



KEMENTERIAN
ALAM SEKITAR DAN AIR
Ministry of Environment and Water



BUKU KOMPENDIUM JABATAN ALAM SEKITAR

KELUARAN 2020

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Assalamualaikum dan Salam Sejahtera,

Alhamdulillah syukur dipanjatkan kepada Allah s.w.t atas kejayaan Jabatan Alam Sekitar (JAS) dalam menerbitkan Buku Kompendium JAS Keluaran 2020.



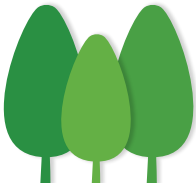
Buku Kompendium JAS ini adalah himpunan segala maklumat mengenai aktiviti JAS yang telah dijalankan sehingga berakhir Disember 2019. Maklumat

seperti kualiti udara, kualiti air sungai, kualiti air marin dan pulau-pulau, kualiti air tanah dan pengurusan bahan berbahaya boleh didapati dalam buku Kompendium ini bagi tujuan kajian, rujukan atau pembelajaran.

Penerbitan Kompendium merupakan salah satu inisiatif penting JAS bagi perkongsian maklumat dan pencapaian dalam pengurusan alam sekitar di Malaysia. Adalah diharapkan agar Kompendium ini dapat dimanfaatkan dan digunakan dengan sebaik mungkin oleh semua pihak.

Sekian, terima kasih.

NORLIN BT JAAFAR
Ketua Pengarah Alam Sekitar



“ALAM SEKITAR, TANGGUNGJAWAB BERSAMA”

JABATAN ALAM SEKITAR : PENGENALAN

DEPARTMENT OF ENVIRONMENT : INTRODUCTION

Pengurusan alam sekitar di Malaysia telah menjadi lebih sistematik apabila Akta Kualiti Alam Sekeliling (AKAS) 1974 diwartakan pada 14 Mac 1974. Turutan daripada itu, sebuah agensi penguatkuasa, Bahagian Alam Sekitar (mula dikenali sebagai Jabatan Alam Sekitar pada tahun 1983) telah ditubuhkan pada tahun 1975. Kini, Jabatan Alam Sekitar (JAS) mempunyai 1409 tenaga kerja yang ditempatkan di Ibu Pejabat, 15 buah Pejabat Negeri dan 29 buah Pejabat Cawangan di seluruh negara. Fungsi utama JAS ialah untuk mencegah, menghapus, mengawal dan membaiki alam sekeliling melalui penguatkuasaan AKAS 1974 dan peraturan-peraturan di bawahnya.

Environmental management in Malaysia became more systematic with the gazettelement of the Environmental Quality Act (EQA) 1974 on 14 March 1974. From thereon, an enforcement agency named Environment Division (known as Department of Environment (DOE) in 1983) was institutionalized in 1975. At present, the Department is empowered with 1409 staffs, extending its operation through Headquarters, 15 States Offices dan 29 Branch Offices. The Department's main role is to prevent, control and abate pollution through the enforcement of the EQA 1974 and its 34 subsidiary legislation made there under.



VISI / VISION

Pemuliharaan Alam Sekitar Untuk Kesejahteraan Rakyat
Environmental Conservation For The Well-being Of The People

MISI / MISSION

Memastikan Pembangunan Lestari Di dalam Proses Memajukan Negara

To ensure Sustainable Development In The Process Of Nation Building

STRATEGI / STRATEGIES

- Pencegahan Dan Kawalan Pencemaran
Pollution Prevention And Control
- Integrasi Faktor Alam Sekitar Dalam Perancangan Pembangunan
Integration Of Environmental Factors In Development Planning
- Promosi Pendidikan Dan Kesedaran Alam Sekitar
Promotion of Environmental Education And Awareness
- Kerjasama Dan Hubungan Dua Hala, Serantau Dan Antarabangsa
Bilateral, Regional And International Cooperation
- Penyertaan Awam Dalam Pengurusan Alam Sekitar
Public Participant In Environmental Management
- Kerjasama Antara Agensi Dan Persekutuan Negeri
Inter-Agency And Federal State Cooperation
- Pembangunan Lestari Melalui Pemuliharaan Sumber Semulajadi
Sustainable Development Through Conservation of Resources



SENARAI PERATURAN-PERATURAN, PERINTAH & KAEDAH DI BAWAH AKTA KUALITI ALAM SEKELILING 1974.

LIST OF REGULATIONS, ORDERS & RULES UNDER THE ENVIRONMENT QUALITY ACT 1974

Kawalan Pencemaran Udara Air Pollution Control

- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Kepekatan Plumbum Dalam Gasolin Motor) 1985
- *Environmental Quality (Control Of Lead Concentration In Motor Gasoline) Regulations 1985*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Bunyi Bising Kenderaan Motor) 1987
- *Environmental Quality (Motor Vehicle Noise) Regulations 1987*
- Perintah Kualiti Alam Sekeliling (Larangan ke Atas Penggunaan Klorofluorokarbon dan lain-Lain Gas Sebagai Propelan dan Agen Pengembang) 1993
- *Environmental Quality (Prohibition On The Use Of Chlorofluorocarbons And Other Gases As Propellants And Blowing Agents) Order 1993*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Pelepasan Daripada Enjin Diesel) 1996
- *Environmental Quality (Control Of Emission From Diesel Engines) Regulations 1996*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Pelepasan Daripada Enjin Petrol) 1996
- *Environmental Quality (Control Of Emission From Petrol Engines) Regulations 1996*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Pengurusan Refrigeran) 1999
- *Environmental Quality (Refrigerant Management) Regulations 1999*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Pengurusan Halon) 1999
- *Environmental Quality (Halon Management) Regulations 1999*
- Kaedah-Kaedah Kualiti Alam Sekeliling (Mengkompaun Kesalahan) (Pembakaran Terbuka) 2000
- *Environmental Quality (Compounding Of Offences) (Open Burning) Rules 2000*
- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa) (Penyiasatan Pembakaran Terbuka) 2000
- *Environmental Quality (Delegation Of Powers) (Investigation Of Open Burning) Order 2000*
- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa) (Pengurusan Halon) 2000
- *Environmental Quality (Delegation Of Powers) (Halon Management) Order 2000*

SENARAI PERATURAN-PERATURAN, PERINTAH & KAEDAH DI BAWAH AKTA KUALITI ALAM SEKELILING 1974.

LIST OF REGULATIONS, ORDERS & RULES UNDER THE ENVIRONMENT QUALITY ACT 1974

Kawalan Pencemaran Udara

Air Pollution Control

- Perintah Kualiti Alam Sekeliling (Aktiviti Yang Diisytiharkan) (Pembakaran Terbuka) 2003
Environmental Quality (Declared Activities) (Open Burning) Order 2003
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Pelepasan Daripada Motorsikal) 2003
Environmental Quality (Control Of Emission From Motorcycles) Regulations 2003
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Kandungan Petrol Dan Diesel) 2007
Environmental Quality (Control Of Petrol And Diesel Properties) Regulations 2007
- Peraturan-Peraturan Kualiti Alam Sekeliling (Udara Bersih) 2014
Environmental Quality (Clean Air) Regulations 2014

Kawalan Pencemaran Air

Water Pollution Control

- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa Kawalan Pencemaran Marin) 1993
Environmental Quality (Delegation Of Powers On Marine Pollution Control) Order 1993
- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa Kawalan Pencemaran Marin) 1994
Environmental Quality (Delegation Of Powers On Marine Pollution Control) Order 1994
- Perintah Kualiti Alam Sekeliling (Larangan Terhadap Penggunaan Bahan Terkawal Di Dalam Sabun, Bahan Cuci Sintetik Dan Agen Pencuci Lain) 1995
Environmental Quality (Prohibition On The Use Of Controlled Substance In Soap, Synthetic Detergent And Other Cleaning Agents) Order 1995
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kumbahan) 2009
Environmental Quality (Sewage) Regulations 2009
- Peraturan-Peraturan Kualiti Alam Sekeliling (Kawalan Pencemaran daripada Stesen Pemandahan Sisa Pepejal Dan Kambus Tanah) 2009
Environmental Quality (Control Of Pollution From Solid Waste Transfer Station And Landfill) Regulations 2009
- Peraturan-Peraturan Kualiti Alam Sekeliling (Efluen Perindustrian) 2009
Environmental Quality (Industrial Effluent) Regulations 2009

SENARAI PERATURAN-PERATURAN, PERINTAH & KAEDAH DI BAWAH AKTA KUALITI ALAM SEKELILING 1974.

LIST OF REGULATIONS, ORDERS & RULES UNDER THE ENVIRONMENT QUALITY ACT 1974

Kawalan Pencemaran Air *Water Pollution Control*

- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa) (Penyiasatan ke atas Kawalan Hakisan dan Kelodakan) 2012
- *Environmental Quality (Delegation Of Powers) (Investigation On Erosion And Sediment Control) Order 2012*

Pengurusan Buangan Terjadual *Scheduled Waste Management*

- Peraturan-Peraturan Kualiti Alam Sekeliling (Pelesenan) 1977 /
Environmental Quality (Licensing)Regulations 1977
- Perintah Kualiti Alam Sekeliling (Pembawa Yang Ditetapkan) (BuanganTerjadual) 2005
Environmental Quality (Prescribed Conveyance) (Scheduled Wastes) Order 2005
- Peraturan-Peraturan Kualiti Alam Sekeliling (BuanganTerjadual) 2005
Environmental Quality (Scheduled Wastes) Regulations 2005
- Perintah Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Kemudahan Pengolahan Dan Pelupusan Buangan Terjadual) 1989
Environmental Quality (Prescribed Premises) (Scheduled Wastes Treatment And Disposal Facilities) Order 1989
- Peraturan-Peraturan Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Kemudahan Pengolahan Dan Pelupusan Buangan Terjadual) 1989
Environmental Quality (Prescribed Premises) (Scheduled Wastes Treatment And Disposal Facilities) Regulation 1989
- Perintah Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Minyak Kelapa Sawit Mentah) 1977
Environmental Quality (Prescribed Premises) (Crude Palm Oil) Order 1977
- Peraturan-Peraturan Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Minyak Kelapa Sawit Mentah) 1977
Environmental Quality (Prescribed Premises) (Crude Palm Oil) Regulations 1977
- Perintah Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Getah Asli Mentah) 1978
Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Order 1978

SENARAI PERATURAN-PERATURAN, PERINTAH & KAEDAH DI BAWAH AKTA KUALITI ALAM SEKELILING 1974.

LIST OF REGULATIONS, ORDERS & RULES UNDER THE ENVIRONMENT QUALITY ACT 1974

Pengurusan Buangan Terjadual *Scheduled Waste Management*

- Peraturan-Peraturan Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Getah Asli Mentah) 1978
- *Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Regulations 1978*

Lain-lain *Others*

- Perintah Kualiti Alam Sekeliling (Aktiviti Yang Ditetapkan) (Penilaian Kesan Kepada Alam Sekeliling) 2015
- *Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015*
- Perintah Kualiti Alam Sekeliling (Aktiviti Yang Ditetapkan) (Penilaian Kesan Kepada Alam Sekeliling) 2015
- *Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015*
- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa) 2005
- *Environmental Quality (Delegation Of Powers) Order 2005*
- Kaedah-Kaedah Kualiti Alam Sekeliling (Mengkompaun Kesalahan-Kesalahan) 1978
- *Environmental Quality (Compounding Of Offences) Rules 1978*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Lembaga Rayuan) 2003
- *Environmental Quality (Appeal Board) Regulations 2003*

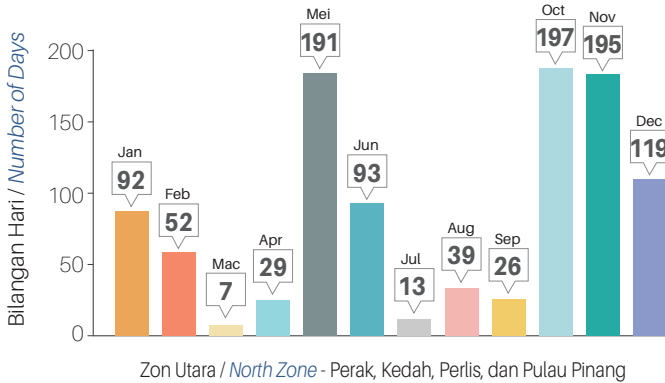
1 (a): Indeks Pencemar Udara (IPU) /
1 (a): Air Pollutant Index (API)

IPU / API	STATUS KUALITI UDARA / AIR QUALITY STATUS
0 - 50	Baik / Good
51 - 100	Sederhana / Moderate
101 - 200	Tidak Sihat / Unhealthy
201 - 300	Sangat Tidak Sihat / Very Unhealthy
> 300	Berbahaya / Hazardous

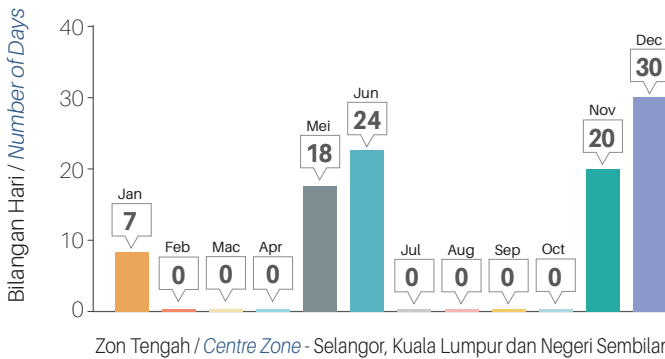
1 (b) : Standard Kualiti Udara Ambien Malaysia /
1 (b) : Malaysian Ambient Air Quality Standard

PARAMETER / PARAMETER	MASA PURATA / AVERAGING TIME	UNIT / UNIT	GARIS PANDUAN SEDIA ADA/ EXISTING GUIDELINES	STANDARD KUALITI UDARA AMBIEN MALAYSIA/ MALYSIAN AMBIENT AIR QUALITY STANDARD		
				IT-1 (2015)	IT-2 (2018)	STANDARD (2020)
PM ₁₀	1 Tahun/Year	µg/m ³	50	50	45	40
	24 Jam/Hour	µg/m ³	150	150	120	100
PM _{2.5}	1 Tahun/Year	µg/m ³	-	35	25	15
	24 Jam/Hour	µg/m ³	-	75	50	35
SO ₂	1 Jam/Hour	µg/m ³	350	350	300	250
		ppm	0.135	0.135	0.115	0.095
	24 Jam/Hour	µg/m ³	105	105	90	80
		ppm	0.040	0.040	0.035	0.030
CO	1 Jam/Hour	mg/m ³	35	35	35	30
		ppm	30.6	30.6	30.6	26.2
	8 Jam/Hour	mg/m ³	10	10	10	10
		ppm	8.75	8.75	8.75	8.75
NO ₂	1 Jam/Hour	µg/m ³	320	320	300	280
		ppm	0.170	0.170	0.160	0.150
	24 Jam/Hour	µg/m ³	75	75	75	70
		ppm	0.040	0.040	0.040	0.037
O ₃	1 Jam/Hour	µg/m ³	200	200	200	180
		ppm	0.100	0.100	0.100	0.090
	8 Jam/Hour	µg/m ³	120	120	120	100
		ppm	0.060	0.060	0.060	0.050

1 (c) : Bilangan Hari Bersih Zon Utara (Januari – Disember 2019)
1 (c) : Number of Clean Day in North Zone (January – December 2019)



1 (d) : Bilangan Hari Bersih Zon Tengah (Januari – Disember 2019)
1 (d) : Number of Clean Day in Central Zone (January – December 2019)

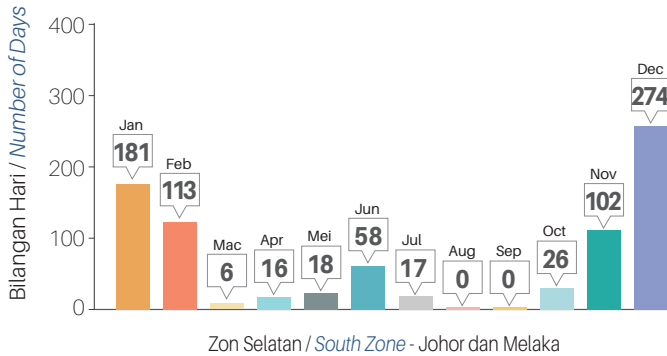


Nota/Note:

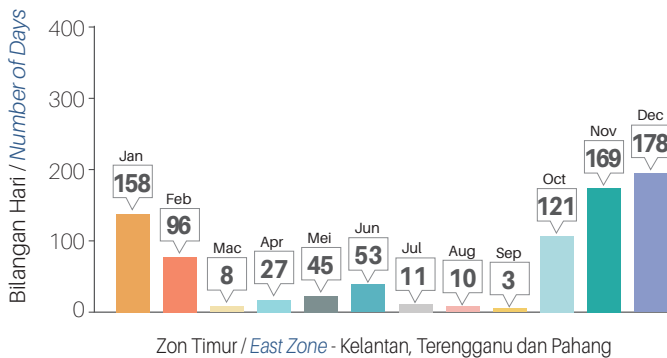
Hari Bersih (Index Pencemaran Udara : 0-50)

Clean Days (Air Pollutant Index : 0-50)

1 (e) : Bilangan Hari Bersih Zon Selatan (Januari- Disember 2019)
1 (e) : Number of Clean Day in South Zone (January - December 2019)



1 (f) : Bilangan hari Bersih Zon Timur (Januari- Disember 2019)
1 (f) : Number of Clean Day in East Zone (January - December 2019)

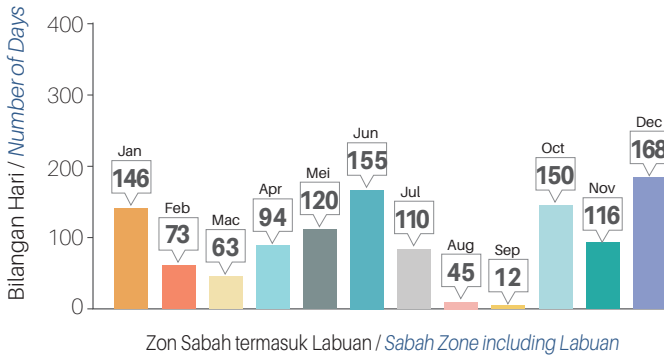


Nota/Note:

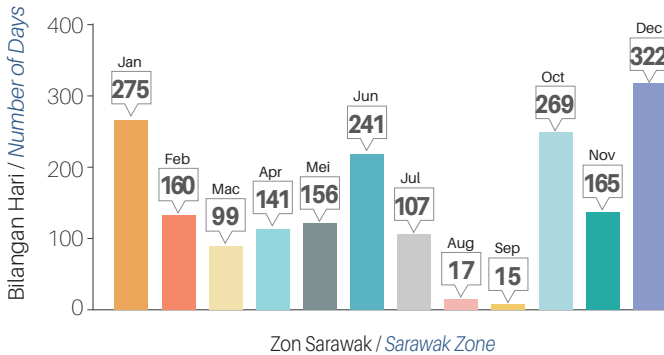
Hari Bersih (Index Pencemaran Udara : 0-50)

Clean Days (Air Pollutant Index : 0-50)

1 (g) : Bilangan Hari Bersih Zon Sabah Termasuk Labuan (Januari-Disember 2019)
1 (g) : Number of Clean Day in Sabah Zone including Labuan (January - December 2019)



1 (h) : Bilangan Hari Bersih Zon Sarawak Termasuk Labuan (Januari-Disember 2019)
1 (h) : Number of Clean Day in Sarawak Zone including Labuan (January - December 2019)



Nota/Note:

Hari Bersih (Index Pencemaran Udara : 0-50)

Clean Days (Air Pollutant Index : 0-50)

1(i) : Jumlah Hari Bersih mengikut Zon (Januari - Disember 2019)
1 (i) : Number of Clean Days by Zone (January - December 2019)

KAWASAN / AREA	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Zon Utara / North Zone Perak, Kedah, Perlis dan Pulau Pinang	92	52	7	29	191	93	13	39	26	197	195	119
Zon Tengah / Centre Zone Selangor, Kuala Lumpur Dan Negeri Sembilan	7	0	0	0	18	24	0	0	0	0	20	30
Zon Selatan / South Zone Johor dan Melaka	181	113	6	16	18	58	17	0	0	26	102	274
Zon Timur / East Zone Kelantan, Terengganu dan Pahang	158	96	8	27	45	53	11	10	3	121	169	178
Zon Sabah / Sabah Zone include Labuan	146	73	63	94	120	155	110	45	12	150	116	168
Zon Sarawak / Sarawak Zone	275	160	99	141	156	241	107	17	15	269	165	322

Nota/Note:

Hari Bersih (Index Pencemaran Udara : 0-50)

Clean Days (Air Pollutant Index: 0-50)

PROGRAM PENGAWASAN KUALITI ALAM SEKITAR
ENVIRONMENTAL QUALITY MONITORING PROGRAM (EQMP)

65
Continuous
Air Quality
Monitoring
Station
(CAQM)



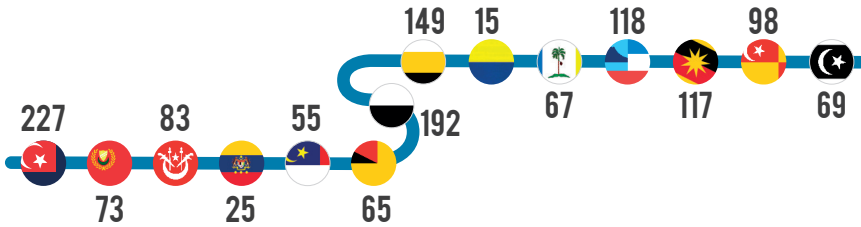
3
Mobile Continuous
Air Quality
Monitoring Station
(MCAQM)



14
Manual
Air Quality
Monitoring
System (MAQM)



30

Continuous
River Water Quality
Monitoring Station
(CRWQM)1353 Manual River Water Quality
Monitoring Station (MRWQM)

Pengawasan Kualiti Air Sungai 2019

672

Sungai

144

Lembangan

17

Parameter
Stesen Auto

30

Parameter
Stesen ManualSungai
BERSIH

408 | 61%

Sungai
Tercemar

59 | 9%

Sungai
Sederhana
Tercemar

205 | 30%

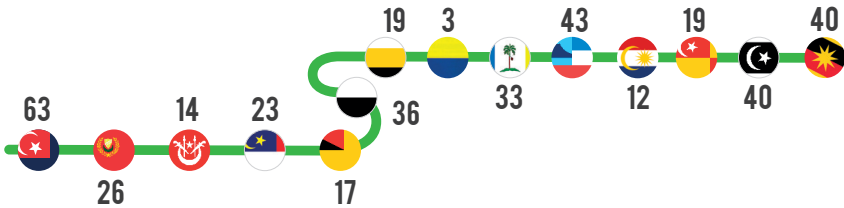


10

Continuous Marine Water Quality Monitoring Station (CMWQM)

Johor 2	Melaka 1	Sarawak 1
Kedah 1	Perak 1	Sabah 1
Kelantan 1	N.Sembilan 1	Labuan 1

388 Manual Marine Water Quality Monitoring Station (MMWQM)



Pengawasan Kualiti Air Marin 2019

368 Stesen Dipantau
(Stesen pengawasan kualiti air marin bagi pantai, muara sungai dan pulau)

• 74 Stesen TERBAIK

• 113 Stesen BAIK

• 166 Stesen SEDERHANA

• 15 Stesen TERCEMAR

Taburan Program Pengawasan Kualiti Alam Sekitar Mengikut Negeri di Malaysia
EQMP Based on States in Malaysia

PERLIS

CAQM 1 MRWQM 15
MCAQM 0 CMWQM 0
MAQM 0 MMWQM 3
CRWQM 0

KEDAH

CAQM 4 MRWQM 73
MCAQM 0 CMWQM 1
MAQM 1 MMWQM 26
CRWQM 3

KELANTAN

CAQM 2 MRWQM 83
MCAQM 0 CMWQM 1
MAQM 1 MMWQM 14
CRWQM 1

PPINANG

CAQM 4 MRWQM 67
MCAQM 0 CMWQM 0
MAQM 1 MMWQM 33
CRWQM 1

PERAK

CAQM 5 MRWQM 149
MCAQM 0 CMWQM 1
MAQM 1 MMWQM 19
CRWQM 2

SELANGOR

CAQM 5 MRWQM 98
MCAQM 1 CMWQM 0
MAQM 0 MMWQM 19
CRWQM 5

N.SEMBILAN

CAQM 3 MRWQM 65
MCAQM 0 CMWQM 1
MAQM 1 MMWQM 17
CRWQM 3

W.P. KUALA LUMPUR

CAQM 2 MRWQM 25
MCAQM 0 CMWQM 0
MAQM 3 MMWQM 0
CRWQM 1

TERENGGANU

CAQM 4 MRWQM 69
MCAQM 0 CMWQM 0
MAQM 0 MMWQM 40
CRWQM 2

PAHANG

CAQM 5 MRWQM 192
MCAQM 0 CMWQM 0
MAQM 2 MMWQM 36
CRWQM 2

JOHOR

CAQM 8 MRWQM 227
MCAQM 0 CMWQM 2
MAQM 3 MMWQM 63
CRWQM 4

SARAWAK

CAQM 12 MRWQM 117
MCAQM 1 CMWQM 1
MAQM 0 MMWQM 40
CRWQM 2

W.P. LABUAN

CAQM 1 MRWQM 0
MCAQM 0 CMWQM 1
MAQM 0 MMWQM 12
CRWQM 0

SABAH

CAQM 5 MRWQM 118
MCAQM 1 CMWQM 1
MAQM 0 MMWQM 43
CRWQM 2

Petunjuk / Legend :

CAQM : Continuous Air Quality Monitoring System
MCAQM : Mobile Continuous Air Quality Monitoring Station
MAQM : Manual Air Quality Monitoring System
CRWQM : Continuous River Water Quality Monitoring Station
MRWQM : Manual River Water Quality Monitoring Station
CMWQM : Continuous Marine Water Quality Monitoring Station
MMWQM : Manual Marine Water Quality Monitoring Station

2 (a) : Kelas Air dan Penggunaan
2(a) : *Water Classes and Usage***Kelas I**
Class I

Pemeliharaan untuk persekitaran semulajadi
Bekalan Air I - Secara praktiknya tidak memerlukan rawatan
Perikanan I - Untuk spesis akuatik yang sangat sensitif

Conservation of natural environment
Water supply I - Practically no treatment necessary
Fishery I - Very sensitive aquatic species

Kelas IIA
Class IIA

Bekalan Air II - Memerlukan rawatan konvensional
Perikanan II - Untuk spesis sensitif

Water Supply II - Conventional treatment required
Fishery II - Sensitive aquatic species

Kelas IIB
Class IIB

Sesuai untuk aktiviti rekreasi yang melibatkan sentuhan badan

Recreational use with body contact

Kelas III
Class III

Bekalan Air III - memerlukan rawatan yang intensif
Perikanan III - Untuk minuman haiwan ternakan

Water Supply III - Extensive treatment required
Fishery III - Livestock drinking

Kelas IV
Class IV

Pengairan
Irrigation

Kelas V
Class V

Selain daripada yang diatas
None the above

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Perlis	Sg. Perlis	Sg. Wang Kelian	1	93	B/C	I	94	B/C	I
		Sg. Arau	2	82	B/C	II	82	B/C	II
		Sg. Terusan Mada	2	83	B/C	II	84	B/C	II
		Sg. Empangan Timah Tasoh	1	88	B/C	II	87	B/C	II
		Sg. Ngulang	1	85	B/C	II	82	B/C	II
		Sg. Jarum	1	84	B/C	II	83	B/C	II
		Sg. Kok Mak	1	84	B/C	II	86	B/C	II
		Sg. Pelarit	1	91	B/C	II	91	B/C	II
Kedah (Langkawi)	Sg. Kiasap	Sg. Kiasap	1	91	B/C	II	90	B/C	II
	Sg. Ulu Melaka	Sg. Melaka	3	85	B/C	II	82	B/C	II
		Sg. Tuba	1	90	B/C	II	88	B/C	II
		Sg. Petang	1	93	B/C	I	93	B/C	I
Kedah	Sg. Kedah	Sg. Janing	1	90	B/C	II	91	B/C	II
		Sg. Pedu	1	87	B/C	II	90	B/C	II
		Sg. Sintok	1	82	B/C	II	81	B/C	II
		Sg. Terusan Lengkuas	1	87	B/C	II	89	B/C	II
		Sg. Terusan Mada Selatan	1	85	B/C	II	88	B/C	II
		Sg. Terusan Tengah	1	87	B/C	II	89	B/C	II
		Sg. Ahning	1	86	B/C	II	88	B/C	II
	Sg. Padang Terap	5	80	ST/SP	II	87	B/C	II	
	Sg. Merbok	Sg. Tupah	1	92	B/C	II	93	B/C	I
		Sg. Bukit Nanas	1	91	B/C	II	93	B/C	I
Sg. Tok Pawang		2	88	B/C	II	88	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : *Water Quality Status of Clean Rivers, 2019*

