



KEMENTERIAN  
ALAM SEKITAR DAN AIR  
Ministry of Environment and Water



# BUKU KOMPENDIUM

*Jabatan Alam Sekitar*

# 2021





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# PRAKATA

## FOREWORD

السلام عليكم ورحمة الله وبركاته

dan Salam Sejahtera,



“ALAM SEKITAR, TANGGUNGJAWAB BERSAMA”

Alhamdulillah syukur dipanjatkan kepada Allah s.w.t atas kejayaan Jabatan Alam Sekitar (JAS) dalam menerbitkan Buku Kompedium JAS Keluaran 2021.

Buku Kompedium JAS ini adalah himpunan maklumat mengenai aktiviti JAS yang telah dijalankan sehingga berakhir Disember 2020. Maklumat seperti kualiti udara, kualiti air sungai, kualiti air marin dan pulau-pulau, kualiti air tanah dan pengurusan bahan berbahaya boleh didapati dalam Buku Kompedium ini bagi tujuan kajian, rujukan atau pembelajaran.

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

Sekian, terima kasih.

**WAN ABDUL LATIFF BIN WAN JAFFAR**  
Ketua Pengarah Alam Sekitar

# 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

- 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*



- 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 Pemindahan 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

- 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) (Buangan Terjadual) 2005  
*Environmental Quality (Prescribed Conveyance) (Scheduled Wastes) Order 2005*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 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*

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

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



- 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*
- Peraturan-Peraturan Kualiti Alam Sekeliling (Premis Yang Ditetapkan)(Getah Asli Mentah) 1978  
*Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Regulations 1978*
- 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*
- Perintah Kualiti Alam Sekeliling (Perwakilan Kuasa) 2005  
*Environmental Quality (Delegation Of Powers) Order 2005*
- Perintah Kualiti Alam Sekeliling (Aktiviti Yang Ditetapkan) (Penilaian Kesan Kepada Alam Sekeliling) 2015  
*Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015*

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

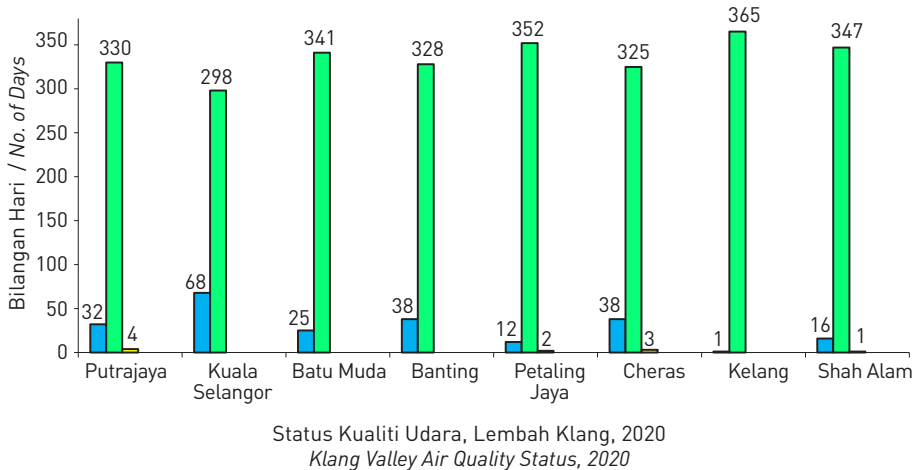
1 (b) : Malaysian Ambient Air Quality Standard

PARAMETER	MASA PURATA/ AVERAGING TIME	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 <sub>10</sub>	1 tahun	µg/m <sup>3</sup>	50	50	45	<b>40</b>
	24 jam	µg/m <sup>3</sup>	150	150	120	<b>100</b>
PM <sub>2.5</sub>	1 tahun	µg/m <sup>3</sup>	-	35	25	<b>15</b>
	24 jam	µg/m <sup>3</sup>	-	75	50	<b>35</b>
SO <sub>2</sub>	1 jam	µg/m <sup>3</sup>	350	350	300	<b>250</b>
		ppm	0.135	0.135	0.115	<b>0.095</b>
	24 jam	µg/m <sup>3</sup>	105	105	90	<b>80</b>
		ppm	0.040	0.040	0.035	<b>0.030</b>
*CO	1 jam	mg/m <sup>3</sup>	35	35	35	<b>30</b>
		ppm	30.6	30.6	30.6	<b>26.2</b>
	8 jam	mg/m <sup>3</sup>	10	10	10	<b>10</b>
		ppm	8.75	8.75	8.75	<b>8.75</b>
NO <sub>2</sub>	1 jam	µg/m <sup>3</sup>	320	320	300	<b>280</b>
		ppm	0.170	0.170	0.160	<b>0.150</b>
	24 jam	µg/m <sup>3</sup>	75	75	75	<b>70</b>
		ppm	0.040	0.040	0.040	<b>0.037</b>
O <sub>3</sub>	1 jam	µg/m <sup>3</sup>	200	200	200	<b>180</b>
		ppm	0.100	0.100	0.100	<b>0.090</b>
	8 jam	µg/m <sup>3</sup>	120	120	120	<b>100</b>
		ppm	0.060	0.060	0.060	<b>0.050</b>

Nota: \*mg/m<sup>3</sup> IT-Interim Tier (tahun)

## 1 (c) : Status Kualiti Udara Lembah Klang, 2020

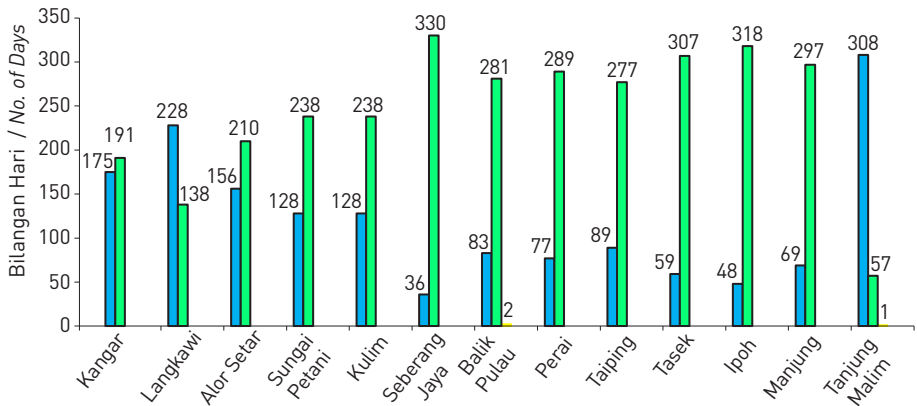
## 1 (c) : Klang Valley Air Quality Status, 2020



- Baik / Good (0-50)
- Sederhana / Moderate (51-100)
- Tidak Sihat / Unhealthy (101-200)
- Very Unhealthy / Sangat Tidak Sihat (201-300)
- Berbahaya / Hazardous (>300)

