

**REDAS-JOINT SEMINAR ON EROSION AND SEDIMENT  
CONTROL AND WATER CONSERVATION (11 May 2006)**

**Requirements under the Sewerage &  
Drainage Act and Sewerage &  
Drainage (Surface Water Drainage)  
Regulations and Consequences for  
Non-Compliance**

*presented by*

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(incorporating *CHANTAN* LLC)

*Advocate & Solicitor*

2 main legislations governing the control of silty discharge from construction or earthworks site:

- Sewerage and Drainage Act (Cap 294, Revised Edition 2001)
- Sewerage and Drainage (Surface Water Drainage) Regulations (2001 Revised Edition)



# Relevant Provisions under the Act and Regulations

- Section 26(1) : Works affecting storm water drainage system
- Section 34(1) : Supervision of works by qualified person (QP)
- Regulation 4 : Prohibition of discharge of silt, etc., into storm water drainage system

**26. —(1)** No person is to carry out or cause to be carried out any works which will affect any storm water drainage system, drain or drainage reserve, directly or indirectly, without obtaining in respect of those works, a clearance certificate or the approval of the Board under section 33.

*[8/2001]*



**“storm water drainage system”** is defined in section 2 of the Act to mean :

A system of drains for the conveyance or storage of storm water and includes —

- (a) any weir, grating, float, boom, gauge, tidegate, sump, storage pond, pumping station, maintenance access, and debris interception and removal facility related to such system;
- (b) any structure constructed to convey, store or measure storm water or for flood alleviation; and
- (c) any bridge over or railing for any such drain or any appurtenance thereof.

## “storm water”

- Refers to rainwater and surface water but does not include sewage  
(section 2)



**“drain”** includes any canal, culvert, conduit, river or watercourse (section 2)

**“drainage reserve”** means any land set aside for drainage works pursuant to development proposals approved by a competent authority (section 2)

**“drainage works”** includes  
any engineering works for  
the construction, alteration  
and maintenance of any  
storm water drainage system  
(section 2)



# Application for clearance certificate or approval

- Application must be in such form and manner as the Board may require (s 33(1))
- Form DP(DRA) - downloadable from PUB website ([www.pub.gov.sg](http://www.pub.gov.sg))

# Application for clearance certificate or approval

- Plans of the works are to be submitted with the application (s 33(3))
- Board may require plans (a) to be made by a QP, and (b) to show such details or specifications as the Board may determine (s 33(4))



# Application for clearance certificate or approval

- Board may require certain requirements to be complied with before issuing its clearance certificate or approval (s 33(6))
- Board may impose conditions in issuing the clearance certificate or granting its approval (s 33(7))

## Consequence for breach of s. 26(1)

**26. —(2)** Where any work has been carried out in contravention of s 26(1), the Board may by notice in writing require the person who carried out the works, or the owner or occupier of any premises in respect of which the works were carried out, to carry out such works as the Board thinks necessary within such time as may be specified in the notice. *[8/2001]*



## Default in compliance with notice

**41. —(1)** Where a person on whom a notice under s 26 is served fails to comply with the notice within the time specified in the notice —

(a) he is guilty of an offence and is liable on conviction to a fine not exceeding \$20,000;

- Any authorised officer may enter the premises to execute the works specified in the notice (**s 41(1)(b)**)
- Any expenses reasonably incurred by the Board may be recovered from the person in default (**s 41(2)**)



# Consequence for breach of s. 26(1)

**26. –(3)** Any person who contravenes s 26(1) is guilty of an offence and is liable on conviction to a fine not exceeding \$20,000

# Relevant Provisions under the Act and Regulations

- Section 26(1) : Works affecting storm water drainage system
- Section 34(1) : Supervision of works by qualified person (QP)
- Regulation 4 : Prohibition of discharge of silt, etc., into storm water drainage system



**34. —(1)** No person is to commence or carry out any works for which a clearance certificate is required under this Act except under the supervision of a qualified person

**34. —(2)** Any person who contravenes s 33(1) is guilty of an offence and is liable on conviction to a fine not exceeding \$50,000 or to imprisonment for a term not exceeding 12 months or to both and, in the case of a continuing offence, to a further fine not exceeding \$1,000 for every day or part thereof during which the offence continues after conviction.