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Kedah/ P.Pinang	Sg. Muda	Sg. Chepir	1	87	B/C	II	87	B/C	II
		Sg. Karangan	1	81	B/C	II	81	B/C	II
		Sg. Muda	12	85	B/C	II	86	B/C	II
		Sg. Gunung Inas	1	90	B/C	II	92	B/C	II
		Sg. Tawar	2	85	B/C	II	90	B/C	II
		Sg. Ketil	1	84	B/C	II	85	B/C	II
		Sg. Sedim	2	82	B/C	II	87	B/C	II
		Sg. Pegang	1	90	B/C	II	93	B/C	I
P.Pinang	Sg. Pinang	Sg. Air Terjun	1	93	B/C	I	93	B/C	I
		Sg. Batu Feringghi	2	84	B/C	II	87	B/C	II
		Sg. Satu	1	91	B/C	II	93	B/C	I
	Sg. Kluang	Sg. Ara	2	82	B/C	II	85	B/C	II
P.Pinang/ Kedah	Sg. Perai	Sg. Kulim	5	85	B/C	II	91	B/C	II
P.Pinang/ Kedah/Perak	Sg. Kerian	Sg. Kechil	2	82	B/C	II	85	B/C	II
		Sg. Selama	3	86	B/C	II	87	B/C	II
		Sg. Kerian	6	82	B/C	II	83	B/C	II
		Sg. Terusan Bagan Serai	1	91	B/C	II	91	B/C	II
Perak	Sg. Bruas	Sg. Rotan	2	91	B/C	II	89	B/C	II
		Sg. Licin	1	93	B/C	I	95	B/C	I
		Sg. Bruas	3	85	B/C	II	90	B/C	II
		Sg. Dandang	1	89	B/C	II	86	B/C	II
	Sg. Kurau	Sg. Ara	2	91	B/C	II	92	B/C	II
		Sg. Kurau	4	80	ST/SP	II	86	B/C	II
	Sg. Perak	Sg. Chepor	1	94	B/C	I	94	B/C	I

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Perak	Sg. Perak	Sg. Chenderiang	2	87	B/C	II	91	B/C	II
		Sg. Behrang	1	92	B/C	II	94	B/C	I
		Sg. Berok	1	92	B/C	II	92	B/C	II
		Sg. Cuar	1	83	B/C	II	83	B/C	II
		Sg. Ibol	1	93	B/C	I	93	B/C	I
		Sg. Kerbau	2	92	B/C	II	92	B/C	II
		Sg. Klian Gunung	1	93	B/C	I	93	B/C	I
		Sg. Pelus	2	86	B/C	II	85	B/C	II
		Sg. Pulau	1	91	B/C	II	94	B/C	I
		Sg. Rui	2	87	B/C	II	91	B/C	II
		Sg. Tapah	1	94	B/C	I	95	B/C	I
		Sg. Klah	2	88	B/C	II	89	B/C	II
		Sg. Kinjang	1	93	B/C	I	94	B/C	I
		Sg. Kampar	2	87	B/C	II	87	B/C	II
		Sg. Batang Padang	3	82	B/C	II	82	B/C	II
		Sg. Kangsar	3	87	B/C	II	88	B/C	II
		Sg. Sungkai	2	85	B/C	II	88	B/C	II
		Sg. Raia	2	85	B/C	II	82	B/C	II
		Sg. Perak	18	87	B/C	II	88	B/C	II
		Sg. Bidor	3	78	ST/SP	II	84	B/C	II
	Sg. Manong	1	92	B/C	II	95	B/C	I	
	Sg. Tesong	1	94	B/C	I	94	B/C	I	
	Sg. Who	1	92	B/C	II	94	B/C	I	
	Sg. Raja Hitam	Sg. Nyior	1	92	B/C	II	95	B/C	I
Sg. Manjong		2	81	B/C	II	85	B/C	II	
Sg. Sepetang	Sg. Nyior	2	88	B/C	II	88	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA/WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Perak	Sg. Sepetang	Sg. Temerloh	2	84	B/C	II	86	B/C	II
		Sg. Jana	2	81	B/C	II	86	B/C	II
		Sg. Limau	1	90	B/C	II	90	B/C	II
		Sg. Trong	2	90	B/C	II	93	B/C	I
		Sg. Batu Tegoh	5	81	B/C	II	82	B/C	II
Selangor/ Perak	Sg. Bernam	Sg. Inki	1	91	B/C	II	93	B/C	I
		Sg. Dusun	1	87	B/C	II	85	B/C	II
		Sg. Slim	3	85	B/C	II	84	B/C	II
		Sg. Trolak	3	87	B/C	II	91	B/C	II
		Sg. Bernam	8	77	ST/SP	II	81	B/C	II
		Sg. Gelinting	1	88	B/C	II	87	B/C	II
Selangor	Sg. Selangor	Sg. Kerling	1	90	B/C	II	93	B/C	I
		Sg. Rangkap	1	91	B/C	II	92	B/C	II
		Sg. Selangor	10	82	B/C	II	81	B/C	II
		Sg. Kanching	1	84	B/C	II	84	B/C	II
		Sg. Serendah	1	85	B/C	II	87	B/C	II
		Sg. Batang Kali	1	87	B/C	II	87	B/C	II
		Sg. Air Hitam	1	76	ST/SP	III	92	B/C	II
	Sg. Tenggi	Sg. Tenggi	4	83	B/C	II	84	B/C	II
Selangor/ WPKL	Sg. Klang	Sg. Rumput	1	90	B/C	II	91	B/C	II
Selangor/ Putrajaya/ N.Sembilan	Sg. Langat	Sg. Anak Chauau	1	74	ST/SP	III	83	B/C	II
		Sg. Rinching	2	82	B/C	II	85	B/C	II
		Sg. Chauau	2	86	B/C	II	87	B/C	II
Melaka/N. Sembilan	Sg. Melaka	Sg. Tampin	3	83	B/C	II	86	B/C	II
		Sg. Dusun	1	87	B/C	II	86	B/C	II
		Sg. Kemunting	1	82	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
N.Sembilan/ Melaka	Sg. Linggi	Sg. Batang Penar	6	82	B/C	II	82	B/C	II
		Sg. Jelai	1	83	B/C	II	84	B/C	II
		Sg. Kepayong	2	81	B/C	II	83	B/C	II
		Sg. Batu Hampar	1	85	B/C	II	88	B/C	II
		Sg. Muar	1	86	B/C	II	90	B/C	II
		Sg. Siput	1	84	B/C	II	85	B/C	II
		Sg. Kundur Besar	1	88	B/C	II	86	B/C	II
		Sg. Pedas	1	83	B/C	II	83	B/C	II
		Sg. Rembau	2	85	B/C	II	82	B/C	II
		Sg. Chembong	1	83	B/C	II	83	B/C	II
Melaka	Sg. Kesang	Sg. Chohong	2	85	B/C	II	82	B/C	II
	Sg. Seri Melaka	Sg. Udang	1	86	B/C	II	81	B/C	II
	Sg. Duyong	Sg. Gapam	1	85	B/C	II	87	B/C	II
Johor	Sg. Batu Pahat	Sg. Kahang	1	82	B/C	II	86	B/C	II
		Sg. Merek	1	82	B/C	II	81	B/C	II
		Sg. Merpo	1	81	B/C	II	81	B/C	II
		Sg. Bantang	1	93	B/C	I	91	B/C	II
		Sg. Chaah	1	78	ST/SP	II	83	B/C	II
		Sg. Lenik	1	79	ST/SP	II	82	B/C	II
	Sg. Semberong Dam	1	85	B/C	II	85	B/C	II	
	Sg. Benut	Sg. Machap Dam	1	84	B/C	II	91	B/C	II
	Sg. Johor	Sg. Pelepah	4	86	B/C	II	91	B/C	II
		Sg. Telor	1	85	B/C	II	84	B/C	II
Sg. Lebam		1	84	B/C	II	85	B/C	II	



2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / MOI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / MOI	KATEGORI/ CATEGORY	KELAS / CLASS
Johor	Sg. Johor	Sg. Papan	1	81	B/C	II	83	B/C	II
		Sg. Penggeli	2	83	B/C	II	87	B/C	II
		Sg. Sening	1	86	B/C	II	83	B/C	II
		Sg. Linggiu	1	84	B/C	II	88	B/C	II
		Sg. Layang	1	87	B/C	II	89	B/C	II
		Sg. Remis	1	83	B/C	II	86	B/C	II
		Sg. Semangar	1	81	B/C	II	82	B/C	II
		Sg. Sayong	4	81	B/C	II	85	B/C	II
		Sg. Santi	1	85	B/C	II	85	B/C	II
		Sg. Layau Kiri	1	89	B/C	II	84	B/C	II
		Sg. Belitong	1	83	B/C	II	86	B/C	II
		Sg. Johor	6	80	ST/SP	II	83	B/C	II
	Sg. Mersing	Sg. Empangan Congok	1	77	ST/SP	II	84	B/C	II
		Sg. Mersing	3	86	B/C	II	87	B/C	II
	Sg. Pulai	Sg. Pulai Dam	1	91	B/C	II	93	B/C	I
	Sg. Sedili Besar	Sg. Dohol	1	84	B/C	II	88	B/C	II
		Sg. Ambat	1	86	B/C	II	88	B/C	II
		Sg. Pasir Panjang	1	85	B/C	II	87	B/C	II
		Sg. Sedili Besar	6	81	B/C	II	82	B/C	II
		Sg. Temubor Kanan	1	89	B/C	II	90	B/C	II
	Sg. Sedili Kecil	Sg. Sedili Kecil	2	80	ST/SP	II	81	B/C	II
	Sg. Jemaluang	Sg. Jemaluang	2	81	B/C	II	86	B/C	II
	Johor/ N.Sembilan/ Pahang	Sg. Muar	Sg. Air Panas	1	90	B/C	II	92	B/C

2 (a) : Status Kualiti Air bagi Sungai Bersih, 2019

2(a) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Johor/ N.Sembilan/ Pahang	Sg. Muar	Sg. Belemang	1	87	B/C	II	90	B/C	II
		Sg. Meda	1	86	B/C	II	82	B/C	II
		Sg. Pendol	1	84	B/C	II	89	B/C	II
		Sg. Segamat	3	86	B/C	II	87	B/C	II
		Sg. Juasseh	3	89	B/C	II	88	B/C	II
		Sg. Gemencheh	2	80	ST/SP	II	83	B/C	II
		Sg. Jelai	1	84	B/C	II	83	B/C	II
		Sg. Jementah	1	88	B/C	II	91	B/C	II
		Sg. Muar	25	79	ST/SP	II	82	B/C	II
Sg. Palong	2	79	ST/SP	II	82	B/C	II		
Pahang/ Johor	Sg. Endau	Sg. Jasin	1	94	B/C	I	94	B/C	I
		Sg. Empangan Labong	1	91	B/C	II	92	B/C	II
		Sg. Lenggor	2	83	B/C	II	86	B/C	II
		Sg. Mamai	1	84	B/C	II	86	B/C	II
		Sg. Tamok	1	86	B/C	II	91	B/C	II
		Sg. Selai	1	89	B/C	II	92	B/C	II
		Sg. Endau	3	87	B/C	II	89	B/C	II
		Sg. Kahang	3	87	B/C	II	86	B/C	II
		Sg. Anak Sg Semberong	1	76	ST/SP	III	84	B/C	II
		Sg. Paloh	1	77	ST/SP	II	81	B/C	II
		Sg. Semberong	5	78	ST/SP	II	83	B/C	II
Sg. Anak Endau	2	83	B/C	II	92	B/C	II		
Pahang/ N.Sembilan	Sg. Pahang	Sg. Teranum	1	89	B/C	II	87	B/C	II
		Sg. Anak Sg. Lepar	1	84	B/C	II	84	B/C	II
		Sg. Belayar	1	91	B/C	II	89	B/C	II

2 (a) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(a) : *Water Quality Status of Clean Rivers, 2019*

NEGERI/ STATE	LEMBANGAN SUNGAI/RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA/WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Pahang/ N.Sembilan	Sg. Pahang	Sg. Berkelah	1	92	B/C	II	92	B/C	II
		Sg. Bilut	2	84	B/C	II	84	B/C	II
		Sg. Jengka	2	85	B/C	II	87	B/C	II
		Sg. Krau	1	87	B/C	II	90	B/C	II
		Sg. Maran	1	85	B/C	II	90	B/C	II
		Sg. Mentiga	3	81	B/C	II	85	B/C	II
		Sg. Penjuring	1	91	B/C	II	87	B/C	II
		Sg. Pertang	2	83	B/C	II	83	B/C	II
		Sg. Raub	1	88	B/C	II	89	B/C	II
		Sg. Retang	1	85	B/C	II	87	B/C	II
		Sg. Salak	1	85	B/C	II	89	B/C	II
		Sg. Tasik Bera	1	84	B/C	II	86	B/C	II
		Sg. Telemong	3	88	B/C	II	88	B/C	II
		Sg. Teras	2	89	B/C	II	88	B/C	II
		Sg. Jempol	5	84	B/C	II	88	B/C	II
		Sg. Telang	1	87	B/C	II	90	B/C	II
		Sg. Teris	3	87	B/C	II	87	B/C	II
		Sg. Benus	3	86	B/C	II	83	B/C	II
		Sg. Kelau	4	83	B/C	II	83	B/C	II
		Sg. Lipis	3	85	B/C	II	86	B/C	II
		Sg. Tembeling	1	84	B/C	II	88	B/C	II
		Sg. Perting	1	89	B/C	II	91	B/C	II
		Sg. Tahan	1	84	B/C	II	88	B/C	II
		Sg. Teh	1	84	B/C	II	90	B/C	II
		Sg. Pahang	27	83	B/C	II	85	B/C	II
		Sg. Tanglir	5	83	B/C	II	86	B/C	II
Sg. Koyan	1	86	B/C	II	88	B/C	II		
Sg. Lepar	1	86	B/C	II	91	B/C	II		
Sg. Luit	1	84	B/C	II	89	B/C	II		

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA/WQI	KATEGORI / CATEGORY	KELAS / CLASS
Pahang/ N.Sembilan	Sg. Pahang	Sg. Bentong	6	84	B/C	II	83	B/C	II
		Sg. Tasik Chini	10	88	B/C	II	90	B/C	II
		Sg. Semantan	4	84	B/C	II	85	B/C	II
		Sg. Tekal	1	83	B/C	II	81	B/C	II
		Sg. Kertam	1	83	B/C	II	90	B/C	II
		Sg. T. Paya Bungor	1	84	B/C	II	85	B/C	II
		Sg. Triang	3	84	B/C	II	86	B/C	II
		Sg. Jelai	3	84	B/C	II	87	B/C	II
		Sg. Habu	1	89	B/C	II	88	B/C	II
		Sg. Lenggok	1	89	B/C	II	91	B/C	II
		Sg. Bertam	4	83	B/C	II	89	B/C	II
		Sg. Burung	1	90	B/C	II	92	B/C	II
		Sg. Ringlet	1	82	B/C	II	82	B/C	II
		Sg. Tringkap	1	82	B/C	II	82	B/C	II
		Sg. Terla	2	91	B/C	II	91	B/C	II
		Sg. Telom	2	83	B/C	II	85	B/C	II
		Sg. Bera	5	80	ST/SP	II	84	B/C	II
		Sg. Chini	1	80	ST/SP	II	86	B/C	II
		Sg. Gapoi	1	92	B/C	II	94	B/C	I
Sg. Kundang	1	64	ST/SP	III	86	B/C	II		
Sg. Ulong	1	92	B/C	II	94	B/C	I		
Pahang	Sg. Balok	Sg. Panjang	1	77	ST/SP	II	86	B/C	II
		Sg. Bebar	2	79	ST/SP	II	83	B/C	II
	Sg. Bebar	Sg. Merba	1	76	ST/SP	III	86	B/C	II
		Sg. Serai	2	79	ST/SP	II	81	B/C	II
		Sg. Kenau	1	88	B/C	II	90	B/C	II
	Sg. Kuantan	Sg. Charu	1	85	B/C	II	92	B/C	II
		Sg. Kuantan	8	84	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA /WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA /WQI	KATEGORI/ CATEGORY	KELAS / CLASS
Pahang	Sg. Kuantan	Sg. Pinang	1	85	B/C	II	89	B/C	II
		Sg. Reman	1	81	B/C	II	86	B/C	II
		Sg. Riau	1	83	B/C	II	84	B/C	II
		Sg. Pandan	1	84	B/C	II	83	B/C	II
	Sg. Merchong	Sg. Merchong	2	78	ST/SP	II	86	B/C	II
	Sg. Rompin	Sg. Pukin	3	81	B/C	II	83	B/C	II
		Sg. Jekatih	2	83	B/C	II	85	B/C	II
		Sg. Jeram	1	85	B/C	II	88	B/C	II
		Sg. Keratong	4	83	B/C	II	85	B/C	II
		Sg. Sepayang	1	81	B/C	II	84	B/C	II
		Sg. Pontian	5	84	B/C	II	87	B/C	II
		Sg. Aur	1	84	B/C	II	86	B/C	II
		Sg. Kepasing	1	80	ST/SP	II	81	B/C	II
		Sg. Rompin	5	80	ST/SP	II	87	B/C	II
		Terengganu	Sg. Besut	Sg. Besut	5	87	B/C	II	90
Sg. Jertih	1			84	B/C	II	84	B/C	II
Sg. Dungun	Sg. Dungun		5	89	B/C	II	88	B/C	II
	Sg. Telemboh		1	83	B/C	II	86	B/C	II
Sg. Kemaman	Sg. Cherul		3	85	B/C	II	85	B/C	II
	Sg. Perasing		1	83	B/C	II	82	B/C	II
	Sg. Kemaman		3	84	B/C	II	84	B/C	II
Sg. Chukai	Sg. Ibok		2	82	B/C	II	84	B/C	II
	Sg. Bungkus		1	80	ST/SP	II	82	B/C	II
Sg. Kertih	Sg. Kertih		2	83	B/C	II	83	B/C	II
Sg. Kluang	Sg. Kluang		1	82	B/C	II	83	B/C	II
Sg. Marang	Sg. Kerak		1	70	ST/SP	III	81	B/C	II
	Sg. Marang		1	85	B/C	II	83	B/C	II
	Sg. Temala		1	85	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Terengganu	Sg. Setiu	Sg. Bari	1	89	B/C	II	91	B/C	II
		Sg. Chalok	3	85	B/C	II	87	B/C	II
		Sg. Tarom	1	88	B/C	II	88	B/C	II
		Sg. Setiu	2	87	B/C	II	86	B/C	II
	Sg. Paka	Sg. Besul	1	85	B/C	II	86	B/C	II
		Sg. Paka	3	85	B/C	II	85	B/C	II
		Sg. Rengat	1	87	B/C	II	85	B/C	II
	Sg. Terengganu	Sg. Berang	2	89	B/C	II	91	B/C	II
		Sg. Nerus	6	84	B/C	II	88	B/C	II
		Sg. Telemong	1	83	B/C	II	89	B/C	II
		Sg. Terengganu	4	86	B/C	II	88	B/C	II
	Kelantan	Sg. Golok	Sg. Golok	5	83	B/C	II	85	B/C
Sg. Jedok			1	84	B/C	II	88	B/C	II
Sg. Lanas			1	85	B/C	II	86	B/C	II
Sg. Kelantan		Sg. Chiku	2	85	B/C	II	85	B/C	II
		Sg. Kenkren	1	85	B/C	II	88	B/C	II
		Sg. Ketil	2	86	B/C	II	86	B/C	II
		Sg. Muring	1	88	B/C	II	84	B/C	II
		Sg. Pelaur	1	89	B/C	II	88	B/C	II
		Sg. Penangau	1	81	B/C	II	82	B/C	II
		Sg. Tuang	1	88	B/C	II	87	B/C	II
		Sg. Pergau	8	90	B/C	II	92	B/C	II
		Sg. Lebir	5	82	B/C	II	85	B/C	II
		Sg. Galas	5	84	B/C	II	84	B/C	II
		Sg. Betis	1	83	B/C	II	84	B/C	II
		Sg. Kerilla	2	89	B/C	II	88	B/C	II
		Sg. Nal	3	82	B/C	II	86	B/C	II
		Sg. Relai	2	85	B/C	II	84	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA /WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA /WQI	KATEGORI/ CATEGORY	KELAS / CLASS
Kelantan	Sg. Kelantan	Sg. Sokor	1	85	B/C	II	83	B/C	II
		Sg. Belatop	3	80	ST/SP	II	83	B/C	II
		Sg. Ber	1	78	ST/SP	II	84	B/C	II
		Sg. Berok	3	77	ST/SP	II	81	B/C	II
		Sg. Kelantan	7	80	ST/SP	II	82	B/C	II
		Sg. Kelesa	1	80	ST/SP	II	84	B/C	II
		Sg. Nenggiri	3	78	ST/SP	II	81	B/C	II
		Sg. Pehi	2	83	B/C	II	87	B/C	II
	Sg. Kemasin	Sg. Rasau	1	78	ST/SP	II	81	B/C	II
		Sg. Kemasin	2	78	ST/SP	II	81	B/C	II
Sabah	Sg. Semerak	Sg. Semerak	3	84	B/C	II	84	B/C	II
		Sg. Apas	Sg. Apas	1	88	B/C	II	91	B/C
	Sg. Balung	Sg. Balung	1	89	B/C	II	93	B/C	I
	Sg. Bongawan	Sg. Bongawan	1	89	B/C	II	88	B/C	II
		Sg. Bengkoka	Sg. Bengkoka	2	87	B/C	II	85	B/C
	Sg. Bingkongan	Sg. Menggaris	2	92	B/C	II	91	B/C	II
		Sg. Bandau	1	91	B/C	II	90	B/C	II
		Sg. Bingkongan	2	92	B/C	II	92	B/C	II
		Sg. Tandek	1	91	B/C	II	90	B/C	II
	Sg. Kalabakan	Sg. Kalabakan	3	84	B/C	II	86	B/C	II
	Sg. Brantian	Sg. Brantian	1	85	B/C	II	91	B/C	II
	Sg. Kalumpang	Sg. Kalumpang	3	84	B/C	II	89	B/C	II
		Sg. Pang Burong 1	1	84	B/C	II	89	B/C	II
Sg. Kedamaian	Sg. Kedamaian	1	91	B/C	II	93	B/C	I	
	Sg. Wariu	1	91	B/C	II	91	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019			
				IKA /WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA /WQI	KATEGORI/ CATEGORY	KELAS / CLASS	
Sabah	Sg. Kedamaian	Sg. Tempasuk	2	91	B/C	II	92	B/C	II	
	Sg. Kimanis	Sg. Kimanis	1	91	B/C	II	89	B/C	II	
	Sg. Kinabatangan	Sg. Koyah		1	86	B/C	II	88	B/C	II
		Sg. Menanggul		1	84	B/C	II	87	B/C	II
		Sg. Pin		1	84	B/C	II	85	B/C	II
		Sg. Takala		1	83	B/C	II	88	B/C	II
		Sg. Leepang		1	84	B/C	II	88	B/C	II
		Sg. Kinabatangan		4	83	B/C	II	87	B/C	II
		Sg. Karamuak		1	89	B/C	II	92	B/C	II
	Sg. Labok	Sg. Kinipir		2	90	B/C	II	91	B/C	II
		Sg. Liwagu		2	90	B/C	II	91	B/C	II
		Sg. Maliau		1	91	B/C	II	93	B/C	I
		Sg. Labok		1	89	B/C	II	89	B/C	II
		Sg. Tungud		1	88	B/C	II	90	B/C	II
	Sg. Lakutan	Sg. Lakutan		1	90	B/C	II	90	B/C	II
	Sg. Likas	Sg. Menggatal		2	89	B/C	II	90	B/C	II
		Sg. Inanam		3	86	B/C	II	84	B/C	II
	Sg. Lingkungan	Sg. Lingkungan		1	91	B/C	II	89	B/C	II
		Sg. Bukau		1	90	B/C	II	90	B/C	II
	Sg. Membakut	Sg. Membakut		1	89	B/C	II	87	B/C	II
	Sg. Menggalong	Sg. Menggalong		2	89	B/C	II	91	B/C	II
	Sg. Merotai	Sg. Merotai		3	89	B/C	II	87	B/C	II
	Sg. Mounad	Sg. Mounad		2	87	B/C	II	87	B/C	II
Sg. Moyog	Sg. Moyog		4	91	B/C	II	92	B/C	II	
Sg. Padas	Sg. Bunsit		1	90	B/C	II	92	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sabah	Sg. Padas	Sg. Liawan	1	90	B/C	II	91	B/C	II
		Sg. Padas	4	88	B/C	II	87	B/C	II
		Sg. Pegalan	3	88	B/C	II	89	B/C	II
		Sg. Tandulu	1	93	B/C	I	90	B/C	II
		Sg. Pangatan	1	88	B/C	II	86	B/C	II
	Sg. Paitan	Sg. Paitan	1	88	B/C	II	88	B/C	II
	Sg. Papar	Sg. Papar	5	91	B/C	II	92	B/C	II
	Sg. Sapi	Sg. Sapi	3	85	B/C	II	87	B/C	II
		Sg. Sualong	1	88	B/C	II	91	B/C	II
	Sg. Segama	Sg. Segama	3	84	B/C	II	91	B/C	II
	Sg. Segaliud	Sg. Segaliud	2	81	B/C	II	87	B/C	II
	Sg. Silabukan	Sg. Silabukan	2	88	B/C	II	90	B/C	II
	Sg. Sugut	Sg. Merali	1	88	B/C	II	92	B/C	II
		Sg. Bongkud	1	92	B/C	II	92	B/C	II
		Sg. Lohan	1	91	B/C	II	92	B/C	II
		Sg. Sugut	3	89	B/C	II	91	B/C	II
	Sg. Tawau	Sg. Tawau	4	84	B/C	II	88	B/C	II
	Sg. Tenghilan	Sg. Tenghilan	1	91	B/C	II	91	B/C	II
	Sg. Tingkayu	Sg. Tingkayu	2	84	B/C	II	89	B/C	II
	Sg. Tuaran	Sg. Tuaran	2	91	B/C	II	92	B/C	II
Sg. Song Sai		1	89	B/C	II	91	B/C	II	
Sg. Damit		2	88	B/C	II	88	B/C	II	
Sg. Tungku	Sg. Tungku	2	88	B/C	II	88	B/C	II	
Sg. Umas-Umas	Sg. Umas-Umas	1	83	B/C	II	90	B/C	II	
Sarawak	Sg. Baram	Sg. Tutuh	1	86	B/C	II	92	B/C	II
		Sg. Baram	4	84	B/C	II	88	B/C	II
	Sg. Balingian	Sg. Balingian	2	82	B/C	II	86	B/C	II
	Sg. Lawas	Sg. Lawas	3	86	B/C	II	91	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA /WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA /WQI	KATEGORI/ CATEGORY	KELAS / CLASS
Sarawak	Sg. Kemena	Sg. Kemena	4	85	B/C	II	85	B/C	II
		Sg. Sibiu	1	86	B/C	II	83	B/C	II
	Sg. Kerian	Sg. Kerian	2	83	B/C	II	82	B/C	II
		Sg. Seblak	1	80	ST/SP	II	82	B/C	II
		Sg. Selalang	1	91	B/C	II	91	B/C	II
	Sg. Kayan	Sg. Kayan	3	79	ST/SP	II	81	B/C	II
	Sg. Limbang	Sg. Limbang	5	86	B/C	II	91	B/C	II
	Sg. Lupar	Sg. Lupar	3	83	B/C	II	88	B/C	II
		Sg. Sekerang	1	89	B/C	II	91	B/C	II
		Sg. Seterap	1	87	B/C	II	86	B/C	II
		Sg. Undup	1	91	B/C	II	88	B/C	II
		Sg. Ai	2	91	B/C	II	92	B/C	II
	Sg. Mukah	Sg. Mukah	5	79	ST/SP	II	83	B/C	II
	Sg. Miri	Sg. Lutong	2	71	ST/SP	III	86	B/C	II
		Sg. Padang Liku	1	80	ST/SP	II	90	B/C	II
	Sg. Niah	Sg. Niah	2	88	B/C	II	90	B/C	II
		Sg. Sekaloh	2	78	ST/SP	II	81	B/C	II
	Sg. Rajang	Sg. Binatang	1	89	B/C	II	89	B/C	II
		Sg. Balo	1	84	B/C	II	89	B/C	II
		Sg. Meradong	1	83	B/C	II	86	B/C	II
		Sg. Rajang	11	83	B/C	II	85	B/C	II
		Sg. Sarikei	2	86	B/C	II	87	B/C	II
		Sg. Julau	1	90	B/C	II	90	B/C	II
		Sg. Kanowit	1	86	B/C	II	88	B/C	II
		Sg. Pakan	1	89	B/C	II	89	B/C	II
	Sg. Pila Parit	1	71	ST/SP	III	81	B/C	II	
	Sg. Sarawak	Sg. Semadang	1	93	B/C	I	90	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2019
 2(b) : Water Quality Status of Clean Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Sarawak	Sg. Sarawak	Sg. Kelantan	1	84	B/C	II	84	B/C	II
		Sg. Kuap	2	86	B/C	II	85	B/C	II
		Sg. Sarawak Kiri	1	92	B/C	II	87	B/C	II
		Sg. Tapah	1	90	B/C	II	89	B/C	II
		Sg. Sarawak	6	88	B/C	II	85	B/C	II
		Sg. Sarawak Kanan	1	86	B/C	II	85	B/C	II
	Sg. Sibuti	Sg. Kejapil	1	85	B/C	II	90	B/C	II
		Sg. Sibuti	2	82	B/C	II	86	B/C	II
	Sg. Satap	1	78	ST/SP	II	86	B/C	II	
	Sg. Oya	Sg. Oya	3	79	ST/SP	II	84	B/C	II
	Sg. Similajau	Sg. Similajau	2	89	B/C	II	89	B/C	II
	Sg. Trusan	Sg. Trusan	1	88	B/C	II	92	B/C	II
	Sg. Saribas	Sg. Layar	2	77	ST/SP	II	87	B/C	II
	Sg. Suai	Sg. Suai	1	84	B/C	II	89	B/C	II
	Sg. Tatau	Sg. Tatau	1	87	B/C	II	87	B/C	II
	Sg. Semunsam	Sg. Semunsam	1	87	B/C	II	85	B/C	II
	Sg. Sadong	Sg. Sadong	4	80	ST/SP	II	84	B/C	II
		Sg. Tarat	1	92	B/C	II	90	B/C	II

Nota / Note.

