

ENVIRONMENTAL QUALITY (SEWAGE) REGULATIONS 2009

PU(A) 432/2009

10 December 2009

IN exercise of the powers conferred by sections 21, 24, 25 and 51 of the **Environmental Quality Act 1974**[Act 127], the Minister, after consultation with the Environmental Quality Council, makes the following regulations:

1. Citation

These regulations may be cited as the **Environmental Quality (Sewage) Regulations 2009**.

2. Interpretation

(1) In these Regulations:-

"sludge" means any deposit of particulate matter settled from a liquid, including deposit resulting from physical, chemical, biological or other treatment of sewage;

"professional engineer" has the same meaning assigned to it in the **Registration of Engineers Act 1967**[Act 138];

"sewage" means any liquid waste or wastewater discharge containing human, animal, domestic or putrescible matter in suspension or solution, and includes liquids containing chemicals in solution either in the raw, treated or partially treated form;

"licence" means a licence referred to in regulation 8 pursuant to subsection 25(1) of the Act;

"parameter" means any of the factors shown in the first column of the Second Schedule;

"authorized officer" means any officer appointed under section 3 of the Act or any other officer to whom the Director General has delegated his power under section 49 of the Act;

"dilution" means any process making sewage less concentrated by adding water or other liquids from external sources other than liquids or materials used for treating the sewage;

"performance monitoring" means the routine monitoring of certain characteristics to provide an indication that a treatment process is functional and capable of treating the sewage;

"population equivalent" means the equivalent in terms of a fixed population of a varying or transient population or other activity, for example industrial or commercial contributing to flow to the sewerage treatment system;

"sewage treatment system" means any facility designed and constructed for the purpose of reducing the potential of the sewage to cause pollution.

(2) Words and expressions which are not defined in these Regulations shall have the same meaning as assigned to them in the Act.

3. Application

These Regulations shall apply to any premises which discharge sewage onto or into any soil, or into any inland waters or Malaysian waters, other than any housing or commercial development or both having a population equivalent of less than one hundred and fifty.

4. Notification for new source of sewage discharge or release

(1) No person shall, without prior written notification to the Director General, discharge or release or permit the discharge or release of sewage onto or into any soil, or into any inland waters or Malaysian waters.

(2) The written notification to the Director General referred to in subregulation (1) shall be in the form as specified in the First Schedule.

5. Provision and proper operation of sewage treatment system

(1) An owner or occupier of any premises shall operate and maintain a sewage treatment system in accordance with sound engineering practice for the treatment of sewage and ensure that all components of the sewage treatment system are in good working condition.

(2) In this regulation, "sound engineering practice" means the manner by which sewage treatment system is operated where the operational characteristics are maintained within the normal range of values commonly used for the treatment of sewage.

6. Competent person

(1) The operation of a sewage treatment system shall be supervised by a competent person.

(2) A competent person shall be a person who has been certified by the Director General that he is duly qualified to supervise the operation of a sewage treatment system.

(3) An owner or occupier of any premises shall ensure that a competent person is on duty at any time the sewage treatment system is in operation.

7. Acceptable conditions of sewage discharge

(1) No person shall discharge sewage which contains substances in concentration greater than the limits of:-

(a) Standard A, as shown in paragraph (i) of the Second Schedule, for new sewage treatment systems discharging into any inland waters within the catchment areas as specified in the Third Schedule;

(b) Standard B, as shown in paragraph (i) of the Second Schedule, for new sewage treatment systems discharging into any other inland waters or Malaysian waters;

(c) Standard A, as shown in paragraph (ii) of the Second Schedule, for existing sewage treatment systems discharging into any inland waters within the catchment areas as specified in the Third Schedule;

(d) Standard B, as shown in paragraph (ii) of the Second Schedule, for existing sewage treatment systems discharging into any other inland waters or Malaysian waters;

(e) Standard A, as shown in paragraph (iii) of the Second Schedule, for existing sewage treatment systems discharging into any inland waters within the catchment areas as specified in the Third Schedule; or

(f) Standard B, as shown in paragraph (iii) of the Second Schedule, for existing sewage treatment systems discharging into any other inland waters or Malaysian waters.

(2) An owner or occupier of a premises shall submit a program to the Director General and implement such program to ensure that all existing sewage treatment systems, except the communal septic tanks and imhoff tanks:-

(a) which discharge sewage into any inland waters within the catchment areas as specified in the Third Schedule, comply with the Standard A as shown in paragraph (i) of the Second Schedule on or before 31 December 2016; and

(b) which discharge sewage into any other inland waters or Malaysian waters, comply with the Standard B as shown in paragraph (i) of the Second Schedule on or before 31 December 2019.

(3) In this regulation:-

(a) "new sewage treatment system" means a sewage treatment built after the date of the coming into operation of these Regulations; and

(b) "existing sewage treatment system" means a sewage treatment system approved between the period after January 1999, until immediately before the date of the coming into operation of these Regulations.

8. Licence to contravene acceptable conditions for sewage discharge

(1) An owner or occupier of premises may apply for a licence under subsection 25(1) of the Act to contravene the acceptable conditions of sewage discharge as specified in regulation 5.

(2) An application for a licence under subregulation (1) shall be made in accordance with the procedures as specified in the **Environmental Quality (Licensing) Regulations 1977[P.U. (A) 198/1977]** and shall be accompanied by:-

- (a) a report on sewage characterization study; and
- (b) a licence fee as specified in regulation 24.

9. Method of analysis and sampling of sewage

(1) An authorized officer may carry out an in-situ or ex-situ analysis of sewage using any instrument approved by the Director General.

(2) An analysis of sewage discharged or released onto or into any soil, or into any inland waters or Malaysian waters shall be carried out in accordance with any of the methods contained in the publications as specified in the Fourth Schedule.

(3) The analysis of sewage referred to in this regulation shall be based on grab samples.

(4) In this regulation:-

(a) "in-situ analysis" means the analysis conducted on a sewage sample that has not been removed from its location or conducted at the site where the sample was taken;

(b) "ex-situ analysis" means the analysis conducted on a sewage sample that has been removed from its location and conducted at the different site from the site where the sample was taken; and

(c) "grab sample" means a discrete individual sample taken within a period of time of less than 15 minutes.

10. Monitoring of sewage discharge

(1) An owner or occupier of a premises that discharges sewage onto or into any soil, or into any inland waters or Malaysian waters shall, at his own expense:-

(a) monitor the concentration of the parameters specified in the first column of the Second Schedule; and

(b) install flow-meters, sampling equipment and recording equipment.

(2) The owner or occupier of the premises shall maintain a record of sewage discharge monitoring data in the format as specified in the Second Schedule.

(3) The owner or occupier of the premises shall submit the first record of sewage discharge monitoring data to the Director General within thirty days after the date of the coming into

operation of these Regulations and the subsequent reports shall be submitted within thirty days after the end of the calendar month for the report of the previous month.

(4) The record of sewage discharge monitoring data shall also be made available for inspection by any authorized officer.

11. Point of discharge of sewage

(1) The point of discharge of sewage shall comply with the specifications as specified in the Sixth Schedule and shall be clearly indicated by the owner or occupier of a premises on the layout plans and engineering drawings certified by a professional engineer.

(2) An owner or occupier of the premises shall submit to the Director General the layout plans and engineering drawings referred to in subregulation (1) within thirty days prior to the commencement of the operations at the premises.

(3) Where an owner or occupier of the premises proposes to make any alteration or change to the location or position of the point of discharge or design of the outlet at the point of discharge of sewage, he or it shall notify the Director General within thirty days prior to the making of any alteration or change.

12. Prohibition against sewage discharge through by-pass

(1) No person shall discharge or cause or permit the discharge of sewage onto and into any soil, or into any inland waters or Malaysian waters through a by-pass.

(2) In this regulation, "by-pass" means any intentional diversion of sewage from any portion of a sewage treatment system.

13. Spill or accidental discharge of sewage

(1) In the event of the occurrence of any spill or accidental discharge of sewage from any premises, which either directly or indirectly gains or may gain access onto or into any soil, or into any inland waters or Malaysian waters, the owner or occupier of the premises shall immediately and not more than six hours from the time of the occurrence inform the Director General of the occurrence.

(2) An owner or occupier of the premises shall, to every reasonable extent, contain, cleanse or abate the spill or accidental discharge of sewage in a manner that satisfies the Director General.

(3) The Director General may in any particular case, if he considers it necessary to do so, specify the manner in which the spill or accidental discharge is to be contained, cleansed or abated and the owner or occupier of the premises shall comply with such specification.

(4) The Director General shall determine any damage caused by any spill or accidental discharge and may recover all costs and expenses from the owner or occupier of the premises.

(5) Where the Director General undertakes to cleanse or abate any spill or accidental discharge, he shall determine the full costs and expenses incurred and may recover such costs and expenses from the owner or occupier of the premises in accordance with the provisions of section 47 of the Act.

14. Prohibition against discharge of sludge into inland waters or Malaysian waters

No person shall discharge or cause or permit the discharge of any sludge that is generated from any sewage treatment system into any inland waters or Malaysian waters.

15. Restriction on the disposal of sludge onto land

No person shall discharge, or cause or permit the disposal of, sludge generated from any sewage treatment system onto or into any soil or surface of any land without the prior written permission of the Director General.

16. Application for disposal of sludge onto land

An application for a written permission of the Director General under regulation 17 shall be accompanied by the prescribed fee of five hundred ringgit.

17. Reporting changes in information furnished for purpose of application of licence

An applicant for a licence or for the renewal or transfer of such licence shall, within seven days of the occurrence of any material change in any information furnished in his application or furnished in writing pursuant to a request by the Director General under subsection 11(2) of the Act, give the Director General a report in writing of the change.

18. Display of licence

The holder of a licence shall display his licence, together with every document forming part of the licence, in conspicuous place in the principal building of his or its premises.

