



Geotechnical Engineering Office
Civil Engineering and Development Department

Simple Guide to "Dangerous Hillside Orders"



This Simple Guide aims to tell private slope owners in simple terms what to do when they receive a Dangerous Hillside (DH) Order, and provides a step by step approach to assist them in fulfilling the requirements of the DH Order promptly and effectively.

- Background on the service of DH Orders
- Steps for handling a DH Order
- Engagement of qualified professionals
- Assistance Provided by the Government

Introduction

When a private slope or retaining wall (hereinafter collectively referred to as a slope) is found to be dangerous or liable to become dangerous, the Buildings Department will serve a DH order to require the slope owner(s) (see Note 1) to investigate and if necessary rectify the slope. DH orders are usually issued as a result of dangerous or potentially dangerous situations found in the following circumstances:

Through the safety screening exercise under the Government Landslip Preventive Measures (LPM) / Landslip Prevention and Mitigation (LPMit) Programme.



Landslides or slopes which exhibit significant signs of distress.



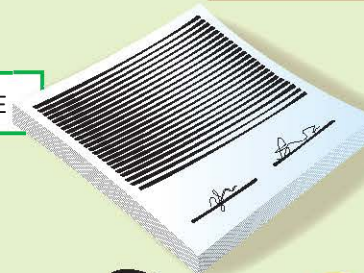
1. Appointment of Authorized Persons (AP) / Registered Geotechnical Engineer (RGE)

Upon receipt of a DH Order, slope owners (Note 1) should:

- Convene an owners' meeting
- Agree and review the scope and programme of the proposed works in accordance with the time frames stipulated in the DH Order



- Invite fee proposals from AP / RGE



- Assess the fee proposals
- Select and appoint a suitable AP / RGE (see also P.6)



In the course of the investigation by the AP / RGE, slope owners should participate in selecting suitable contractors for carrying out

- Topographical survey
- Ground investigation works
- Laboratory testing

Note 1: Slope owners, in the context of the Guide, are owners of the slope or the private party(ies) responsible for main tenance of the slope.

Step by Step

2. Slope Stability Assessment



The RGE should assess the geotechnical conditions of the slope whether they meet the current safety standards.

Meet the current safety standards

The AP should submit the report to the Buildings Department (BD) for discharge of the DH Order.
Also see Note 2.

(End)

Do not meet the current safety standards

The RGE prepares slope works proposals. Slope owners should participate and give their views on the proposals. (see also P.7)

The RGE should then design the slope work. The AP should submit the design proposal to BD for approval.

3. Upgrading Works

- After obtaining BD's approval of the slope works proposal, the AP/RGE should prepare and invite tenders for construction on behalf of the owners.
- Owners should then select a suitable contractor for the works.



ensure that they are carried out in accordance with the approved proposal, and the required specifications and workmanship.

the progress of construction.

Also see Note 2.