B/C : Bersih/Clean

ST/SP : Sederhana Tercemar/Slightly Polluted

T/P : Tercemar/Polluted

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WOI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WOI	KATEGORI / CATEGORY	KELAS / CLASS
Perlis	Sg. Perlis	Sg. Korok	1	73	ST/SP	III	71	ST/SP	III
		Sg. Perlis	1	72	ST/SP	III	72	ST/SP	III
		Sg. Serai	1	81	B/C	II	76	ST/SP	III
Kedah	Sg. Kedah	Sg. Changlun	1	79	ST/SP	II	77	ST/SP	II
		Sg. Kedah	1	66	ST/SP	III	64	ST/SP	III
		Sg. Napoh	1	78	ST/SP	II	80	ST/SP	II
		Sg. Pendang	1	77	ST/SP	II	77	ST/SP	II
		Sg. Tekai	1	83	B/C	II	80	ST/SP	II
		Sg. Temin	1	78	ST/SP	II	77	ST/SP	II
	Sg. Merbok	Sg. Merbok	1	74	ST/SP	III	77	ST/SP	II
		Sg. Korok	1	70	ST/SP	III	69	ST/SP	III
		Sg. Bongkok	1	71	ST/SP	III	63	ST/SP	III
		Sg. Batu	1	75	ST/SP	III	66	ST/SP	III
Kedah (Langkawi)	Sg. Ulu Melaka	Sg. Chenang	1	54	T/P	III	69	ST/SP	III
		Sg. Saga	1	84	B/C	II	76	ST/SP	III
Kedah/ P.Pinang	Sg. Muda	Sg. Kuah	1	65	ST/SP	III	74	ST/SP	III
		Sg. Jerong	2	68	ST/SP	III	67	ST/SP	III
P.Pinang	Sg. Bayan Lepas	Sg. Tiram	2	74	ST/SP	III	71	ST/SP	III
		Sg. Bayan Lepas	1	70	ST/SP	III	76	ST/SP	III
	Sg. Jawi	Sg. Machang Bubok	1	72	ST/SP	III	70	ST/SP	III
		Sg. Junjong	3	67	ST/SP	III	62	ST/SP	III
		Sg. Tengah	1	49	T/P	IV	61	ST/SP	III

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI/ CATEGORY	KELAS /CLASS	IKA/WQI	KATEGORI/ CATEGORY	KELAS /CLASS
P.Pinang	Sg. Juru	Sg. Ara	1	70	ST/SP	III	66	ST/SP	III
		Sg. Permatang Rawa	2	74	ST/SP	III	64	ST/SP	III
		Sg. Kilang Ubi	5	68	ST/SP	III	68	ST/SP	III
		Sg. Pasir	1	59	T/P	III	61	ST/SP	III
	Sg. Kluang	Sg. Relau	1	79	ST/SP	II	66	ST/SP	III
		Sg. Kluang	1	70	ST/SP	III	63	ST/SP	III
P.Pinang/ Kedah	Sg. Pinang	Sg. Dondang	6	71	ST/SP	III	74	ST/SP	III
		Sg. Pinang	3	70	ST/SP	III	68	ST/SP	III
		Sg. Jelutong	1	67	ST/SP	III	64	ST/SP	III
		Sg. Titi Kerawang	1	65	ST/SP	III	63	ST/SP	III
		Sg. Air Itam	3	76	ST/SP	III	76	ST/SP	III
	Sg. Perai	Sg. Jarak	6	70	ST/SP	III	72	ST/SP	III
		Sg. Kubang Semang	1	61	ST/SP	III	64	ST/SP	III
		Sg. Seluang	1	62	ST/SP	III	64	ST/SP	III
		Sg. Keladi	1	76	ST/SP	III	74	ST/SP	III
		Sg. Perai	2	59	T/P	III	63	ST/SP	III
Sg. Seluang Bawah	2	59	T/P	III	65	ST/SP	III		
P.Pinang/ Kedah/ Perak	Sg. Kerian	Sg. Semang	1	80	ST/SP	II	76	ST/SP	III
		Sg. Serdang	1	75	ST/SP	III	73	ST/SP	III
Perak	Sg. Kurau	Sg. Air Hitam	1	76	ST/SP	III	76	ST/SP	III
	Sg. Perak	Sg. Kerdah	2	75	ST/SP	III	72	ST/SP	III
		Sg. Kinta	9	76	ST/SP	III	76	ST/SP	III

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Perak	Sg. Perak	Sg. Kepadang	2	75	ST/SP	III	70	ST/SP	III
		Sg. Pinji	2	65	ST/SP	III	67	ST/SP	III
		Sg. Pari	2	71	ST/SP	III	72	ST/SP	III
		Sg. Serokai	2	61	ST/SP	III	69	ST/SP	III
		Sg. Sintang	1	65	ST/SP	III	65	ST/SP	III
		Sg. Sungkai Mati	2	72	ST/SP	III	76	ST/SP	III
		Sg. Nyamok	1	76	ST/SP	III	68	ST/SP	III
		Sg. Teja	1	76	ST/SP	III	78	ST/SP	II
		Sg. Tumboh	1	70	ST/SP	III	71	ST/SP	III
		Sg. Kuang	1	84	B/C	II	80	ST/SP	II
	Sg. Raja Hitam	Sg. Klian Baru	2	74	ST/SP	III	76	ST/SP	III
		Sg. Derhaka	2	77	ST/SP	II	68	ST/SP	III
	Sg. Sepetang	Sg. Raja Hitam	3	69	ST/SP	III	68	ST/SP	III
		Sg. Lidin	1	78	ST/SP	II	75	ST/SP	III
		Sg. Malai	2	68	ST/SP	III	76	ST/SP	III
	Sg. Wangi	Sg. Sepetang	2	76	ST/SP	III	78	ST/SP	II
Sg. Wangi		2	76	ST/SP	III	79	ST/SP	II	
Selangor	Sg. Selangor	Sg. Deralik	2	71	ST/SP	III	73	ST/SP	III
		Sg. Sembah	2	74	ST/SP	III	74	ST/SP	III
		Sg. Guntong	1	74	ST/SP	III	73	ST/SP	III
	Sg. Sepang	Sg. Kundang	1	64	ST/SP	III	66	ST/SP	III
Sg. Rawang		1	70	ST/SP	III	70	ST/SP	III	
Selangor/ Putrajaya/ N.Sembilan	Sg. Langat	Sg. Sepang	3	78	ST/SP	II	75	ST/SP	III
		Sg. Semenyih	3	78	ST/SP	II	77	ST/SP	II

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Selangor/ Putrajaya/ N.Sembilan	Sg. Langat	Sg. Batang Benar	1	73	ST/SP	III	67	ST/SP	III
		Sg. Batang Labu	8	72	ST/SP	III	72	ST/SP	III
		Sg. Beranang	1	79	ST/SP	II	76	ST/SP	III
		Sg. Buan	1	73	ST/SP	III	76	ST/SP	III
		Sg. Limau Manis	1	80	ST/SP	II	74	ST/SP	III
		Sg. Sering	1	63	ST/SP	III	60	ST/SP	III
		Sg. Jijan	1	80	ST/SP	II	78	ST/SP	II
		Sg. Pajam	2	64	ST/SP	III	63	ST/SP	III
		Sg. Batang Nilai	2	69	ST/SP	III	72	ST/SP	III
		Sg. Langat	9	70	ST/SP	III	72	ST/SP	III
Selangor/ WPKL	Sg. Klang	Sg. Batu	5	75	ST/SP	III	70	ST/SP	III
		Sg. Anak Air Batu	1	73	ST/SP	III	72	ST/SP	III
		Sg. Bunos	3	61	ST/SP	III	67	ST/SP	III
		Sg. Penchala	3	64	ST/SP	III	64	ST/SP	III
		Sg. Pusu	1	68	ST/SP	III	67	ST/SP	III
		Sg. Keroh	3	67	ST/SP	III	60	ST/SP	III
		Sg. Gombak	5	66	ST/SP	III	63	ST/SP	III
		Sg. Damansara	5	64	ST/SP	III	62	ST/SP	III
		Sg. Jinjang	4	67	ST/SP	III	66	ST/SP	III
		Sg. Rasau	1	73	ST/SP	III	74	ST/SP	III
Sg. Ampang	2	58	T/P	III	60	ST/SP	III		
Sg. Belongkong	1	57	T/P	III	67	ST/SP	III		

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019			
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	
Selangor/ WPKL	Sg. Klang	Sg. Semelah	1	82	B/C	II	80	ST/SP	II	
Melaka	Sg. Duyong	Sg. Duyong	3	66	ST/SP	III	71	ST/SP	III	
		Sg. Kesang	Sg. Kesang	3	74	ST/SP	III	72	ST/SP	III
			Sg. Chin Chin	3	74	ST/SP	III	73	ST/SP	III
			Sg. Tangkak	1	62	ST/SP	III	64	ST/SP	III
	Sg. Seri Melaka	Sg. Air Salak	1	70	ST/SP	III	65	ST/SP	III	
Sg. Seri Melaka		1	61	ST/SP	III	65	ST/SP	III		
Melaka/N. Sembilan	Sg. Melaka	Sg. Batang Melaka	3	79	ST/SP	II	80	ST/SP	II	
		Sg. Rembia	2	70	ST/SP	III	66	ST/SP	III	
		Sg. Durian Tunggal	1	76	ST/SP	III	73	ST/SP	III	
		Sg. Melaka	14	72	ST/SP	III	71	ST/SP	III	
Melaka/N. Sembilan	Sg. Linggi	Sg. Empangan Terip	1	72	ST/SP	III	72	ST/SP	III	
		Sg. Kayu Ara	1	69	ST/SP	III	62	ST/SP	III	
		Sg. Kenaboi	1	78	ST/SP	II	80	ST/SP	II	
		Sg. Ngoi- Ngoi	1	72	ST/SP	III	73	ST/SP	III	
		Sg. Paroi	1	75	ST/SP	III	76	ST/SP	III	
		Sg. Senawang	1	74	ST/SP	III	74	ST/SP	III	
		Sg. Temiang	2	66	ST/SP	III	68	ST/SP	III	
		Sg. Simin	1	75	ST/SP	III	77	ST/SP	II	
Negeri Sembilan	Sg. Baru	Sg. Lukut	1	71	ST/SP	III	69	ST/SP	III	
		Sg. Baru	1	70	ST/SP	III	68	ST/SP	III	

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI / STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI / CATEGORY	KELAS / CLASS
Johor	Sg. Batu Pahat	Sg. Amran	1	69	ST/SP	III	74	ST/SP	III
		Sg. Bekok	6	77	ST/SP	II	71	ST/SP	III
		Sg. Simpang Kiri	3	65	ST/SP	III	61	ST/SP	III
		Sg. Bertian	1	76	ST/SP	III	79	ST/SP	II
	Sg. Benut	Sg. Ulu Benut	1	77	ST/SP	II	79	ST/SP	II
		Sg. Parit Hj. Yassin	1	80	ST/SP	II	77	ST/SP	II
		Sg. Pinggan	1	60	ST/SP	III	61	ST/SP	III
		Sg. Benut	4	71	ST/SP	III	65	ST/SP	III
	Sg. Endau	Sg. Dengar	1	81	B/C	II	80	ST/SP	II
		Sg. Jebong	1	71	ST/SP	III	61	ST/SP	III
		Sg. Lenga	1	74	ST/SP	III	60	ST/SP	III
		Sg. Melatai	1	68	ST/SP	III	63	ST/SP	III
		Sg. Mengkibol	3	73	ST/SP	III	74	ST/SP	III
		Sg. Pamol	1	68	ST/SP	III	65	ST/SP	III
	Sg. Johor	Sg. Anak Sg. Sayong	2	75	ST/SP	III	77	ST/SP	II
		Sg. Seluyut	1	76	ST/SP	III	77	ST/SP	II
		Sg. Tiram	4	77	ST/SP	II	79	ST/SP	II
		Sg. Pantl	1	79	ST/SP	II	72	ST/SP	III
		Sg. Berangan	1	63	ST/SP	III	67	ST/SP	III
		Sg. Chemangar	1	70	ST/SP	III	72	ST/SP	III
		Sg. Bukit Besar	2	83	B/C	II	76	ST/SP	III
		Sg. Temoh	1	58	T/P	III	64	ST/SP	III
		Sg. Sebol	1	75	ST/SP	III	69	ST/SP	III
Sg. Kim Kim	Sg. Kim Kim	2	58	T/P	III	67	ST/SP	III	

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN / NUMBER OF STATIONS	2018			2019		
				IKA /WOI	KATEGORI/ CATEGORY	KELAS /CLASS	IKA /WOI	KATEGORI/ CATEGORY	KELAS /CLASS
Johor	Sg. Paloi	Sg. Paloi	1	85	B/C	II	80	ST/SP	II
	Sg. Skudai	Sg. Melana	2	71	ST/SP	III	68	ST/SP	III
	Sg. Pontian Besar	Sg. Air Hitam	2	72	ST/SP	III	80	ST/SP	II
		Sg. Pontian Besar	5	69	ST/SP	III	67	ST/SP	III
	Sg. Pontian Kecil	Sg. Pontian Kecil	2	78	ST/SP	II	79	ST/SP	II
	Sg. Pulai	Sg. Pulai	2	72	ST/SP	III	72	ST/SP	III
		Sg. Ulu Choh	1	64	ST/SP	III	67	ST/SP	III
	Sg. Rambah	Sg. Rambah	2	70	ST/SP	III	62	ST/SP	III
	Sg. Sanglang	Sg. Sanglang	1	63	ST/SP	III	60	ST/SP	III
Sg. Sedili Kecil	Sg. Bahan	2	60	ST/SP	III	76	ST/SP	III	
Johor/N. Sembilan/ Pahang	Sg. Muar	Sg. Gemas	2	66	ST/SP	III	67	ST/SP	III
		Sg. Kelamah	1	74	ST/SP	III	79	ST/SP	II
		Sg. Merbudu	1	68	ST/SP	III	65	ST/SP	III
		Sg. P. Mengkuang	1	80	ST/SP	II	67	ST/SP	III
		Sg. Pagoh	1	69	ST/SP	III	67	ST/SP	III
		Sg Labis	3	83	B/C	II	79	ST/SP	II
		Sg. Sarang Buaya	1	63	ST/SP	III	70	ST/SP	III
		Sg. Senarut	1	71	ST/SP	III	66	ST/SP	III
		Sg. Simpang Loi	1	76	ST/SP	III	78	ST/SP	II
		Sg. Tenang	1	66	ST/SP	III	68	ST/SP	III
Pahang	Sg. Balok	Sg. Balok	2	70	ST/SP	III	68	ST/SP	III
		Sg. Yior	1	64	ST/SP	III	64	ST/SP	III
	Sg. Cherating	Sg. Cherating	1	82	B/C	II	79	ST/SP	II

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI/ CATEGORY	KELAS/CLASS	IKA/WQI	KATEGORI/ CATEGORY	KELAS/CLASS
Pahang	Sg. Kuantan	Sg. Talam	1	77	ST/SP	II	69	ST/SP	III
		Sg. Galing Besar	2	63	ST/SP	III	61	ST/SP	III
		Sg. Belat	1	82	B/C	II	79	ST/SP	II
Pahang/ Johor	Sg. Rompin	Sg. Bakar	1	79	ST/SP	II	71	ST/SP	III
	Sg. Tonggok	Sg. Tonggok	2	71	ST/SP	III	70	ST/SP	III
Pahang/N. Sembilan	Sg. Pahang	Sg. Batu	1	82	B/C	II	79	ST/SP	II
		Sg. Kecau	3	81	B/C	II	80	ST/SP	II
		Sg. Serting	5	77	ST/SP	II	76	ST/SP	III
Terengganu	Sg. Chukai	Sg. Chukai	1	80	ST/SP	II	80	ST/SP	II
		Sg. Ruang	2	74	ST/SP	III	73	ST/SP	III
	Sg. Merang	Sg. Merang	1	77	ST/SP	II	77	ST/SP	II
	Sg. Merchang	Sg. Merchang	1	71	ST/SP	III	72	ST/SP	III
		Sg. Landas	1	70	ST/SP	III	65	ST/SP	III
	Sg. Terengganu	Sg. Pueh	2	71	ST/SP	III	69	ST/SP	III
	Sg. Ibai	Sg. Ibai	3	77	ST/SP	II	78	ST/SP	II
	Sg. Kemaman	Sg. Ransan	2	75	ST/SP	III	73	ST/SP	III
	Sg. Paka	Sg. Rasau	2	78	ST/SP	II	79	ST/SP	II
	Sg Golok	Sg. Tasik Garu	1	78	ST/SP	II	76	ST/SP	III
Kelantan	Sg. Kelantan	Sg. Aring	1	76	ST/SP	III	76	ST/SP	III
		Sg. Isos	1	69	ST/SP	III	73	ST/SP	III
	Sg. Kemasin	Sg. Gali	1	74	ST/SP	III	76	ST/SP	III
	Sg. Pengkalan Chepa	Sg. Raja Gali	1	73	ST/SP	III	73	ST/SP	III
		Sg. Alor Lintah	1	63	ST/SP	III	61	ST/SP	III
		Sg. Keladi	1	80	ST/SP	II	78	ST/SP	II

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2019
2 (c) : *Water Quality Status of Slightly Polluted Rivers, 2019*

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS / CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS / CLASS
Kelantan	Sg. Pengkalan Datu	Sg. Pengkalan Datu	3	78	ST/SP	II	76	ST/SP	III
		Sg. Pasir Hor	1	75	ST/SP	III	67	ST/SP	III
Sabah	Sg. Sembulan	Sg. Sembulan	2	73	ST/SP	III	77	ST/SP	II
	Sg. Kalumpang	Sg. Pang Burong 2	1	70	ST/SP	III	76	ST/SP	III
	Sg. Likas	Sg. Darau	1	84	B/C	II	76	ST/SP	III
		Sg. Likas	2	76	ST/SP	III	78	ST/SP	II
	Sg. Telipok	Sg. Telipok	2	80	ST/SP	II	77	ST/SP	II
Sarawak	Sg. Miri	Sg. Adong	1	59	T/P	III	70	ST/SP	III
		Sg. Miri	2	61	ST/SP	III	75	ST/SP	III
		Sg. Dalam	1	72	ST/SP	III	74	ST/SP	III
	Sg. Rajang	Sg. Salim	1	77	ST/SP	II	80	ST/SP	II
		Sg. Daro	1	64	ST/SP	III	76	ST/SP	III
		Sg. Jemoreng	1	63	ST/SP	III	78	ST/SP	II
	Sg. Sarawak	Sg. Semenggoh	1	66	ST/SP	III	77	ST/SP	II
		Sg. Tabuan	1	78	ST/SP	II	73	ST/SP	III
		Sg. Samarahan	2	73	ST/SP	III	70	ST/SP	III
		Sg. Maong Kiri	1	69	ST/SP	III	76	ST/SP	III
	Sg. Saribas	Sg. Saribas	1	77	ST/SP	II	80	ST/SP	II
	Sg. Sibuti	Sg. Kabuloh	2	72	ST/SP	III	68	ST/SP	III
		Sg. Karangan	2	75	ST/SP	III	78	ST/SP	II

Nota / Note

B/C : Bersih/Clean

ST/SP : Sederhana Tercemar/Slightly Polluted

T/P : Tercemar/Polluted

2 (d) : Status Kualiti Air bagi Sungai Tercemar, 2019
 2(d) : Water Quality Status of Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA /WQI	KATEGORI/ CATEGORY	KELAS/CLASS	IKA /WQI	KATEGORI/ CATEGORY	KELAS /CLASS
P.Pinang	Sg. Jawi	Sg. Jawi	1	47	T/P	IV	49	T/P	IV
		Sg. Chempedak	1	39	T/P	IV	54	T/P	III
	Sg. Juru	Sg. Juru	2	58	T/P	III	56	T/P	III
		Sg. Rambai	2	54	T/P	III	51	T/P	IV
	Sg. Kluang	Sg. Dua Besar	1	65	ST/SP	III	57	T/P	III
P.Pinang/ Kedah	Sg. Perai	Sg. Air Melintas	1	51	T/P	IV	54	T/P	III
		Sg. Kereh	3	56	T/P	III	57	T/P	III
		Sg. Pertama	1	54	T/P	III	59	T/P	III
Kedah	Sg. Merbok	Sg. Bakar Arang	1	55	T/P	III	59	T/P	III
		Sg. Petani	1	56	T/P	III	54	T/P	III
Perak	Sg Perak	Sg. Seluang	1	64	ST/SP	III	58	T/P	III
Selangor/ WPKL	Sg. Klang	Sg. Air Busuk	1	58	T/P	III	59	T/P	III
		Sg. Untut	1	55	T/P	III	54	T/P	III
		Sg. Kuyoh	2	50	T/P	IV	51	T/P	IV
		Sg. Kerayong	4	54	T/P	III	54	T/P	III
		Sg. Klang	13	61	ST/SP	III	58	T/P	III
		Sg. Toba	1	64	ST/SP	III	59	T/P	III
Selangor	Sg. Buloh	Sg. Buloh	6	53	T/P	III	52	T/P	III
	Sg. Sepang	Sg. Rambai	1	31	T/P	IV	21	T/P	V
Selangor/ Putrajaya/N. Sembilan	Sg. Langat	Sg. Balak	1	61	ST/SP	III	56	T/P	III
N. Sembiah/ Melaka	Sg Tuang	Sg. Tuang	1	88	B/C	II	58	T/P	III
	Sg Linggi	Sg. Tuang	1	70	ST/SP	III	57	T/P	III
Melaka	Sg. Merlimau	Sg. Merlimau	5	52	T/P	III	49	T/P	IV
	Sg. Duyong	Sg. Punggur	2	48	T/P	IV	51	T/P	IV

2 (d) : Status Kualiti Air bagi Sungai Tercemar, 2019

2(d) : Water Quality Status of Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/WQI	KATEGORI/ CATEGORY	KELAS /CLASS	IKA/WQI	KATEGORI/ CATEGORY	KELAS /CLASS
Melaka/N. Sembilan	Sg. Melaka	Sg. Malim	2	54	T/P	III	58	T/P	III
		Sg. Putat	2	61	ST/SP	III	58	T/P	III
Johor	Sg. Air Baloi	Sg. Air Baloi	3	53	T/P	III	49	T/P	IV
		Sg. Batu Pahat	Sg. Simpang Kanan	2	59	T/P	III	56	T/P
	Sg. Temehel		1	44	T/P	IV	48	T/P	IV
	Sg. Batu Pahat		1	59	T/P	III	56	T/P	III
	Sg. Panchor		1	61	ST/SP	III	58	T/P	III
	Sg. Johor	Sg. Semberong	2	67	ST/SP	III	55	T/P	III
		Sg. Semenchu	1	61	ST/SP	III	35	T/P	IV
	Sg. Serai	Sg. Serai	1	61	ST/SP	III	57	T/P	III
		Sg. Endau	Sg. Singol	1	80	ST/SP	II	55	T/P
	Sg. Danga	Sg. Danga	2	47	T/P	IV	46	T/P	IV
	Sg. Kawasan Pasir Gudang	Sg. Perembi	1	42	T/P	IV	42	T/P	IV
		Sg. Masai	1	56	T/P	III	50	T/P	IV
		Sg. Buluh	1	26	T/P	V	41	T/P	IV
		Sg. Tukang Batu	1	22	T/P	V	37	T/P	IV
		Sg. Latoh	1	64	ST/SP	III	58	T/P	III
	Sg. Kempas	Sg. Kempas	2	46	T/P	IV	40	T/P	IV
	Sg. Sedili Besar	Sg. Mupur	1	48	T/P	IV	47	T/P	IV
	Sg. Sedili Kecil	Sg. Anak Sedili Kecil	2	76	ST/SP	III	56	T/P	III
	Sg. Pontian Besar	Sg. Ayer Merah	1	51	T/P	IV	46	T/P	IV
	Sg. Skudai	Sg. Skudai	9	63	ST/SP	III	57	T/P	III
	Sg. Segget	Sg. Segget	5	59	T/P	III	52	T/P	III
	Sg. Tebrau	Sg. Bala	1	45	T/P	IV	42	T/P	IV
		Sg. Sebulung	1	44	T/P	IV	38	T/P	IV

2 (d) : Status Kualiti Air bagi Sungai Tercemar, 2019
 2(d) : Water Quality Status of Polluted Rivers, 2019

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2018			2019		
				IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor	Sg. Tebrau	Sg. Plentong	1	54	T/P	III	52	T/P	III
		Sg. Tebrau	5	51	T/P	IV	56	T/P	III
		Sg. Pandan	1	42	T/P	IV	43	T/P	IV
		Sg. Tampoi	1	45	T/P	IV	44	T/P	IV
		Sg. Sengkuang	1	30	T/P	V	35	T/P	IV
Johor/N. Sembilan	Sg. Muar	Sg. Merlimau	1	55	T/P	III	59	T/P	III
		Sg. Serom	1	54	T/P	III	55	T/P	III
Terengganu	Sg. Kemaman	Sg. Neram	1	74	ST/SP	III	31	T/P	IV
Kelantan	Sg. Pengkalan Chepa	Sg. Alor B	1	57	T/P	III	48	T/P	IV
		Sg. Pengkalan Chepa	2	65	ST/SP	III	59	T/P	III

Nota / Note

B/C : Bersih/Clean

ST/SP : Sederhana Tercemar/Slightly Polluted

T/P : Tercemar/Polluted

2(d) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan **BOD, AN** dan **SS, 2019**
2(d) : *Polluted Rivers and Classes Based on BOD, AN And SS, 2019*