## 1 (d) : Status Kualiti Udara, Wilayah Utara Pantai Barat Semenanjung Malaysia, 2020

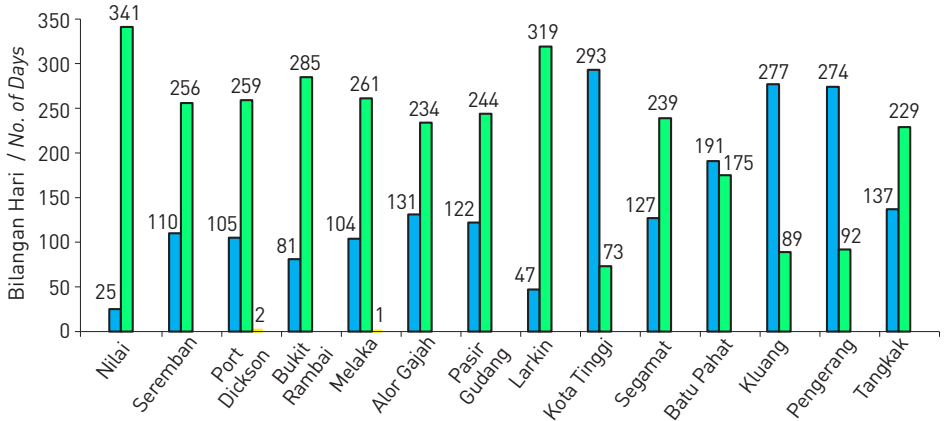
## 1 (d) : Northern Region of The West Coast Peninsular Malaysia Air Quality Status, 2020



- Baik / Good (0-50)
- Sederhana / Moderate (51-100)
- Tidak Sihat / Unhealthy (101-200)
- Very Unhealthy / Sangat Tidak Sihat (201-300)
- Berbahaya / Hazardous (>300)

1 (e) : Status Kualiti Udara, Wilayah Selatan Pantai Barat Semenanjung Malaysia, 2020

1 (e) : Southern Region of The West Coast Peninsular Malaysia Air Quality Status, 2020

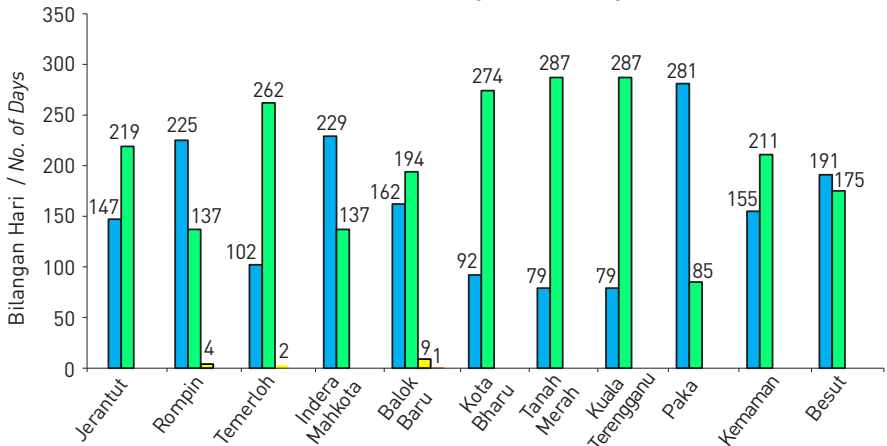


Status Kualiti Udara, Wilayah Selatan Pantai Barat Semenanjung Malaysia, 2020  
Air Quality Status, Southern Region of The West Coast Peninsular Malaysia, 2020

- Baik / Good (0-50)
- Sederhana / Moderate (51-100)
- Tidak Sihat / Unhealthy (101-200)
- Very Unhealthy / Sangat Tidak Sihat (201-300)
- Berbahaya / Hazardous (>300)

1 (f) : Status Kualiti Udara, Pantai Timur Semenanjung Malaysia, 2020

1 (f) : East Coast Peninsular Malaysia Air Quality Status, 2020

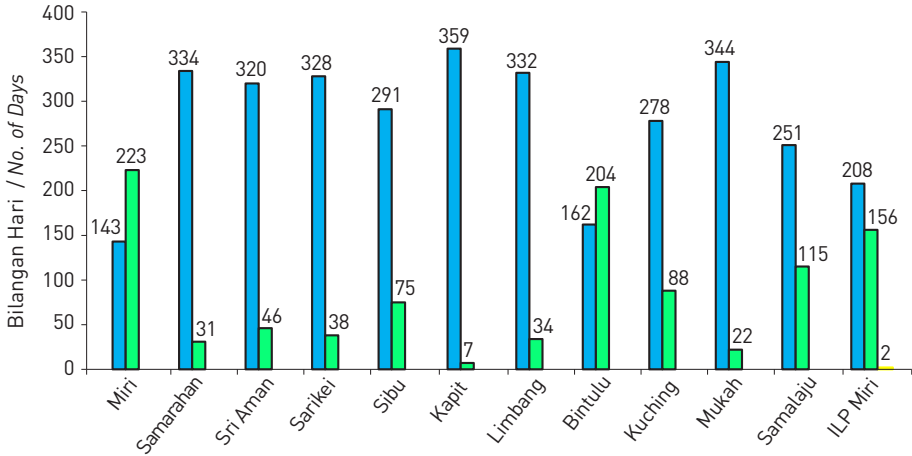


Status Kualiti Udara, Pantai Timur Semenanjung Malaysia, 2020  
Air Quality Status, East Coast Peninsular Malaysia, 2020

- Baik / Good (0-50)
- Sederhana / Moderate (51-100)
- Tidak Sihat / Unhealthy (101-200)
- Very Unhealthy / Sangat Tidak Sihat (201-300)
- Berbahaya / Hazardous (>300)

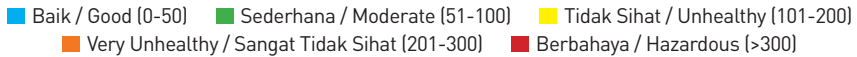
## 1 (g) : Status Kualiti Udara Sarawak, 2020