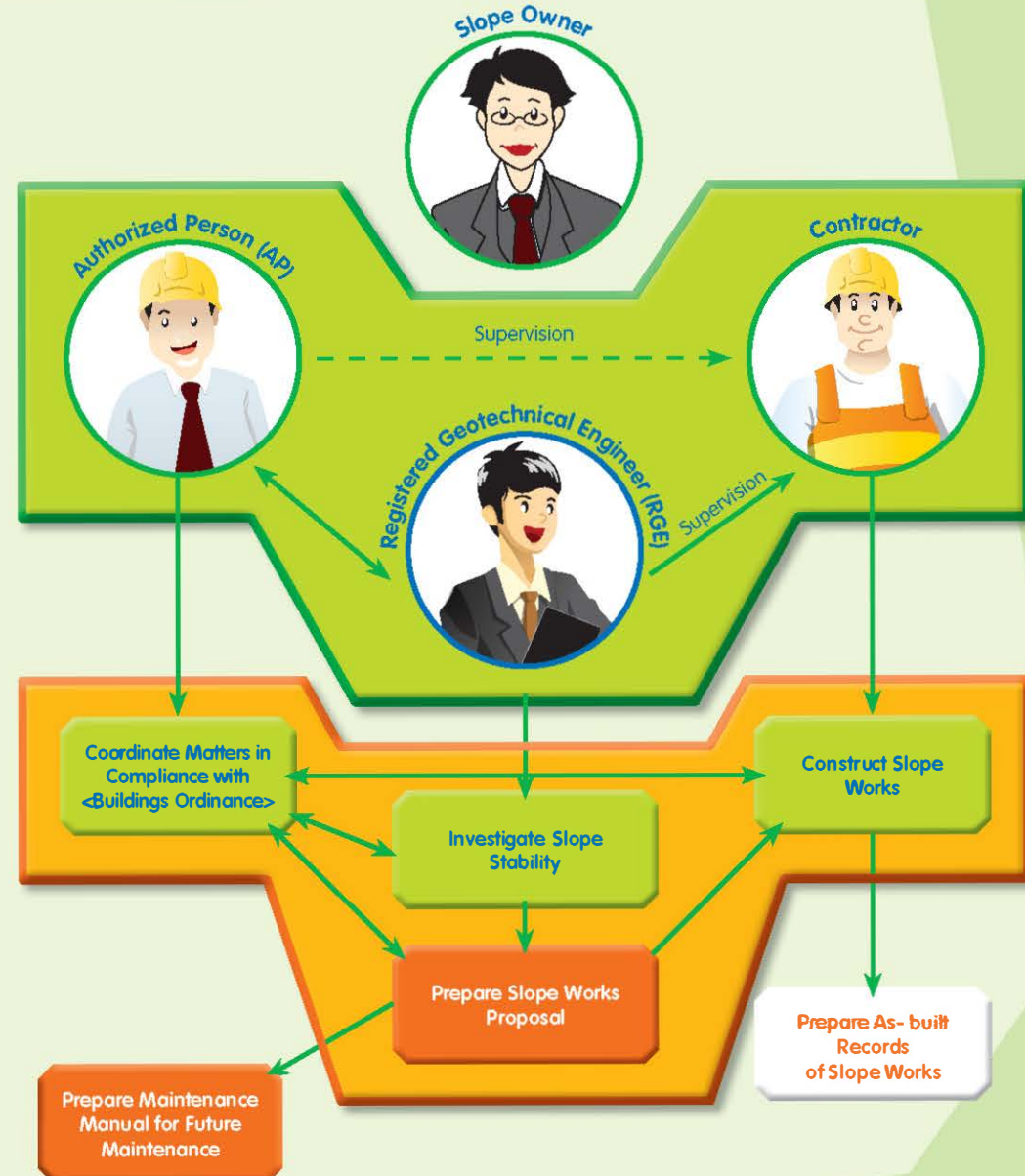
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The AP/RGE should draw up a contingency plan and monitor the stability of the slope during the course of investigation and construction. If the slope shows any signs of instability, the AP / RGE should arrange to carry out emergency repair immediately and advise residents and others of any safety precautions. Slope owners should report any observations of slope movements to the AP / RGE.

Note 2: Before discharge of the DH Order, the RGE should prepare a Maintenance Manual for the slope owners to aid them in carrying out the necessary future slope maintenance works.

Process for Handling a Dangerous Hillside Order



Note: The AP and RGE assist owners in preparing tender and contract documents, selecting contractors and supervising the construction works.



Owners should engage the following professionals/ parties to fulfill the requirements of the DH Order:

Authorized Person

To co-ordinate works as required under the Buildings Ordinance.

A list of Authorized Persons is available for viewing at the Building Department (BD) and Local District Offices or downloading from the BD Website (<http://www.bd.gov.hk/english/inform/index.html>)



Registered Geotechnical Engineer

To provide geotechnical consultancy service.

A list of Registered Geotechnical Engineers can be obtained from the BD or downloaded from the BD Website (<http://www.bd.gov.hk/english/inform/index.html>)



Registered Specialist Contractor

To carry out topographic survey, ground investigation, laboratory testing and slope works.