19. Continuance of existing conditions and restrictions in case of change in occupancy

Where a person becomes the occupier of a licensed premise in succession to another person who holds an unexpired licence in respect of such premises, then:-

(a) for a period of fourteen days after the change in occupancy; or

(b) where the new occupier applies within the period specified in paragraph (a) for the transfer of the licence to him, for the period from the change in occupancy until the final determination of his application, the conditions and restrictions of the licence shall be binding on the new occupier and shall be observed by him, notwithstanding that he is not yet the holder of the licence or that the licence may, during the period as specified in paragraph (a) or (b), as the case may be, have expired.

20. Maintenance of records

(1) An owner or occupier of a premises equipped with a sewage treatment system shall maintain records of the operation, maintenance and performance monitoring of the sewage treatment system.

(2) The records maintained under subregulation (1) shall be made available for inspection by any authorized officer.

21. Personnel training

(1) An owner or occupier of any premises equipped with a sewage treatment system:-

(a) shall ensure that his or its employees attend training on environmental requirements and on the best practices in the operation and maintenance of sewage treatment systems before they begin work;

(b) shall ensure that the training for his or its employees include retraining on updates for new, revised and existing requirements and procedures; and

(c) shall maintain records of training which shall include the training date, name and position of employee, training provider and a brief description of the training content.

(2) The record under paragraph (1)(c) shall be submitted to the Director General upon request and shall be made available for inspection by any authorized officer.

22. Provision for inspection

An owner or occupier of a premises who discharges sewage onto or into any soil, or into any inland waters or Malaysian waters shall, in connection with such discharge, install inspection chambers, flow-meters, sampling equipment, monitoring equipment, and measuring and recording equipment.

23. Owner or occupier to render assistance during inspection

An owner or occupier of any premises shall provide the Director General or any authorized officer every reasonable assistance and facility available at the premises, including labour, equipment, appliances and instruments that the Director General or authorized officer may require for the purpose of taking any action.

24. Fee for licence

(1) The fee for a licence, including the renewal and transfer of a licence, shall be five hundred ringgit and an additional sewage-related licence fee computed in accordance with the method as specified in the Seventh Schedule.

(2) The fee for a licence including the renewal and transfer of a licence of five hundred ringgit shall accompany the application and shall not be refundable.

(3) The sewage-related licence fee shall not become due until called for.

25. Waiver of fee

(1) If the Director General is satisfied that the research on sewage treatment or disposal that is being or is to be conducted on a licensed premises is likely to benefit the cause of environmental protection, he may, with the approval of the Minister, wholly, or partly, waive any sewage-related licence fee payable by virtue of regulation 24.

(2) In deciding the extent of the waiver, the Director General shall be guided by the consideration of the pollution loading of sewage being discharged or to be discharged.

26. Penalty

Any person who contravenes regulations 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22 and 23 shall be guilty of an offence and shall be liable to a fine not exceeding one hundred thousand ringgit or to a term of imprisonment for a period not exceeding five years or to both and to a further fine not exceeding one thousand ringgit a day for every day that the offence is continued after the notice by the Director General requiring him to cease the act specified in the notice has been served upon him.

27. Revocation, transitional and savings provision

(1) The **Environmental Quality (Sewage and Industrial Effluents) Regulations 1979**[P.U. (A) 12/1979] is revoked (hereinafter referred to as "the revoked Regulations").

(2) Any application made under the revoked Regulations for a licence to contravene the acceptable conditions, renewal or transfer of the licence or written permission which are pending immediately before the date of the coming into operation of these Regulations shall, after the date of the coming into operation of these Regulations, be dealt with under the revoked Regulations and for such purposes it shall be treated as if these Regulations have not been made.

(3) All licences issued or written permission granted under the revoked Regulations shall, after the date of the coming into operation of these Regulations, continue to remain in full force and effect until the licence expires, is amended, suspended or canceled, or the written permission expires or is revoked under the revoked Regulations and for such purposes it shall be treated as if these Regulations have not been made.

(4) The provisions of the revoked Regulations relating to the acceptable conditions for sewage discharge shall continue to apply until twelve months after the date of the coming into operation of these Regulations where on the date of the coming into operation of these Regulations:-

(a) any work on any construction of any sewage treatment system has not commenced within twelve months from the date of the issuance of the written permission for its construction immediately before the date of the coming into operation of these Regulations;

(b) any work on any construction of any sewage treatment has commenced but has not been completed immediately before the date of the coming into operation of these Regulations; or

(c) any work on any construction of any sewage treatment system has been completed but has not begun its operation immediately before the date of the coming into operation of these Regulations.

(5) Where on the date of the coming into operation of these Regulations, any premises is discharging sewage into any inland waters which is not specified as a catchment area under the revoked Regulations immediately before the date of the coming into operation of these Regulations, the provisions of the revoked Regulations relating to acceptable conditions for sewage discharge shall continue to apply to such sewage discharge until twelve months after the date of the coming into operation of these Regulations.

(6) Notwithstanding anything contained in these Regulations, upon the date of the coming into operation of these Regulations, in relation to sewage discharge from any sewerage treatment system, other than communal septic tanks and imhoff tanks:-

(a) the provisions of the revoked Regulations relating to acceptable conditions of sewage discharge as specified in paragraphs (ii) and (iii) of the Second Schedule for Standard A shall apply until 31 December 2016; and

(b) the provisions of the revoked Regulations relating to acceptable conditions of sewage discharge as specified in paragraphs (ii) and (iv) of the Second Schedule for Standard B shall apply until 31 December 2019.

(7) Any proceeding, whether civil or criminal, commenced under the revoked Regulations and are pending on the date of the coming into operation of these Regulations shall, on the date of the coming into operation of these Regulations, be continued and concluded under the revoked Regulations and for such purposes it shall be treated as if these Regulations have not been made.

FIRST SCHEDULE

(Regulation 4)

NOTIFICATION FOR NEW SOURCES OF SEWAGE DISCHARGE OR RELEASE

SECTION I

IDENTIFICATION OF PREMISES

- (i) Name and address of premises:.....

 Mailing address of premises (if different from above):.....

 Telephone number:..... Fax number:.....
- (ii) File reference number of Department of Environment (if applicable):

SECTION II

DESCRIPTION OF PREMISES

2(i) Description of premises/development project

(Please tick in the relevant box below)

- | | | | |
|--------------------------------------|-------|---|-------|
| (a) Housing/ Residential | _____ | (b) Commercial | _____ |
|) | - | | |
| (c) Industrial Estate | _____ | (d) Mixed (commercial plus residential) | _____ |
|) | - | | |
| (e) Mixed (industry plus commercial) | _____ | (f) Mixed (industry plus residential) | _____ |
|) | - | | |
| (g) Hotel | _____ | (h) Resort | _____ |
|) | - | | |
| (i) Others | _____ | | |
| | - | | |

Please describe: _____

(ii) Size of premises/development project

(Please describe the size of the premise/development project in terms of population equivalent and other descriptors such as number of units, number of rooms, land area, etc. wherever relevant)

Population equivalent: _____

Number of units: _____

Number of rooms: _____

Land area (acres): _____

Other information: _____

SECTION III

INFORMATION ON SEWAGE TREATMENT SYSTEM

(i) Type of treatment system

(Please tick in the relevant box below)

(a) Conventional Activated Sludge System _____

(c) Extended Aeration Activated Sludge System _____

(e) Rotating Biological Contactor _____

(g) Sequencing Batch Reactor _____

(h) Others _____

Please describe: _____

(b) Oxidation Ponds _____

(d) Oxidation Ditch _____

(f) Tricking Filter _____

SECTION IV

DISCHARGE INFORMATION

4. (i) Where is the treated sewage (ie, the final sewage) discharged into?

(Please tick in the relevant box below)

(a) Watercourse _____

Name of watercourse: _____

(b) Lake _____

Name of lake: _____

(c) Sea _____

Name of sea: _____

(d) Estuary _____

Name of estuary: _____

(e) Others _____

Please describe: _____

(ii) Location of discharge point

Latitude: _____

Longitude: _____

SECTION V

DECLARATION

I, _____ hereby declare that all information given in this form is to the best of my knowledge and belief true and correct.

Signature of responsible person:

Name: _____

Designation: _____

Date: _____

(Affix official seal or stamp of company)

(e) Ammoniacal Nitrogen mg/L - - 100 100 80 80 70 70 60 60

Note:

1. Standard A is applicable to discharge into any inland waters within catchment areas listed in the Third Schedule, while Standard B is applicable to any other inland waters or Malaysian waters.

2. These standards are applicable to the sewerage treatment systems that may have been constructed prior to 1999 based upon approval given by other agency, other than the Department of Sewerage Services, Ministry of Housing and Local Government.

(iii) Existing sewage treatment system (approved after January 1999)

All sewerage treatment systems which were approved after the Guidelines for Developers: Sewerage Treatment Vol. IV, 2nd edition and were enforced by the Department of Sewerage Services, Ministry of Housing and Local Government, beginning January 1999 and up to the date of coming into operation of these Regulations.

	Parameter	Unit	Standard	
			A	B
(a)	BOD at 20°C	mg/L	20	50
(b)	COD	mg/L	120	200
(c)	Suspended Solids	mg/L	50	100
(d)	Oil and Grease	mg/L	20	20
(e)	Ammoniacal Nitrogen	mg/L	50	50

Note:

Standard A is applicable to discharge into any inland waters within catchment areas listed in the Third Schedule, while Standard B is applicable to any other inland waters or Malaysian waters.

THIRD SCHEDULE

(Regulation 7)

LIST OF CATCHMENT AREAS WHERE STANDARD A APPLIES

1. The catchment areas referred to in these Regulations shall be the areas upstream of surface or above subsurface water supply intakes, for the purpose of human consumption including drinking water.