## Duties of the QP (section 35(1))

- To take all reasonable steps and exercise due diligence in supervising and inspecting the works to ensure that those works are carried out in accordance with the Act, the submitted plans and any condition imposed by the Board

## Duties of the QP (section 35(1))

- To notify the Board of any contravention of the Act pertaining to the works
- To keep and maintain at the premises on which works are carried out such documents, books and records as may be prescribed



## Duties of the QP (section 35(1))

- To carry out such inspection of the works as the Board may require
- To submit to the Board at the prescribed times such reports and certificates as may be prescribed

## Duties of the QP (section 35(1))

- On completion of the inspection, to submit to the Board a certificate containing such particulars as the Board may require (Certificate of Inspection for Drainage Works)



**35. –(2)** Any qualified person who contravenes any of the requirements of s 35(1) is guilty of an offence and is liable on conviction to a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 6 months or to both and, in the case of a continuing offence, to a further fine not exceeding \$500 for every day or part thereof during which the offence continues after conviction.

# Relevant Provisions under the Act and Regulations

- Section 26(1) : Works affecting storm water drainage system
- Section 34(1) : Supervision of works by qualified person (QP)
- Regulation 4 : Prohibition of discharge of silt, etc., into storm water drainage system



**Reg 4. —(1)** No person is to discharge or cause or permit the discharge into the storm water drainage system of Total Suspended Solids in concentrations greater than 50 milligrams per litre of the discharge.

**Reg 4. —(2)** Every person carrying out earthworks or construction works must comply with the Code of Practice and, in particular, with the following requirements:



## Requirement (a) :

Earth control measures is to be provided and maintained in accordance with the Code of Practice

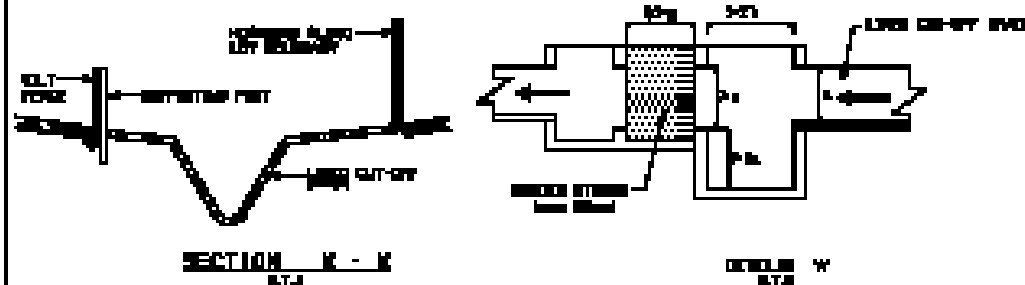
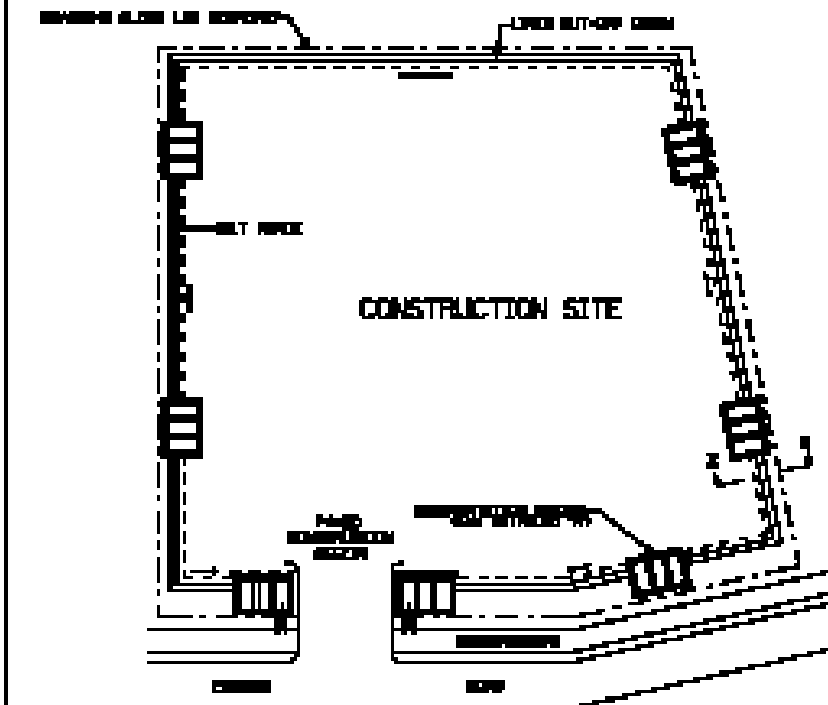
## **6.3 Earth Control Measures**