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	STATUS 2019		KELAS BERDASARKAN/ CLASS BASED ON		
				IKA/ WQI	KELAS/ CLASS	BOD	AN	SS
1	Johor	Air Balai	Sg. Air Balai	49	IV	IV	II	IV
			Sg. Batu Pahat	56	III	III	IV	II
		Batu Pahat	Sg. Panchor	58	III	III	IV	II
			Sg. Semberong	55	III	III	IV	I
		Sg. Simpang Kaman	56	III	III	IV	I	
		Sg. Temehel	48	IV	IV	V	I	
		Danga	46	IV	IV	V	III	
		Endau	55	III	IV	V	III	
		Johor	Sg. Semenchu	35	IV	V	IV	III
			Sg. Serai	57	III	III	V	II
		Kaw. Pasir Gudang	Sg. Buluh	41	IV	V	IV	III
			Sg. Latoh	58	III	V	IV	III
		Kempas	Sg. Masai	50	IV	V	V	II
			Sg. Perembi	42	IV	V	V	II
Pontian Besar	Sg. Tukang Batu	37	IV	V	V	II		
	Sg. Kempas	40	IV	V	V	III		
Sedili Kecil	Sg. Ayer Merah	46	IV	V	V	II		
	Sg. Anak Sedili Kecil	56	III	V	V	III		

2(d) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan BOD, AN dan SS, 2019
 2(d) : Polluted Rivers and Classes Based on BOD, AN And SS, 2019

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	STATUS 2019		KELAS BERDASARKAN/ CLASS BASED ON		
				IKA/ WQI	KELAS/ CLASS	BOD	AN	SS
1	Johor	Sedili Besar	Sg. Mupur	47	IV	V	V	III
			Sg. Segget	52	III	IV	V	I
		Skudai	Sg. Skudai	57	III	IV	V	II
			Sg. Bala	42	IV	V	V	II
		Tebrau	Sg. Pandan	43	IV	V	V	II
			Sg. Plentong	52	III	IV	V	II
		Muar	Sg. Sebulung	38	IV	V	V	II
			Sg. Sengkuang	35	IV	V	V	II
			Sg. Tampoi	44	IV	V	V	II
			Sg. Tebrau	56	III	IV	V	II
2	Johor/N.Sembilan/Pahang	Muar	Sg. Merlimau	59	III	IV	IV	II
			Sg. Serom	55	III	III	IV	I
3	Kedah	Merbok	Sg. Bakar Arang	59	III	IV	IV	II
			Sg. Petani	54	III	IV	V	II
4	Kelantan	Pengkalan Chepa	Sg. Alor B	48	IV	V	V	I
			Sg. Pengkalan Chepa	59	III	IV	IV	III
5	Melaka	Merlimau	Sg. Punggur	51	IV	IV	V	II
			Sg. Merlimau	49	IV	IV	V	I

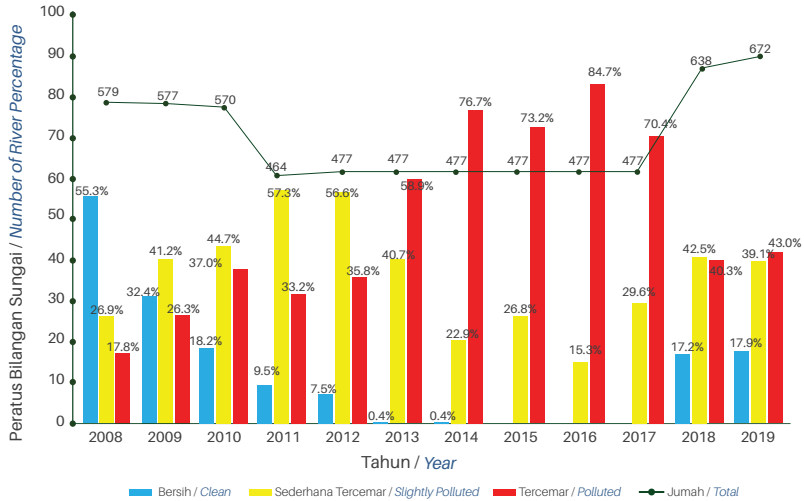
2(d) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan BOD, AN dan SS, 2019
2(d) : Polluted Rivers and Classes Based on BOD, AN And SS, 2019

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI / RIVER BASIN	SUNGAI / RIVER	STATUS 2019		KELAS BERDASARKAN/ CLASS BASED ON		
				IKA/ WQI	KELAS/ CLASS	BOD	AN	SS
6	Melaka/N.Sembilan	Melaka	Sg. Malim	58	III	IV	V	III
			Sg. Putat	58	III	IV	V	II
7	N.Sembilan/Melaka	Tuang Linggi	Sg. Tuang Sg. Tuang	58 57	III III	IV IV	V V	III III
		Jawi	Sg. Chempedak	54	III	IV	V	III
			Sg. Jawi	49	IV	IV	V	III
8	P.Pinang	Juru	Sg. Juru	56	III	IV	V	II
			Sg. Rambai	51	IV	IV	V	II
		Kluang	Sg. Dua Besar	57	III	IV	V	I
			Sg. Air Melintas	54	III	IV	V	II
9	P.Pinang/ Kedah	Perai	Sg. Kereh	57	III	IV	V	III
			Sg. Pertama	59	III	IV	IV	III
10	Perak	Perak	Sg. Seluang	58	III	IV	V	II
11	Selangor	Buloh Sepang	Sg. Buloh Sg. Rambai	52 21	III V	IV V	IV V	II IV
12	Selangor/Putrajaya/ N.Sembilan	Langat	Sg. Balak	56	III	IV	V	I
13	Selangor/WPKL	Klang	Sg. Air Busuk	59	III	V	V	II

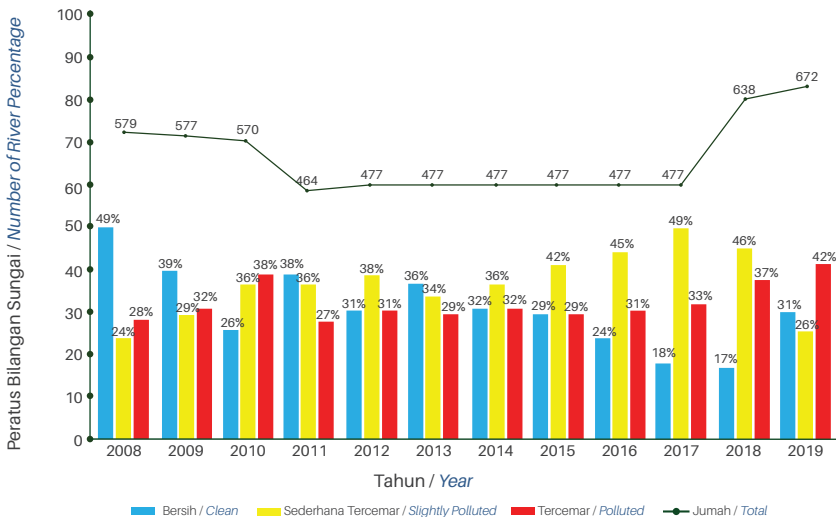
2(d) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan BOD, AN dan SS, 2019
2(d) : *Polluted Rivers and Classes Based on BOD, AN And SS, 2019*

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI / RIVERBASIN	SUNGAI/ RIVER	STATUS 2019		KELAS BERDASARKAN/ CLASS BASEDON		
				IKA/ WQI	KELAS/ CLASS	BOD	AN	SS
13	Selangor/WPKL		Sg. Kerayong	54	III	V	V	I
			Sg. Klang	58	III	IV	V	II
			Sg. Kuyoh	51	IV	IV	V	II
			Sg. Toba	59	III	IV	V	II
			Sg. Untut	54	III	V	V	I
14	Terengganu	Kemaman	Sg. Neram	31	IV	V	IV	III

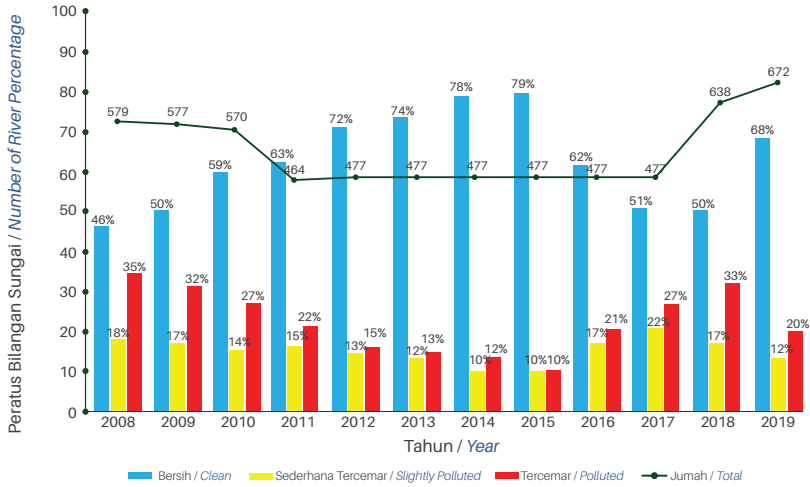
Rajah 2 (d): Tren Kualiti Air Sungai Berdasarkan Sub-Indeks BOD (2008- 2019) / Figure 2 (d): River Water Quality Trend Based on BOD Sub-Index (2008-2019)



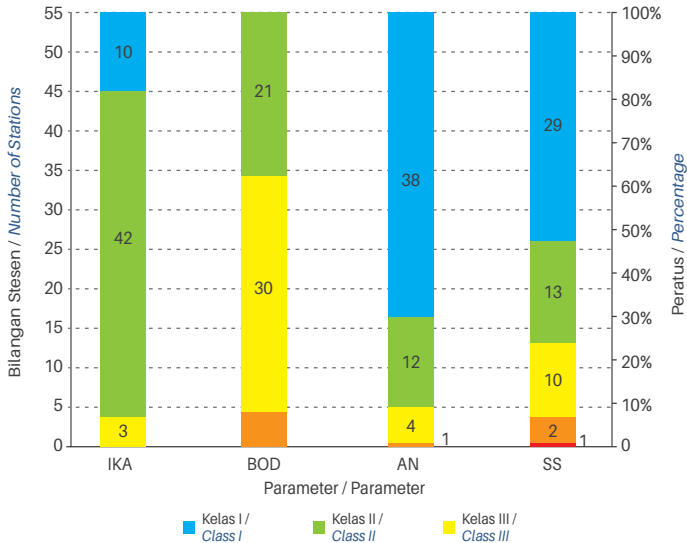
Rajah 2 (e): Tren Kualiti Air Sungai Berdasarkan Sub-Indeks AN (2008- 2019) / 2 (e): River Water Quality Trend Based on AN Sub-Index (2008-2019)



2 (f) : Tren Kualiti Air Sungai Berdasarkan Sub-Indeks SS (2008- 2019)/
2 (f) : River Water Quality Trend Based on SS Sub-Index (2008-2019)



2 (g) : Kualiti Air Sungai di Stesen di Hulu Muka Sauk, 2019
2 (g) : River Water Quality at Upstream Stations of Water Intakes, 2019



3 (a) : Klasifikasi Indeks Kualiti Air Marin Malaysia /
3 (a) : *Malaysian Marine Water Quality Index Classification*

KATEGORY / CATEGORY	NILAI INDEKS / INDEX VALUE
Terbaik / <i>Excellent</i>	90 - 100
Baik / <i>Good</i>	80 - <90
Sederhana / <i>Moderate</i>	50 - <80
Tercemar / <i>Poor</i>	0 - <50

3 (b) : Parameter Kualiti Air Marin
3 (b) : *Marine Water Quality Parameters*

BIL / NO	PARAMETERS / PARAMETERS	KOD / CODE	UNIT / UNIT
PENGUKURAN IN-SITU / IN-SITU MEASUREMENTS			
1	Oksigen terlarut / <i>Dissolved Oxygen</i>	DO	mg/l
2	pH	pH	-
3	Kemasinan / <i>Salinity</i>	Sal	ppt
4	Suhu / <i>Temperature</i>	Temp	°C
5	Kekeruhan / <i>Turbidity</i>	Turb	NTU
6	Konduktiviti / <i>Conductivity</i>	Cond	mS/cm

3 (b) : Parameter Kualiti Air Marin
3 (b) : Marine Water Quality Parameters

BIL / NO	PARAMETER / PARAMETERS	KOD / CODE	UNIT / UNIT
1	Jumlah Pepejal Terampai / <i>Total Suspended Solid</i>	TSS	mg/l
2	Minyak dan Gris / <i>Oil and Grease</i>	O&G	mg/l
3	Bebola Tar / <i>Tarball</i>	Tar	g/100m
4	Merkuri / <i>Mercury</i>	Hg	µg/l
5	Kadmium / <i>Cadmium</i>	Cd	µg/l
6	Kromium / <i>Chromium</i>	Cr ⁶⁺	µg/l
7	Kuprum / <i>Copper</i>	Cu	µg/l
8	Arsenik / <i>Arsenic</i>	As	µg/l
9	Plumbum / <i>Lead</i>	Pb	µg/l
10	Zink / <i>Zinc</i>	Zn	µg/l
11	Sianida / <i>Cyanide</i>	CN	µg/l
12	Amonia Tidak Terion / <i>Unionized Ammonia</i>	NH ₃	µg/l
13	Amoniakal Nitrogen / <i>Ammoniacal Nitrogen</i>	NH ₃ -N	µg/l
14	Nitrit / <i>Nitrite</i>	NO ₂	µg/l
15	Nitrat / <i>Nitrate</i>	NO ₃	µg/l
16	Fosfat / <i>Phosphate</i>	PO ₄	µg/l
17	Fenol / <i>Phenol</i>	Phenol	µg/l
18	Tributiltin / <i>Tributyltin</i>	TBT	µg/l
19	<i>Total Coliform</i>	TC	cfu/100
20	<i>Faecal Coliform</i>	FC	cfu/100
21	<i>Escherichia coli</i>	E.coli	cfu/100
22	<i>Enterococci</i>	-	cfu/100
23	<i>Polycyclic Aromatic Hydrocarbons</i>	PAHs	µg/l

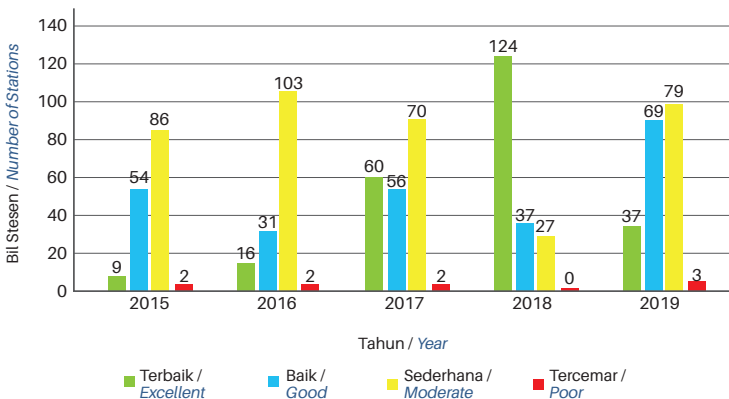
3 (c) : Standard Kualiti Air Marin Malaysia
3 (c) : *Malaysian Marine Water Quality Standards*

PARAMETER ($\mu\text{G/L}$) MELAINKAN DINYATAKAN SEBALIKNYA/ PARAMETER ($\mu\text{G/L}$) UNLESS OTHERWISE STATED	KLASIFIKASI / CLASSIFICATION					
	KELAS 1/ CLASS 1	KELAS 2/ CLASS 2	KELAS 3/ CLASS 3	INTERIM KELAS E1/ INTERIM CLASS E1	INTERIM KELAS E2/ INTERIM CLASS E2	INTERIM KELAS E3/ INTERIM CLASS E3
	HABITAT MARIN SENSITIF/ SENSITIVE MARINE HABITATS	PERIKANAN (TERMASUK MARIKULTUR/ FISHERIES (INCLUDING MARICULTURE)	INDUSTRI, AKTIVITI KOMERSIAL & KAWASAN KEDIAMAN PESISIR PANTAI / INDUSTRY, COMMERCIAL ACTIVITIES & COASTAL SETTLEMENTS	MUARA SUNGAI / ESTUARIES		
			DATARAN PANTAI/ COASTAL PLAIN	LAGUN/ LAGOON	RANGKAIAN KOMPLEKS/ COMPLEX DISTRIBUTARY NETWORK	
Oksigen Terlarut / <i>Dissolved Oxygen (mg/l)</i>	>6.0	>5.0	>3.0	>5.0	>5.0	>5.0
Jumlah Pepejal Terampai / <i>Total Suspended Solids (mg/l)</i>	25.0	50.0	100.0	30.0	30.0	30.0
Fosfat / <i>Phosphate</i>	5.0	75.0	670.0	100.0	180.0	180.0
Nitrat / <i>Nitrate</i>	10.0	60.0	700.0	200.0	570.0	430.0
Ammonia	35.0	50.0	320.0	5.0	10.0	10.0
Merkuri / <i>Mercury</i>	0.04	0.04	0.04	0.04	0.04	0.04
Kadmium / <i>Cadmium</i>	0.50	2.00	3.00	1.00	1.00	1.00
Kromium (VI) / <i>Chromium (VI)</i>	0.14	10.00	20.00	10.00	10.00	10.00
Kuprum / <i>Copper</i>	1.30	2.90	8.00	1.00	1.00	1.00
Sianida / <i>Cyniade</i>	2.00	7.00	14.00	5.00	5.00	5.00
Plumbum / <i>Lead</i>	2.20	8.50	12.00	1.30	2.00	2.00
Zink / <i>Zinc</i>	7.00	50.00	100.00	16.00	5.00	5.00
Arsenik (III) / <i>Arsenic (III)</i>	1.00	3.00	3.00	3.00	1.00	1.00
Aluminium	27.0	27.0	55.0	27.0	27.0	27.0
TBT	0.001	0.010	0.050	0.002	0.002	0.002
PAH	100.0	200.0	1000.0	5.0	5.0	5.0

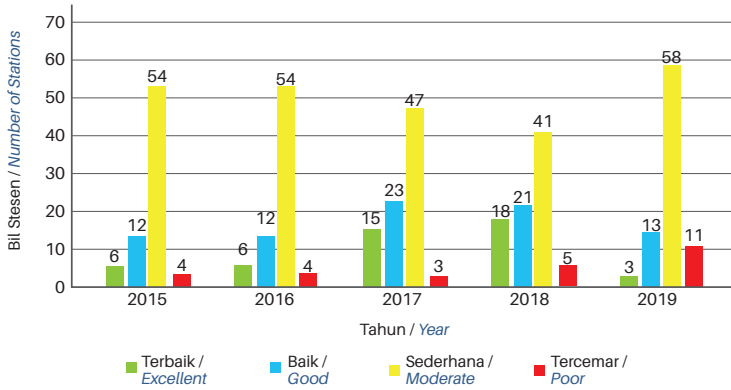
3 (c) : Standard Kualiti Air Marin Malaysia
3 (c) : *Malaysian Marine Water Quality Standards*

PARAMETER (µG/L) MELAINKAN DINYATAKAN SEBALIKNYA/ PARAMETER (µG/L) UNLESS OTHERWISE STATED	KLASIFIKASI / CLASSIFICATION					
	KELAS 1/ CLASS 1	KELAS 2/ CLASS 2	KELAS 3/ CLASS 3	INTERIM KELAS E1/ INTERIM CLASS E1	INTERIM KELAS E2/ INTERIM CLASS E2	INTERIM KELAS E3/ INTERIM CLASS E3
	HABITAT MARIN SENSITIF/ SENSITIVE MARINE HABITATS	PERIKANAN (TERMASUK MARIKULTUR)/ FISHERIES (INCLUDING MARICULTURE)	INDUSTRI, AKTIVITI KOMERSIAL & KAWASAN KEDIAMAN PESISIR PANTAI /INDUSTRY, COMMERCIAL ACTIVITIES & COASTAL SETTLEMENTS	MUARA SUNGAI / ESTUARIES		
				DATARAN PANTAI/ COASTAL PLAIN	LAGUN/ LAGOON	RANGKAIAN KOMPLEKS/ COMPLEX DISTRIBUTARY NETWORK
Jumlah Fenol <i>Total Phenol</i>	1.0	10.0	100.0	10.0	10.0	10.0
Minyak & Gris/ <i>Oil & Grease (mg/l)</i>	0.01	0.14	5.00	1.00	1.00	1.00
Faecal Coliform <i>(cfu/100ml)</i>	70	70	70	70	70	70
Suhu (°C) / <i>Temperature (°C)</i>	≤ 2 °C bertambah melebihi ambien maksimum/ ≤ 2 °C increase over maximum ambient					
pH	6.5 - 9.0					
<i>Marine Litter</i>	Bebas dari <i>marine litter</i> / <i>Free from marine litter</i>					

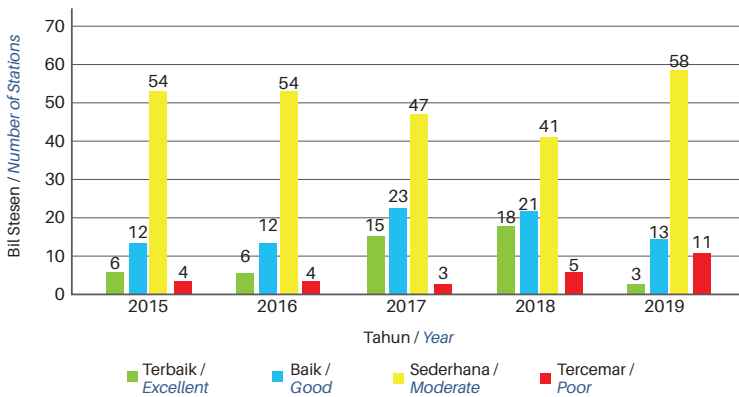
3 (d) Tren Status Kualiti Air Marin bagi Kawasan Pantai, 2015 - 2019
3 (d) *Trends of Marine Water Status for Coastal Area, 2015-2019*



3 (e) : Tren Status Kualiti Air Marin Bagi Kawasan Muara Sungai, 2015-2019
3 (e) : Trends Of Marine Water Quality Status for Estuary, 2015-2019



3 (f) : Tren Status Kualiti Air Marin Bagi Kawasan Pulau, 2015-2019
3 (f) : Trends of Marine Water Quality Status for Island Area, 2015-2019



3 (g): Senarai Stesen Marin dengan Status Kategori Tercemar dan Peratusan Sub-Indeks Mengikut Parameter, 2019
3 (g): Marine Stations under the Category of Poor Status and it's Sub-Index Percentages by Parameter, 2019

NEGERI/ STATE	KLASIFIKASI STESEN/ STATION CLASSIFICATION	LOKASI/ LOCATION	ID STESEN/ STATION ID	IKAMM/ MWQI CATEGORY	KATEGORI IKAMM/ MWQI CATEGORY	PERATUSAN SUB INDEKS (%) / SUB INDEX PERCENTAGES (%)					
						OKSIGEN TERLARUT/ DISSOLVED OXYGEN	AMONIA TIDAK TERION / UNIONIZED AMMONIA	FAECAL COLIFORM	JUMLAH PEPAL TERAMPAL / TOTAL SUSPENDED SOLID	NITRAT / NITRATE	FOSFAT / PHOSPHATE
Johor	Pantai/Coastal	Pantai Stulang Laut	MMJCO04	49	Tercemar / Poor	85	92	8	89	73	64
Johor	Pantai/Coastal	Hadapan Hsajb	MMJCO07	36	Tercemar / Poor	10	92	8	94	88	55
Johor	Pantai/Coastal	Pantai Lido	MMJCO08	37	Tercemar / Poor	10	92	8	94	89	57
Selangor	Muara Sungai/ Estuary	Kuala Sungai Langat (Lumut)	MMBE006	49	Tercemar / Poor	75	94	8	84	74	59
Selangor	Muara Sungai/ Estuary	Kuala Sungai tengi	MMBE009	49	Tercemar / Poor	90	96	8	74	79	87
Selangor	Muara Sungai/ Estuary	Kuala Sungai Selangor	MMBE008	45	Tercemar / Poor	96	98	8	66	46	88
Kelantan	Muara Sungai/ Estuary	Kuala Sungai Kemasin	MMDE005	39	Tercemar / Poor	35	99	8	93	93	93
Melaka	Muara Sungai/ Estuary	Kuala Sungai Sri Melaka	MMME002	45	Tercemar / Poor	52	82	8	89	89	82
Pulau Pinang	Muara Sungai/ Estuary	Kuala Sungai Jawi	MMAE001	46	Tercemar / Poor	96	89	8	84	89	49
Perak	Muara Sungai/ Estuary	Kuala Sungai Sepetang	MMAE005	48	Tercemar / Poor	69	98	8	78	83	75
Selangor	Muara Sungai/ Estuary	Kuala Sungai Buloh	MMBE007	44	Tercemar / Poor	42	95	8	87	79	82
Selangor	Muara Sungai/ Estuary	Kuala Sungai Klang	MMBE005	38	Tercemar / Poor	30	93	8	87	83	28
Johor	Muara Sungai/ Estuary	Kuala Sungai Laloh	MMJE002	39	Tercemar / Poor	10	86	8	89	89	69
Johor	Muara Sungai/ Estuary	Kuala Sungai Segget	MMJE001	33	Tercemar / Poor	10	87	8	92	74	50
Selangor	Pulau/ Island	Lumut	MMBR003	48	Tercemar / Poor	83	90	8	85	76	58

3 (h): Senarai Stesen Pantai dengan Status Kategori Terbaik, 2019
 3 (h) : *Coastal Stations under the Category of Excellent Status, 2019*

BIL. / NO.	NEGERI / STATE	LOKASI / LOCATION
1	Terengganu	Pantai Tok Jembal
2	Terengganu	Pantai Kelulut
3	Kelantan	Pantai Bisikan Bayu
4	Sabah	Pantai Sabandar
5	Pahang	Pantai Cherating (Legend B)
6	Terengganu	KIPC Selatan
7	Terengganu	Pantai Teluk Kalong
8	Sabah	Pantai Teluk Brunei 2
9	Sabah	Pantai Teluk Brunei 6
10	Johor	Tanjung Resang

3 (i): Senarai Stesen Pulau dengan Status Kategori Terbaik, 2019
 3(i): *Island Stations under the Category of Excellent Status, 2019*

BIL. / NO.	NEGERI / STATE	PULAU / ISLAND
1	Terengganu	Lima
2	Pahang	Sembilang
3	Terengganu	Gemia
4	Kedah	Teluk Ewa
5	Kedah	Dangli
6	Pahang	Cebeh
7	Pahang	Sepui
8	Sabah	Mantanani Besar
9	Kedah	Pasir
10	Kedah	Gasing

3 (j): Senarai Stesen Muara Sungai dengan Status Kategori Terbaik, 2019
 3(j) : *Estuaries Stations under the Category of Excellent Status, 2019*

BIL. / NO.	NEGERI / STATE	LOKASI / LOCATION
1	Terengganu	Tioxide Utara (Kg. Bukit Kuang, Kijal)
2	Terengganu	Tioxide Tengah (Pupuk Semangat, Kijal)
3	Sarawak	Kuala Sungai Semantan

3 (k): Bilangan Insiden Tumpahan Minyak di Laut, Malaysia, 2015-2019
3 (k) : Number of Oil Spill Incidents at Sea, Malaysia, 2015-2019

LAUT/ SEA	TAHUN/ YEAR				
	2015	2016	2017	2018	2019
Selat Melaka / Straits of Malacca	-	6	7	17	4
Laut China Selatan / South China Sea	10	10	8	18	9
Selat Johor / Straits of Johore	3	3	3	9	-
Laut Sulu dan Sulawesi / Sulu and Sulawesi Sea	4	1	1	1	-
Jumlah/ Total	17	20	19	45	13



3 (l): Bilangan Kes Tumpahan Minyak Mengikut Punca dan Sebab, Malaysia, 2015-2019
 3 (l) :Number of Oil Spill Incidents By Source And Cause, Malaysia, 2015-2019

PUNCA/ SOURCE	SEBAB/ CAUSE	TAHUN/ YEAR				
		2015	2016	2017	2018	2019
Kapal / Vessels	<i>Desludging</i>	-	-	-	-	-
	Letupan dan/atau kebakaran / <i>Explosion and/or fire</i>	1	-	-	-	-
	Pelanggaran / <i>Collision</i>	1	-	2	1	-
	Pelepasan haram / <i>Illegal discharging</i>	-	-	-	-	-
	Terkandas / <i>Grounding</i>	-	-	2	-	-
	Pemindahan minyak dari kapal ke kapal / <i>Ship to ship transfer</i>	-	-	-	-	1
Pelantar minyak / <i>Oil platform</i>	Kerosakan mekanikal / <i>Mechanical failure</i>	4	-	-	-	-
Pengkalan dan gudang / <i>Terminal and depot</i>	Kebocoran injap dan phlanges / <i>Leaking valves and phlanges</i>	1	4	4	5	1
	Pembersihan tangki dan 'deballasting' / <i>Tank washing and deballasting</i>	-	-	-	-	-
	Pengisian berlebihan / <i>Overfilling</i>	-	-	1	2	-
Saluran paip / <i>Pipeline</i>	Pecah / <i>Rupture</i>	-	-	-	1	-
Lain-lain / <i>Others</i>	Tiada maklumat lengkap / <i>Insufficient information</i>	10	16	10	36	11
Jumlah / Total		17	20	19	45	13