2. For the purpose of these Regulations, the water supply intakes shall include the public water supply intakes specified below:

(1) The State of Johor

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
	2° 39' 29"	Sg. Muar	Segamat
102° 55' 37"	2° 32' 57"	Sg. Segamat	Segamat
102° 03' 10"	2° 28' 02"	Sg. Jauseh	Segamat
102° 03' 10"	2° 28' 02"	Sg. Jauseh	Segamat
102° 39' 57"	2° 25' 29"	Sg. Jementah	Segamat
102° 49' 55"	2° 21' 01"	Sg. Muar	Muar
102° 47' 11"	2° 18' 11"	Sg. Muar	Muar
102° 48' 40"	2° 14' 59"	Sg. Muar	Muar
102° 44' 58"	2° 12' 04"	Sg. Muar	Muar
102° 44' 03"	2° 10' 49"	Sg. Muar	Muar
102° 05' 03"	1° 53' 09"	Sg. Sembrong/Sg. Bekok Transf	Batu Pahat
103° 32' 24"	2° 12' 03"	Sg. Kahang	Kluang
103° 26' 55"	2° 05' 27"	Sg. Kahang	Kluang
103° 40' 14"	2° 35' 15"	Labong Dam	Mersing
103° 47' 31"	2° 30' 22"	Conggok Dam	Mersing
103° 39' 22"	2° 23' 13"	Sg. Lenggor	Mersing
103° 54' 07"	2° 02' 11"	Sg. Sedili Besar	Mersing
103° 51' 16"	2° 16' 27"	Bekas Lombong	Mersing
104° 02' 52"	1° 53' 38"	Sg. Gembut	Kota Tinggi
103° 49' 50"	1° 49' 52"	Sg. Pelepah	Kota Tinggi
103° 43' 19"	1° 48' 01"	Sg. Linggiu	Kota Tinggi
103° 40' 05"	1° 48' 14"	Sg. Sayong	Kota Tinggi
103° 40' 05"	1° 48' 14"	Sg. Sayong	Kota Tinggi
103° 35' 28"	1° 51' 28"	Sg. Penggeli	Kota Tinggi
104° 08' 08"	1° 44' 39"	Sg. Sedili Kecil	Kota Tinggi
104° 12' 13"	1° 32' 30"	Lebam Dam	Kota Tinggi
103° 46' 58"	1° 44' 47"	Sg. Johor	Kota Tinggi
103° 27' 09"	1° 43' 12"	Sg. Pontian Besar	Johor Bahru
103° 54' 43"	1° 33' 22"	Layang Dam	Johor Bahru
103° 50' 14"	1° 44' 07"	Sg. Johor	Johor Bahru
103° 21' 54"	2° 03' 35"	Sg. Sembrong	Kluang
103° 11' 01"	1° 58' 23"	Sembrong Dam	Kluang
103° 17' 47"	1° 49' 33"	Sg. Benut	Kluang
103° 03' 10"	2° 00' 57"	Sg. Bekok Transf	Batu Pahat
104° 03' 12"	2° 00' 54"	Sg. Bekok Transf	Batu Pahat
103° 05' 57"	1° 52' 33"	Sg. Sembrong	Batu Pahat
102° 44' 03"	2° 10' 49"	Sg. Muar	Muar
102° 44' 05"	2° 10' 48"	Sg. Muar	Muar
102° 44' 05"	2° 10' 48"	Sg. Muar	Muar
102° 34' 56"	2° 19' 37"	Ledang Dam	Muar
102° 50' 09"	2° 31' 07"	Sg. Segamat	Segamat
102° 50' 17"	2° 31' 12"	Sg. Segamat	Segamat
102° 49' 59"	2° 30' 55"	Sg. Segamat	Segamat
102° 03' 11"	2° 28' 01"	Sg. Jauseh	Segamat
103° 52' 24"	1° 44' 42"	Sg. Johor	PUB Singapura
103° 39' 40"	1° 33' 30"	Sg. Skudai	PUB Singapura
103° 34' 14"	1° 32' 30"	Pulai Dam	PUB Singapura
103° 44' 24"	1° 33' 00"	Sg. Tebrau	PUB Singapura

(2) The State of Pahang

Location of Water Intake

Name of River/Reservoir/Well

Water Supply Scheme

(1)

(2)

(3)

Longitude

Latitude

East)

(North)

02° 27' 00"	3° 41' 00"	Sg. Pahang	Batu Sawar
02° 37' 00"	3° 26' 00"	Sg. Pahang	Bukit Kertau
02° 36' 00"	3° 30' 00"	Sg. Pahang	Chenor
02° 39' 00"	3° 44' 45"	Sg. Jempol	Ulu Jempol
02° 40' 00"	3° 41' 00"	Sg. Jempol	Jengka 3-7
02° 51' 00"	3° 38' 00"	Sg. Liut	Kg. New Zealand
02° 39' 00"	3° 40' 00"	Sg. Jempol	Simpang Jengka
02° 40' 00"	3° 47' 00"	Sg. Jerik	Sg. Jerik Pump House
02° 51' 00"	3° 20' 00"	Sg. Mentiga	Cini
02° 32' 48"	2° 56' 00"	Sg. Keratung	Paluh Rumbek
02° 51' 27"	3° 07' 63"	Sg. Aur	Aur
03° 23' 00"	2° 50' 51"	Sg. Keratung	Keratung
03° 10' 00"	3° 30' 15"	Sg. Pahang	Kg. Mengkasar
03° 26' 00"	3° 33' 00"	Sg. Pahang	Lepar/Pulau Manis
03° 23' 30"	3° 08' 00"	Ground Water	Nenasi
03° 19' 00"	3° 30' 54"	Sg. Pahang	Peramu
01° 53' 00"	3° 35' 00"	Sg. Pahang	Sekor
01° 45' 00"	3° 41' 00"	Sg. Bilut	Bilut
01° 49' 00"	3° 44' 00"	Sg. Hijau	Bukit Fraser Pump House
01° 58' 00"	3° 56' 00"	Sg. Cheroh	Cheroh
01° 49' 00"	3° 55' 00"	Sg. Keloi	Dong
02° 01' 00"	4° 19' 00"	Sg. Jelai	Kuala Medang Pump House
01° 51' 30"	3° 42' 00"	Sg. Pertang	Lembah Klau
01° 59' 00"	3° 45' 24"	Sg. Bilut	Raub
02° 00' 00"	3° 44' 30"	Sg. Chalit	Sg. Chalit Pump House
01° 48' 30"	3° 46' 00"	Sg. Kelau	Sg. Klau
01° 47' 45"	3° 44' 00"	Sg. Teras	Teras
03° 29' 36"	4° 12' 30"	Sg. Koyan	Sg. Koyan Pump House
03° 26' 35"	3° 48' 24"	Ground Water	Rompin
02° 10' 30"	2° 37' 15"	Empangan Sg. Anak Endau	Loji Air Seladang
02° 30' 00"	3° 31' 00"	Sg. Semantan	Bukit Damar
02° 33' 00"	3° 18' 00"	Sg. Teriang	Bukit Mendi
02° 22' 00"	2° 18' 00"	Sg. Bera	Bera
02° 26' 00"	3° 24' 00"	Sg. Pahang	Charuk Puting
02° 23' 00"	2° 45' 00"	Sg. Kerau	Jenderak Utara
01° 24' 30"	2° 30' 00"	Sg. Pahang	Lubuk Kawah
01° 55' 00"	3° 31' 00"	Sg. Semantan	Mentakab
01° 53' 00"	3° 14' 30"	Sg. Teriang	Triang (Baru)
02° 03' 00"	3° 29' 00"	Sg. Benus	Bt. 4, Jln. KL/Bentong
01° 53' 00"	3° 20' 00"	Sg. Benus	Janda Baik
02° 07' 10"	3° 26' 00"	Sg. Temelong	Karak
01° 54' 00"	3° 41' 00"	Sg. Bilut	Lurah Bilut
02° 00' 30"	3° 15' 20"	Sg. Gapoi	Sg. Gapoi
01° 23' 30"	3° 39' 00"	Sg. Penjuring	Sg. Penjuring
01° 25' 00"	3° 33' 00"	Sg. Kelau	Sg. Sertik
01° 21' 00"	4° 31' 20"	Sg. Bertam	Brinchang
01° 24' 10"	4° 34' 00"	Sg. Perlong	Kuala Terla
01° 23' 50"	4° 27' 00"	Sg. Jasin	Lubok Tamang
01° 24' 20"	4° 24' 35"	Sg. Bertam	Takong Empangan Bertam Valley
01° 21' 40"	4° 26' 20"	Sg. Luchut	Takong Empangan Habu
	3° 34' 40"	Sg. Ikan	Takong Empangan Kg. Raja
	4° 24' 20"	Sg. Ringlet	Takong Empangan Ringlet

01° 25' 3"	4° 30' 02"	Sg. Triangkap	Takong Empangan Tringkap
02° 11' 00"	4° 00' 00"	Sg. Cheka	Batu Balai
02° 21' 42"	3° 57' 30"	Sg. Pahang	Batu Embun
02° 28' 00"	3° 53' 00"	Sg. Tekam	Jengka 8-15
02° 19' 00"	4° 03' 00"	Sg. Retang	Padang Piol
02° 31' 48"	3° 52' 00"	Sg. Tekam	Sg. Tekam
02° 33' 42"	3° 50' 00"	Sg. Tekam	Sg. Tekam Utara
02° 16' 00"	4° 05' 00"	Sg. Jelai	Mela
02° 11' 00"	4° 12' 00"	Sg. Jelai	Bt. 9 Halt
01° 58' 00"	4° 02' 00"	Sg. Lipis	Benta
01° 59' 00"	4° 14' 25"	Sg. Jelai	Bukit Betong
02° 02' 10"	4° 10' 20"	Sg. Lipis	Kuala Lipis
02° 01' 00"	4° 38' 00"	Sg. Merapoh	Merapoh Pump House
02° 06' 00"	4° 19' 00"	Sg. Temau	Sg. Temau Pump House
03° 22' 00"	3° 51' 00"	Sg. Jabor	Alor Batu Pump House
03° 21' 00"	4° 01' 00"	Sg. Ular	Baru Sg. Ular
03° 12' 00"	3° 53' 00"	Sg. Riau	Bukit Goh
03° 15' 34"	3° 49' 42"	Sg. Kuantan	Bukit Ubi/Kg. Kobat
03° 15' 00"	3° 15' 00"	Sg. Kuantan	Kg. Padang
03° 6' 00"	3° 33' 00"	Sg. Lepar	Lepar Hilir
03° 12' 00"	3° 53' 00"	Sg. Kuantan	Pasir Kemudi
03° 13' 00"	3° 53' 00"	Sg. Berkelah	Paya Bungor
03° 21' 00"	3° 50' 00"	Sg. Kuantan	Semambu
03° 02' 00"	3° 56' 0"	Sg. Kuantan	Sg. Lembing