1 (g) : Sarawak Air Quality Status, 2020



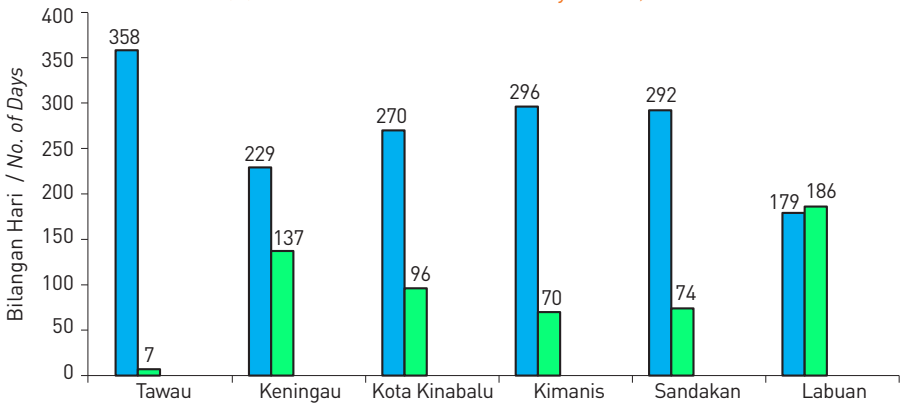
Status Kualiti Udara, Sarawak, 2020

Air Quality Status, Sarawak, 2020



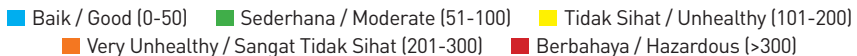
## 1 (h) : Status Kualiti Udara Sabah dan Labuan, 2020

1 (h) : Sabah and Labuan Air Quality Status, 2020



Status Kualiti Udara, Sabah dan Labuan, 2020

Air Quality Status, Sabah and Labuan, 2020



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 spesies 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 spesies 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 di atas

*None of the above*

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020			
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	
Perlis	Sg. Perlis	Sg. Arau	2	82	B/C	II	83	B/C	II	
		Sg. Empangan Timah Tasoh	1	87	B/C	II	93	B/C	I	
		Sg. Jarum	1	83	B/C	II	88	B/C	II	
		Sg. Jernih	2	86	B/C	II	91	B/C	II	
		Sg. Kok Mak	1	86	B/C	II	88	B/C	II	
		Sg. Ngulang	1	82	B/C	II	90	B/C	II	
		Sg. Pelarit	1	91	B/C	II	94	B/C	I	
		Sg. Serai	1	76	ST/SP	III	82	B/C	II	
		Sg. Terusan Mada	2	85	B/C	II	88	B/C	II	
		Sg. Wang Kelian	1	94	B/C	I	95	B/C	I	
Kedah	Sg. Kedah	Sg. Ahning	1	88	B/C	II	92	B/C	II	
		Sg. Changlun	1	77	ST/SP	II	87	B/C	II	
		Sg. Janing	1	91	B/C	II	93	B/C	I	
		Sg. Napoh	1	80	ST/SP	II	82	B/C	II	
		Sg. Padang Terap	5	87	B/C	II	86	B/C	II	
		Sg. Pedu	1	90	B/C	II	91	B/C	II	
		Sg. Pendang	1	77	ST/SP	II	81	B/C	II	
		Sg. Sintok	1	81	B/C	II	92	B/C	II	
		Sg. Tekai	1	80	ST/SP	II	88	B/C	II	
		Sg. Temin	1	77	ST/SP	II	84	B/C	II	
		Sg. Terusan Lengkuas	1	89	B/C	II	86	B/C	II	
		Sg. Terusan Mada Selatan	1	88	B/C	II	89	B/C	II	
		Sg. Terusan Tengah	1	89	B/C	II	88	B/C	II	
		Sg. Kiasap	Sg. Kiasap	1	90	B/C	II	95	B/C	I
		Sg. Kuah	Sg. Kuah	1	74	ST/SP	III	81	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Kedah	Sg. Merbok	Sg. Bukit Merah	1	80	ST/SP	II	92	B/C	II
		Sg. Bukit Nanas	1	93	B/C	I	95	B/C	I
		Sg. Tok Pawang	2	88	B/C	II	90	B/C	II
		Sg. Tupah	1	93	B/C	I	94	B/C	I
	Sg. Muda	Sg. Chepir	1	87	B/C	II	89	B/C	II
		Sg. Gunung Inas	1	92	B/C	II	93	B/C	I
		Sg. Karangan	1	81	B/C	II	85	B/C	II
		Sg. Ketil	1	85	B/C	II	87	B/C	II
		Sg. Muda	12	86	B/C	II	87	B/C	II
		Sg. Pegang	1	93	B/C	I	95	B/C	I
		Sg. Sedim	2	87	B/C	II	89	B/C	II
		Sg. Tawar	3	90	B/C	II	88	B/C	II
	Sg. Ulu Melaka	Sg. Melaka	3	82	B/C	II	90	B/C	II
		Sg. Petang	1	93	B/C	I	96	B/C	I
		Sg. Saga	1	76	ST/SP	III	81	B/C	II
		Sg. Tuba	1	88	B/C	II	94	B/C	I
P.Pinang	Sg. Juru	Sg. Ara	1	66	ST/SP	III	82	B/C	II
	Sg. Pinang	Sg. Air Terjun	1	93	B/C	I	95	B/C	I
		Sg. Batu Feringghi	2	87	B/C	II	92	B/C	II
		Sg. Satu	1	93	B/C	I	96	B/C	I
P.Pinang / Kedah	Sg. Perai	Sg. Kulim	5	91	B/C	II	89	B/C	II
P.Pinang / Kedah / Perak	Sg. Kerian	Sg. Kechil	2	85	B/C	II	86	B/C	II
		Sg. Kerian	6	83	B/C	II	86	B/C	II
		Sg. Selama	3	87	B/C	II	88	B/C	II
		Sg. Semang	1	76	ST/SP	III	81	B/C	II
		Sg. Terusan Bagan Serai	1	91	B/C	II	93	B/C	I

