accommodate the sewage hauling vehicle;
- (9) It is prohibited to use the sewage hauling vehicle for other purposes and the sewage hauled is not allowed to be disposed in a public space;
- (10) Carry out other requirements as promulgated by the Minister by advice of the Committee in the Government Gazette.
- Clause 11. The person responsible for sewage management shall procure sewage removing and hauling staff to undergo annual health check and training programmes concerning sewage management. In this regard, it must be in accordance with the criteria, procedures, and conditions promulgated by the Director-General of the Department of Health in the Government Gazette.

Clause 12. The sewage hauling vehicle must have following specifications:

(1) The tank containing sewage must come with an open-close lid on its top which can be tightly shut, leakproof, and can prevent odour, animals, insects, or vectors;

- (2) Pipes or hoses to draw sewage must be leakproof;
- (3) Feature equipment that is able to draw heavy sludge and a sewage meter that is in a functional condition;
- (4) Feature a bore to store cleaning equipment of the sewage hauling vehicle, such as water buckets, brooms, and sterilisers;
- (5) On the tank that contains sewage, it shall be a text that reads "Only for Sewage Hauling" which is clearly visible from outside of the vehicle.

In the case where sewage hauling is carried out by local government, the name of the local government written in clearly visible alphabets must be labeled on both sides of the sewage containing tank at a position that is clearly visible to the public.

In the case where the sewage hauling is carried out by a party entrusted by the local government under supervision of the local government, the name of said local government written in clearly visible alphabets must be labeled on both sides of the sewage containing tank, together with a text indicating name, address, and telephone number of the entrusted party at a position that is clearly visible to the public.

In the case where the sewage hauling is carried out by a party licensed by the local government, it is required that such party shall display a code or license number together with a text indicating name, address, and telephone number of the licensed juristic entity, or of the owner, with clearly visible alphabets on both sides of the sewage containing tank at a position that is clearly visible to the public. The alphabets must be of at least ten-centimetre height. In the case where such juristic entity is granted with licenses issued by several local governments, it is required to display only the code of the first license, and copies of other licenses shall be kept in the sewage hauling vehicle as references for further examination.

Clause 13. In hauling waste, it prescribes that local government shall define routes and issue an authorisation document for sewage hauling in order to prevent illegal sewage disposal.

The authorisation document for sewage hauling under paragraph one shall be as promulgated by the Minister by advice of the Committee in the Government Gazette.

Chapter 3
Sewage Disposal Hygiene

Clause 14. Sewage disposal system is divided into two systems as follows:

(1) Fixed sewage disposal system;

#### (2) Central sewage disposal system.

Type, size, duration of sludge withdrawal, and water discharging methods of sewage disposal systems under paragraph one must fulfill the required standards. In this regard, they must be in accordance with the criteria, procedures, and conditions promulgated by the Minister by advice of the Committee in the Government Gazette.

Clause 15. In discharging water and sludge through the sewage disposal system, such discharged water and sludge must contain helminth eggs and Escherichia coli not exceeding the amount promulgated by the Minister by advice of the Committee in the Government Gazette.

Sampling method and identification of helminth eggs and Escherichia coli in discharged water and sludge under paragraph one shall be in accordance with the criteria, procedures, and conditions promulgated by the Minister by advice of the Committee in the Government Gazette.

Clause 16. The person responsible for sewage management shall procure sewage removing and hauling staff to undergo annual health check and training programmes concerning sewage management. In this regard, it must be in accordance with the criteria, procedures, and conditions promulgated by the Director-General of the Department of Health in the Government Gazette.

Clause 17. The person responsible for sewage management shall arrange personal protective equipment which is suitable and in a ready-to-use condition for the sewage removing and hauling staff, as well as providing equipment or devices to prevent accidents that are potentially caused by the operations. Moreover, use of such equipment or devices must be monitored and controlled. First aid kits shall be provided at the area or location of sewage disposal.

Clause 18. The sewage removing and hauling staff must wear clothes that entirely cover up their bodies, thick rubber gloves, facial mask, and calf boots with rubber insoles, and shall clean the thick rubber gloves and calf boots with rubber insoles every time after operations.

## Transitional Provision

Clause 19. It prescribes that the person responsible for sewage management or an entrusted person, or licensee who has operated the business or was authorised prior to the

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execution of this Ministerial Regulation shall comply with this Ministerial Regulation within one year from the date this Ministerial Regulation comes into force.

Clause 20. The standards of sewage disposal system under Clause 14 shall not be applied to the owner or possessor of residential houses, buildings, or places under Clause 6 paragraph one which have been installed with a sewage disposal system prior to the date of the execution of this Ministerial Regulation.

Clause 21. The criteria on specifications of toilet doors under Clause 7 paragraph one (7) which set out that the door must be outswing, be a swing door, sliding door shall not be applied to the owner or possessor of buildings or places that offer public toilets according to Clause 7, and the owner or possessor of a vehicle or raft that has mobile toilets according to Clause 8 which operate prior to the date of the execution of this Ministerial Regulation.

Given on the 25<sup>th</sup> Day of May 2018
Piyasakol Sakolsatayadorn
Public Health Minister

#### (Translation)

Note:- The reasons for the promulgation of this Ministerial Regulation are as follows. At present, there are no such laws that particularly concern hygiene control in sewage management. For sewage management, there are several steps to be taken, starting from sewage collecting, hauling, and disposing in order for the sewage management to be appropriate and hygienic, ensuring disease control and prevention of transmission of diseases. As it is deemed expedient to prescribe standards for sewage management operations, this Ministerial Regulation is necessarily issued.