(3) The State of Kelantan

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
02° 14' 40"	6° 06' 50"	Kg. Puteh Wellfield	Kampung Puteh
02° 16' 40"	6° 05' 20"	Kubang Kerian Wellfield	Kubang Kerian
02° 17' 40"	6° 09' 40"	Pengkalan Chepa Wellfield	Pengkalan Chepa
02° 14' 15"	6° 05' 50"	Pintu Geng Wellfield	Pintu Geng
02° 16' 15"	6° 08' 30"	Tg. Mas Wellfield	Tanjung Mas
02° 16' 44"	6° 05' 18"	Kubang Kerian Wellfield	Chicha
02° 15' 57"	6° 03' 53"	Kg. Seribong Wellfield	Chicha
02° 15' 03"	6° 04' 41"	Kg. Chicha Wellfield	Chicha
02° 15' 38"	6° 05' 12"	Kg. Pasir Hor Wellfield	Chicha
02° 16' 48"	6° 04' 01"	Kg. Pasir Tumbuh Wellfield	Chicha
02° 15' 44"	6° 04' 29"	Kg. Padang Penyadat Wellfield	Chicha
02° 17' 08"	6° 05' 38"	Kg. Kenali Wellfield	Chicha
02° 05' 20"	6° 12' 30"	Wakaf Bharu Wellfield	Wakaf Bharu
02° 10' 20"	6° 10' 00"	Wakaf Bharu Wellfield	Wakaf Bharu
02° 11' 50"	6° 07' 00"	Kg. Sedar Wellfield	Kg. Sedar
02° 09' 23"	6° 02' 50"	Sg. Kelantan	Kelar
01° 58' 00"	6° 01' 10"	Rantau Panjang Wellfield	Rantau Panjang
02° 08' 31"	6° 02' 15"	Sg. Kelantan	Lemal
02° 20' 40"	6° 02' 30"	Kg. Chap Wellfield	Kg. Chap
02° 23' 10"	5° 00' 50"	Kg. Chap Wellfield	Kg. Chap
02° 24' 00"	6° 02' 50"	Jelawat Wellfield	Jelawat
02° 24' 50"	5° 49' 45"	Sg. Rasau	Wakaf Bunut
02° 13' 08"	5° 31' 17"	Sg. Kelantan	Tualang
02° 13' 40"	5° 28' 20"	Sg. Lebir	Pahi
02° 12' 20"	5° 29' 30"	Sg. Lebir	Manik Urai
02° 08' 40"	5° 41' 50"	Sg. Kelantan	Kg. Bandar Kemubu
02° 05' 45"	5° 55' 50"	Sg. Muring	Kemahang
02° 09' 20"	5° 47' 20"	Sg. Kelantan	Bukit Remah

02° 05' 45"	5° 55' 50"	Sg. Jegor	Bendang Nyior
01° 58' 30"	5° 50' 00"	Sg. Jedok	Batu Gajah
02° 05' 30"	5° 41' 00"	Sg. Kerila	Kuala Tiga
01° 53' 25"	5° 46' 40"	Sg. Lanas	Air Lanas
01° 50' 30"	5° 42' 00"	Sg. Pergau	Jeli
01° 50' 10"	5° 29' 20"	Sg. Terang	Kuala Balah
02° 00' 00"	5° 18' 20"	Sg. Stong	Stong
02° 04' 14"	5° 04' 50"	Sg. Galas	Limau Kasturi
02° 18' 29"	4° 57' 40"	Sg. Lebir	Aring
02° 02' 39"	5° 08' 50"	Sg. Nenggiri	Bertam baru
02° 10' 36"	4° 53' 56"	Sg. Ciku	Ciku
01° 59' 07"	4° 50' 35"	Sg. Ketil	Sg. Ketil
01° 47' 25"	4° 54' 01"	Sg. Betis	Panggung Lalat

(4) The State of Perlis

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
00° 09' 14"	6° 20' 11"	Anak Sungai	Terusan Arau
00° 16' 15"	6° 25' 15"	Telaga Gerek/Mada Canal	Arau
00° 19' 00"	6° 31' 25"	Telaga Gerek	Felda Chuping
00° 12' 00"	6° 42' 30"	Sungai Rasa	Wang Kelian
00° 12' 00"	6° 34' 00"	Empangan Timah Tasoh	Timah Tasoh
00° 14' 30"	6° 33' 15"	Telaga Gerek	Semadong

(5) The State of Kedah

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
00° 25' 48.3"	6° 12' 20.5"	Ter. MADA Utara	Alor Star
00° 27' 34.8"	6° 13' 11.9"	Sg. Padang Terap	Jitra
00° 31' 5.0"	6° 14' 48.0"	Kuala Nerang	Kuala Nerang
00° 41' 18.0"	6° 20' 27.5"	Sg. Ahning	Padang Sanai
00° 45' 10.5"	6° 03' 16.3"	Sg. Muda	Nami
00° 29' 2.47"	5° 55' 29.1"	Ter. MADA Selatan	Bukit Jenun
00° 43' 53.8"	6° 00' 05.8"	Sg. Muda	Lubuk Merbau
00° 26' 6.2"	6° 23' 48.0"	Sg. Temin	Changloon
00° 38' 43.4"	5° 54' 26.2"	Sg. Muda	Jeneri
00° 29' 47.3"	5° 34' 13.8"	Sg. Muda	Pinang Tunggai
00° 29' 59.6"	5° 34' 13.8"	Sg. Muda	Pinang Tunggai
00° 37' 13.8"	5° 49' 26.8"	Sg. Muda	Jeniang
00° 26' 28.3"	5° 46' 04.7"	Gunung Jerai	Tupah
00° 24' 54.1"	5° 44' 36.6"	Gunung Jerai	Merbok
00° 41' 37.8"	5° 47' 40.0"	Sg. Chepir	Sik
00° 30' 24.5"	5° 34' 15.6"	Sg. Muda	Kulim Hi-Tech
00° 30' 24.5"	5° 34' 15.6"	Sg. Muda	Bukit Selambau
00° 29' 47.3"	5° 39' 39.7"	Sg. Ketil	Baling
00° 29' 59.6"	5° 40' 23.0"	Gunung Inas	Baling
00° 37' 13.8"	5° 40' 52.4"	Gunung Inas	Baling
00° 26' 28.3"	5° 36' 30.6"	Kuala Ketil	Kuala Ketil
00° 24' 54.1"	5° 43' 24.8"	Sg. Muda	Teloi Kanan

00° 29' 47.3"	5° 19' 40.7"	Sg. Kerian	Mahang
00° 29' 59.6"	5° 28' 57.0"	Sg. Sedin	Bikan
00° 37' 13.8"	5° 21' 50.5"	Sg. Kulim	Sg. Ular
00° 26' 28.3"	5° 08' 18.0"	Sg. Krian	Lubuk Buntar
00° 29' 47.3"	6° 22' 45.8"	Sg. Raga	Langkawi
00° 29' 59.6"	6° 22' 47.3"	Sg. Melaka	Langkawi
00° 37' 13.8"	6° 21' 09.4"	Empangan Malut	Langkawi
00° 26' 28.3"	6° 15' 16.5"	Sg. Teluk Bujur	Pulau Tuba
00° 24' 54.1"	6° 20' 24.3"	Ter. MADA, Arau	Langkawi
00° 11' 10"	6° 20' 26"	Mada Canal (Arau)	Sg. Baru