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Perak	Sg. Bruas	Sg. Bruas	3	90	B/C	II	90	B/C	II
		Sg. Dandang	1	86	B/C	II	91	B/C	II
		Sg. Licin	1	95	B/C	I	96	B/C	I
		Sg. Rotan	2	89	B/C	II	89	B/C	II
	Sg. Kurau	Sg. Air Hitam	1	76	ST/SP	III	95	B/C	I
		Sg. Ara	2	92	B/C	II	93	B/C	I
		Sg. Kurau	4	86	B/C	II	86	B/C	II
	Sg. Perak	Sg. Batang Padang	3	82	B/C	II	88	B/C	II
		Sg. Behrang	1	94	B/C	I	97	B/C	I
		Sg. Berok	1	92	B/C	II	96	B/C	I
		Sg. Bidor	3	84	B/C	II	84	B/C	II
		Sg. Chenderiang	2	91	B/C	II	93	B/C	I
		Sg. Chepor	1	94	B/C	I	96	B/C	I
		Sg. Cuar	1	83	B/C	II	87	B/C	II
		Sg. Ibol	1	93	B/C	I	94	B/C	I
		Sg. Kampar	2	87	B/C	II	92	B/C	II
		Sg. Kangsar	3	88	B/C	II	91	B/C	II
		Sg. Kerbau	2	92	B/C	II	94	B/C	I
		Sg. Kinjang	1	94	B/C	I	96	B/C	I
		Sg. Kinta	9	76	ST/SP	III	83	B/C	II
		Sg. Klah	2	89	B/C	II	91	B/C	II
		Sg. Klian Baru	2	76	ST/SP	III	81	B/C	II
		Sg. Klian Gunong	1	93	B/C	I	96	B/C	I
		Sg. Kuang	1	80	ST/SP	II	81	B/C	II
		Sg. Manong	1	95	B/C	I	95	B/C	I
		Sg. Pelus	2	85	B/C	II	88	B/C	II
		Sg. Perak	18	88	B/C	II	89	B/C	II
	Sg. Pulau	1	94	B/C	I	95	B/C	I	
	Sg. Raia	2	82	B/C	II	86	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Perak	Sg. Perak	Sg. Rui	2	91	B/C	II	94	B/C	I
		Sg. Sungkai	4	88	B/C	II	91	B/C	II
		Sg. Sungkai Mati	2	76	ST/SP	III	81	B/C	II
		Sg. Tapah	1	95	B/C	I	96	B/C	I
		Sg. Teja	1	78	ST/SP	II	82	B/C	II
		Sg. Tesong	1	94	B/C	I	96	B/C	I
		Sg. Woh	1	94	B/C	I	96	B/C	I
	Sg. Raja Hitam	Sg. Manjong	2	85	B/C	II	86	B/C	II
		Sg. Nyior	1	95	B/C	I	95	B/C	I
	Sg. Sepetang	Sg. Batu Tegoh	5	82	B/C	II	90	B/C	II
		Sg. Jana	2	86	B/C	II	83	B/C	II
		Sg. Lidin	1	75	ST/SP	III	84	B/C	II
		Sg. Limau	1	90	B/C	II	91	B/C	II
		Sg. Nyior	2	88	B/C	II	96	B/C	I
		Sg. Temerloh	2	86	B/C	II	88	B/C	II
	Sg. Wangi	Sg. Trong	2	93	B/C	I	95	B/C	I
		Sg. Wangi	2	79	ST/SP	II	81	B/C	II
Selangor / Perak	Sg. Bernam	Sg. Bernam	8	81	B/C	II	83	B/C	II
		Sg. Dusun	1	85	B/C	II	91	B/C	II
		Sg. Gelinting	1	87	B/C	II	92	B/C	II
		Sg. Inki	1	93	B/C	I	94	B/C	I
		Sg. Slim	3	84	B/C	II	88	B/C	II
		Sg. Trolak	3	91	B/C	II	92	B/C	II
Selangor	Sg. Selangor	Sg. Batang Kali	1	87	B/C	II	90	B/C	II
		Sg. Kanching	1	84	B/C	II	90	B/C	II
		Sg. Kerling	1	93	B/C	I	94	B/C	I
		Sg. Rangkap	1	92	B/C	II	95	B/C	I
		Sg. Selangor	10	81	B/C	II	85	B/C	II
	Selangor	Sg. Selangor	1	87	B/C	II	90	B/C	II
	Sg. Tenggi	Sg. Tenggi	4	84	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Selangor / W.P. Kuala Lumpur	Sg. Klang	Sg. Anak Air Batu	1	72	ST/SP	III	81	B/C	II
		Sg. Rasau	1	74	ST/SP	III	83	B/C	II
		Sg. Rumpit	1	91	B/C	II	92	B/C	II
		Sg. Semelah	1	80	ST/SP	II	83	B/C	II
Selangor / Putrajaya / N.Sembilan	Sg. Langat	Sg. Anak Chuau	1	83	B/C	II	89	B/C	II
		Sg. Beranang	1	76	ST/SP	III	82	B/C	II
		Sg. Chuau	2	87	B/C	II	91	B/C	II
		Sg. Jijan	1	78	ST/SP	II	85	B/C	II
		Sg. Rinching	2	85	B/C	II	88	B/C	II
		Sg. Semenyih	3	77	ST/SP	II	83	B/C	II
Melaka / N.Sembilan	Sg. Melaka	Sg. Batang Melaka	3	80	ST/SP	II	88	B/C	II
		Sg. Dusun	1	86	B/C	II	93	B/C	I
		Sg. Kemunting	1	87	B/C	II	92	B/C	II
		Sg. Tampin	3	86	B/C	II	92	B/C	II
N.Sembilan / Melaka	Sg. Linggi	Sg. Batang Penar	6	82	B/C	II	89	B/C	II
		Sg. Batu Hampar	1	88	B/C	II	93	B/C	I
		Sg. Chembong	1	83	B/C	II	93	B/C	I
		Sg. Jelai	1	84	B/C	II	89	B/C	II
		Sg. Kenaboi	1	80	ST/SP	II	83	B/C	II
		Sg. Kepayong	2	83	B/C	II	88	B/C	II
		Sg. Kundur Besar	1	86	B/C	II	91	B/C	II
		Sg. Muar	1	90	B/C	II	88	B/C	II
		Sg. Pedas	1	83	B/C	II	90	B/C	II
		Sg. Rembau	1	82	B/C	II	91	B/C	II
		Sg. Simin	1	77	ST/SP	II	82	B/C	II
		Sg. Simpang Ampat	1	79	ST/SP	II	83	B/C	II
		Sg. Siput	2	85	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Melaka	Sg. Duyong	Sg. Gapam	1	87	B/C	II	88	B/C	II
	Sg. Kesang	Sg. Chohong	2	82	B/C	II	88	B/C	II
	Sg. Seri Melaka	Sg. Sg.Udang	1	81	B/C	II	87	B/C	II
Johor	Sg. Batu Pahat	Sg. Bantang	1	91	B/C	II	96	B/C	I
		Sg. Bekok	6	71	ST/SP	III	81	B/C	II
		Sg. Chaah	1	83	B/C	II	88	B/C	II
		Sg. Kahang	1	86	B/C	II	90	B/C	II
		Sg. Lenik	1	82	B/C	II	82	B/C	II
		Sg. Merek	1	81	B/C	II	88	B/C	II
		Sg. Merpo	1	81	B/C	II	91	B/C	II
	Sg. Benut	Sg. Machap Dam	1	91	B/C	II	92	B/C	II
		Sg. Parit Hj.Yassin	1	77	ST/SP	II	85	B/C	II
		Sg. Ulu Benut	1	79	ST/SP	II	89	B/C	II
	Sg. Endau	Sg. Anak Sg. Semberong	1	84	B/C	II	84	B/C	II
		Sg. Dengar	1	80	ST/SP	II	84	B/C	II
		Sg. Empangan Labong	1	92	B/C	II	89	B/C	II
		Sg. Endau	3	89	B/C	II	87	B/C	II
		Sg. Jasin	1	94	B/C	I	94	B/C	I
		Sg. Kahang	3	86	B/C	II	90	B/C	II
		Sg. Lenggong	2	86	B/C	II	81	B/C	II
		Sg. Mamai	1	86	B/C	II	87	B/C	II
		Sg. Paloh	1	81	B/C	II	82	B/C	II
		Sg. Selai	1	92	B/C	II	92	B/C	II
Sg. Semberong	5	83	B/C	II	84	B/C	II		
Sg. Tamok	1	91	B/C	II	91	B/C	II		