4 (a) : Taburan Stesen Pengawasan Kualiti Air Tanah di Seluruh Negeri di Malaysia Mengikut Jenis Kategori Guna Tanah, 2019

4 (a) : *Distribution of Groundwater Quality Monitoring Stations (Wells) Throughout State in Malaysia by Land Use Category, 2019*

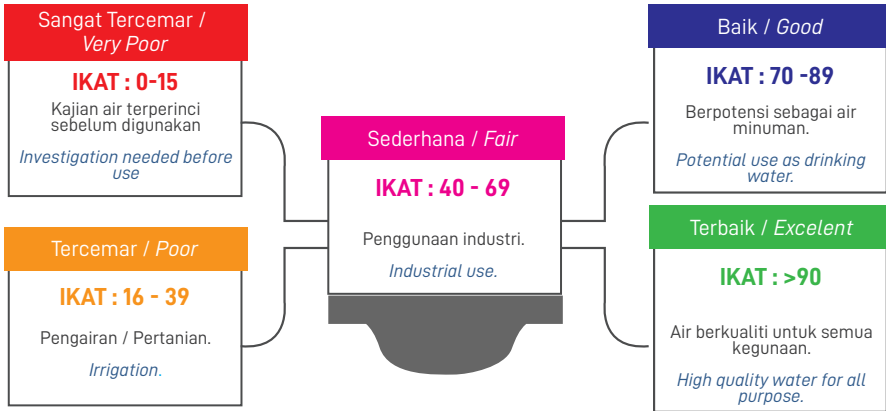
KATEGORI/ CATEGORY	BILANGAN TELAGA/ NUMBER OF WELLS	NEGERI/ STATE	BILANGAN TELAGA/ NUMBER OF WELLS
Kawasan Pertanian/ <i>Agriculture</i>	14	Sabah	2
		Terengganu	5
		Pahang	1
		Kedah	2
		Perlis	1
		Kelantan	2
		Selangor	1
Bandar & Pinggir Bandar/ <i>Urban & Suburban Area</i>	14	Sabah	1
		Terengganu	2
		Pahang	2
		Kedah	1
		Perlis	2
		Kelantan	2
		Selangor	3
		Kuala Lumpur	1
Tapak Perindustrian/ <i>Industrial Sites</i>	22	Sabah	1
		Terengganu	5
		Johor	2
		Kedah	1
		Kelantan	2
		Melaka	1
		Selangor	3
		Pulau Pinang	3
		Negeri Sembilan	1
		Perak	1
		Pahang	1
		Perlis	1

4 (a) : Taburan Stesen Pengawasan Kualiti Air Tanah di Seluruh Negeri di Malaysia Mengikut Jenis Kategori Guna Tanah, 2019

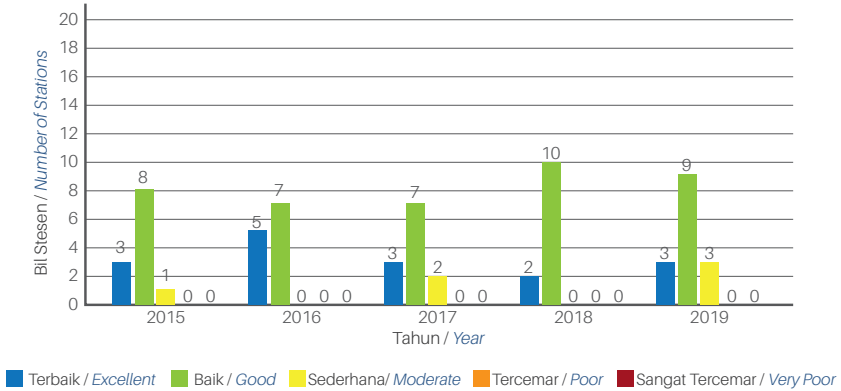
4 (a) : *Distribution of Groundwater Quality Monitoring Stations (Wells) Throughout State in Malaysia by Land Use Category, 2019*

KATEGORI/ CATEGORY	BILANGAN TELAGA/ NUMBER OF WELLS	NEGERI/ STATE	BILANGAN TELAGA/ NUMBER OF WELLS
Bekas Tapak Pelupusan Sampah / <i>Ex-Solid Waste Landfills</i>	26	Sabah	7
		Sarawak	2
		Terengganu	2
		Johor	2
		Kelantan	3
		Perak	1
		Kuala Lumpur	5
		Negeri Sembilan	3
		Melaka	1
Padang Golf / <i>Golf Courses</i>	7	Sabah	2
		Kelantan	4
		Kuala Lumpur	1
Luar Bandar / <i>Rural</i>	5	Terengganu	1
		Kelantan	3
		Melaka	1
Bekas Lombong Emas / <i>Ex-Mining (Gold Mines)</i>	3	Sarawak	3
Bekalan Air / <i>Water Supply</i>	5	Sabah	1
		Sarawak	4
Bekas Tapak Pelupusan Bangkai Haiwan / <i>Ex-Animal Burial Sites</i>	14	Sarawak	2
		Johor	3
		Perak	3
		Selangor	3
		Pulau Pinang	3
Akuakultur/ <i>Aquaculture</i>	7	Pahang	6
		Terengganu	1
Tapak Pelupusan Radioaktif/ <i>Radioactive Landfills</i>	1	Perak	1
Peranginan/ <i>Resorts</i>	2	Sabah	1
		Kedah	1

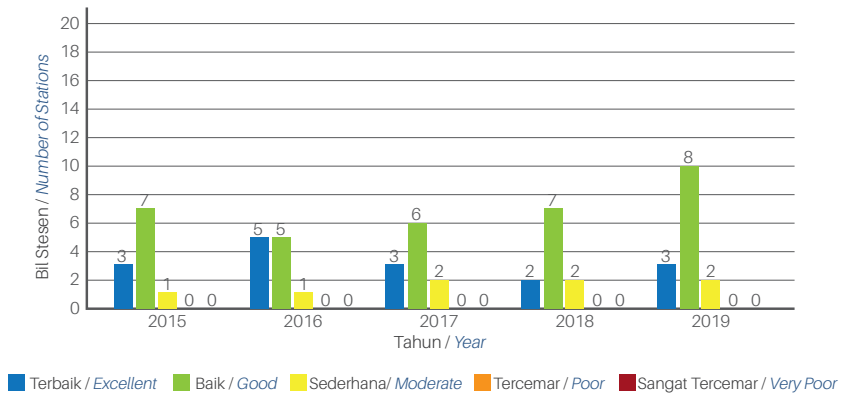
4 (b): Klasifikasi Indeks Kualiti Air Tanah
4 (b): *Groundwater Quality Index Classification*



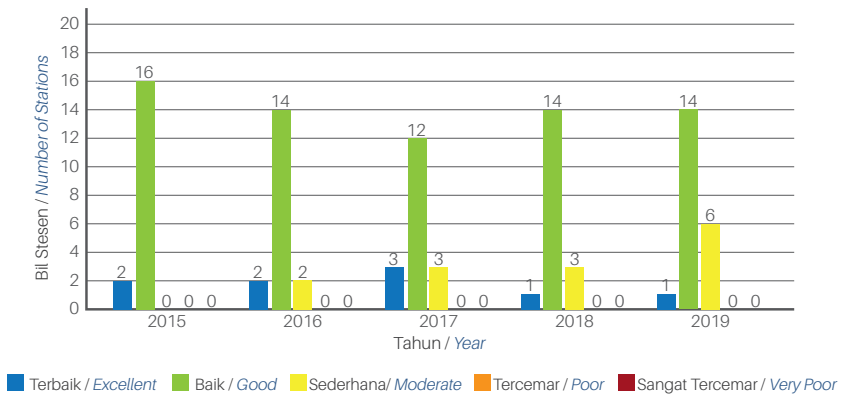
4 (c): Tren Indeks Kualiti Air Tanah Kawasan Pertanian (2015-2019)
4 (c): *Trends of Groundwater Quality Index for Agriculture (2015-2019)*



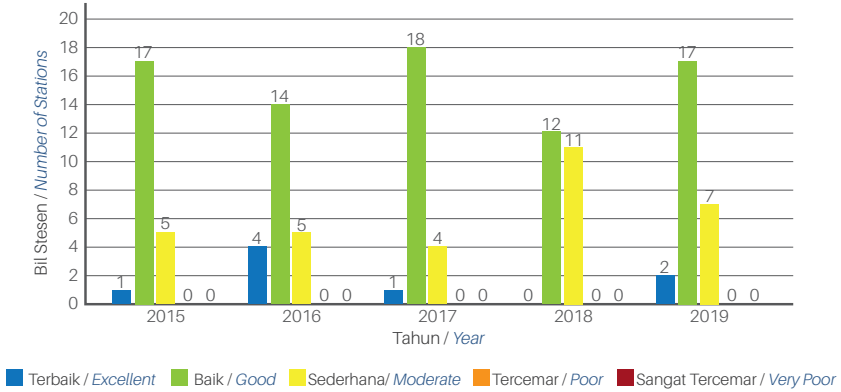
4 (d): Tren Indeks Kualiti Air Tanah bagi Bandar dan Pinggir Bandar (2015-2019)
4(d): Trends of Groundwater Quality Index for Urban and Suburban (2015-2019)



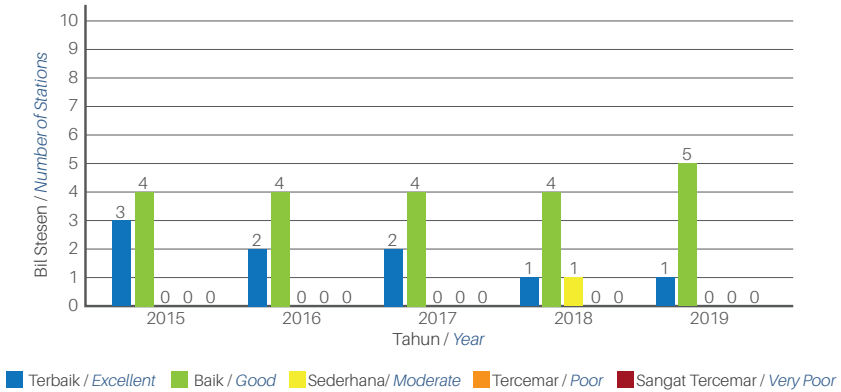
4 (e): Tren Indeks Kualiti Air Tanah bagi Tapak Perindustrian (2015-2019)
4 (e): Trends of Groundwater Quality Index for Industrial Sites (2015-2019)



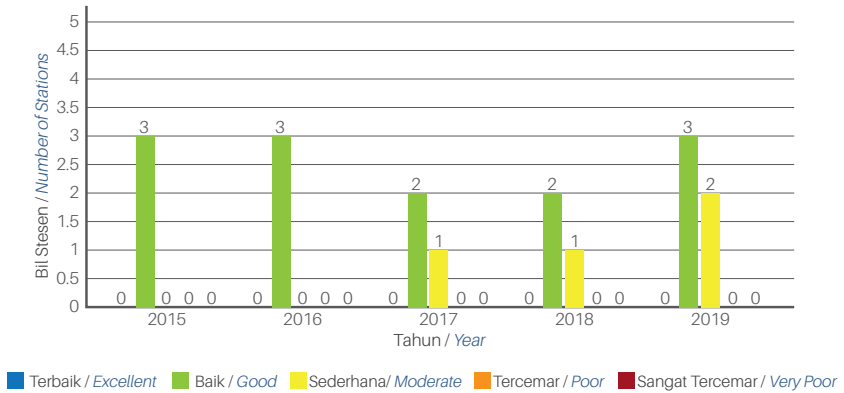
4 (f) : Tren Indeks Kualiti Air Tanah bagi Bekas Tapak Pelupusan Sampah (2015-2019)
4(f) : Trends of Groundwater Quality Index for Ex-Solid Waste Landfills (2015-2019)



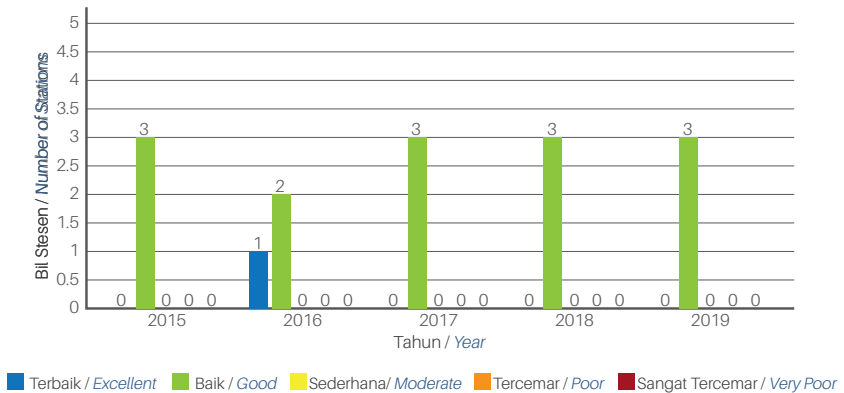
4 (g) : Tren Indeks Kualiti Air Tanah bagi Padang Golf (2015-2019)
4(g) : Trends of Groundwater Quality Index for Golf Courses (2015-2019)



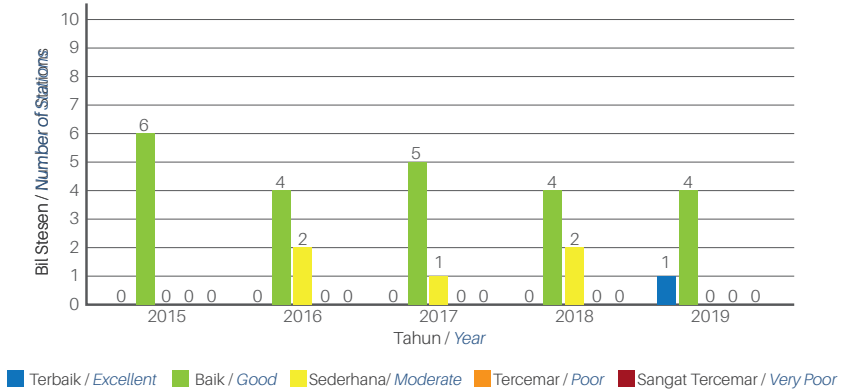
4(h): Tren Indeks Kualiti Air Tanah bagi Luar Bandar (2015-2019)
4(h): Trends of Groundwater Quality Index for Rural (2015-2019)



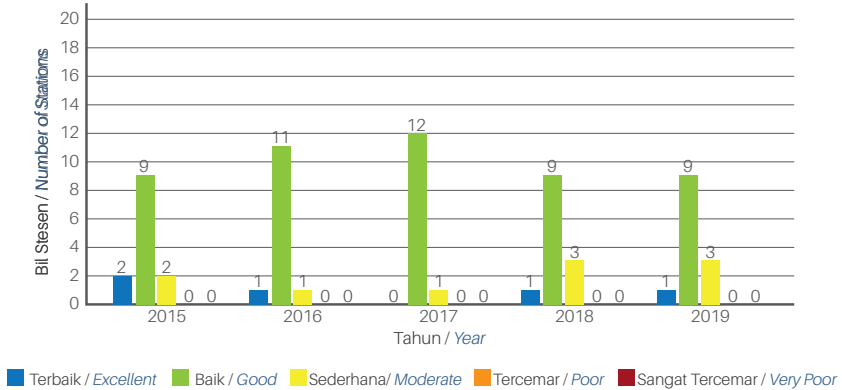
4 (i) : Tren Indeks Kualiti Air Tanah bagi Bekas Lombong Emas (2015-2019)
4(i) : Trends of Groundwater Quality Index for Ex-Mining (Gold Mine) (2015-2019)



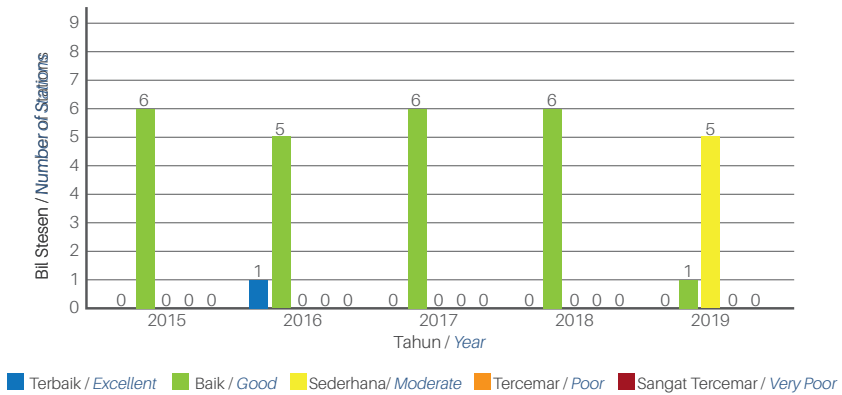
4 (j) : Tren Indeks Kualiti Air Tanah bagi Bekalan Air (2015-2019)
4(j) : Trends of Groundwater Quality Index for Water Supply (2015-2019)



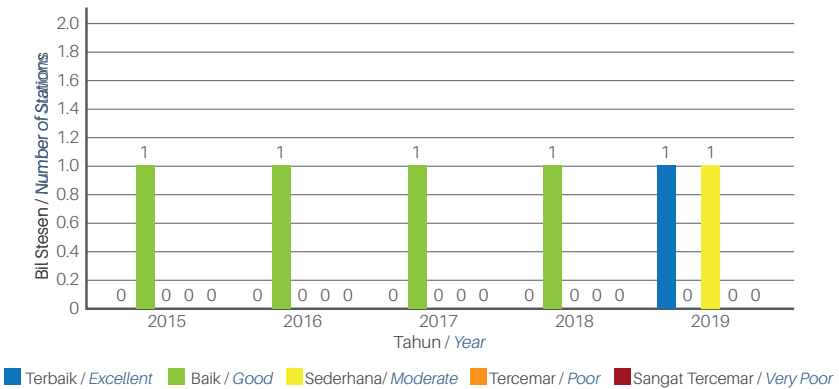
4 (k) : Tren Indeks Kualiti Air Tanah bagi Bekas Tapak Pelupusan Bangkai Haiwan (2015-2019)
4(k) : Trends of Groundwater Quality Index for Ex-Animal Burial Sites (2015-2019)



4 (l) : Tren Indeks Kualiti Air Tanah bagi Akuakultur (2015-2019)
4(l) : Trends of Groundwater Quality Index for Aquaculture (2015-2019)



4 (m) : Tren Indeks Kualiti Air Tanah bagi Peranginan (2015-2019)
4(m) : Trends of Groundwater Quality Index for Resorts (2015-2019)



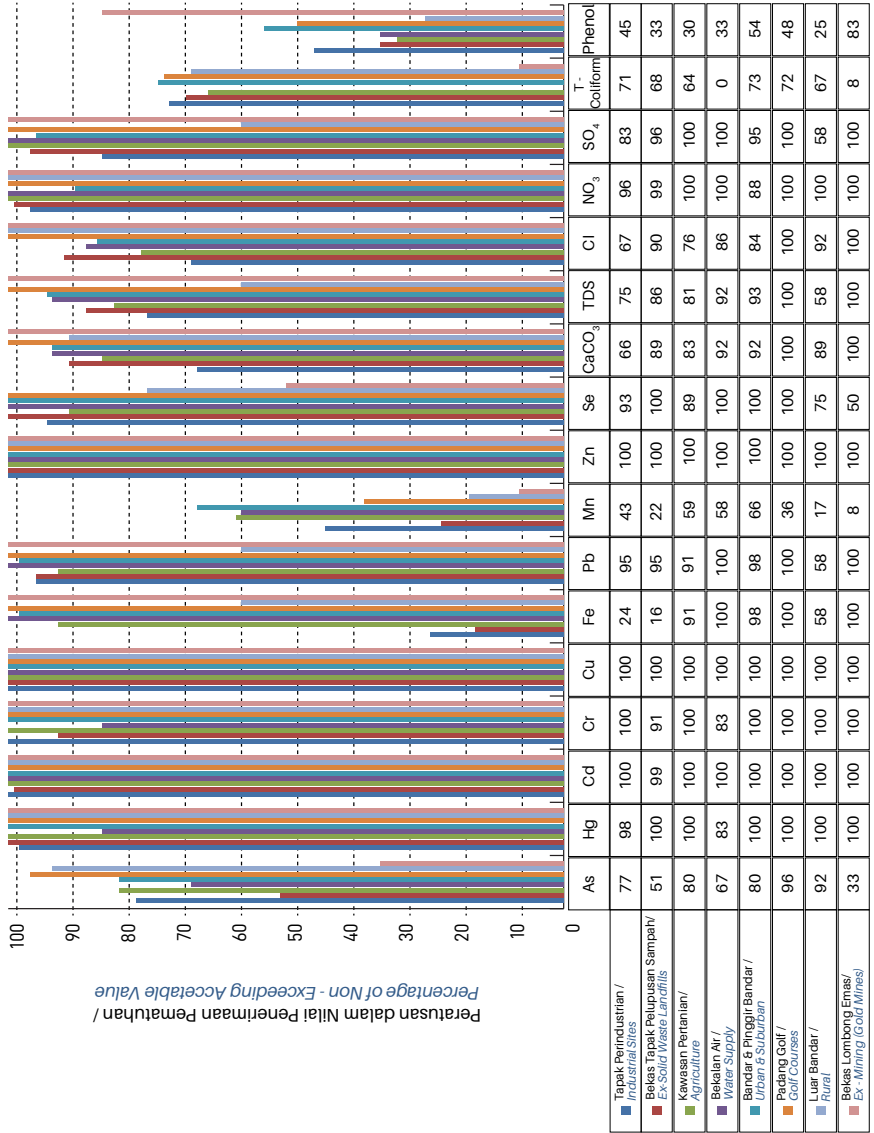
4 (n): Standard Kualiti Air Tanah Bagi Rawatan Air Mentah Secara Konvensional (Air Minuman) Merujuk Kepada Parameter Utama Dalam Penilaian Status Kualiti Air Tanah
4 (n): *Groundwater Quality Standards for Conventional Treatment of Raw Water (Drinking Water) Refer to Significant Parameter in Identify of Groundwater Quality Status*

PARAMETER/ PARAMETER	SIMBOL/ SYMBOL	STANDARD/ STANDARD	UNIT/ UNIT
Koliform / <i>Total coliform</i>	-	5000	MPN/100 ml
Pepejal Terlarut / <i>TDS</i>	-	1500	mg/l
Klorida / <i>Chloride</i>	Cl	250	mg/l
Besi / <i>Iron</i>	Fe ²⁺	1.0	mg/l
Keliatan / <i>Hardness</i>	CaCO ₃	500	mg/l
Mangan / <i>Manganese</i>	Mn ²⁺	0.2	mg/l
Nitrit / <i>Nitrite</i>	NO ₂	0.4	mg/l
Raksa / <i>Mercury</i>	Hg ²⁺	0.001	mg/l
Kadmium / <i>Cadmium</i>	Cd ²⁺	0.003	mg/l
Arsenik / <i>Arsenic</i>	As ⁺³	0.01	mg/l
Plumbum / <i>Lead</i>	Pb ²⁺	0.05	mg/l
Kromium / <i>Chromium</i>	Cr ³⁺	0.05	mg/l
Kuprum / <i>Copper</i>	Cu ²⁺	1.0	mg/l
Zink / <i>Zinc</i>	Zn ²⁺	3.0	mg/l
Sulfat / <i>Sulphate</i>	SO ₄ ²⁻	250	mg/l
Selenium / <i>Selenium</i>	Se-	0.01	mg/l
Sebatian Fenol / <i>Phenolics</i>	-	0.002	mg/l

4 (o) : Peratusan Julat Nilai Pematuhan, 2019
4(o) : *Percentage of Compliance, 2019*

PERATUSAN JULAT NILAI PEMATUHAN (%) PERCENTAGE OF COMPLIANCE (%)	KATEGORI / CATEGORY
0% - 49%	Rendah / <i>Low</i>
50% - 79%	Sederhana / <i>Moderate</i>
80% - 100%	Tinggi / <i>High</i>

4 (p) : Peratusan Pemantauan oleh Pencemar Terpilih Mengikut Guna Tanah, 2019
 4(p) : Percentage of Compliance of Selected Contaminants by Land Use, 2019



5 (a) : Lesen-Lesen yang Dikeluarkan Bagi Kemudahan Pemeroletan Kembali, Pengolahan dan Pelupusan Buangan Terjadual yang Dituluskan Oleh Jabatan Alam Sekitar, 2019
5 (a) : Licences Issued for Recovery Facilities Processing Wastes Disposal Approved by The Department of The Environment, 2019

BIL / NO	KEMUDAHAN / FACILITIES	JOHOR	KEDAG	KELANTAN	MELAKA	N.SEMILAN	PAHANG	PERAK	PERLIS	P.PINANG	SABAH	SARAWAK	SELANGOR	TERENGGANU	W.PERSEKUTUAN KUMPUR	W.PERSEKUTUAN LABUAN	JUMLAH
1	Pembawa Yang Ditetapkan / Prescribed Conveyance	61	23	6	20	22	6	25	41	41	9	24	78	6	6	5	335
	Penstoran Luar Tapak / Off-Site Storage	5	1	6	2	2	1	1	0	0	6	21	2	0	0	6	54
2	Pemeroletan Kembali Luar Tapak / Off Site Recovery																
	a. Pemeroletan Kembali Luar Tapak (bukan e-Waste) / Off Site Recovery (Non e-waste)	36	13	0	10	19	8	22	22	22	2	4	53	4	0	2	196
	b. Pemeroletan Kembali Luar Tapak (penuh e-Waste) / Off Site Recovery (Full e-Waste)	1	0	0	0	2	0	0	6	6	0	0	2	0	0	0	11
	c. Pemeroletan Kembali Luar Tapak (separa e-Waste) / Off Site Recovery (Partial e-Waste)	16	9	2	9	3	0	1	14	14	1	3	20	2	6	6	92
3	Penuu Buangan Terjadual / Scheduled Waste Incinerator	6	0	0	0	2	1	6	0	0	2	2	2	2	0	0	23
4	Pengolahan Di Tanah / Land Treatment Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Pengolahan Luar Tapak / Off-Site Treatment Facilities	1	0	0	1	0	0	2	0	0	0	0	1	0	0	1	6
6	Tapak Pelupusan Selamat / Secured Landfill	1	1	0	0	1	1	0	0	0	0	1	0	1	0	0	6
Bil Lesen / No. of Licenses		127	47	14	42	51	17	58	83	83	20	55	158	15	12	20	723
Bil. Premis / No. of Premises		66	24	8	22	29	11	32	42	42	11	31	80	9	6	15	388

Jadual 5(b) : Kemudahan Yang Mengendalikan Buangan Terjadual, 2019

Table 5(b) : Malaysia: Facilities Handling Scheduled Wastes, 2019

NO / BIL	KEMUDAHAN / FACILITIES	(MT/TAHUN) / (MT/YEAR)	PERATUSAN (%) / PERCENTAGE (%)
1	Pengurusan Khas / <i>Special Waste Management</i>	1,504,833.23	37.50
2	Pengolahan Dalam Tapak / <i>On-site Treatment</i>	1,330,887.41	33.16
3	Kemudahan Pemerolehan Kembali Luar Tapak Tempatan / <i>Local Off-Site Recovery Facilities</i>	501,165.30	12.49
4	Penstoran Dalam Tapak / <i>On-Site Storage</i>	472,662.72	11.78
5	Kualiti Alam Sdn Bhd	147,854.51	3.68
6	Kemudahan Buangan Klinikal (Penunu Buangan Klinikal, Gelombang Mikro dan Tapak Pelupusan Selamat) / <i>Off-Site Clinical Waste Facilities (Incinerator, Microwave and Secured Landfill)</i>	33,756.99	0.84
7	Kemudahan Luar Negara (Ekspot) / <i>Foreign Facilities (Export)</i>	15,420.35	0.38
8	Trienekens (Sarawak) Sdn Bhd	6,608.51	0.16
JUMLAH / TOTAL		4,013,189.02	100.00