(6) The State of Perak

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
00° 55' 15"	4° 56' 25"	Sg. Biong	Sauk
00° 57' 04"	4° 48' 04"	Sg. Perak	Kota Lama Kiri
00° 51' 33"	4° 45' 04"	Sg. Kangsar	Pdg. Rengas
00° 51' 23"	4° 36' 17"	Sg. Guar	Manong
01° 04' 33"	4° 49' 21"	Sg. Kerbau	Sg. Siput
01° 04' 10"	4° 47' 42"	Sg. Bemban	Sg. Siput
01° 04' 19"	4° 59' 00"	Sg. Kucha	Felda Lasah
01° 10' 45"	4° 54' 40"	Sg. Kerbau	Perlop I
01° 01' 09"	5° 42' 36"	Sg. Kuak	Pengkalan Hul
01° 00' 20"	5° 45' 33"	Sg. Semangga	Pengkalan Hulu
01° 04' 11"	5° 42' 00"	Sg. Kuak	Lepang Nenering
01° 01' 02"	5° 38' 08"	Sg. Kajang	Klian Intan
01° 08' 03"	5° 31' 51"	Sg. Berok	Kg. Jong
01° 21' 02"	5° 33' 10"	Sg. Perak-Tasek Temenggong	Pulau Banding
01° 12' 43"	5° 25' 48"	Sg. Perak-Tasek Bersia	Grik V
01° 09' 45"	5° 21' 40"	Sg. Perak	Air Ganda
01° 03' 11"	5° 18' 55"	Sg. Pulau	Lawin Kinayat
01° 00' 41"	5° 11' 43"	Sg. Ibol	Sumpitan
00° 57' 38"	5° 06' 55"	Sg. Lenggong	Lenggong
00° 28' 38"	5° 03' 54"	Terusan Besar	Jalan Baru
00° 39' 06"	4° 57' 38"	Terusan Selinsing	Gunung Semanggol
00° 46' 15"	4° 52' 45"	Sg. Ranting	Taiping Headworks
00° 46' 15"	4° 52' 53"	Sg. Anak Ranting	Taiping Headworks
00° 46' 29"	4° 50' 39"	Sg. Batu Teguh	Taiping Headworks
00° 46' 16"	4° 50' 06"	Sg. Tupai	Taiping Headworks
00° 45' 53"	4° 52' 05"	Sg. Air Terjun	Taiping Headworks
00° 49' 23"	5° 14' 47"	Sg. Seputeh	Sungai Bayor
00° 51' 25"	5° 15' 40"	Sg. Selama	Selama
00° 52' 30"	5° 09' 10"	Sg. Klian Gunung	Kelian Gunung
00° 50' 30"	5° 00' 55"	Sg. Air Hitam	Jelai
00° 49' 58"	4° 54' 27"	Sg. Kurau	Batu Kurau
00° 45' 25"	4° 41' 27"	Sg. Terong	Terong
00° 42' 56"	4° 37' 48"	Sg. Wang	Air Terjun
00° 46' 07"	4° 37' 38"	Sg. Nyior	Air Terjun
00° 46' 10"	4° 36' 32"	Sg. Pulai	Air Terjun
00° 46' 13"	4° 48' 47"	Sg. Larut	Air Kuning
00° 44' 45"	4° 48' 41"	Sg. Buluh	Air Kuning
01° 09' 41"	4° 22' 02"	Sg. Kampar	Sg. Kampar
01° 10' 38"	4° 21' 24"	Sg. Palai	Sg. Palai
01° 02' 42"	4° 37' 45"	Sg. Tapah	Sg. Tapah
00° 54' 57"	4° 29' 17"	Sg. Perak	Sultan Idris Shah II
01° 12' 03"	4° 40' 07"	Sg. Kinta	Ulu Kinta

00° 53' 00"	4° 19' 19"	Sg. Perak	Teluk Kepayang
00° 53' 00"	4° 24' 19"	Sg. Perak	Kg. Paloh
00° 54' 12"	4° 22' 40"	Sg. Perak	BB Seri Iskandar
00° 47' 00"	4° 31' 11"	Sg. Lichin	Beruas
00° 47' 07"	4° 32' 29"	Sg. Beruas	Beruas
00° 56' 11"	4° 11' 02"	Sg. Perak	Kampung Gajah
01° 19' 40"	4° 17' 25"	Sg. Btg. Padang	Bukit Temoh
01° 21' 45"	4° 13' 04"	Sg. Who	Bukit Temoh
01° 31' 48"	3° 47' 52"	Sg. Behrang	Sg. Dara
01° 16' 27"	3° 56' 38"	Sg. Sungkai	Felda Gunung Besout
01° 25' 39"	3° 57' 17"	Sg. Trolak	Trolak Selatan
01° 25' 39"	3° 57' 17"	Sg. Trolak	Trolak Timor
01° 24' 41"	4° 00' 54"	Sg. Tesong	Felda Sg. Klah
01° 30' 28"	3° 53' 30"	Sg. Gelinting	Tg. Malim (Proton City)

(7) The State of Penang

Location of Water Intake

Name of River/Reservoir/Well

Water Supply Scheme

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
00° 16' 10"	5° 24' 00"	Sg. Air Hitam	Pulau Pinang
00° 15' 56"	5° 24' 13"	Sg. Air Itam (Sg. Tepi)	Pulau Pinang untuk Kolam Air, Air Itam
00° 16' 58"	5° 26' 25"	Sg. Air Terjun	Pulau Pinang
00° 14' 41"	5° 26' 53"	Sg. Batu Ferringhi	Pulau Pinang
00° 14' 28"	5° 26' 51"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 14' 20"	5° 27' 17"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 14' 42"	5° 26' 52"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 14' 45"	5° 26' 55"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 14' 45"	5° 27' 12"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 14' 45"	5° 27' 27"	Sg. Batu Ferringhi	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 17' 32"	5° 26' 04"	Highlands	Pulau Pinang
00° 16' 33"	5° 25' 02"	Highlands	Bekalan untuk Kolam Air, Air Terjun
00° 16' 23"	5° 27' 39"	Sg. Kecil	Pulau Pinang
00° 16' 18"	5° 27' 44"	Sg. Kecil	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 16' 37"	5° 27' 23"	Sg. Klean	Pulau Pinang
00° 15' 49"	5° 26' 23"	Talian Kuasa Sg. Klean	Pulau Pinang untuk Kolam Air Guilemar dan Kolam Air Batu Ferringhi
00° 13' 33"	5° 24' 15"	Sg. Pinang Barat	Pulau Pinang
00° 13' 40"	5° 24' 16"	Sg. Pinang Barat	Bekalan untuk Kolam Air Balik Pulau
00° 14' 17"	5° 28' 15"	Anak Sg. Sebelah 3Vs	Pulau Pinang
00° 16' 33"	5° 27' 41"	Sg. Siru	Pulau Pinang
00° 16' 45"	5° 24' 55"	Anak Sg. Tats	Pulau Pinang
00° 14' 55"	5° 25' 09"	Kolam Air Tiger Hill	Pulau Pinang untuk Kawasan Bukit Bendera
00° 15' 51"	5° 23' 46"	Empangan Air Itam	Pulau Pinang untuk Kolam Air, Air Itam
00° 30' 13"	5° 26' 05"	Sg. Kulim	Seberang Perai Utara
00° 29' 15"	5° 33' 24"	Sg. Muda	Seberang Perai Utara
00° 29' 52"	5° 22' 33"	Kolam Air Bukit Berapit/Sg Mengkuang	Seberang Perai Tengah
00° 30' 39"	5° 21' 02"	Kolam Air Cherok Tok Kun	Seberang Perai Tengah
00° 32' 11"	5° 09' 35"	Kolam Air Bukit Panchor	Seberang Perai Selatan
00° 17' 00"	5° 25' 00"	Sg. Air Putih	Pulau Pinang Air Hitam

00° 14' 41"
 00° 14' 35"
 00° 34' 00"
 00° 32' 00"
 00° 13' 00"

5° 26' 53"
 5° 28' 00"
 5° 10' 00"
 5° 09' 00"
 5° 26' 30"

Sg. Batu Ferringhi
 Sg. Batu Ferringhi
 Sg. Kecil Hilir
 Simpang Hantu
 Empangan Teluk Bahang

Pulau Pinang
 Pulau Pinang Batu Ferringhi
 Seberang Perai Selatan
 Seberang Perai Selatan
 Pulau Pinang

(8) The State of Selangor

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
01° 04' 48"	3° 43' 48"	Sg. Bernam	Sabak Bernam
01° 40' 06"	3° 27' 54"	Sg. Batang Kali	Hulu Selangor
01° 23' 54"	3° 40' 30"	Sg. Dusun	Hulu Selangor
01° 26' 48"	3° 44' 24"	Sg. Bernam	Hulu Selangor
01° 25' 30"	3° 37' 30"	Sg. Tenggi	Hulu Selangor
01° 35' 42"	3° 38' 54"	Sg. Inki	Hulu Selangor
01° 41' 30"	3° 36' 42"	Sg. Gerachi	Hulu Selangor
01° 34' 00"	3° 24' 30"	Sg. Darah	Hulu Selangor
01° 26' 48"	3° 24' 00"	Sg. Selangor/Sg. Tinggi	Kuala Selangor
01° 25' 20"	3° 23' 20"	Sg. Selangor/Empangan Sg. Tinggi	Kuala Selangor
01° 25' 20"	3° 23' 20"	Sg. Selangor/Empangan Sg. Tinggi	Kuala Selangor
01° 25' 20"	3° 23' 20"	Sg. Selangor/Empangan Sg. Tinggi	Kuala Selangor
01° 10' 30"	3° 32' 30"	Sg. Sireh	Kuala Selangor
01° 41' 10"	3° 16' 05"	Sg. Batu/Empangan Batu	Gombak
01° 40' 00"	3° 17' 00"	Sg. Kanching	Gombak
01° 44' 00"	3° 18' 30"	Sg. Gombak	Gombak
01° 36' 50"	3° 14' 15"	Sg. Buloh	Gombak
01° 44' 18"	3° 17' 54"	Sg. Rumpit	Gombak
01° 37' 36"	3° 14' 18"	Sg. Keroh	Gombak
01° 33' 00"	3° 01' 05"	Sg. Pusu	Gombak
01° 48' 06"	3° 09' 42"	Sg. Ampang	Gombak
01° 29' 00"	3° 10' 00"	Sg. Subang/Empangan Subang	Kelang
01° 47' 18"	3° 04' 42"	Sg. Langat/Empangan Langat	Hulu Langat
01° 46' 36"	3° 02' 36"	Sg. Langat/Empangan Langat	Hulu Langat
01° 47' 12"	3° 05' 48"	Sg. Serai	Hulu Langat
01° 53' 25"	3° 13' 15"	Sg. Lolo	Hulu Langat
01° 53' 15"	3° 12' 50"	Sg. Pangsoon	Hulu Langat
01° 45' 36"	3° 14' 16"	Sg. Klang/Empangan Klang Gates	Kuala Lumpur
01° 40' 48"	2° 50' 48"	Sg. Langat/Empangan Langat	Kuala Langat
01° 43' 05"	2° 46' 45"	Sg. Labu	Sepang
01° 44' 20"	2° 53' 20"	Sg. Semenyih/Empangan Semenyih	Sepang
01° 25.2' 15.9"	3° 23.2' 19.9"	Batang Berjantai/Sg. Selangor	Kuala Selangor
01° 26' 20.5"	3° 23' 10.2"	Batang Berjantai/Sg. Selangor	Kuala Selangor
01° 38' 7.7"	3° 30' 30.4"	Rasa/Sg. Selangor	Kuala Selangor
01° 44' 10"	2° 53' 30"	Sg. Semenyih	Sepang
01° 42' 50"	2° 53' 23"	Sg. Semenyih	Sepang
01° 48' 10"	3° 09' 15"	Sg. Ampang	Gombak
01° 41' 56"	3° 28' 45"	Sg. Batang Kali	Hulu Selangor
01° 20' 05"	3° 40' 50"	Sg. Bernam	Sabak Bernam
01° 26' 48"	3° 44' 30"	Sg. Bernam	Hulu Selangor
01° 31' 42"	3° 24' 24"	Sg. Darah	Hulu Selangor
01° 23' 54"	3° 40' 30"	Sg. Dusun	Hulu Selangor
01° 41' 30"	3° 36' 42"	Sg. Gerachi	Kuala Selangor
01° 44' 00"	3° 18' 30"	Sg. Gombak	Gombak
02° 44' 00"	3° 17' 06"	Sg. Gombak	Gombak
01° 36' 10"	3° 39' 05"	Sg. Inki	Hulu Selangor
01° 40' 18"	3° 16' 24"	Sg. Kepong	Gombak