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor	Sg. Jemaluang	Sg. Jemaluang	2	86	B/C	II	81	B/C	II
		Sg. Belitong	1	86	B/C	II	83	B/C	II
	Sg. Johor	Sg. Johor	6	83	B/C	II	84	B/C	II
		Sg. Layang	1	89	B/C	II	93	B/C	I
		Sg. Layau Kiri	1	84	B/C	II	87	B/C	II
		Sg. Linggiu	1	88	B/C	II	84	B/C	II
		Sg. Papan	1	83	B/C	II	81	B/C	II
		Sg. Pelepah	4	91	B/C	II	88	B/C	II
		Sg. Penggeli	2	87	B/C	II	89	B/C	II
		Sg. Remis	1	86	B/C	II	86	B/C	II
		Sg. Santi	1	85	B/C	II	89	B/C	II
		Sg. Sayong	4	85	B/C	II	82	B/C	II
		Sg. Seluyut	1	77	ST/SP	II	83	B/C	II
		Sg. Semangar	1	82	B/C	II	81	B/C	II
		Sg. Sening	1	83	B/C	II	89	B/C	II
		Sg. Telor	1	84	B/C	II	88	B/C	II
		Sg. Mersing	Sg. Empangan Congok	1	84	B/C	II	85	B/C
	Sg. Mersing		3	87	B/C	II	86	B/C	II
	Sg. Paloi	Sg. Paloi	1	80	ST/SP	II	89	B/C	II
	Sg. Pontian Kecil	Sg. Pontian Kecil	2	79	ST/SP	II	82	B/C	II
	Sg. Pulai	Sg. Pulai Dam	1	93	B/C	I	95	B/C	I
	Sg. Sedili Besar	Sg. Ambat	1	88	B/C	II	86	B/C	II
		Sg. Dohol	1	88	B/C	II	89	B/C	II
		Sg. Pasir Panjang	1	87	B/C	II	88	B/C	II
		Sg. Sedili Besar	6	82	B/C	II	86	B/C	II
		Sg. Temubor Kanan	1	90	B/C	II	93	B/C	I
	Sg. Sedili Kecil	Sg. Sedili Kecil	2	81	B/C	II	82	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor / N.Sembilan / Pahang	Sg. Muar	Sg. Air Panas	1	92	B/C	II	94	B/C	I
		Sg. Belemang	1	90	B/C	II	94	B/C	I
		Sg. Gemencheh	2	83	B/C	II	82	B/C	II
		Sg. Jelai	1	83	B/C	II	88	B/C	II
		Sg. Jementah	1	91	B/C	II	93	B/C	I
		Sg. Juasseh	3	88	B/C	II	94	B/C	I
		Sg. Labis	3	79	ST/SP	II	88	B/C	II
		Sg. Meda	1	82	B/C	II	82	B/C	II
		Sg. Muar	25	82	B/C	II	83	B/C	II
		Sg. P.Mengkuang	1	67	ST/SP	III	89	B/C	II
		Sg. Palong	2	82	B/C	II	85	B/C	II
		Sg. Pendol	1	89	B/C	II	90	B/C	II
		Sg. Segamat	3	87	B/C	II	90	B/C	II
Pahang / N.Sembilan	Sg. Pahang	Sg. Anak Sg. Lepar	1	84	B/C	II	85	B/C	II
		Sg. Batu	1	79	ST/SP	II	84	B/C	II
		Sg. Belayar	1	89	B/C	II	94	B/C	I
		Sg. Bentong	6	83	B/C	II	89	B/C	II
		Sg. Benus	3	83	B/C	II	93	B/C	I
		Sg. Bera	5	84	B/C	II	84	B/C	II
		Sg. Berkelah	1	92	B/C	II	93	B/C	I
		Sg. Bertam	4	89	B/C	II	94	B/C	I
		Sg. Bilut	2	84	B/C	II	83	B/C	II
		Sg. Burung	1	92	B/C	II	96	B/C	I
		Sg. Chini	1	86	B/C	II	82	B/C	II
		Sg. Gapoi	1	94	B/C	I	94	B/C	I
		Sg. Habu	1	88	B/C	II	90	B/C	II
		Sg. Jelai	3	87	B/C	II	88	B/C	II
		Sg. Jempol	5	88	B/C	II	87	B/C	II
Sg. Jengka	2	87	B/C	II	88	B/C	II		

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Pahang / N.Sembilan	Sg. Pahang	Sg. Kecau	3	80	ST/SP	II	86	B/C	II
		Sg. Kelau	4	83	B/C	II	88	B/C	II
		Sg. Kertam	1	90	B/C	II	91	B/C	II
		Sg. Koyan	1	88	B/C	II	89	B/C	II
		Sg. Krau	1	90	B/C	II	92	B/C	II
		Sg. Lenggok	1	91	B/C	II	93	B/C	I
		Sg. Lepar	1	91	B/C	II	92	B/C	II
		Sg. Lipis	3	86	B/C	II	89	B/C	II
		Sg. Luit	1	89	B/C	II	91	B/C	II
		Sg. Maran	1	90	B/C	II	93	B/C	I
		Sg. Mentiga	3	85	B/C	II	84	B/C	II
		Sg. Pahang	27	85	B/C	II	87	B/C	II
		Sg. Penjuring	1	87	B/C	II	94	B/C	I
		Sg. Pertang	2	83	B/C	II	90	B/C	II
		Sg. Perting	1	91	B/C	II	94	B/C	I
		Sg. Raub	1	89	B/C	II	93	B/C	I
		Sg. Retang	1	87	B/C	II	92	B/C	II
		Sg. Ringlet	1	82	B/C	II	83	B/C	II
		Sg. Salak	1	89	B/C	II	87	B/C	II
		Sg. Semantan	4	85	B/C	II	88	B/C	II
		Sg. Serting	5	76	ST/SP	III	81	B/C	II
		Sg. T. Paya Bungor	1	85	B/C	II	91	B/C	II
		Sg. Tahan	1	88	B/C	II	91	B/C	II
		Sg. Tanglir	5	86	B/C	II	88	B/C	II
		Sg. Tasik Bera	1	86	B/C	II	91	B/C	II
		Sg. Tasik Chini	10	90	B/C	II	92	B/C	II
		Sg. Teh	1	90	B/C	II	93	B/C	I
		Sg. Tekal	1	81	B/C	II	85	B/C	II
Sg. Telang	1	90	B/C	II	91	B/C	II		