5(c) : Buangan Terjadual Yang Diuruskan Di Bawah Pengurusan Khas 2019

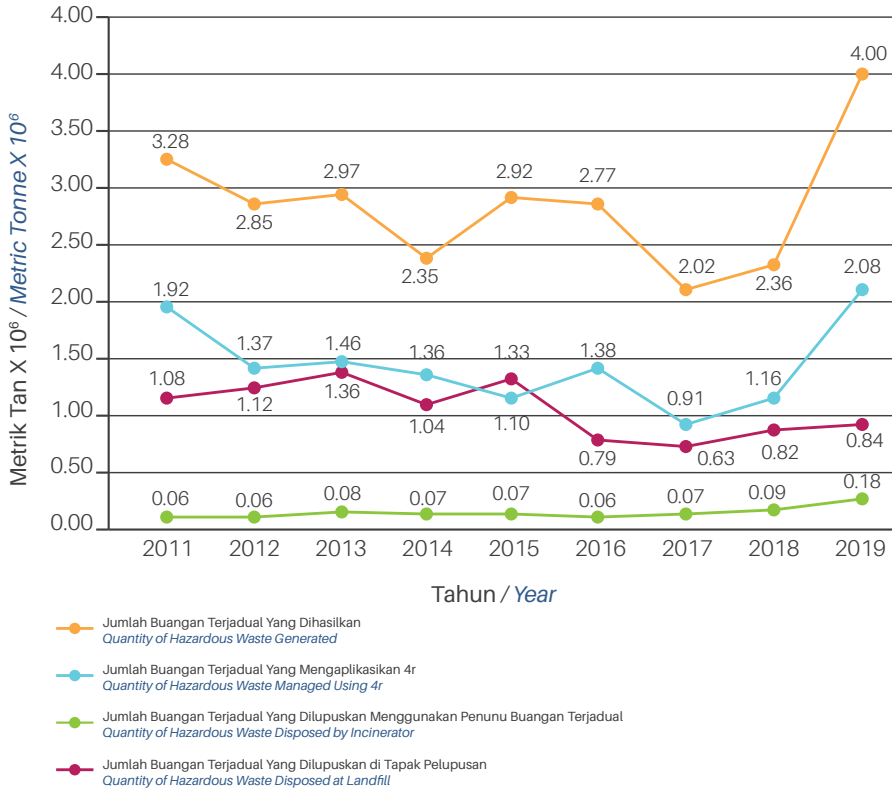
5 (c) : Scheduled Wastes Managed Under Special Management, 2019

NO. / BIL	KATEGORI BUANGAN / WASTE CATEGORY	KOD BUANGAN / WASTE CODE	SUMBER / SOURCE	METRIC TAN / TONNE METRIC	PERATUS (%) / PERCENTAGE (%)	KAEDAH PELUPUSAN / METHOD OF DISPOSAL
1	Fly Ash & Bottom Ash	SW 104	Loji Janakuasa elektrik	619,272.64	41.15	Guna semula sebagai bahan mentah pembuatan produk
			Industri	80,524.78	5.35	
2	Enap cemar Logam Berat	SW 204	Loji Rawatan Air Minuman	736,171.59	48.92	Tapak Pelupusan Sanitari

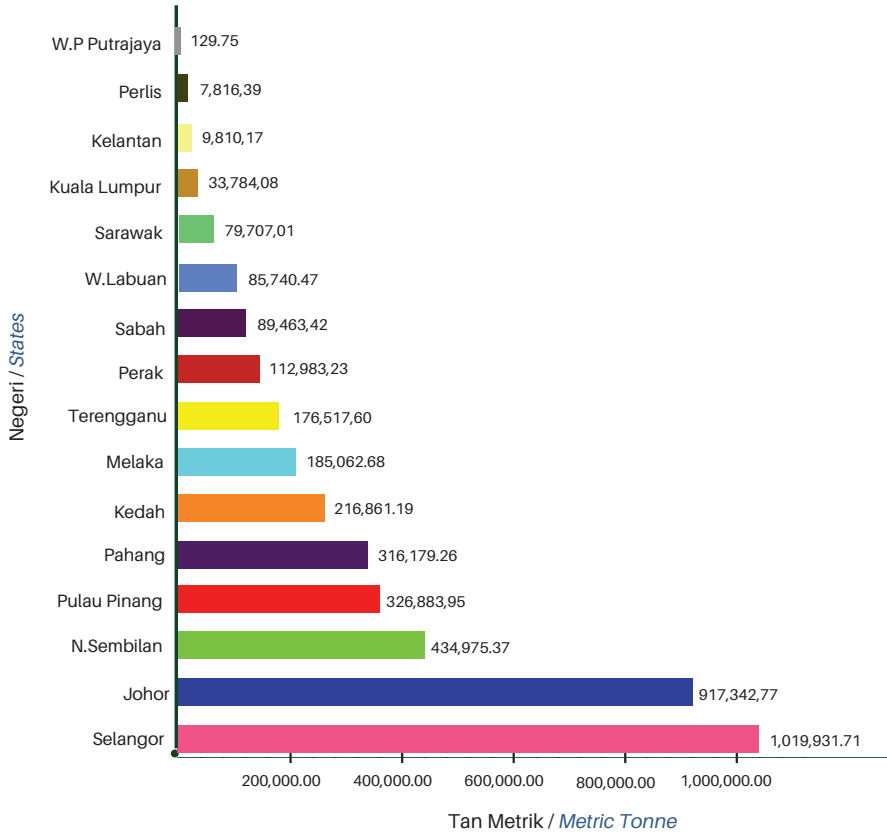
5(c) : Buangan Terjadual Yang Diuruskan Di Bawah Pengurusan Khas 2019
 5 (c) : Scheduled Wastes Managed Under Special Management, 2019

NO. / BIL	KATEGORI BUANGAN / WASTE CATEGORY	KOD BUANGAN / WASTE CODE	SUMBER / SOURCE	METRIC TAN / TONNE METRIC	PERATUS (%) / PERCENTAGE (%)	KAEDAH PELUPUSAN / METHOD OF DISPOSAL
2	Enap cemar Logam Berat	SW 204	Industri	11,766.92	0.78	Tapak Pelupusan Sanitari
				47,674.66	3.17	Guna semula sebagai bahan mentah pembuatan produk
3	Gypsum	SW 205	Industri	257.14	0.02	Guna semula sebagai bahan mentah pembuatan produk
4	Abu dari enapcemar kertas	SW 406	Industri	4,354.08	0.29	Tapak Pelupusan Sanitari
5	Enap Cemar Mineral	SW 427	Industri	963.20	0.06	Gunasemula sebagai agen peneutralan
6	Buangan yang mengandungi formaldehid, resin, serbuk epoksi terbuang	SW 320, 325, 418	Industri	847.92	0.06	Tapak Pelupusan Sanitari
7	Activated Carbon Terpakai	SW411	Industri	2,991.50	0.20	Guna semula sebagai bahan mentah pembuatan produk
8	Kelengkapan yang dicemari dengan buangan terjadual	SW409	Industri	0.10	0.00	Guna semula sebagai bahan mentah pembuatan produk
9	Buangan daripada bahan letupan terpakai	SW431	Industri	8.70	0.00	Kaedah Slow Burning
JUMLAH				1,504,833.23	100.00	

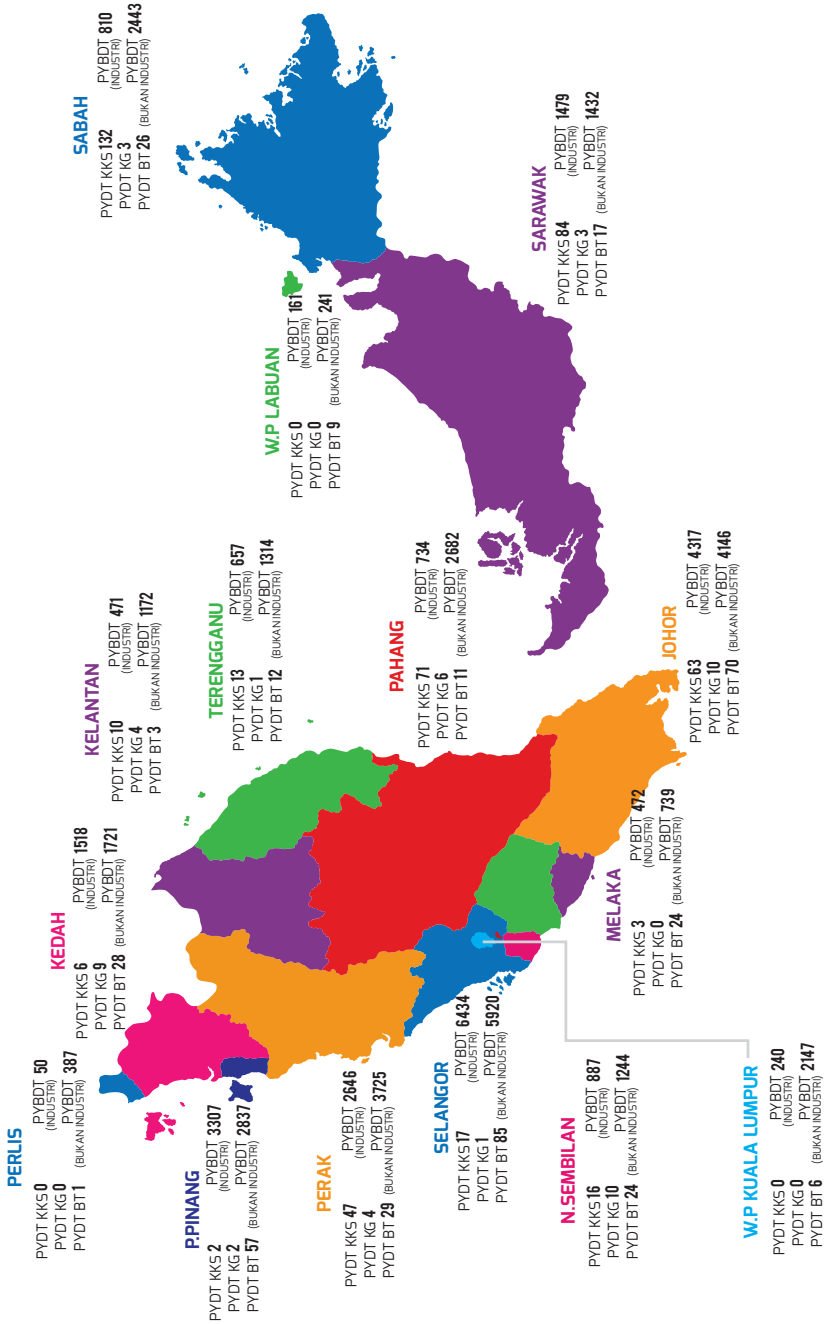
5 (d) : Tren Pengurusan Buangan Terjadual, 2011-2019
5 (d) : Scheduled Waste Management Trend, 2011-2019



5 (e) : Penghasilan Buangan Terjadual Mengikut Negeri 2019
5 (e) : Distribution of Scheduled Wastes Generated by State 2019

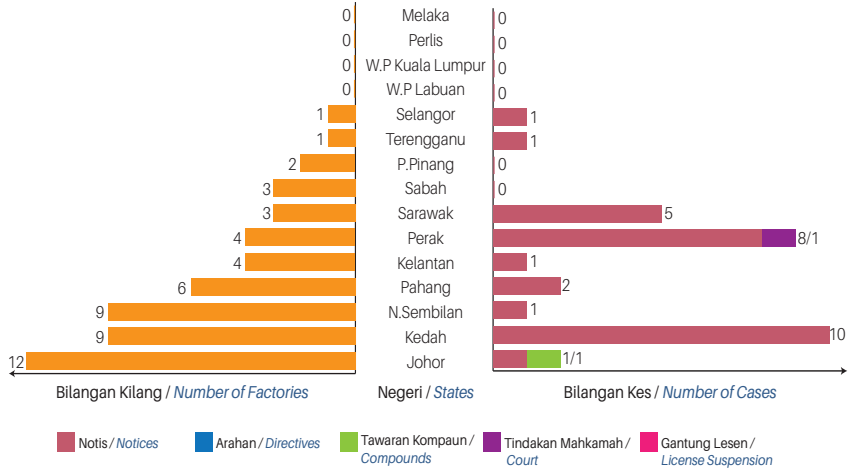


6 (a) : Bilangan Premis Mengikut Kategori di Setiap Negeri
6(a) : Number of Premises in Each States by Category



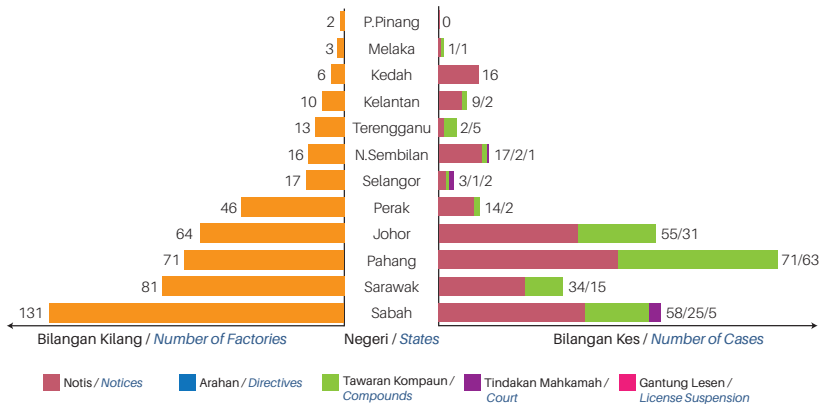
6 (b) : Bilangan Kilang Getah Asli Mentah & Tindakan Undang-Undang Terhadap Kilang Getah Asli Mentah, 2019

6(b) : Number & Legal Action Against Raw Natural Rubber Factories, 2019

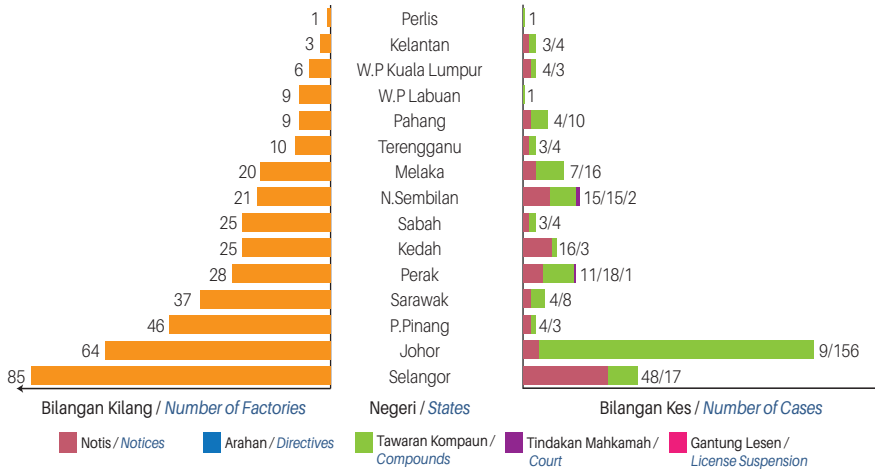


6 (c) Tindakan undang-undang Terhadap Kilang Minyak Kelapa Sawit, 2019

6 (c) : Legal Action Againsts Crude Palm Oil Mills, 2019

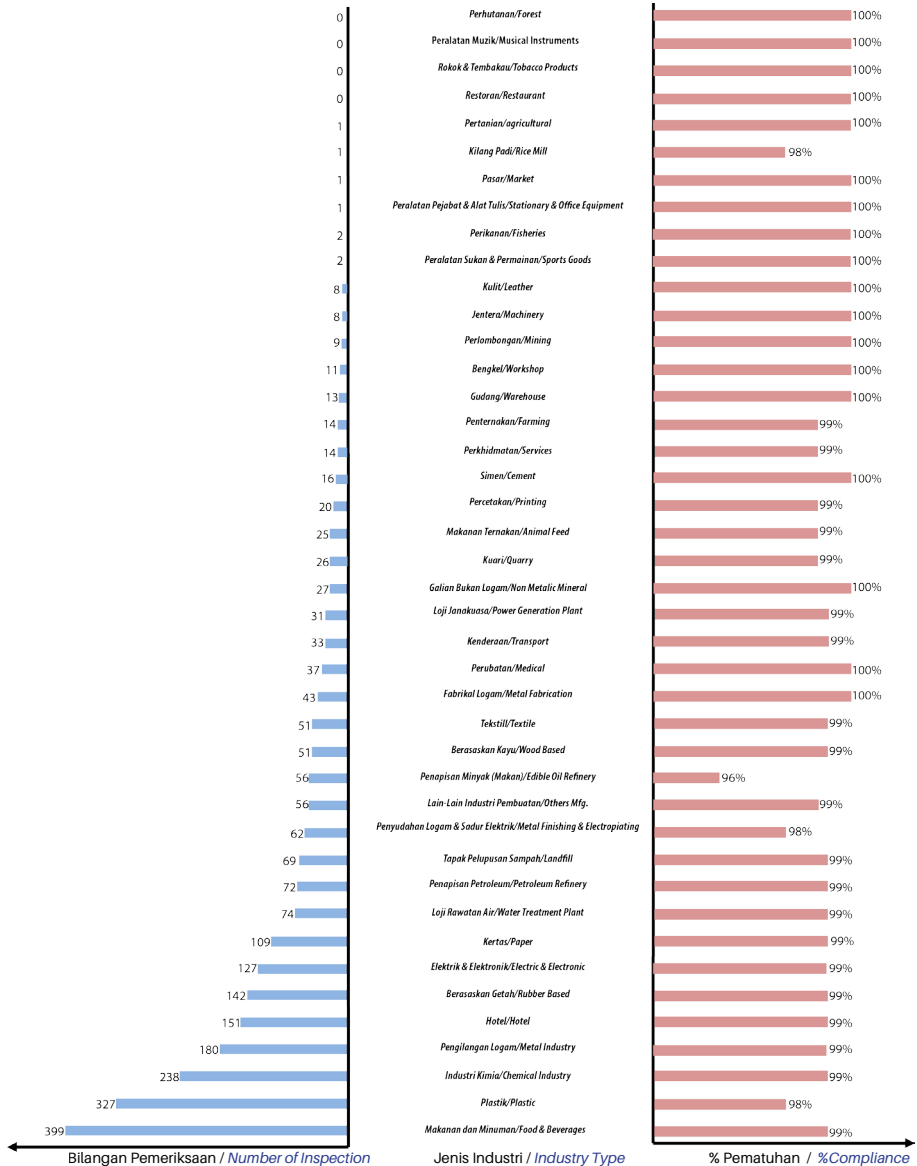


6 (d) : Bilangan Kilang Pemerolehan Kembali Buangan Terjadual & Tindakan Undang-Undang Terhadap Kilang Pemerolehan Kembali Buangan Terjadual
 6(d) : Number of Scheduled Wastes Recovery Premises & Legal Action Against Scheduled Waste Recovery Premises



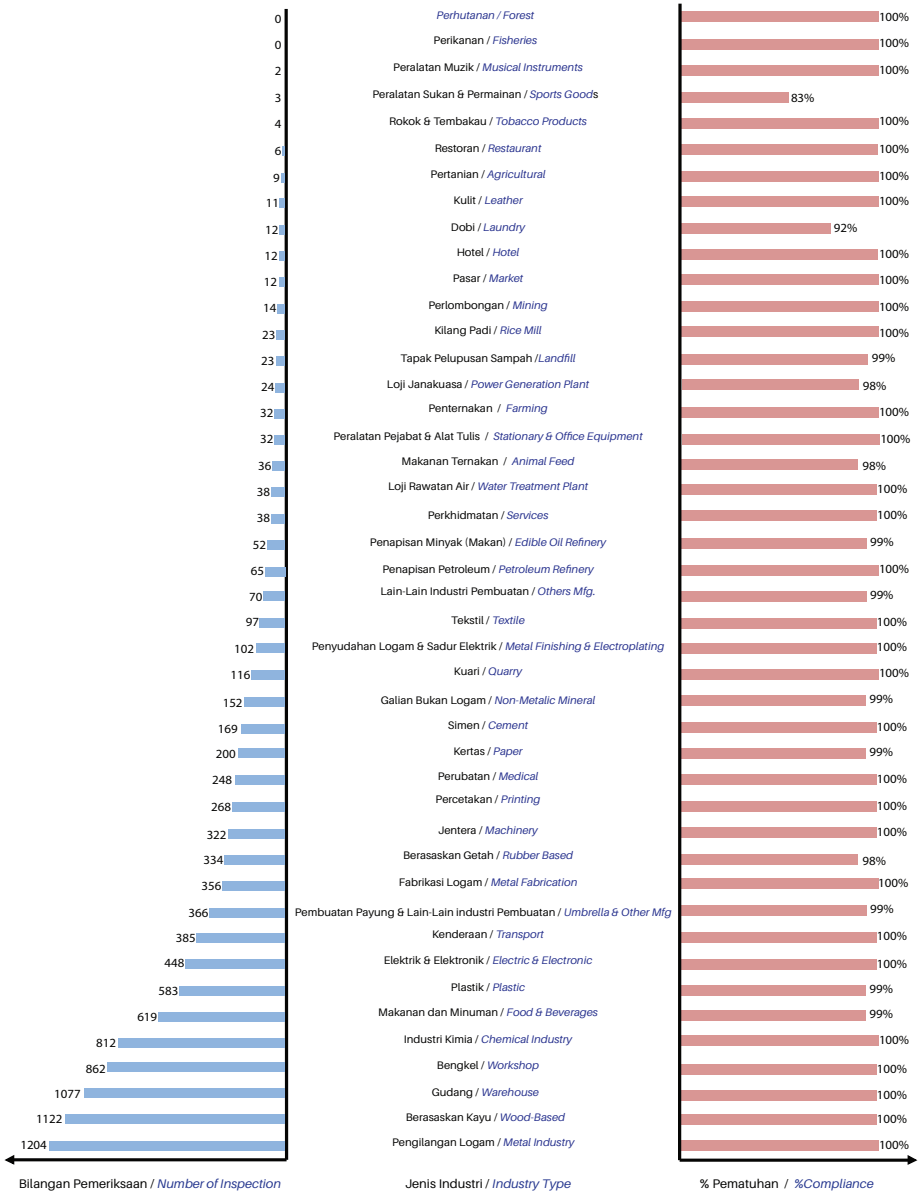
6 (e): Status Pematuhan Industri Terhadap Peraturan-Peraturan Kualiti Alam Sekeliling (Efluen Perindustrian) 2009, 2019

6 (e) : Compliance Status to the Environmental Quality (Industrial Effluent) Regulations 2009, 2019

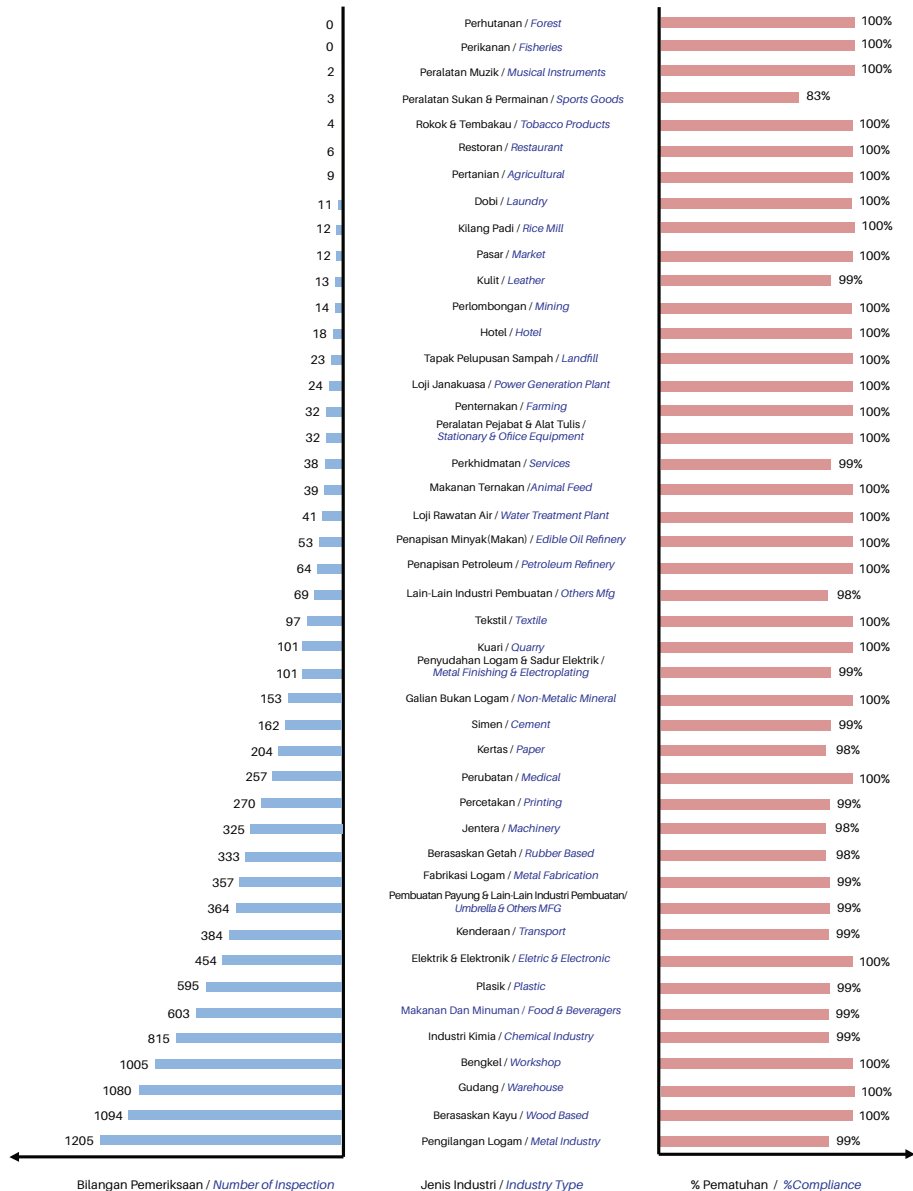


6 (f) : Status Pematuhan Industri Terhadap Peraturan-Peraturan Kualiti Alam Sekeliling (Udara Bersih) 2014, 2019

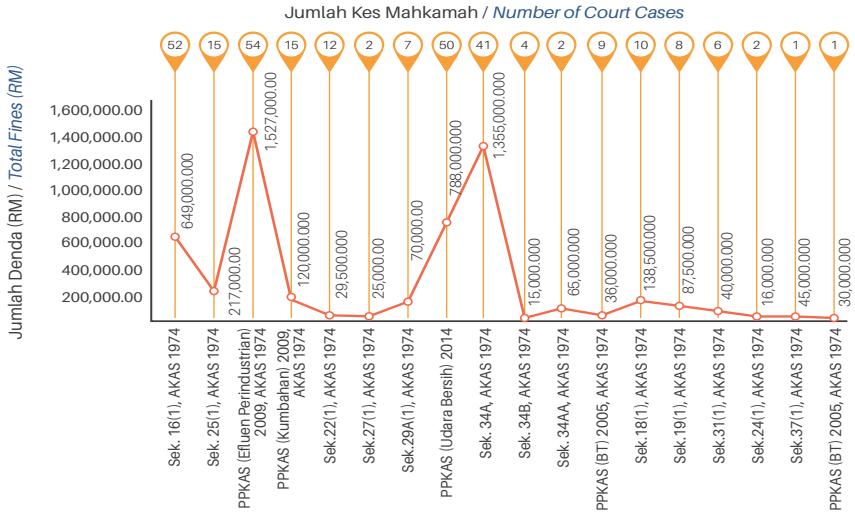
6 (f) : Compliance Status to the Environmental Quality (Clean Air) Regulations 2014, 2019



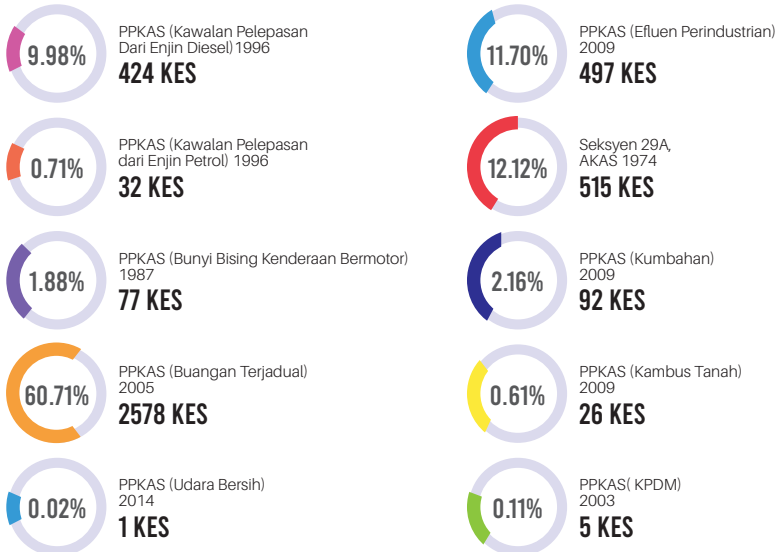
6 (g) : Status Pematuhan Industri Terhadap Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005, 2019
6 (g): Compliance Status to the Environmental Quality (Scheduled Waste) Regulations 2005, 2019