01° 37' 36"	3° 14' 18"	Sg. Keroh	Sg. Keroh
01° 30' 48"	3° 34' 05"	Sg. Kubu	Kuala Selangor
01° 42' 05"	2° 47' 05"	Sg. Labu	Sepang
01° 40' 48"	3° 50' 48"	Sg. Langat	Kuala Langat
01° 46' 36"	3° 02' 36"	Sg. Langat	Hulu Langat
01° 50' 18"	3° 44' 42"	Sg. Lolo	Hulu Langat
01° 50' 24"	3° 44' 36"	Sg. Pangsoon	Hulu Langat
01° 43' 48"	3° 17' 48"	Sg. Pusu	Gombak
01° 40' 00"	3° 17' 00"	Sg. Rangkap	Gombak
01° 45' 05"	3° 18' 00"	Sg. Rumpit	Gombak
01° 26' 48"	3° 24' 00"	Sg. Selangor	Kuala Selangor
01° 26' 48"	3° 22' 06"	Sg. Selangor	Kuala Selangor
01° 47' 12"	3° 05' 48"	Sg. Serai	Hulu Langat
01° 25' 40"	3° 38' 15"	Sg. Tenggi	Hulu Selangor
01° 45' 36"	3° 14' 16"	Empangan Klang Gates	Kuala Lumpur
02° 45' 36"	4° 14' 16"	Empangan Klang Gates	Gombak
01° 47' 30"	3° 04' 42"	Empangan Sg. Langat (discharge into Sg. Langat)	Hulu Langat
01° 41' 10"	3° 17' 05"	Empangan Sg. Batu	Gombak
01° 28' 48"	3° 10' 00"	Empangan Tasik Subang	Kelang

(9) The State of Sarawak

Location of Water Intake

Name of River/Reservoir/Well

Water Supply Scheme

Longitude

(1)

Latitude

(2)

(3)

(East)

(North)

11° 52' 47"	1° 34' 52"	Sg. Batang Rajang	Sibu
11° 52' 27"	2° 15' 51"	Sg. Batang Rajang	Sibu
10° 16' 42"	1° 27' 20"	Sg. Sarawak Kiri	Batu Kitang, Kuching
10° 16' 44"	1° 27' 19"	Sg. Sarawak Kiri	Batu Kitang, Kuching
10° 16' 33"	1° 26' 58"	Sg. Sarawak Kiri	Batu Kitang, Kuching
10° 16' 31"	1° 26' 52"	Sg. Sarawak Kiri	Batu Kitang, Kuching
10° 12' 30"	1° 34' 52"	Empangan Matang	Matang, Kuching
10° 11' 14"	1° 36' 33"	Sg. Cina	Matang, Kuching
10° 12' 53"	1° 34' 56"	Sebutut Basin Intake	Matang, Kuching
12° 02' 05"	4° 18' 18"	Sg. Liku	Miri
14° 02' 05"	4° 18' 19"	Sg. Liku	Miri
14° 06' 05"	4° 18' 18"	Sg. Liku	Miri
14° 06' 33"	4° 18' 06"	Sg. Liku	Miri
14° 07' 40"	4° 11' 37"	Sg. Bakong	Buri
14° 58' 10"	4° 40' 01"	Sg. Berawan	Limbang
15° 02' 27"	4° 37' 07"	Sg. Pendaruan	Limbang
12° 25' 45"	2° 40' 30"	Sg. Krat	Bako
10° 08' 47"	1° 08' 47"	Sg. Sarawak Kanan	Kuching
09° 51' 11"	1° 40' 52"	Sg. Lundu	Kuching
10° 28' 50"	1° 38' 48"	Sg. Selabat	Kuching
10° 24' 04"	1° 17' 28"	Sg. Tapah	Siburan, Tapah and Beratok
09° 47' 44"	1° 47' 41"	Sg. Sebat Besar	Sematan
10° 01' 56"	1° 26' 52"	Sg. Siniawan	Kuching
11° 31' 10"	1° 08' 14"	Sg. Batang Undup	Sri Aman
11° 25' 00"	1° 06' 15"	Sg. Dor	Melugu
11° 37' 10"	1° 17' 08"	Sg. Dor	Skrang
11° 49' 51"	1° 00' 11"	Sg. Batang Ai	Lubuk Antu
11° 38' 13"	1° 07' 53"	Sg. Marup	Engkili
11° 23' 05"	1° 18' 22"	Sg. Seterap	Pantu
11° 10' 16"	1° 21' 05"	Sg. Stugok	Lingga
12° 50' 05"	1° 02' 26"	Sg. Lemanak	Lubuk Antu LDS
11° 32' 16"	1° 24' 31"	Sg. Stumbin	Stumbin/Bijjat
13° 06' 33"	3° 12' 32"	Sg. Sibiu	Bintulu

13° 06' 32"	3° 12' 27"	Sg. Sibiu	Bintulu
11° 02' 09"	1° 39' 38"	Sg. Meludam	Meludam
11° 07' 00"	1° 10' 00"	Sg. Batang Layar	Betong
11° 23' 57"	1° 39' 12"	Sg. Obar	Debak
11° 12' 19"	1° 38' 01"	Sg. Dumit	Beladin
11° 17' 15"	1° 38' 39"	Sg. Undai	Pusa
11° 19' 34"	1° 47' 15"	Sg. Sebelak	Betong
11° 41' 11"	2° 04' 54"	Sg. Bintangor	Bintangor
11° 30' 05"	2° 01' 35"	Sg. Bintangor	Sarikei
11° 40' 45"	1° 53' 35"	Sg. Julau	Pakan
11° 54' 15"	2° 01' 41"	Sg. Julau	Julau
11° 15' 42"	2° 00' 54"	Sg. Kerubong	Selalang
15° 23' 11"	4° 49' 34"	Sg. Gaya	Lawas
14° 55' 48"	4° 49' 34"	Sg. Menuang	Lubai Tengah
15° 19' 17"	4° 50' 32"	Sg. Batang Trusan	Trusan
15° 16' 15"	4° 47' 08"	Sg. Batang Trusan	Sundar
10° 33' 45"	1° 09' 45"	Sg. Sadong	Serian
10° 37' 08"	1° 08' 03"	Sg. Sinyaru	Triboh
10° 47' 61"	1° 22' 03"	Sg. Melanjok	Simunjan
10° 30' 21"	1° 05' 53"	Sg. Kayan	Terbakang
10° 40' 00"	1° 12' 23"	Sg. Batang Krang	Gedong
10° 37' 01"	1° 32' 31"	Sg. Nonok	Samarahan
10° 56' 06"	1° 31' 08"	Sg. Sebuyau	Sebuyau
10° 21' 18"	1° 01' 45"	Sg. Suhu	Tebedu
10° 45' 58"	1° 33' 36"	Sg. Sebangon	Sebangon
10° 48' 26"	1° 03' 04"	Sg. Krang	Balai Ringin
13° 16' 08"	3° 06' 43"	Sg. Sebangat	Sebauh
12° 51' 32"	2° 53' 13"	Sg. Sap Kiri	Tatau
13° 29' 49"	3° 15' 39"	Sg. Batang Kemena	Labang
13° 42' 49"	3° 09' 54"	Sg. Jelalang	Tubau
12° 47' 05"	3° 04' 08"	Ground Water	Bintulu
12° 47' 15"	3° 04' 08"	Sg. Anap	Bintulu
13° 56' 42"	3° 09' 52"	Sg. Koyan	Bakau
14° 19' 06"	4° 10' 40"	Sg. Batang Baram	Miri
14° 24' 43"	3° 45' 56"	Sg. Batang Baram	Long Lama
13° 55' 44"	4° 06' 26"	Sg. Kejapil	Bekenu
14° 06' 15"	3° 58' 02"	Sg. Bakong	Beluru
13° 47' 02"	3° 44' 00"	Sg. Niah	Niah, Subis
12° 11' 26"	2° 46' 08"	Sg. Kanowit	Kanowit
12° 35' 09"	3° 00' 47"	Sg. Mukah	Ulu Mukah
12° 23' 28"	2° 22' 28"	Sg. Ulu Mukah	Ng. Sekuau
12° 04' 19"	2° 52' 26"	Sg. Kanowit	Machan
12° 04' 46"	2° 17' 15"	Sg. Bawang Assan	Sibu
11° 58' 30"	2° 41' 15"	Sg. Ngemah	Ng. Jagau
11° 18' 21"	1° 53' 08"	Sg. Kabah	Ng. Tada
12° 09' 08"	2° 55' 18"	Sg. Ngemah	Ng. Ngungun
12° 56' 15"	2° 00' 51"	Sg. Batang Rejang	Kapit
13° 46' 02"	2° 42' 33"	Sg. Belaga	Belaga
13° 40' 57"	1° 49' 08"	Sg. Batang Baleh	Ng. Entawau
12° 32' 24"	2° 56' 17"	Sg. Suyung	Balingan
12° 09' 05"	2° 05' 57"	Sg. Batang Mukah	Mukah
11° 43' 10"	2° 50' 05"	Sg. Lasai Dagan	Igan
11° 50' 28"	2° 44' 11"	Sg. Nangar	Kut
12° 21' 36"	2° 05' 16"	Sg. Setuan Besar	Kuala Balingian
11° 30' 42"	2° 38' 14"	Sg. Mabun	Kg. Tian
11° 23' 32"	2° 25' 05"	Sg. Muara Serdang	Semup
11° 15' 12"	2° 24' 48"	Ground Water	Paloh
11° 35' 08"	2° 04' 49"	Sg. Batang Jemoreng	Matu
11° 27' 54"	2° 37' 57"	Sg. Daro	Daro
11° 27' 50"	2° 30' 00"	Ground Water	Saai