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Pahang / N.Sembilan	Sg. Pahang	Sg. Telemong	3	88	B/C	II	93	B/C	I
		Sg. Telom	2	85	B/C	II	86	B/C	II
		Sg. Tembeling	1	88	B/C	II	91	B/C	II
		Sg. Teranum	1	87	B/C	II	95	B/C	I
		Sg. Teras	2	88	B/C	II	92	B/C	II
		Sg. Teris	3	87	B/C	II	91	B/C	II
		Sg. Terla	2	91	B/C	II	94	B/C	I
		Sg. Triang	3	86	B/C	II	88	B/C	II
		Sg. Tringkap	1	82	B/C	II	89	B/C	II
		Sg. Ulong	1	94	B/C	I	96	B/C	I
Pahang	Sg. Anak Endau	Sg. Anak Endau	2	92	B/C	II	87	B/C	II
	Sg. Bebar	Sg. Bebar	2	83	B/C	II	82	B/C	II
		Sg. Merba	1	86	B/C	II	85	B/C	II
	Sg. Cherating	Sg. Cherating	1	79	ST/SP	II	81	B/C	II
	Sg. Kuantan	Sg. Charu	1	92	B/C	II	93	B/C	I
		Sg. Kenau	1	90	B/C	II	94	B/C	I
		Sg. Kuantan	8	87	B/C	II	88	B/C	II
		Sg. Pandan	1	83	B/C	II	87	B/C	II
		Sg. Reman	1	86	B/C	II	87	B/C	II
	Sg. Riau	1	84	B/C	II	84	B/C	II	
	Sg. Merchong	Sg. Merchong	2	86	B/C	II	87	B/C	II
	Sg. Rompin	Sg. Aur	1	86	B/C	II	86	B/C	II
		Sg. Jekatih	2	85	B/C	II	87	B/C	II
		Sg. Jeram	1	88	B/C	II	88	B/C	II
		Sg. Kepasing	1	81	B/C	II	88	B/C	II
Sg. Keratong		4	85	B/C	II	85	B/C	II	
Sg. Pontian		1	87	B/C	II	85	B/C	II	
Sg. Pukin		3	83	B/C	II	86	B/C	II	
Sg. Rompin	5	87	B/C	II	83	B/C	II		

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Terengganu	Sg. Besut	Sg. Besut	5	90	B/C	II	92	B/C	II
		Sg. Jertih	1	84	B/C	II	88	B/C	II
	Sg. Chukai	Sg. Ibok	2	84	B/C	II	85	B/C	II
		Sg. Dungun	5	88	B/C	II	90	B/C	II
	Sg. Telemboh	Sg. Telemboh	1	86	B/C	II	86	B/C	II
		Sg. Ibai	3	78	ST/SP	II	83	B/C	II
	Sg. Kemaman	Sg. Cherul	3	85	B/C	II	90	B/C	II
		Sg. Kemaman	3	84	B/C	II	88	B/C	II
		Sg. Perasing	1	82	B/C	II	82	B/C	II
		Sg. Ransan	2	73	ST/SP	III	81	B/C	II
	Sg. Kertih	Sg. Kertih	2	83	B/C	II	85	B/C	II
	Sg. Kluang	Sg. Kluang	1	83	B/C	II	88	B/C	II
	Sg. Marang	Sg. Marang	1	83	B/C	II	88	B/C	II
		Sg. Temala	1	87	B/C	II	91	B/C	II
	Sg. Merang	Sg. Merang	1	77	ST/SP	II	82	B/C	II
	Sg. Paka	Sg. Besul	1	86	B/C	II	92	B/C	II
		Sg. Paka	3	85	B/C	II	87	B/C	II
		Sg. Rasau	2	79	ST/SP	II	82	B/C	II
		Sg. Rengat	1	85	B/C	II	84	B/C	II
	Sg. Setiu	Sg. Bari	1	91	B/C	II	92	B/C	II
		Sg. Chalok	3	87	B/C	II	86	B/C	II
		Sg. Setiu	2	86	B/C	II	89	B/C	II
		Sg. Tarom	1	88	B/C	II	89	B/C	II
	Sg. Terengganu	Sg. Berang	2	91	B/C	II	91	B/C	II
		Sg. Nerus	6	88	B/C	II	89	B/C	II
		Sg. Telemong	1	89	B/C	II	88	B/C	II
		Sg. Terengganu	4	88	B/C	II	87	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020			
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	
Kelantan	Sg. Golok	Sg. Golok	5	85	B/C	II	88	B/C	II	
		Sg. Jedok	1	88	B/C	II	90	B/C	II	
		Sg. Lanas	1	86	B/C	II	84	B/C	II	
	Sg. Kelantan	Sg. Belatop	3	83	B/C	II	82	B/C	II	
		Sg. Ber	1	84	B/C	II	87	B/C	II	
		Sg. Berok	3	81	B/C	II	82	B/C	II	
		Sg. Betis	1	84	B/C	II	86	B/C	II	
		Sg. Chiku	2	85	B/C	II	88	B/C	II	
		Sg. Galas	5	84	B/C	II	86	B/C	II	
		Sg. Kelantan	7	82	B/C	II	82	B/C	II	
		Sg. Kelesa	1	84	B/C	II	87	B/C	II	
		Sg. Kenkren	1	88	B/C	II	92	B/C	II	
		Sg. Kerilla	2	88	B/C	II	91	B/C	II	
		Sg. Ketil	2	86	B/C	II	90	B/C	II	
		Sg. Lebir	5	85	B/C	II	87	B/C	II	
		Sg. Muring	1	84	B/C	II	85	B/C	II	
		Sg. Nal	3	86	B/C	II	88	B/C	II	
		Sg. Nenggiri	3	81	B/C	II	81	B/C	II	
		Sg. Pehi	2	87	B/C	II	86	B/C	II	
		Sg. Pelaur	1	88	B/C	II	90	B/C	II	
		Sg. Pergau	8	92	B/C	II	92	B/C	II	
		Sg. Relai	2	84	B/C	II	90	B/C	II	
		Sg. Sokor	1	83	B/C	II	86	B/C	II	
		Sg. Tuang	1	87	B/C	II	90	B/C	II	
		Sg. Kemasin	Sg. Kemasin	2	81	B/C	II	83	B/C	II
			Sg. Semerak	3	84	B/C	II	85	B/C	II
		Sg. Pengkalan Datu	Sg. Pengkalan Datu	3	76	ST/SP	III	85	B/C	II