A list of Registered Specialist Contractors can be obtained from the BD or downloaded from the BD Website (<http://www.bd.gov.hk/english/inform/index.html>)



Notes for Engagement of AP/RGE

Selection of the AP/RGE should be made objectively according to the quality of service expected, not solely on the costs alone. The following points should be considered in the selection process.

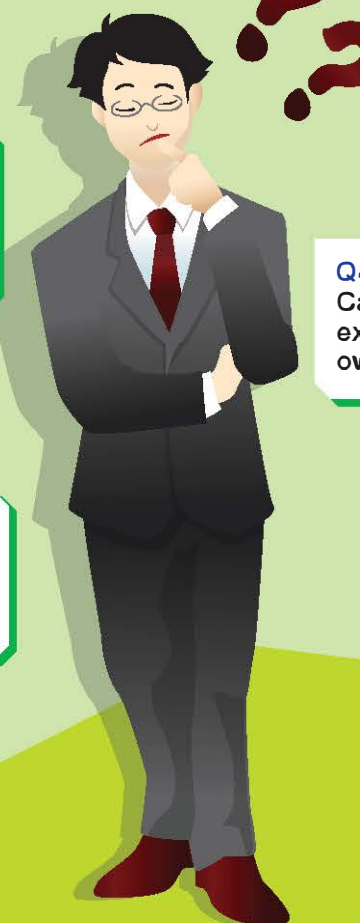
Q1: Does the AP/RGE understand the requirements of the DH Order?

Q2: Does the AP/RGE have the required manpower and resources for the work?

Q3: Has the AP/RGE had previous experience and performed similar jobs in Hong Kong?

Q4: Can you draw reference/ experience from other owners?

Q5: What are AP/RGE's opinions and views on the future slope works?



Issues to be Considered

1 Are the proposed slope works safe during the Construction?
Is insurance coverage adequate?

2 Can future maintenance works be easily carried out?
Does it involve recurrent expenditure and high maintenance costs?

3 Does the slope works proposal affect other private/
Government land? Are permissions required? Does it involve
additional future maintenance responsibility?

4 Should other slopes within the lot be investigated and
upgraded at the same time?

5 The aesthetic quality / robustness of the works.
Does it improve the nearby environment?

6 Duration of works and other construction related issues such as
hours of work, noise, air quality, temporary relocation of parking
spaces and access, removal of trees, etc.

Assistance

The Geotechnical Engineering Office (GEO) has set up a Community Advisory Unit (CAU) to provide assistance and advice to private slope owners.

Private slope owners who have received a DH Order are welcome to contact CAU at telephone no. 2760 5800 or by email: cau@cedd.gov.hk



An Integrated Building Maintenance Assistance Scheme has been set up to provide financial assistance to private slope owners in carrying out slope repair or slope maintenance works. For further information or enquiry, please call telephone no. 3188 1188 or CAU.

GEO has uploaded the records of 60,000 man-made slopes
in Hong Kong onto the
Hong Kong Slope Safety Website (<http://hkss.cedd.gov.hk>)

The Lands Department has published the maintenance responsibility of
slopes on their Website (<http://www.slope.landsd.gov.hk/smris>).

Owners are welcome to browse these Websites
to obtain information on their slopes

Enquiry

Community Advisory Unit

cau@cedd.gov.hk
2760 5800

Hong Kong Slope Safety Website

<http://hkss.cedd.gov.hk>

Slope Safety Hotline

1823

Geotechnical Information Unit
Civil Engineering Library

2762 5148

Buildings Department

Building Safety Loan Scheme Enquiry Hotline

<http://bd.gov.hk>
2626 1579

Registers of Authorized Persons,
Registered Geotechnical
Engineers and Registered
Specialist Contractors

<http://www.bd.gov.hk/english/inform/index.html>
2626 1616

Integrated Building Maintenance
Assistance Scheme Hotline

3188 1188

Customer Service Hotline, Land Registry

3105 0000

Slope Maintenance Responsibility

<http://www.slope.landsd.gov.hk/smris/>
2231 3333