

**Ministerial Regulation Prescribing Protection Measures against Collapse of Soil and Structures in the Course of Land Excavation and Fill, B.E. 2548 (2005)**

By virtue of provisions of Section 6 (2), (3), (4) and (5) and Section 10 of the Land Excavation and Fill Act B.E. 2543 (2000) which is an Act containing certain provisions in relation to the restriction of rights and liberties of a person, in respect of which Section 29 in conjunction with Section 35, Section 48 and Section 50 of the Constitution of the Kingdom of Thailand so permit by virtue of provisions of law, the Minister of Interior, by the advice of the Land Excavation and Fill Committee, hereby issues the Ministerial Regulation as follows.

Clause 1. In this Ministerial Regulation:

“drawing” means a document which shows specifications of land excavation or fill;

“specification document” means documents with contents specifying details regarding types of soil, the depth and size of a soil pit to be excavated, the height and area of an earth mound to be filled, the slope of the soil pit or earth mound, the distance between the edge of the soil pit or earth mound to boundaries of a land lot or a structure of another person, the protection measures against collapse of soil or structures, and the methods of land excavation or fill, as well as the condition of the area and adjacent areas, the original level of soil, the characteristics of soil to be excavated or filled, and the practices or methods for land excavation or fill adopted to ensure compliance with the drawing;

“calculation document” means documents which present the method for calculating the safety of slope stability documents in the course of land excavation or fill, or specifications which present the method for calculating the factor of safety of a retaining wall.

Clause 2. In the course of land excavation under Section 17 or fill under Section 26 Paragraph 3, the person performing excavation or person performing fill shall arrange to have signs showing the boundaries of the land lot where the land

excavation or fill is to be carried out, and must install a sign post which is at least 120 centimeters in width and at least 240 centimeters in length at the site of land excavation or fill. The sign post must be easily visible throughout the period of land excavation or fill, and contains the following information:

- (1) area of the project where the land excavation or fill is to be carried out;
- (2) area at the top of the soil pit, earth mound, and the depth or height of the land excavation or fill;
- (3) purposes of the land excavation or fill;
- (4) receipt number of the notification receipt and the end date of the land excavation or fill;
- (5) name of the supervisor and person preparing the drawing, specification document and calculation document, as well as their engineering profession registration number under the law on engineers;
- (6) name and address of the notifier of the land excavation or fill;
- (7) name and address of the landowner;
- (8) name and address of the person carrying out the land excavation or fill;
- (9) other information as prescribed by notification of the Department of Public Works and Town & Country Planning.

## Chapter I

### Land Excavation

Clause 3. The land excavation under Section 17 may be carried out only during the period between sunrise and sunset. If it is to be carried out during the period between sunset and sunrise, a written permit from the local officer must be obtained.

Clause 4. In regards to land excavation with the depth exceeding 3 meters from the ground level or with the area at the top of the soil pit exceeding 10,000 square meters, there must be a drawing, a specification document and a calculation document prepared by a person with a regulated engineering professional license in the field of civil engineering, who is at the level not lower than a professional engineer

under the law on engineers.

Clause 5. In regards to land excavation with the depth exceeding 20 meters, prevention measures against collapse of soil or structures shall be put in place by installation of equipment to measure soil drifting, and there must be a drawing, a specification document and a calculation document prepared by a person with a regulated engineering professional license in the field of civil engineering, who is at the level of a senior professional engineer under the law on engineers.

The provisions of Paragraph 1 shall not apply to the excavating of a water well with the area at the top of the soil pit not exceeding 4 square meters.

Clause 6. In the case where land excavation is carried out for the purpose of landfill of waste, or toxic or radioactive materials, the person intending to carry out the land excavation shall also submit, in the process of notification, an evidence of permission under the law on such matter.

Clause 7. In regards to land excavation with the depth exceeding 3 meters from the ground level or with the area at top of the soil pit exceeding 10,000 square meters, the distance between the edge of the soil pit and the boundaries of a land lot of another person or a public land shall not be less than twice the depth of the soil pit to be excavated, unless prevention measures against collapse of soil or structures have been put in place with certification by a person with a regulated engineering professional license in the field of civil engineering under the law on engineers.