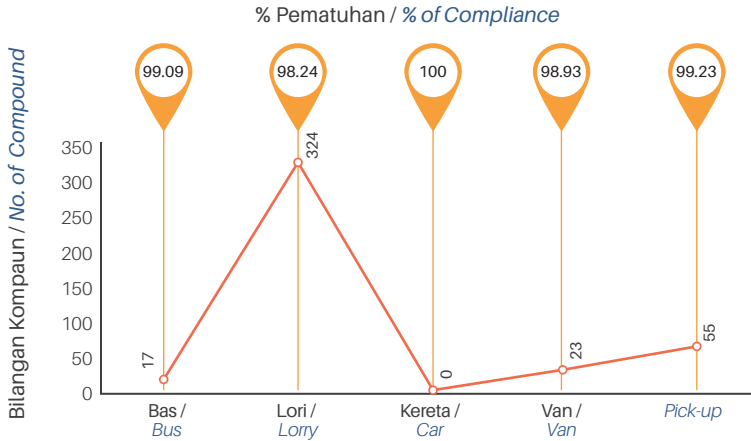
6 (h) : Bilangan Kes Mahkamah dan Denda Tahun, 2019
6 (h) : Number of Court Cases and Fines, 2019



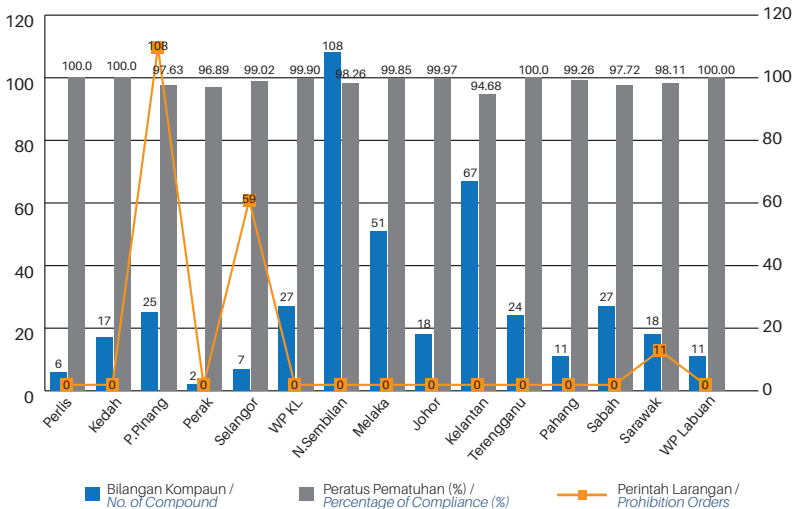
6 (i) : Bilangan Kes Kompaun Mengikut Pecahan PPKAS, 2019
6 (i) : Number of Compound Cases According to Environmental Quality Regulations, 2019



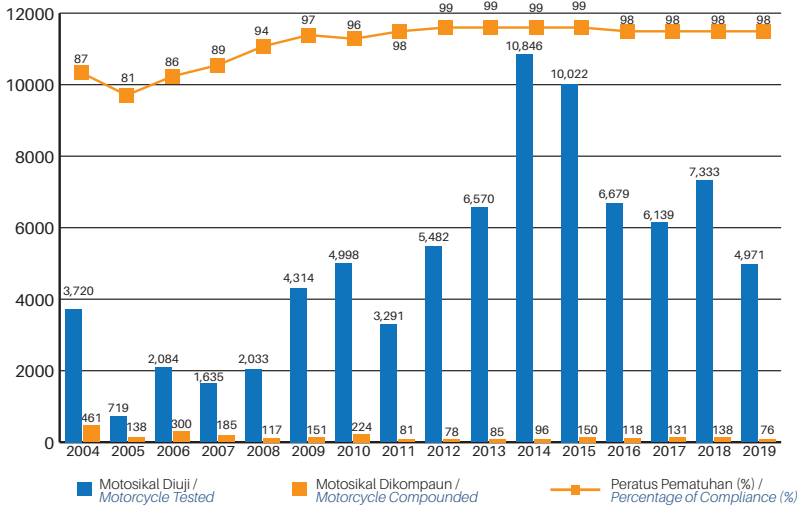
6 (i) : Peratus Pematuhan Mengikut Jenis Kenderaan Dan Bilangan Kompaun, 2019
6 (i) : Percentage of Compliance, According to Vehicle Type and Number of Compound, 2019



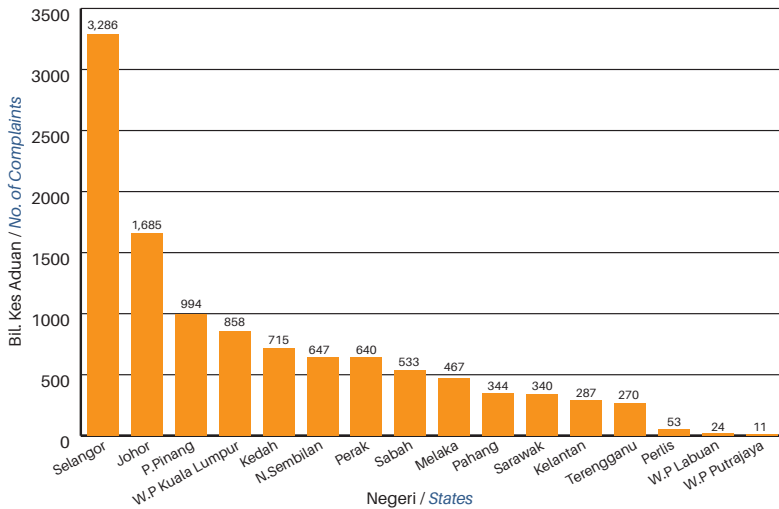
6 (j) : Bilangan Kenderaan Dikompaun, Pengeluaran Perintah Larangan & Peratus Pematuhan, 2019
6 (j) : Number of Vehicles Compounded, Number of Prohibition Orders Issued & Percentage of Compliance, 2019



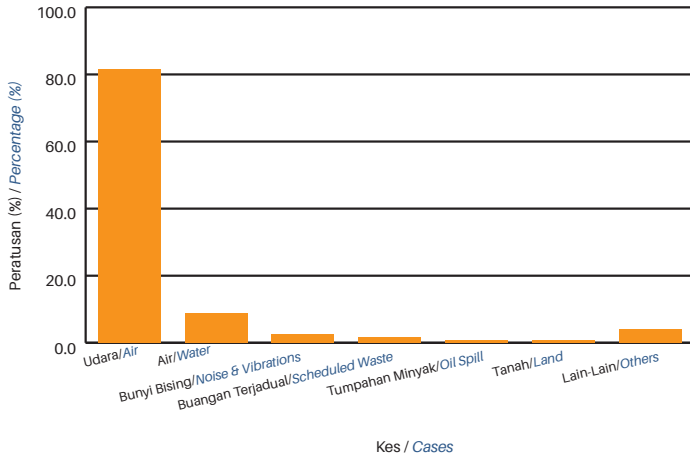
6 (k) : Peratus Pematuhan Bilangan Motosikal Diuji Dan Bilangan Kompaun (2002-2019)
 6 (k) : Percentage of Compliance, Number of Motorcycle Tested and Compound (2002 - 2019)



6 (l) : Bilangan Aduan Mengikut Negeri, 2019
 6 (l) : Number of Complaint by States, 2019



6 (m) Bilangan Kes Aduan Mengikut Jenis, 2019
6(m) : Number of Complaint Cases by Categories, 2019



6 (n) : Aktiviti-Aktiviti Tertakluk di Bawah Keperluan Penilaian Kesan Kepada Alam Sekitar (EIA)
6 (n) : *List of Prescribed Activities subjected to the Environmental Impact Assessment (EIA) requirements*

JADUAL PERTAMA / FIRST SCHEDULE

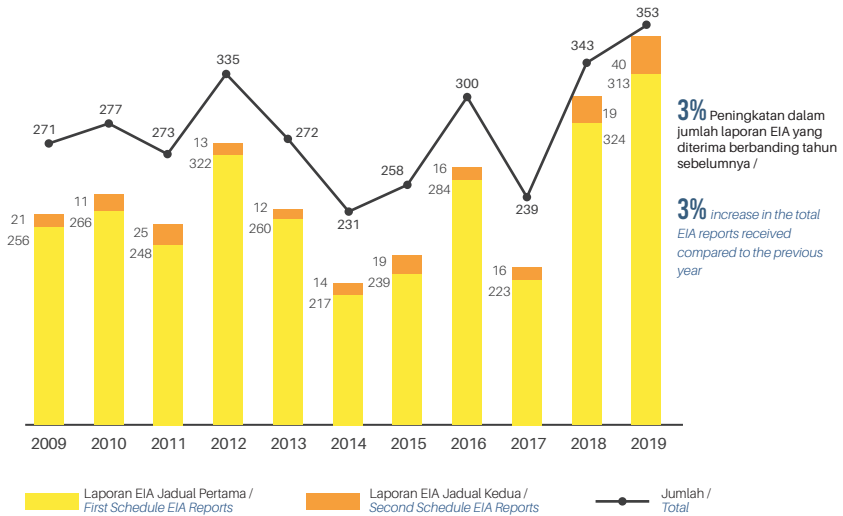
- | | |
|--|--|
| 1 Pertanian / <i>Agriculture</i> | 11 Penjanaaan Dan Pemancaran Kuasa / <i>Power Generation and Transmission</i> |
| 2 Aerodrom / <i>Aerodrome</i> | 12 Pembangunan di Kawasan Pantai dan Bukit / <i>Development in Coastal and Hill Area</i> |
| 3 Saliran dan Pengairan / <i>Drainage and Irrigation</i> | 13 Pembangunan di Kawasan Cerun / <i>Development in Slope Area</i> |
| 4 Perikanan / <i>Fisheries</i> | 14 Pengolahan dan Pelupusan Buangan / <i>Waste Treatment and Disposal</i> |
| 5 Perhutanan / <i>Forestry</i> | 15 Pengorekan / <i>Dredging</i> |
| 6 Industri / <i>Industry</i> | 16 Perumahan / <i>Housing</i> |
| 7 Penebusgunaan Tanah / <i>Land Reclamation</i> | 17 Pembangunan Estet Industri / <i>Industrial Estate Development</i> |
| 8 Perlombongan / <i>Mining</i> | 18 Bandar Baharu / <i>New Township</i> |
| 9 Petroleum / <i>Petroleum</i> | 19 Kuari / <i>Quarry</i> |
| 10 Pelabuhan / <i>Ports</i> | 20 Jalan / <i>Road</i> |
| | 21 Bekalan Air / <i>Water Supply</i> |



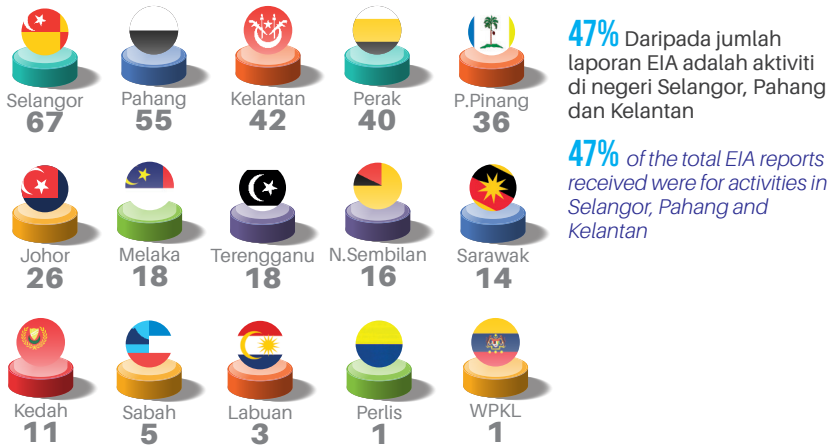
JADUAL KEDUA / SECOND SCHEDULE

- | | |
|--|--|
| 1 Pertanian / <i>Agriculture</i> | 11 Penjanaaan Dan Pemancaran Kuasa / <i>Power Generation and Transmission</i> |
| 2 Aerodrom / <i>Aerodrome</i> | 12 Pembangunan di Kawasan Pantai, Taman Negara dan Taman Negeri / <i>Development In Coastal Area, National Park And State Park</i> |
| 3 Saliran dan Pengairan / <i>Drainage and Irrigation</i> | 13 Pembangunan di Kawasan Cerun / <i>Development in Slope Area</i> |
| 4 Perikanan / <i>Fisheries</i> | 14 Pengolahan dan Pelupusan Buangan / <i>Waste Treatment and Disposal</i> |
| 5 Perhutanan / <i>Forestry</i> | 15 Pembinaan Empangan / <i>Construction of Dam</i> |
| 6 Industri / <i>Industry</i> | 16 Pengangkutan / <i>Transportation</i> |
| 7 Penebusgunaan Tanah / <i>Land Reclamation</i> | 17 Bahan Radioaktif dan Buangan Radioaktif / <i>Radioactive Materials and Radioactive Waste</i> |
| 8 Perlombongan / <i>Mining</i> | |
| 9 Petroleum / <i>Petroleum</i> | |
| 10 Pelabuhan / <i>Ports</i> | |

6 (o) : Bilangan Laporan EIA yang Diterima Mengikut Tahun (2009-2019)
6 (o) : Number of EIA Reports Received By Years (2009 – 2019)



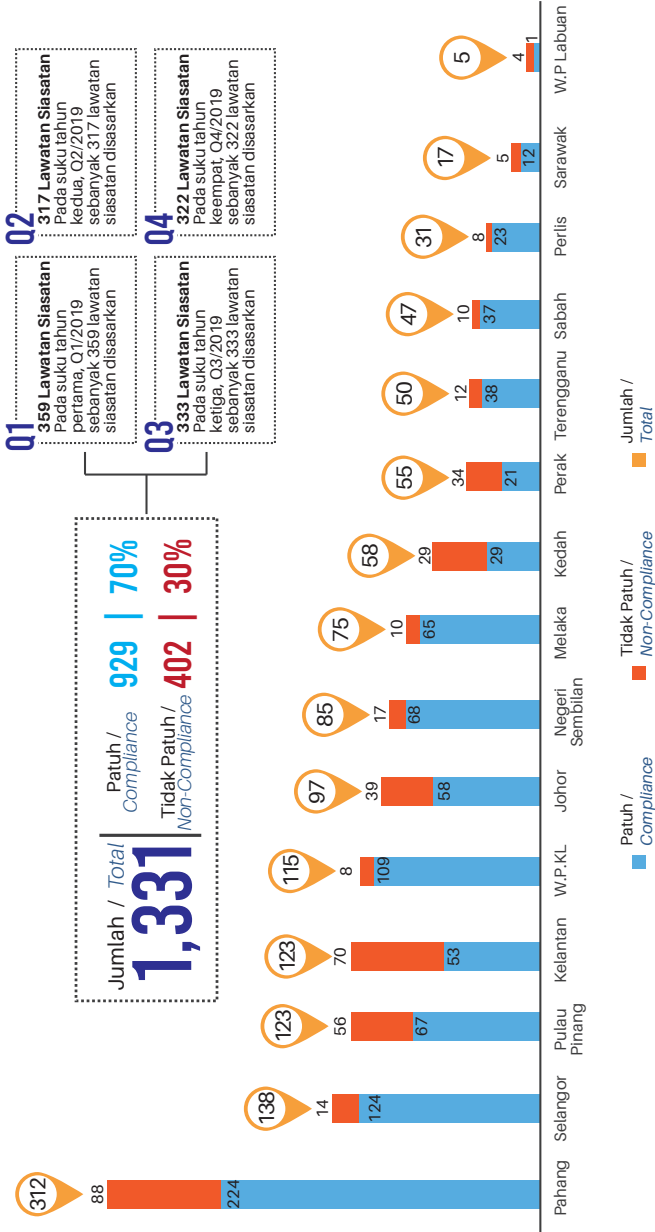
6 (p) : Bilangan Laporan EIA yang Diterima Mengikut Negeri 2019
6 (p) : Numbers of EIA Report Received By State 2019



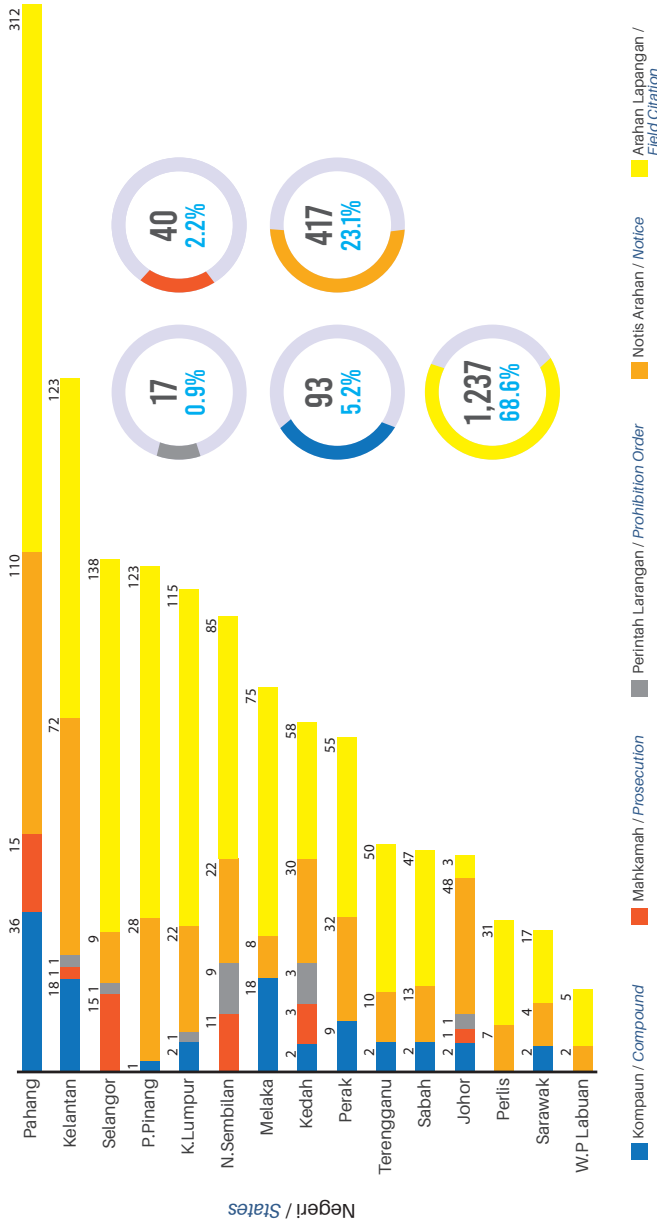
6 (q) : Bilangan Laporan EIA yang Diterima Mengikut Aktiviti 2019
6 (q) : Number of EIA Reports Received By Activity 2019



6 (r) : Siasatan Penguatkuasaan Projek EIA 2019
6 (r) : Post EIA Enforcement Investigation 2019

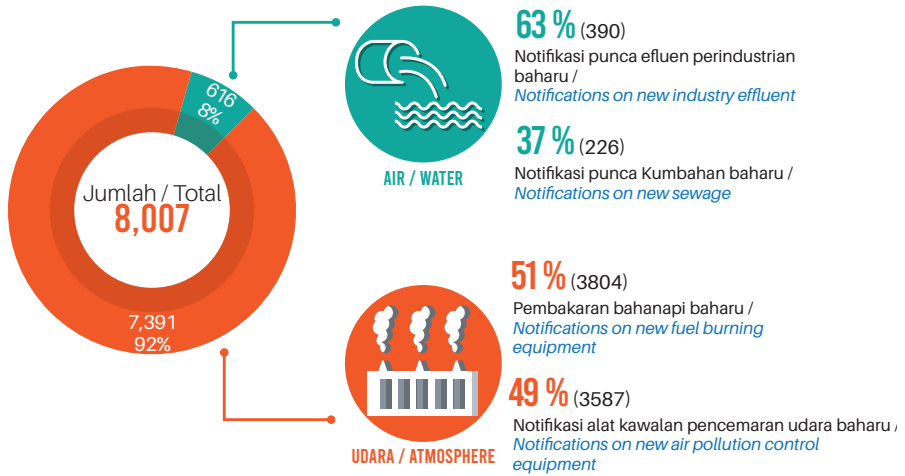


6 (s) : Tindakan Susulan Penguatkuasaan Post EIA Tahun 2019
6 (s): Follow Up Action Of EIA Enforcement Investigations 2019



6 (t) : Pemberitahuan Bertulis Bagi Pelepasan Kumbahan, Efluen Perindustrian, Alat Pembakaran Bahan Api, Dan Alat Kawalan Pencemaran Udara, 2019

6 (t) : Notification For Sewage Discharge, Industrial Effluent, Fuel Burning Equipment, And Air Pollution Control Equipment, 2019

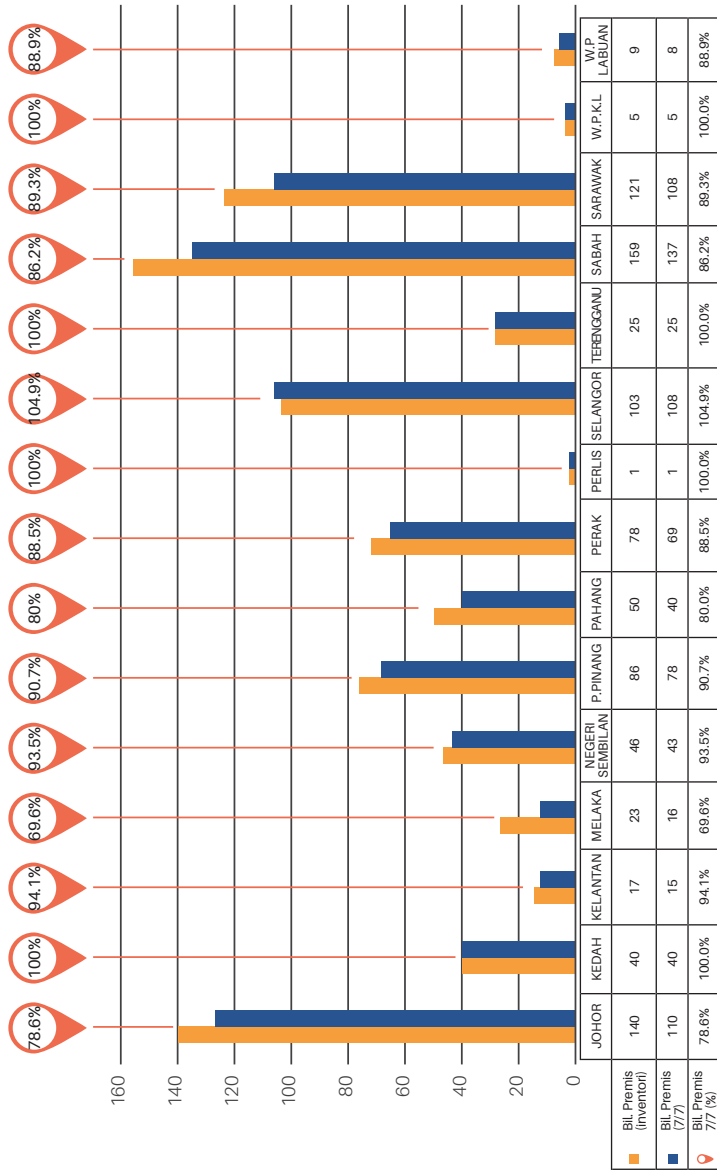


6(u) : Pematuhan Kendiri Terpimpin Melalui Pelaksanaan Tujuh (7) Environmental Mainstreaming Tools (EMTs)

6(u) : 7 Environmental Mainstreaming Tools (EMTs) in Guided Self - Regulation



6 (v) : Pencapaian Premis Yang Ditetapkan Kepada 7 Environmental Mainstreaming Tools, 2019
 6 (v) : Prescribed Premises Achievement on 7 Environmental Mainstreaming Tools, 2019



Nota : Sejumlah 804 premis daripada jumlah 903 PYDT telah mencapai 7/7 EMT

Note : A total of 804 premises out of 903 Prescribed Premises achieved 7/7 EMT

7 (a) : Pencapaian Program CEPA Ibu Pejabat 2019
 7 (a) : Achievement of DOE Headquarters on CEPA Program 2019

BIL / No	PROGRAM / PROGRAMME	PENCAPAIAN 2019 / 2019 ACHIEVEMENTS
1	Sambutan Hari Bumi Peringkat Kebangsaan	Tempat: Taman Teluk Likas, Kota Kinabalu, Sabah Tarikh: 22 April 2019 Bilangan Penyertaan: 1500 Orang (Penyertaan keseluruhan Malaysia - 4,300)
2	World Environment Day (WED)	Kempen Hindari Plastik Sekali Guna Tempat: Bazar Ramadhan Putrajaya
3	Sambutan Hari Alam Sekitar Negara 2019 Peringkat Kebangsaan	Tempat: Taman Pudu Ulu, WP Kuala Lumpur Tarikh: 19 Oktober 2019 Bilangan Penyertaan: 5010 Orang (Penyertaan keseluruhan Malaysia - 30,150)
4	Sambutan Hari Ozon Sedunia	Tempat: Hotel Tenera, Bangi, Selangor Tarikh: 24 September 2019 Bilangan Penyertaan: 300 Orang (keseluruhan Malaysia - 1500)
5	Sesi Dialog dengan Industri	Sesi town hall Tempat: Pasir Gudang, Johor Tarikh: 4 Ogos 2019
6	Minggu Sains Negara (MSN)	Tempat: Perlis dan Sabah Tarikh: April dan Ogos 2019
7	Kick-Off Promosi Sekolah Lestari-Anugerah Alam Sekitar (SLAAS) dan Kempen Tanpa Single-Use Plastic di Sekolah	Tempat: Dewan Baiduri, Wisma Sumber Asli, Putrajaya Tarikh: 21 Mac 2019
8	Bengkel Promosi Sekolah Lestari-Anugerah Alam Sekitar Zon Timur	Tempat: Bukit Gambang Resort City, Pahang Tarikh: 1-2 April 2019
9	Bengkel Promosi Sekolah Lestari-Anugerah Alam Sekitar Zon Utara	Tempat: The Jerai Hotel, Kedah Tarikh: 1-2 April 2019
10	Bengkel Promosi Sekolah Lestari-Anugerah Alam Sekitar Zon Tengah	Tempat: Bayou Lagoon Hotel, Melaka Tarikh: 18-19 Mac
11	Bengkel Promosi Sekolah Lestari-Anugerah Alam Sekitar Zon Sabah	Tempat: Hotel Courtyard, Kota Kinabalu, Sabah Tarikh: 28-29 Mac 2019
12	Bengkel Promosi Sekolah Lestari-Anugerah Alam Sekitar Zon Sarawak	Tempat: Harbour View Hotel, Sarawak Tarikh: 28-29 Mac 2019

7 (a) : Pencapaian Program CEPA Ibu Pejabat 2019
7 (a) : Achievement of DOE Headquarters on CEPA Program 2019