- 6.3.1 A system of earth control measures as outlined in clause 6.3.2 shall be provided and maintained at work site for earthworks or any other construction works to prevent earth, silt, sand or any other material from the work site being washed into the drains and adjacent premises.
- 6.3.2 The following earth control measures shall be complied with:
- (a) silt-control facilities including temporary lined perimeter cut-off drains, lined silt-trapping devices, silt fences, turfing, wash-bays and perimeter bunds shall be provided and maintained to prevent earth, silt, sand or any other material from the work site being washed into the drains and adjacent premises. The silt fences shall be provided beside and along the lined perimeter cut-off drains.  
Details on the use of cut-off drains, silt traps and silt fences are shown in Drawing No.9.
  - (b) all earth surfaces or slopes adjacent to any drain shall be close turfed or paved and all other bare earth surfaces shall be turfed to control soil erosion.
- 6.3.3 The discharge into the storm water drainage system shall not contain Total Suspended Solids in concentrations greater than 50 milligrams per litre of the discharge.
- 6.3.4 The Professional Engineer shall design and supervise the construction of the earth control measures.



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This drawing shows schematically the drainage facilities and minimum structural requirements. Details of the structural, geotechnical and foundation systems are to be designed by a Professional Engineer.



## History

Before commencing of works, the site operator shall submit a detailed North Central Missouri RSDO proposal endorsed by a Professional Engineer (PE) to Director, Drainage District WPH&S Board for records. The design related items shall be valid for a 1 to 2 years term. The RSDO shall be put in place before commencement of work.

**The detailed EIR proposal shall include but not limited to the following: -**

### Erosion control

• The extent of bare areas and the direction of exposure should be identified. All bare areas/ slopes should be revegetated or covered with rolled straw, erosion control blankets, erosion sheets, turf or other materials which are effective in controlling soil erosion and these shall be clearly indicated in the EOP plans.

## Sediment Control

to Producer 001-07 which shall be convertible and adequate to replace all runoff from the site preventing overflow onto adjacent properties.

© MC Pumps shall be provided along the perimeter and off-drain. The all bases and supporting pads are to be undisturbed firmly to the ground.

30 Submersible tanks are to be provided in sufficient numbers and of adequate size and designed to present the least drag of all the public drags. Location and numbers of the all drags may vary to suit the site conditions. Generally, a Submersible drag of size 10 to 15 m x 15m CD for every 10000 m<sup>2</sup> is to be provided along the particular drag project drags.

• Chemical testing system to be provided before the discharge starts its testing duty.

## ■ Maintenance

10 The EOM shall be regularly maintained and the proposal shall be  
11 revised to ensure its effectiveness to suit each phase of the  
12 construction self-study.

g) The card shall be removed only upon the completion of all mandatory collection.

## Requirement (b) :

Runoff within, upstream of and adjacent to the work site is to be effectively drained away without causing flooding within or in the vicinity of the work site



## Requirement (c) :

All earth slopes are to be set outside a drainage reserve

## Requirement (d) :

All earth slopes adjacent to any drain are to be close turfed

## Requirement (e) :

Must take adequate measures to prevent any earth, sand, top-soil, cement, concrete, debris or any other material to fall or be washed into the storm water drainage system from any stockpile thereof



**Reg 6.** Any person who contravenes or fails to comply with the Regulations is guilty of an offence and is liable on conviction to a fine not exceeding \$5,000 and, in the case of a continuing offence, to a further fine of \$500 for every day or part thereof during which the offence continues after conviction

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**The End**



## **Speaker's profile (Monica Neo)**

**Nationality and resident status:** Singaporean

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### **Academic and Professional Qualifications**

Bachelor of Laws, LLB Hons - University of London

Barrister at Law, Lincoln's Inn

Advocate & Solicitor, Supreme Court of the Republic of Singapore

Fellow Member, Singapore Institute of Arbitrators

Member, Chartered Institute of Arbitrators

Member, Reserve Panel, Singapore International Arbitration Centre

Member of the Civil Practice Committee, Law Society of Singapore (2002)

Legal Adviser, Singapore Contractors' Association Limited

### **Major Publications (author or co-author):**

"The Singapore Court Forms"

"The Singapore Standard Form of Building Contract – An Annotation"

"Construction Defects: Your Rights and Remedies" title of the Sweet & Maxwell's Law for Layman Series

Singapore Civil Procedure 2003 (White Book)

Real Estate Developers' Association of Singapore's (REDAS) Design and Build Standard form contract