Clause 8. During land excavation, the person performing excavation under Section 17 shall drain the water on the ground around the edge of the soil pit so as to avoid waterlogging, and must not use the area around the edge of the soil pit to pile up soil or any other material in a manner which may cause a collapse of soil or may be detrimental to a structure in such area.

Clause 9. During land excavation and after the completion thereof, the person performing excavation under Section 17, landowner or land occupier, as the case may be, must inspect the stability of the soil pit and stabilize the soil pit to ensure safety periodically.

Clause 10. In regards to land excavation in the area adjacent to a public

land or on a public land, the person performing excavation must arrange to have strong guardrails or rails erected around the area, and install electrical devices to provide adequate lighting or install appropriate number of warning lights during the period between sunset and sunrise, throughout the period of the land excavation.

In the case where the land excavation under Paragraph 1 is carried out in an area with no electricity for lighting, the guardrails or rails shall be painted in a reflective color which is easily visible.

Clause 11. The person performing excavation under Section 17 must install one reflective warning sign which is at least 50 centimeters in width and at least 1 meter in length and made from durable materials, at a conspicuous location at least every 40 meters around the soil pit, throughout the period of the land excavation.

## Chapter II

### Fill

Clause 12. Any person intending to carry out fill with the height of the earth mound higher than the level of an adjacent land lot owned by another person, and with the area of the earth mound exceeding 2,000 square meters, shall notify the local officer of such fill in the form prescribed by the local officer and submit documents providing the following information:

- (1) site plan of the area where fill is intended to be carried out;
- (2) map showing the boundaries of the land lot and adjacent land lots;
- (3) methods of fill and water drainage;
- (4) period of fill;
- (5) name of the supervisor;
- (6) name and address of the notifier of the fill;
- (7) encumbrances of other persons with interest in the land lot where the fill is to be carried out.

Clause 13. The fill under Section 26 Paragraph 3 may be carried out only during the period between sunrise and sunset. If it is to be carried out during the period between sunset and sunrise, a written permit from the local officer must be obtained.

Clause 14. In regards to fill with the area of the adjoining earth mounds exceeding 2,000 square meters, and with the height of the earth mound exceeding 2 meters from the level of an adjacent land lot owned by another person, there must be a drawing, a specification document and a calculation document prepared by a person with a regulated engineering professional license in the field of civil engineering, who is at the level not lower than a professional engineer under the law on engineers.

Clause 15. In regards to fill with the area of the adjoining earth mounds exceeding 2,000 square meters, and with the height of the earth mound at least 2 meters higher than the level of an adjacent land lot owned by another person, there must be a supervisor who is a person with a regulated engineering professional license in the field of civil engineering under the law on engineers.

Clause 16. In carrying out fill, the distance between the base of an earth mound and the boundaries of a land lot of another person or a public land must not be less the height of the earth mound to be filled, unless prevention measures against collapse of soil or structures have been put in place with certification by a person with a regulated engineering professional license in the field of civil engineering under the law on engineers.

Clause 17. In regards to fill in the area adjacent to a public land, the person performing fill must install a reflective warning sign which is at least 50 centimeters in width and at least 1 meter in length and made from durable materials, at a conspicuous location on the side of the filled earth mound which is connected to the public land, throughout the period of the fill.

Clause 18. During fill and after the completion thereof, the person performing fill, landowner or land occupier, as the case may be, must inspect the stability of the earth mound and stabilize the earth mound to ensure safety periodically.

Given on the 4th Day of March B.E. 2548

Bhokin Bhalakula

Minister of Interior

Remark: The grounds for promulgation of this Ministerial Regulation are:

Whereas Section 6 (2), (3), (4) and (5) of the Land Excavation and fill B.E. 2543 (2000) provide that the Minister, by the advice of the Committee, shall have the power to issue a Ministerial Regulation prescribing correlation of the slope of a soil pit or an earth mound to the type of soil, the depth and size of the soil pit to be excavated, the height and area of the earth mound to be filled, and the distance between the edge of the soil pit or earth mound to the boundaries of a land lot or a structure of other persons, protection measures against the collapse of soil or structures, and protection and safety measures for workers and third persons, as well as other rules, procedures and conditions for land excavation or fill, for the purpose of prevention of collapse of soil or structures, it is therefore necessary to issue this Ministerial Regulation.

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