BIL/ No	PROGRAM / PROGRAMME	PENCAPAIAN 2019 / 2019 ACHIEVEMENTS
13	Bengkel Panel Penilai Sekolah Lestari - Anugerah Alam Sekitar	Tempat: Metra Square Hotel, Melaka Tarikh: 11-12 April 2019
14	Majlis Penganugerahan Sekolah Lestari - Anugerah Alam Sekitar	Diadakan pada 19 Oktober 2019 sempena Hari Alam Sekitar Negara Peringkat Kebangsaan 2019
15	Bengkel Panel Penilai Debat Alam Sekitar Tahun 2019	Tempat: Pacific Regency Hotel Suites, Kuala Lumpur Tarikh: 30 Oktober -2 November 2019
16	Pertandingan Debat Alam Sekitar Antara IPT Tahun 2019	Tempat: Universiti Sultan Zainal Abidin (UniSZA) Tarikh: 16-17 Oktober 2019
17	Program Outreach Komuniti	6 Program Outreach Komuniti :- i. Program Enviro Hiking Bersama LPPSA dan RAS di Gunung Angsi, Kuala Pilah pada 16 Mac 2019 ii. Pendaftaran RAS sempena Program Gotong Royong Cakna Pantai di Pantai Senok, Bachok, Kelantan pada 27 Julai 2019 iii. Program Kesedaran Hari Pembersihan Sedunia Bersama pihak industri di Pantai Chempaka, Kuantan, Pahang pada 5 Oktober 2019 iv. Gotong-royong Mega 2019 di Tawau pada 23 November 2019 v. Program Plogging Bersama peserta Debat Alam Sekitar di Pantai Miami, Terengganu pada 2 November 2019 vi. Program Cakna Banjir di Mukim Pontian, Daerah Rompin pada 21 Disember 2019
18	Pameran Interaktif	Sebanyak 20 pameran interaktif telah dilaksanakan sepanjang tahun di sekolah, industri dan IPT
19	Hebahan Melalui Media Sosial (FB, Twitter, Instagram, Youtube)	180 siaran telah dimuat naik di semua platform media social JAS
20	Slot Temubual	Siaran Televisyen dan Radio
21	Kenyataan Media Massa	Kenyataan akhbar/ press release bagi siding media
22	Video Pendek	2 video pendek dihasilkan: EIA & Penguatkuasa
23	Perkongsian Strategik	Sebanyak 200 perkongsian strategik telah dijalankan sepanjang tahun melibatkan pemegang taruh semasa sambutan dan program yang diadakan oleh JAS
JUMLAH PROGRAM/ AKTIVITI KESEDARAN		469

7 (b) : Pencapaian Program CEPA JAS Negeri 2019
7 (b) : Achievement of DOE State Office on CEPA Program 2019

Bil	Program/Kesedaran Alam Sekitar	PERLIS	KEDAH	PULAU PINANG	PERAK	SELANGOR	WPKL	NEGERI SEMBILAN	MELAKA	JOHOR	PAHANG	TERENGGANU	KELANTAN	SABAH	SARAWAK	WPK LABUAN
1	Kempen dan Pendidikan Alam Sekitar:															
i	Ceramah Sekolah/IPT	10	3	6	7	35	19	13	2	7	12	24	17	44	36	3
ii	Ceramah Industri	1	15	6	4	11		5	1	13	7	7	7	35	21	2
iii	Ceramah Umum	4	4	5	16	5		5	6	28	16	3	8	20	3	0
iv	Pameran	12	30	32	13	35	30	30	25	18	22	40	15	32	22	6
v	Seminar/ Taklimat/ Bengkel	2	4	5	4	20	4	25	5	2	17	4	12	9	22	2
vi	Sekolah Lestari- Anugerah Alam Sekitar	9	1	16	4	4	6	7	6	16	3	4	7	15	7	2
vii	Lain-Lain (Cth: Pengumpulan E-Waste/ Kekas/ Gotong-Royong / Tanam Pokok/ Plogging dll)	6	2	5	3	6	4	8	11	1	16	7	-	14	12	11
	Jumlah kempen dan Pendidikan Alam Sekitar	44	59	75	51	116	63	93	56	85	93	89	66	169	123	26
2	Sambutan															
i	Hari Bumi	6	1	1	1	1	1	1	1	2	-	1	1	10	3	1
ii	Hari Alam Sekitar Sedunia (WED)	1	1	3	1	1	1	1	2	1	2	1	1	4	2	1
iii	Hari Alam Sekitar Negara (HASN)	1	1	2	1	1	1	1	2	1	2	1	1	9	5	1

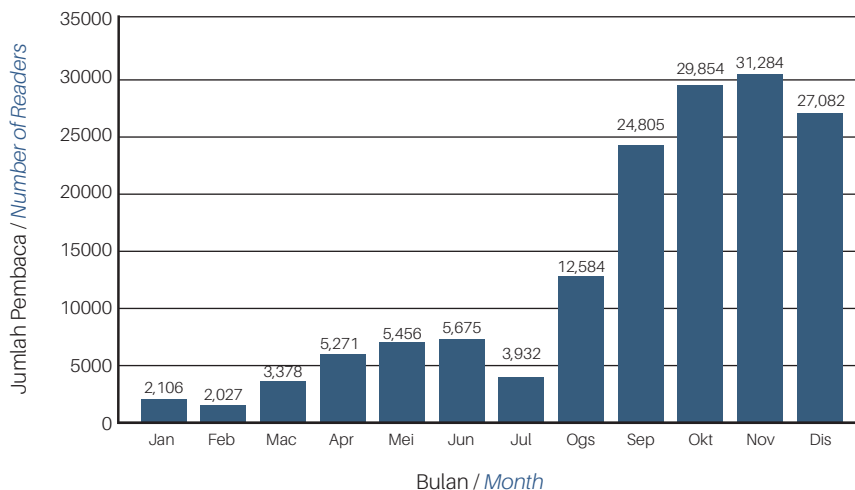
7 (b) : Pencapaian Program CEPA JAS Negeri 2019
7 (b) : Achievement of DOE State Office on CEPA Program 2019

Bil	Program/Kesedaran Alam Sekitar	PERLIS	KEDAH	PULAU PINANG	PERAK	SELANGOR	WPKL	NEGERI SEMBILAN	MELAKA	JOHOR	PAHANG	TERENGGANU	KELANTAN	SABAH	SARAWAK	WP LABUAN
	Jumlah Sembutan	8	3	6	3	3	3	3	5	4	4	3	3	23	10	3
3	Rakan Alam Sekitar (RAS):															
i	Bilangan Ahli RAS	592	1055	1035	1186	1177	1050	1000	1000	700	-	-	1200	1400	1059	150
ii.	Program RAS	3	-	2	1	4	-	10	0	0	1630	1166	0	55	14	2
4	Bilangan Ahli Pasukan Pemantau Pencemaran (3P):	0	-	0	0	0	0	-	0	-	-	10	0	0	Di Tangguhkan	-
5	Rakan Strategik		(Dipinda)							(Dipinda)		X				-
i	Bilangan Rakan Strategik (RS)	12	13	13	15	2	12	15	0	-	9	-	0	12	13	19
ii	Program / Engagement bersama Rakan Strategik	10	1	3	1	3	3	1	3	-	4	7	3	31	24	19
iii.	Program / Engagement bersama Stakeholders dan MP	2	4	1	0	0	-	1	2	-	-	10	8	22	24	1
	Jumlah Libat Urus	12	5	4	1	3	3	2	5	0	4	17	11	53	48	20
6	Sebaran Maklumat															
i	Hebahan melalui media masa (Elektronik dan cetak)	6	2	0	5	95	12	12	3	-	2	-	12	10	5	7
ii	Hebahan melalui media sosial (FB, Twitter, Instagram, Youtube)	12	2	3	60	25	20	24	241		40	5	6	65	48	12

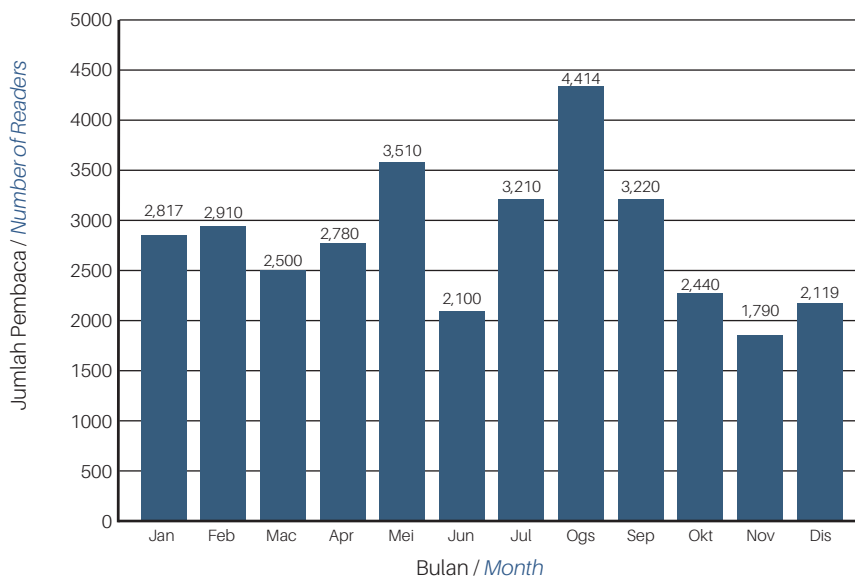
7 (b) : Pencapaian Program CEPA JAS Negeri 2019
 7 (b) : Achievement of DOE State Office on CEPA Program 2019

Bil	Program Kesedaran Alam Sekitar	PERLIS	KEDAH	PULAU PINANG	PERAK	SELANGOR	WPKL	NEGERI SEMBILAN	MELAKA	JOHOR	PAHANG	TERENGGANU	KELANTAN	SABAH	SARAWAK	WP LABUAN
	Jumlah Sebaran Maklumat	18	4	3	65	120	32	36	244	0	42	5	18	75	53	19
7	Aktiviti Tambahan															
7.1	Kempen dan Pendidikan Alam Sekitar:															
i	Aktiviti pengumpulan e-waste	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
ii	Pembudayaan ESTECC di sekolah - menjalankan aktiviti berkaitan sains teknologi dan inovasi	35	14	26	12	31	17	27	14	14	12	27	17	44	70	6
JUMLAH AKTIVITI		132	98	129	148	279	130	186	324	103	170	155	115	431	331	97
		2828														

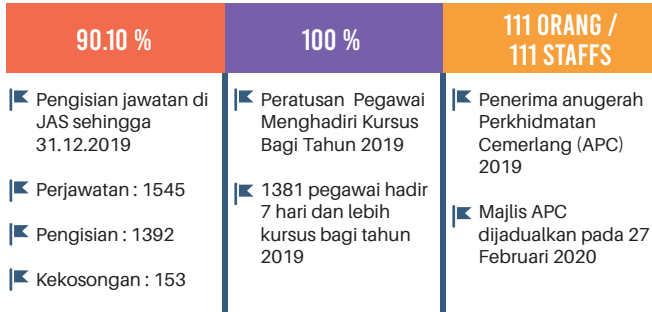
7 (c) : Jumlah Pembaca EKMC (Enviro Knowledge Management Center) , 2019
7 (c) : The total of readers on EKMC (Enviro Knowledge Management Center) , 2019



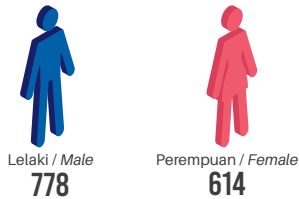
7 (d) : Jumlah pembaca EMUSEUM , 2019
7 (d) : Total of readers on EMUSEUM, 2019



Pengurusan Sumber Manusia / Human Resource Management



Pecahan Pegawai Mengikut Jantina / Breakdown of Officers by Gender



Pecahan Perjawatan / Breakdown of Position



Pengurusan Kewangan (Pembangunan) / Financial Management (Development)



Pengurusan Kewangan (Mengurus) / *Financial Management*

Anggaran Belanja Mengurus, 2019 /
Estimation for Management Expenditure, 2019

OBJEK AM / OBJEK AM	PERIHAL OBJEK AM / DESCRIPTION OF OBJEK AM	PERUNTUKAN DILULUSKAN / APPROVED BUDGET	PERUNTUKAN DIPINDA / BUDGET AMENDMENT
		(RM)	(RM)
10000	Emolumen	89,877,300	89,877,300
20000	Perkhidmatan & Bekalan	24,999,600	25,538,100
30000	Aset	-	11,268,500
40000	Pemberian & Kenaan Bayaran Tetap	820,300	1,220,300
JUMLAH KESELURUHAN / TOTAL		115,697,200	127,904,200

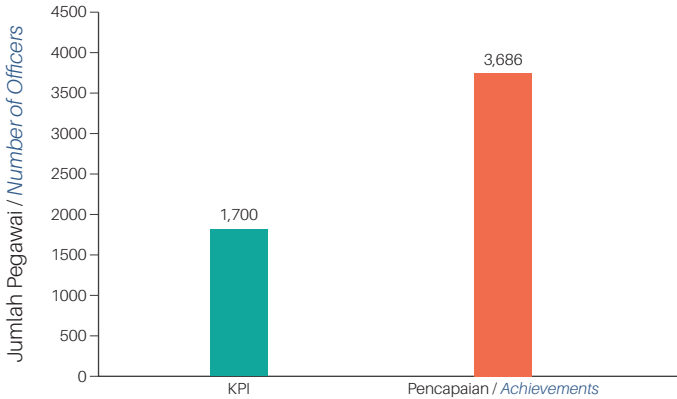
Pengurusan Aset / *Asset Management*

JENIS ASET / TYPE OF ASSETS	KUANTITI / QUANTITY	NILAI PEROLEHAN (RM) / VALUE OF ASSETS (RM)
Alat Pengawasan Udara, Aduan, Kenderaan Bermotor	267	10,720,805.56
Alat Pengawasan Air	109	2,910,620

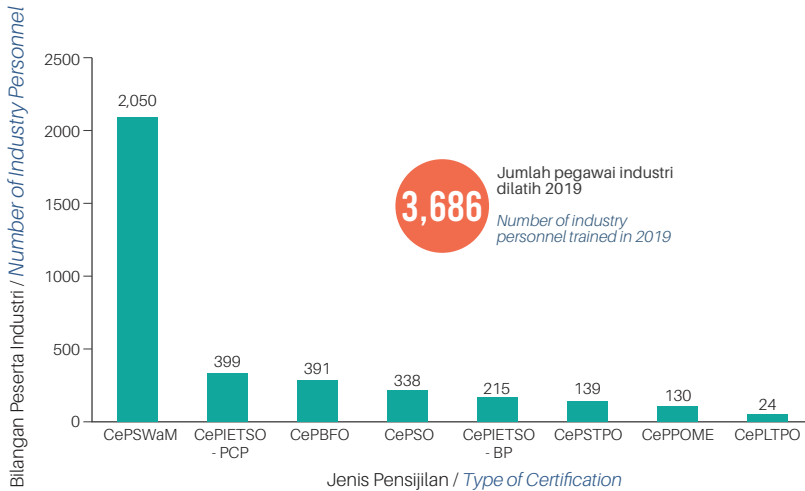
TAHUN / YEAR	KUANTITI ASET DISELENGGARA / QUANTITY OF MAINTENANCE ASSET	JUMLAH KOS PENYELENGGARAAN (RM) / TOTAL COST OF MAINTENANCE (RM)
2016	1137	1,518,725.19
2017	1047	1,669,077.49
2018	552	782,352.11
2019	627	1,051,415.14

Kompetensi Industri / Industrial Competency

8 (a): Bilangan Pegawai Industri Dilatih Berbanding KPI Yang Ditetapkan, 2019
8 (a) : Number Of Industry Personnel Trained Against KPI, 2019

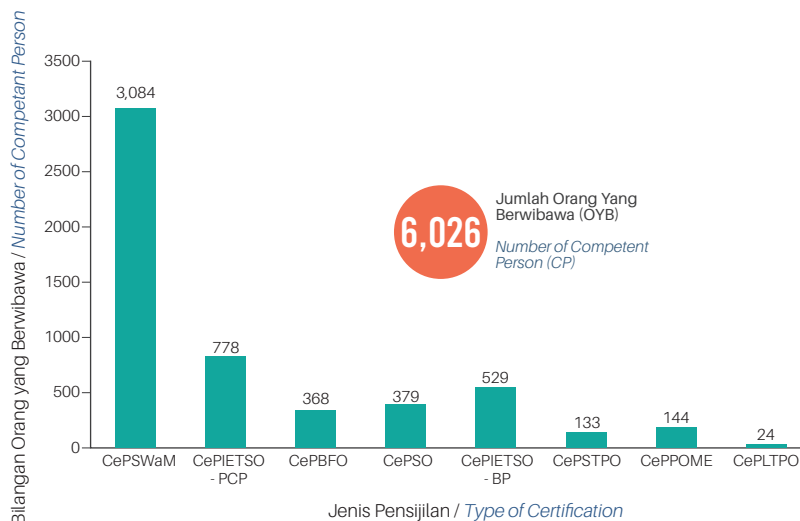


8 (b): Statistik Bilangan Pegawai Industri Dilatih Mengikut Kursus, 2019
8 (b) : Number of Industry Personnel Trained According to Course, 2019



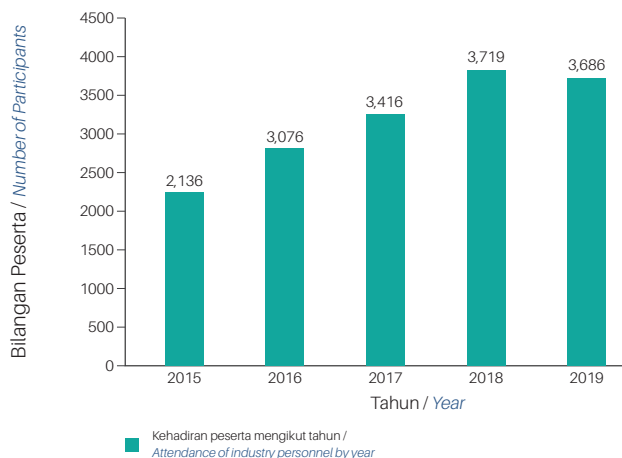
8 (c): Statistik Bilangan Orang Yang Berwibawa Mengikut Jenis Pensijilan Secara Keseluruhan, 2019

8 (c): Statistics of Competent Persons According to Type of Certification, 2019



8 (d): Bilangan Kehadiran Pegawai Industri Bagi 5 Tahun Terkini (2015 - 2019)

8 (d) : Attendance Of Industry Personnel For The Last 5 Years (2015 - 2019)



ARKITEKTUR BISNES JAS DOE BUSINESS ARCHITECTURE

MEDIUM PERKHIDMATAN / SERVICE MEDIUM

Aplikasi Mobil/ <i>Mobile Application</i>	Aplikasi Atas Talian / <i>On-Line Application</i>	Portal/ <i>Portal</i>	Emel/ <i>Email</i>	Sosial Media/ <i>Social Media</i>
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PENGGUNA PERKHIDMATAN/USER

DALAMAN/INTERNAL

- JAS Negeri/
Cawangan
DOE State Offices
- Kementerian /
Ministry

LUARAN/EXTERNAL

- Industri/*Industry*
- Badan Bukan
Kerajaan/*NGOs*
- Orang awam/*Public*
- Jururunding/*Consultant*

PERKHIDMATAN UTAMA/MAIN SERVICES

PENDAFTARAN/ REGISTRATION

- Premis /*Premise*
- Perunding/
Juruaudit
*Consultant/
Auditor*
- Pemaju/
Developer
- Rakan Alam
Sekitar

PEMBANGUNAN/ DEVELOPMENT

- Penilaian
Laporan EIA/
*Review of EIA
Report*
- Input
Pembangunan/
*Development
Input*
- Pelesenan/
Licensing

PENGAWASAN/ MONITORING

- Pencemaran Udara
(Kilang, Kenderaan
Bermotor, Pembakaran
Terbuka)/
*Air Pollution (Factories,
Motor Vehicles, Open
Burning)*
- Pengurusan Buangan
Terjadual & Tanah
Tercemar/
*Scheduled Wastes &
Contaminated Land
management*
- Pencemaran Bunyi
Bising/
Noise Pollution
- Pencemaran Air (Marin,
Sungai, Tanah Daratan)/
*Water Pollution (Marine,
River, Groundwater)*

PENGUATKUASAAN/ ENFORCEMENT

- Pematuhan Premis
Punca Tetap/
*Point Sources
Premises Compliance*
- Pematuhan
Kenderaan Bermotor/
*Motor Vehicles
Compliance*
- Pengendalian Kes
Aduan/
Complaints Handling

KOMUNIKASI STRATEGIK/ STRATEGIC COMMUNICATION

- Program Pendidikan & Kesedaran
Alam Sekitar Industri / *Education &
Awareness Program for Industry*
- Program Pendidikan & Kesedaran
Alam Sekitar Pelajar & Orang Awam /
*Education & Awareness Program for
Students & Public*
- Perhubungan Badan dan Agensi Luar
Negara /
International Cooperation

KOMPETENSI/ COMPETENCY

- Pelaksanaan Program
Latihan/Persijilan
*Competency/Training Program
Implementation*

PERKHIDMATAN SOKONGAN / SUPPORTING SERVICES

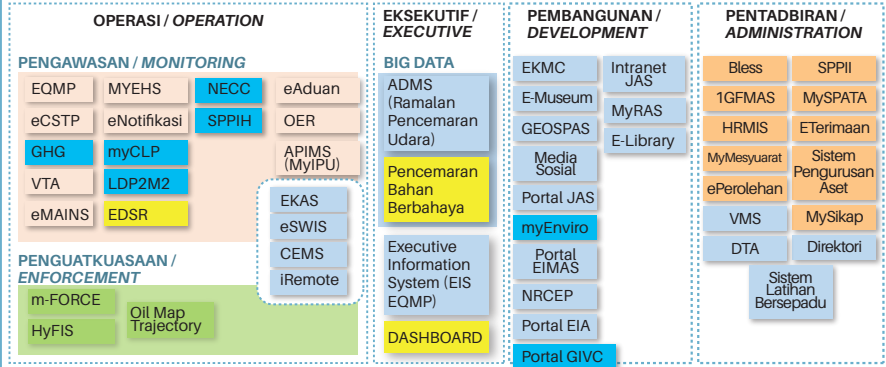
PENTADBIRAN & KEWANGAN / ADMINISTRATION & FINANCE

- Pengurusan Sumber Manusia / Human Resource Management
- Pentadbiran / Administration
- Pengurusan Kewangan & Akaun / Finance & Account Management
- Pengurusan Aset & Stor / Asset & Store Management

TEKNOLOGI MAKLUMAT / INFORMATION TECHNOLOGY

- Pembangunan & Penyelenggaraan Maklumat Spatial / Spatial Information Development & Maintenance
- Pembangunan & Penyelenggaraan Aplikasi / Application Development & Maintenance
- Pengurusan Infrastruktur / Infrastructure Management
- Latihan ICT / ICT Training & Management

SISTEM APLIKASI YANG MENYOKONG PERKHIDMATAN / FUNGSI APPLICATION SYSTEM SUPPORTING DOE SERVICES / FUNCTIONS



DATA / DATA

LUARAN / EXTERNAL

- Hidrologi (JPS)
- Cuaca (MET)
- Hotspot (ASMC)
- Fasiliti (MACGDI)
- Lot.Topo (JUPEM)
- Media Sosial
- Gunatanah (Plan)

DALAMAN / INTERNAL

- Pengawasan
- Pemeriksaan
- Tindakan
- SIMPAS (Maklumat Premis)
- Penguatkuasaan
- Pelesenan
- Pelepasan Bahan Cemar Udara (CEMS)
- Aduan
- RAS
- Jururunding
- Spatial
- EIA
- KPI
- Effluent
- Audit
- Waste
- IPU
- Tumpahan Minyak
- Juruteknik Servis
- Hotspot Jas

AGENSI LUAR YANG BERHUBUNG DENGAN JAS

- Industri
- Badan Kerajaan
- IPTA / IPTS
- Rakan Strategik
- Orang Awam
- NGO
- Pemaju Projek
- Jururunding
- Juruaudit

BAHAGIAN/CAWANGAN YANG DIKAWALSELIA

- Udara
- Bahan Berbahaya
- ICT
- Penguatkuasaan
- EIMAS
- Air & Marin
- Komunikasi Strategik
- Penilaian
- Pentadbiran & Kewangan

TEKNOLOGI / TECHNOLOGY

- Pusat Data
- Disaster Recovery Center
- Rangkaian ICT
- Keselamatan ICT
- Pengkalan Data
- Peralatan ICT
- Big Data (KATS)
- Internet Benda
- Pemprosesan Awam
- Kecerdasan Buatan

Petunjuk: Dalam Perancangan | Sistem JAS | Sistem Agensi Induk | Dalam Pembangunan

9 (a) : Kompilasi Ringkas Mengenai Sistem-sistem Utama Di Jabatan Alam Sekitar
9 (a) : *Compilation of Main Systems in the Department of Environment*

BIL / NO	SISTEM APLIKASI / APPLICATION SYSTEM	URL / URL
SEKTOR OPERASI / OPERATION SECTOR		
1	Sistem Elektronik Kawalan Alam Sekitar (eKAS)	https://www.ekas.doe.gov.my
2	Sistem Continuous Emission Monitoring System (CEMS)	https://cems.doe.gov.my/
3	Sistem Integrated Remote Monitoring System (iREMOTE)	https://iremote.doe.gov.my/
4	Sistem Environmental Quality Monitoring Programme (EQMP)	https://eqmp.doe.gov.my/
5	Sistem Air Pollutant Index of Malaysia (APIMS/ MyIPU)	http://apims.doe.gov.my
6	National Environment Control Centre (NECC)	http://necc.doe.gov.my/
7	Electronic Certification Service Technician Programme (eCSTP)	https://ecstp.doe.gov.my/
8	Sistem Environmental Mainstreaming Tools (EMAINS)	https://emains.doe.gov.my/
9	Portal dan Sistem Environmentally Hazardous Substances Notification And Registration (myEHS)	https://myehs.doe.gov.my/portal/ehsnr/
10	Online Environmental Reporting (OER)	https://oer.doe.gov.my/
11	Sistem Pengurusan dan Pemantauan Industri Hijau (SPPIH)	Dalam perancangan / Pembangunan
12	Sistem Electronic Aduan (eADUAN)	https://eaduan.doe.gov.my
13	Sistem Green House Gasses (GHG)	https://ghg-inventory.doe.gov.my/green/
14	Sistem Notifikasi Udara (eNotifikasi)	Dalam perancangan / Pembangunan
15	Environmental Spatial Data Repository - ESDR	Dalam perancangan / Pembangunan
16	Vehicle Type Approval (VTA)	https://vta.doe.gov.my/
17	Sistem Certification Environmental Practitioner (myCEP)	https://mycep.doe.gov.my
18	Sistem Aplikasi Land Disturbing Pollution Prevention and Mitigation Measures (LDP2M2)	Dalam perancangan / Pembangunan
19	Sistem Air Data Management System (ADMS)	https://adms.doe.gov.my
20	Sistem Oil Spill Trajectory	Tiada (merupakan perisian yang dimuat turun dalam komputer)
21	Sistem Hydrocarbon Fingerprinting (HyFis)	https://hyfis.doe.gov.my

9 (a) : Kompilasi Ringkas Mengenai Sistem-sistem Utama Di Jabatan Alam Sekitar
 9 (a) : *Compilation of Main Systems in the Department of Environment*

BIL / NO	SISTEM APLIKASI / APPLICATION SYSTEM	URL / URL
SEKTOR PEMBANGUNAN / DEVELOPMENT SECTOR		
22	Sistem Aplikasi Geospasial Alam Sekitar (GeoSpAS)	https://geospas.doe.gov.my/
23	Sistem Aplikasi Rakan Alam Sekitar (MYRAS)	https://myras.doe.gov.my
24	Sistem Laporan Erosion & Sediment Control (ESC)	http://eia.doe.gov.my/
25	Sistem Kehadiran Pejabat (DTA)	http://dta.doe.gov.my
26	Sistem Perpustakaan Atas Talian (KOHA)	http://elibrary.doe.gov.my
27	Sistem Pengurusan Fail	http://spf.doe.gov.my
28	Sistem Direktori JAS	http://apps.doe.gov.my/directorylogin/
29	Sistem Pengurusan Pelawat (ViMS)	http://apps.doe.gov.my/vims/
30	Laman Web Rasmi Jabatan Alam Sekitar	https://www.doe.gov.my
31	Portal Informasi Alam Sekitar (myEnviro)	https://myenviro.doe.gov.my
32	Laman Intranet JAS	https://www.doe.gov.my/portala_intranet
33	Laman Web Enviro Knowledge Management Centre	https://enviro2.doe.gov.my/ekmc
34	Laman Web Enviro MUSEUM	https://enviro2.doe.gov.my/emuseum/
35	Laman Web Institut Alam Sekitar Malaysia (EIMAS)	www.doe.gov.my/eimasv2
36	Laman Web Rakan Alam Sekitar	https://ras.doe.gov.my/v2/
37	Laman Web Environmental Impact assessment (EIA)	https://www.doe.gov.my/eia/
38	Laman Web Bahan Buangan Elektrik Isi Rumah	https://www.doe.gov.my/hhew/
39	Laman Web Pusat Visual Industri Hijau (GIVC)	https://cp.doe.gov.my/cpvc/



**Jabatan Alam Sekitar
Kementerian Alam Sekitar dan Air**

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