(10) Federal Territory of Labuan

Location of Water Intake

Name of River/Reservoir/Well

Water Supply Scheme

Longitude (1) Latitude (2) (3)

(East)

(North)

15° 11' 00"	5° 21' 00"	Sg. Kina Benuwa	Empangan Air Bukit Kuda Empangan Air Sungai Pagar Empangan Air Kerupang
15° 10' 00"	5° 19' 00"	Sg. Kina Benuwa	
15° 13' 00"	5° 19' 00"	Sg. Kina Benuwa	
15° 12' 59"	5° 18' 13"	Sg. Kina Benuwa	
15° 14' 59"	5° 17' 36"	Telaga Tiub Borehole No. A19	
15° 15' 01"	5° 17' 27"	Telaga Tiub Borehole No. M	
15° 15' 02"	5° 17' 19"	Telaga Tiub Borehole No. B	
15° 15' 17"	5° 17' 21"	Telaga Tiub Borehole No. A 21	
15° 15' 26"	5° 17' 24"	Telaga Tiub Borehole No. M 11	
15° 15' 34"	5° 17' 38"	Telaga Tiub Borehole No. B 23	
15° 15' 20"	5° 17' 42"	Telaga Tiub Borehole No. A 12	
15° 15' 16"	5° 10' 05"	Telaga Tiub Borehole No. W 5	
15° 15' 11"	5° 17' 53"	Telaga Tiub Borehole No. A 20	
15° 15' 11"	5° 10' 16"	Telaga Tiub Borehole No. B 24	
15° 15' 01"	5° 10' 01"	Telaga Tiub Borehole No. 10	
15° 14' 59"	5° 10' 30"	Telaga Tiub Borehole No. W 4	
15° 14' 48"	5° 18' 45"	Telaga Tiub Borehole No. W 3	
15° 14' 26"	5° 19' 51"	Telaga Tiub Borehole No. B 27	
15° 14' 26"	5° 19' 52"	Telaga Tiub Borehole No. A 14	
15° 14' 13"	5° 19' 36"	Telaga Tiub Borehole No. A 17	
15° 14' 29"	5° 19' 18"	Telaga Tiub Borehole No. A 13	
15° 14' 38"	5° 19' 28"	Telaga Tiub Borehole No. B 26	
15° 14' 33"	5° 19' 05"	Telaga Tiub Borehole No. W 1	
15° 14' 39"	5° 19' 12"	Telaga Tiub Borehole No. B 25	
15° 14' 40"	5° 18' 56"	Telaga Tiub Borehole No. W 2	
15° 14' 44"	5° 18' 28"	Telaga Tiub Borehole No. A 8	
15° 14' 28"	5° 18' 28"	Telaga Tiub Borehole No. A 15	
15° 15' 09"	5° 17' 32"	Telaga Tiub Borehole No. B 22	
15° 14' 46"	5° 18' 00"	Telaga Tiub Borehole No. A 18	

(11) The State of Sabah

Location of Water Intake

Name of River/Reservoir/Well

Water Supply Scheme

Longitude (1) Latitude (2) (3)

(East)

(North)

16° 09' 24.2"	5° 55' 21.4"	Sg. Moyog	Penampang
16° 11' 16.2"	5° 54' 47.6"	Empangan Babagon	Penampang
16° 06' 33.6"	5° 54' 52.4"	Sg. Moyog	Penampang
16° 00' 00.1"	5° 41' 06.6"	Sg. Papar	Papar
15° 56' 51.9"	5° 42' 52.9"	Sg. Papar	Papar
15° 56' 52.2"	5° 42' 50.2"	Sg. Papar	Papar
16° 02' 12.5"	5° 42' 31.4"	Sg. Papar	Papar
16° 14' 34.3"	6° 08' 49.9"	Sg. Tuaran	Tamparuli
16° 16' 09.9"	6° 07' 54.9"	Sg. Tuaran	Tamparuli
16° 14' 14.3"	6° 09' 12.2"	Sg. Tuaran	Tamparuli
16° 13' 56.6"	6° 08' 24.9"	Sg. Tuaran	Tamparuli
16° 17' 55.7"	6° 11' 20.4"	Sg. Damit	Tuaran
16° 13' 43.2"	6° 10' 26.1"	Sg. Tuaran	Tuaran
18° 06' 49.7"	5° 51' 14.2"	Boreholes	Sandakan
18° 06' 47.9"	5° 51' 22.0"	Boreholes	Sandakan
18° 06' 29.0"	5° 51' 21.4"	Boreholes	Sandakan

18° 06' 12.9"	5° 51' 27.6"	Boreholes	Sandakan
18° 05' 51.5"	5° 51' 21.6"	Boreholes	Sandakan
18° 04' 41.3"	5° 51' 17.0"	Boreholes	Sandakan
18° 03' 45.1"	5° 49' 58.8"	Boreholes	Sandakan
18° 03' 49.1"	5° 50' 04.1"	Boreholes	Sandakan
18° 04' 07.6"	5° 50' 36.7"	Boreholes	Sandakan
18° 04' 14.1"	5° 50' 45.5"	Pond	Sandakan
18° 04' 19.8"	5° 50' 57.5"	Boreholes	Sandakan
18° 04' 31.8"	5° 51' 14.1"	Boreholes	Sandakan
18° 03' 03.6"	5° 50' 36.5"	Boreholes	Sandakan
18° 03' 01.2"	5° 50' 24.9"	Pond	Sandakan
18° 02' 41.5"	5° 50' 13.6"	Boreholes	Sandakan
18° 02' 46.4"	5° 50' 00.0"	Boreholes	Sandakan
18° 02' 50.8"	5° 49' 57.9"	Pond	Sandakan
18° 02' 26.5"	5° 49' 34.2"	Boreholes	Sandakan
18° 02' 24.3"	5° 49' 20.8"	Boreholes	Sandakan
18° 02' 11.6"	5° 49' 59.1"	Boreholes	Sandakan
18° 01' 44.8"	5° 50' 18.7"	Boreholes	Sandakan
18° 01' 56.1"	5° 49' 39.3"	Boreholes	Sandakan
18° 01' 35.2"	5° 49' 30.1"	Boreholes	Sandakan
18° 01' 22.4"	5° 49' 25.5"	Boreholes	Sandakan
18° 01' 19.2"	5° 48' 53.9"	Boreholes	Sandakan
18° 04' 42.1"	5° 51' 16.0"	Boreholes	Sandakan
17° 50' 11.3"	5° 29' 07.2"	Sg. Kinabatangan	Kinabatangan
17° 32' 00"	5° 53' 00"	Sg. Muanad	Beluran
17° 52' 48.3"	4° 16' 47.0"	Sg. Tawau	Tawau
17° 53' 52.2"	4° 21' 00.4"	Sg. Tawau	Tawau
17° 46' 31.7"	4° 27' 10.0"	Sg. Merotai	Tawau
18° 10' 09.6"	5° 00' 11.4"	Empangan Sepagaya	Lahad Datu
18° 13' 28.0"	5° 06' 01.2"	Sg. Segama	Lahad Datu
18° 49' 50.8"	5° 04' 24.5"	Sg. Tungku	Lahad Datu
18° 14' 34.7"	4° 28' 52.3"	Sg. Kalumpang	Semporna
18° 11' 04.4"	4° 35' 10.9"	Sg. Kalumpang	Kunak
16° 08' 48.8"	5° 22' 39.9"	Sg. Liawan	Keningau
16° 10' 01.6"	5° 26' 18.0"	Sg. Bayayo	Keningau
16° 20' 04.4"	5° 41' 49.6"	Sg. Tondulu	Tambunan
15° 56' 06.0"	5° 06' 58.7"	Sg. Padas	Tenom
15° 55' 01.8"	4° 53' 38.8"	Sg. Padas	Tenom
16° 25' 59.4"	5° 02' 01.5"	Sg. Panawan	Pensiangan
16° 18' 12.6"	5° 08' 38.2"	Sg. Sook	Sook
15° 46' 10.9"	5° 20' 36.2"	Sg. Padas	Beaufort
15° 34' 37.5"	5° 06' 31.0"	Sg. Lukutan	Sipitang
15° 48' 04.0"	5° 28' 19.7"	Sg. Membakut	Membakut
16° 48' 04.4"	6° 56' 20.5"	Empangan Pinangsoo	Kudat
16° 44' 56.6"	6° 28' 01.1"	Sg. Bandau	Kota Marudu
16° 44' 54.1"	6° 27' 57.1"	Sg. Pengapunya	Kota Marudu
17° 01' 50.1"	6° 40' 45.1"	Sg. Bengkoka	Pitas
16° 26' 05.4"	6° 21' 31.8"	Sg. Tempasuk	Kota Belud
16° 37' 43.4"	5° 57' 16.1"	Sg. Liwagu	Ranau
17° 06' 00"	5° 37' 00"	Sg. Maliau	Telupid
16° 59' 00"	5° 16' 00"	Sg. Milian	Tongod
16° 50' 00"	5° 12' 00"	Sg. Melikop	Tongod