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sabah	Sg. Apas	Sg. Apas	1	91	B/C	II	89	B/C	II
	Sg. Balung	Sg. Balung	1	93	B/C	I	87	B/C	II
	Sg. Bengkoka	Sg. Bengkoka	2	85	B/C	II	88	B/C	II
	Sg. Bingkongan	Sg. Bandau	1	90	B/C	II	91	B/C	II
		Sg. Bingkongan	2	92	B/C	II	91	B/C	II
		Sg. Menggaris	2	91	B/C	II	93	B/C	I
		Sg. Tandek	1	90	B/C	II	91	B/C	II
	Sg. Bongawan	Sg. Bongawan	1	88	B/C	II	87	B/C	II
	Sg. Brantian	Sg. Brantian	1	91	B/C	II	86	B/C	II
	Sg. Kalabakan	Sg. Kalabakan	3	86	B/C	II	84	B/C	II
	Sg. Kalumpang	Sg. Kalumpang	3	89	B/C	II	86	B/C	II
		Sg. Pang Burong 1	1	89	B/C	II	83	B/C	II
	Sg. Kedamaian	Sg. Kedamaian	1	93	B/C	I	90	B/C	II
		Sg. Tempasuk	2	92	B/C	II	91	B/C	II
		Sg. Warriu	1	91	B/C	II	91	B/C	II
	Sg. Kimanis	Sg. Kimanis	1	89	B/C	II	87	B/C	II
	Sg. Kinabatangan	Sg. Karamuak	1	92	B/C	II	91	B/C	II
		Sg. Kinabatangan	4	87	B/C	II	84	B/C	II
		Sg. Koyah	1	88	B/C	II	87	B/C	II
		Sg. Leepang	1	88	B/C	II	84	B/C	II
		Sg. Menanggul	1	87	B/C	II	81	B/C	II
		Sg. Pin	1	85	B/C	II	86	B/C	II
		Sg. Takala	1	88	B/C	II	85	B/C	II
	Sg. Labok	Sg. Kinipir	2	91	B/C	II	90	B/C	II
		Sg. Labok	1	89	B/C	II	87	B/C	II
		Sg. Liwagu	2	91	B/C	II	88	B/C	II
		Sg. Maliau	1	93	B/C	I	92	B/C	II
Sg. Tungud		1	90	B/C	II	88	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sabah	Sg. Lakutan	Sg. Lakutan	1	90	B/C	II	89	B/C	II
	Sg. Likas	Sg. Inanam	3	84	B/C	II	84	B/C	II
		Sg. Menggatal	2	90	B/C	II	85	B/C	II
	Sg. Lingkungan	Sg. Bukau	1	90	B/C	II	88	B/C	II
		Sg. Lingkungan	1	89	B/C	II	91	B/C	II
	Sg. Membakut	Sg. Membakut	1	87	B/C	II	85	B/C	II
	Sg. Menggalong	Sg. Menggalong	2	91	B/C	II	89	B/C	II
	Sg. Merotai	Sg. Merotai	3	87	B/C	II	89	B/C	II
	Sg. Mounad	Sg. Mounad	2	87	B/C	II	86	B/C	II
	Sg. Moyog	Sg. Moyog	4	92	B/C	II	89	B/C	II
	Sg. Padas	Sg. Bunsit	1	92	B/C	II	91	B/C	II
		Sg. Liawan	1	91	B/C	II	91	B/C	II
		Sg. Padas	4	87	B/C	II	86	B/C	II
		Sg. Pangatan	1	86	B/C	II	87	B/C	II
		Sg. Pegalan	3	89	B/C	II	88	B/C	II
		Sg. Tandulu	1	90	B/C	II	91	B/C	II
	Sg. Paitan	Sg. Paitan	1	88	B/C	II	85	B/C	II
	Sg. Papar	Sg. Papar	5	92	B/C	II	90	B/C	II
	Sg. Sapi	Sg. Sapi	3	87	B/C	II	85	B/C	II
		Sg. Sualong	1	91	B/C	II	92	B/C	II
	Sg. Segaliud	Sg. Segaliud	2	87	B/C	II	87	B/C	II
	Sg. Segama	Sg. Segama	3	91	B/C	II	85	B/C	II
	Sg. Silabukan	Sg. Silabukan	2	90	B/C	II	89	B/C	II
	Sg. Sugut	Sg. Bongkud	1	92	B/C	II	91	B/C	II
		Sg. Lohan	1	92	B/C	II	91	B/C	II
		Sg. Merali	1	92	B/C	II	88	B/C	II
		Sg. Sugut	3	91	B/C	II	88	B/C	II
Sg. Tawau	Sg. Tawau	4	88	B/C	II	85	B/C	II	
Sg. Telipok	Sg. Telipok	2	77	ST/SP	II	86	B/C	II	
Sg. Tenghilan	Sg. Tenghilan	1	91	B/C	II	92	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sabah	Sg. Tingkayu	Sg. Tingkayu	2	89	B/C	II	85	B/C	II
		Sg. Damit	2	88	B/C	II	89	B/C	II
	Sg. Tuaran	Sg. Song Sai	1	91	B/C	II	90	B/C	II
		Sg. Tuaran	2	92	B/C	II	92	B/C	II
	Sg. Tungku	Sg. Tungku	2	88	B/C	II	89	B/C	II
	Sg. Umas-Umas	Sg. Umas Umas	1	90	B/C	II	83	B/C	II
Sarawak	Sg. Balingian	Sg. Balingian	2	86	B/C	II	90	B/C	II
	Sg. Baram	Sg. Baram	4	88	B/C	II	84	B/C	II
		Sg. Tutuh	1	92	B/C	II	90	B/C	II
	Sg. Kayan	Sg. Kayan	3	81	B/C	II	82	B/C	II
	Sg. Kemena	Sg. Kemena	4	85	B/C	II	82	B/C	II
		Sg. Sibiu	1	83	B/C	II	81	B/C	II
	Sg. Kerian	Sg. Kerian	2	82	B/C	II	86	B/C	II
		Sg. Seblak	1	82	B/C	II	84	B/C	II
	Sg. Lawas	Sg. Selalang	1	91	B/C	II	92	B/C	II
		Sg. Lawas	3	91	B/C	II	89	B/C	II
	Sg. Limbang	Sg. Limbang	5	91	B/C	II	88	B/C	II
	Sg. Lupar	Sg. Ai	2	92	B/C	II	90	B/C	II
		Sg. Lupar	3	88	B/C	II	85	B/C	II
		Sg. Sekerang	1	91	B/C	II	92	B/C	II
		Sg. Seterap	1	86	B/C	II	82	B/C	II
		Sg. Undup	1	88	B/C	II	91	B/C	II
	Sg. Miri	Sg. Adong	1	70	ST/SP	III	83	B/C	II
		Sg. Dalam	1	74	ST/SP	III	84	B/C	II
		Sg. Miri	2	75	ST/SP	III	87	B/C	II
		Sg. Padang Liku	1	90	B/C	II	89	B/C	II
Sg. Mukah	Sg. Mukah	5	83	B/C	II	88	B/C	II	
Sg. Niah	Sg. Niah	2	90	B/C	II	86	B/C	II	
Sg. Oya	Sg. Oya	3	84	B/C	II	86	B/C	II	