(12) The State of Terengganu

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude (East)	(1)	(2)	(3)
	Latitude (North)		

03° 21' 20"	4° 40' 40"	Loji Air Bukit Bauk	Dungun
03° 20' 18"	4° 47' 40"	Loji Air Serdang	Dungun
03° 10' 20"	4° 49' 10"	Loji Air Tepus	Dungun
03° 19' 10"	4° 13' 00"	Loji Air Bukit Sah	Kemaman
03° 11' 50"	4° 06' 35"	Loji Air Cherul	Kemaman
03° 03' 50"	5° 15' 55"	Loji Air Kepong	Kuala Terengganu
03° 05' 40"	5° 17' 37"	Loji Air Bukit Losong	Kuala Terengganu
03° 00' 35"	5° 04' 30"	Loji Air Kuala Berang	Hulu Terengganu
03° 02' 45"	4° 55' 45"	Loji Air Gunung	Hulu Terengganu
02° 58' 05"	5° 09' 10"	Loji Air Telemong	Hulu Terengganu
03° 12' 15"	4° 50' 38"	Loji Air Jerangau	Hulu Terengganu
02° 30' 00"	5° 38' 05"	Loji Air Bukit Bunga (Old and New)	Besut
02° 45' 00"	5° 05' 00"	Loji Air Pulau Perhentian	Besut
02° 45' 00"	5° 31' 50"	Sg. Setiu	Setiu
02° 49' 42"	5° 26' 18"	Sg. Chalok	Setiu
02° 51' 42"	5° 20' 12"	Sg. Nerus	Setiu

(13) The State of Negeri Sembilan

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)
(East)	(North)		
02° 20' 32"	2° 34' 06"	Empangan Gemencheh	Gemencheh
02° 34' 18"	2° 38' 35"	Sg. Muar	Gemas Baru
02° 32' 21"	2° 38' 23"	Sg. Muar	Pasir Besar
02° 21' 10"	2° 40' 14"	Sg. Dangi	Dangi Baru
02° 23' 49"	2° 36' 16"	Telaga Tiub Bukit Rokan	Bukit Rokan
02° 03' 17"	2° 39' 40"	Sg. Beringin	Pedas Baru
02° 34' 18"	2° 38' 59"	Empangan Batu Hampar	Pedas Lama
02° 22' 01"	2° 43' 00"	Sg. Jelai	Felda Kepis
02° 14' 79"	2° 44' 02"	Sg. Muar	Bukit Pilah
02° 14' 22"	2° 44' 25"	Sg. Muar	Kuala Pilah
02° 04' 3"	2° 42' 44"	Sg. Batang Terachi	Ulu Bendul
02° 08' 51.7"	2° 47' 10"	Empangan Talang/Sg. Muar	Air Talang
02° 24.090'	2° 44' 24"	Sg. Muar	Kuala Jelai
02° 22' 0.05"	2° 48' 59"	Sg. Muar	Bahau Baru
02° 22' 24.8"	2° 47' 59"	Sg. Muar	Jempol
02° (6.4"	2° 48' 14"	Hutan Simpan Berembun	Pantai
01° 55' 04.5"	2° 56' 06"	Sg. Broga	Broga
01° 59' 43.4"	2° 45' 31"	Sg. Batang Benar	Terip
01° 00' 14.3"	2° 45' 33"	Empangan Sg. Terip	Loji Rawatan Air Sg. Terip
02° 14.784'	2° 44' 25"	Sg. Mahang	Mahang
01° 50.000'	2° 48' 14"	Sg. Ngoi-Ngoi	Ngoi-Ngoi
02° 56.927	2° 36' 12"	Sg. Linggi	Linggi
02° 03' 59"	02° 56' 13.1"	Sg. Kemin	Kuala Klawang
02° 13' 04.7"	3° 04' 31"	Sg. Triang	Lakai
02° 06' 40.0"	3° 04' 02"	Sg. Kenaboi	Felda Titi
02° 13' 36"	02° 57' 54"	Sg. Pertang	Durian Tawar

(14) The State of Melaka

Location of Water Intake		Name of River/Reservoir/Well	Water Supply Scheme
Longitude	(1) Latitude	(2)	(3)

(East)	(North)		
02° 15' 50"	2° 17' 55"	Sg. Melaka	Jasin, Melaka Tengah and Alor Gajah
02° 18' 40"	2° 20' 00"	Empangan Durian Tunggal	Melaka Tengah, Alor Gajah and Jasin
02° 15' 50"	2° 17' 55"	Sg. Melaka	Melaka Tengah, Alor Gajah and Jasin
02° 15' 25"	2° 24' 35"	Sg. Batang Melaka	Alor Gajah, Masjid Tanah and Lubuk Cina
02° 29' 12"	2° 16' 00"	Sg. Kesang	Jasin
02° 28' 15"	2° 11' 50"	Sg. Kcsang	Jasin and Merlimau
02° 22' 15"	2° 26' 35"	Empangan Jus	Alor Gajah, Masjid Tanah and Lubuk Cina
02° 35' 16"	2° 24' 23"	Empangan Asahan	Asahan, Simpang, Bekoh, Nyalas and Bukit Senggeh
02° 45' 02"	2° 12' 10"	Sg. Muar	Melaka Tengah, Alor Gajah and Jasin

FOURTH SCHEDULE

(Regulation 9)

METHODS OF ANALYSIS OF SEWAGE

1. The 21st edition of "Standard Methods for the Examination of Water and Wastewater" published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation of the United States of America; or
2. "Code of Federal Regulations, Chapter 40, Subchapter D, part 136" published by the Office of the Federal Register, National Archives and Records Administration, United States of America.

FIFTH SCHEDULE

(Regulation 10)

MONTHLY SEWAGE DISCHARGE MONITORING REPORT

SECTION I

IDENTIFICATION

1. (i) Name and address of premises:

.....
.....

Telephone number: Fax number:

(ii) File reference number of Department of Environment (if applicable):

.....

2. (i) Name and address of accredited analytical laboratory:

.....
 Telephone number: Fax number:

(ii) Name of analyst:

3. (i) Reporting year :

(ii) Reporting month:

SECTION II

SEWAGE INFORMATION*

4. (i) Flowrate

Maximum:..... m3/d, Minimum: m3/d

(ii) Population equivalent (P.E.):

(iii) Quality of sewage discharged

Quality of sewage discharged (unit in mg/L) for new sewage treatment systems

Parameter	First Week	Second Week	Third Week	Fourth Week
	Date:.....	Date:.....	Date:.....	Date:.....
BOD at 20°C				
COD				
Suspended Solids				
Oil and Grease				
Ammoniacal Nitrogen (enclosed water body)				
Ammoniacal Nitrogen (river)				
Nitrate - Nitrogen (river)				
Nitrate - Nitrogen (enclosed water body)				
Phosphorous (enclosed water body)				

Quality of sewage discharged (unit in mg/L) for existing sewage treatment systems

Parameter	First Week	Second Week	Third Week	Fourth Week
-----------	------------	-------------	------------	-------------

	Date:.....	Date:.....	Date:.....	Date:.....
BOD at 20°C				
COD				
Suspended Solids				
Oil and Grease				

NOTE:*

(a) The flowrate and concentration of sewage at the point of discharge as determined in accordance with the sampling procedure and method of analysis as specified in regulation 9.

(b) Sewage treatment systems with less than 5000 population equivalent (P.E.) shall conduct sampling once a month only.

SECTION III

DECLARATION

I,hereby declare that all information given in this form is to the best of my knowledge and belief true and correct.

Signature of responsible person:

.....

Name:

Designation:

Date:

(Affix official seal or stamp of company)

SIXTH SCHEDULE

(Regulation 11)

SPECIFICATIONS OF POINT OF DISCHARGE OF SEWAGE

1. The discharge point is located within the boundary of the sewage treatment system, immediately after its the final unit operation or unit process.
2. The location of the discharge point is easily accessible and does not pose any safety hazards to personnel performing site inspection or sewage sampling.

3. The leachate is discharged through a pipe, conduit or channel to facilitate sewage sampling.
4. The discharge point is physically identified by installing a metal identification sign which reads "Final Discharge Point".
5. The discharge point and its surrounding is properly maintained to be free from any obstruction that may pose difficulty or hazards during site inspection or sewage sampling.

SEVENTH SCHEDULE

(Regulation 24)

METHOD OF COMPUTING SEWAGE-RELATED LICENCE FEE

1. For existing sewage treatment systems, the sewage-related licence fee is computed as follows:

Parameter	Fee per kg of contaminant discharged into inland waters as specified in subparagraphs 5(1)(a), (c) or (e)	Fee per kg of contaminant discharged onto any soil or into other inland water
i) at BOD 20°C	RM0.50	RM0.05
ii) Oil and Grease	RM2500.00	RM250.00

2. For new sewage treatment system, the sewage-related licence fee is computed as follows:

Parameter	Fee per kg of contaminant discharged into inland waters specified in subparagraphs 5(1)(a), (c) or (e)	Fee per kg of contaminant discharged onto any soil or into other inland waters
i) at BOD 20°C	RM0.50	RM0.05
ii) Oil and Grease	RM2500.00	RM250.00
iii) Ammoniacal Nitrogen	RM500.00	RM50.00