2 (b) : Status Kualiti Air bagi Sungai Bersih, 2020  
2 (b) : Water Quality Status of Clean Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sarawak	Sg. Rajang	Sg. Balo	1	89	B/C	II	89	B/C	II
		Sg. Binatang	1	89	B/C	II	89	B/C	II
		Sg. Julau	1	90	B/C	II	88	B/C	II
		Sg. Kanowit	1	88	B/C	II	89	B/C	II
		Sg. Pakan	1	89	B/C	II	88	B/C	II
		Sg. Rajang	11	85	B/C	II	85	B/C	II
		Sg. Salim	1	80	ST/SP	II	83	B/C	II
		Sg. Sarikei	2	87	B/C	II	85	B/C	II
	Sg. Sadong	Sg. Sadong	4	84	B/C	II	83	B/C	II
		Sg. Tarat	1	90	B/C	II	91	B/C	II
	Sg. Sarawak	Sg. Kuap	2	85	B/C	II	87	B/C	II
		Sg. Sarawak	6	85	B/C	II	87	B/C	II
		Sg. Sarawak Kanan	1	85	B/C	II	82	B/C	II
		Sg. Sarawak Kiri	1	87	B/C	II	88	B/C	II
		Sg. Semadang	1	90	B/C	II	89	B/C	II
		Sg. Tapah	1	89	B/C	II	89	B/C	II
	Sg. Saribas	Sg. Layar	2	87	B/C	II	86	B/C	II
	Sg. Semunsam	Sg. Semunsam	1	85	B/C	II	87	B/C	II
	Sg. Sibuti	Sg. Kejapil	1	90	B/C	II	88	B/C	II
		Sg. Satap	1	86	B/C	II	88	B/C	II
		Sg. Sibuti	2	86	B/C	II	85	B/C	II
	Sg. Similajau	Sg. Similajau	2	89	B/C	II	90	B/C	II
	Sg. Suai	Sg. Suai	1	89	B/C	II	88	B/C	II
Sg. Tatau	Sg. Tatau	1	87	B/C	II	88	B/C	II	
Sg. Trusan	Sg. Trusan	1	92	B/C	II	88	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, 2020

## 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Perlis	Sg. Perlis	Sg. Korok	1	71	ST/SP	III	75	ST/SP	III
		Sg. Perlis	1	72	ST/SP	III	76	ST/SP	III
Kedah	Sg. Kedah	Sg. Kedah	1	64	ST/SP	III	70	ST/SP	III
		Sg. Batu	1	66	ST/SP	III	70	ST/SP	III
	Sg. Merbok	Sg. Bongkok	1	63	ST/SP	III	71	ST/SP	III
		Sg. Korok	1	69	ST/SP	III	65	ST/SP	III
		Sg. Merbok	1	77	ST/SP	II	79	ST/SP	II
		Sg. Petani	1	54	T/P	III	63	ST/SP	III
	Sg. Muda	Sg. Jerong	2	67	ST/SP	III	68	ST/SP	III
Sg. Ulu Melaka	Sg. Chenang	1	69	ST/SP	III	78	ST/SP	II	
P.Pinang	Sg. Bayan Lepas	Sg. Bayan Lepas	1	76	ST/SP	III	64	ST/SP	III
		Sg. Tiram	2	71	ST/SP	III	73	ST/SP	III
	Sg. Jawi	Sg. Junjong	3	62	ST/SP	III	66	ST/SP	III
		Sg. Machang Bubok	1	70	ST/SP	III	76	ST/SP	III
	Sg. Juru	Sg. Juru	2	56	T/P	III	68	ST/SP	III
		Sg. Kilang Ubi	5	68	ST/SP	III	70	ST/SP	III
		Sg. Pasir	1	61	ST/SP	III	65	ST/SP	III
	Sg. Kluang	Sg. Ara	2	85	B/C	II	67	ST/SP	III
		Sg. Dua Besar	1	57	T/P	III	64	ST/SP	III
		Sg. Kluang	1	63	ST/SP	III	65	ST/SP	III
		Sg. Relau	1	66	ST/SP	III	66	ST/SP	III
	Sg. Pinang	Sg. Air Itam	3	76	ST/SP	III	77	ST/SP	II
		Sg. Dondang	6	74	ST/SP	III	73	ST/SP	III
		Sg. Jelutong	1	64	ST/SP	III	63	ST/SP	III
		Sg. Pinang	3	68	ST/SP	III	69	ST/SP	III
Sg. Titi Kerawang		1	63	ST/SP	III	68	ST/SP	III	

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020  
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
P.Pinang / Kedah	Sg. Perai	Sg. Jarak	6	72	ST/SP	III	73	ST/SP	III
		Sg. Keladi	1	74	ST/SP	III	78	ST/SP	II
		Sg. Kubang Semang	1	64	ST/SP	III	64	ST/SP	III
		Sg. Perai	2	63	ST/SP	III	66	ST/SP	III
		Sg. Pertama	1	59	T/P	III	65	ST/SP	III
		Sg. Seluang	1	64	ST/SP	III	64	ST/SP	III
		Sg. Seluang Bawah	2	65	ST/SP	III	61	ST/SP	III
P.Pinang / Kedah / Perak	Sg. Kerian	Sg. Serdang	1	73	ST/SP	III	71	ST/SP	III
Perak	Sg. Perak	Sg. Keping	2	70	ST/SP	III	79	ST/SP	II
		Sg. Kerdah	2	72	ST/SP	III	80	ST/SP	II
		Sg. Nyamok	1	68	ST/SP	III	76	ST/SP	III
		Sg. Pari	2	72	ST/SP	III	80	ST/SP	II
		Sg. Pinji	2	67	ST/SP	III	73	ST/SP	III
		Sg. Seluang	1	58	T/P	III	72	ST/SP	III
		Sg. Serokai	2	69	ST/SP	III	73	ST/SP	III
		Sg. Sintang	1	65	ST/SP	III	72	ST/SP	III
		Sg. Tumboh	1	71	ST/SP	III	73	ST/SP	III
	Sg. Raja Hitam	Sg. Derhaka	2	68	ST/SP	III	77	ST/SP	II
		Sg. Raja Hitam	3	68	ST/SP	III	72	ST/SP	III
	Sg. Sepetang	Sg. Malai	2	76	ST/SP	III	76	ST/SP	III
		Sg. Sepetang	2	78	ST/SP	II	79	ST/SP	II
Sg. Wangi	Sg. Deralik	2	73	ST/SP	III	73	ST/SP	III	
Selangor	Sg. Buloh	Sg. Buloh	6	52	T/P	III	60	ST/SP	III
	Sg. Selangor	Sg. Air Hitam	1	92	B/C	II	75	ST/SP	III
		Sg. Guntong	1	73	ST/SP	III	80	ST/SP	II
		Sg. Kundang	1	66	ST/SP	III	70	ST/SP	III
		Sg. Rawang	1	70	ST/SP	III	77	ST/SP	II
		Sg. Sembah	2	74	ST/SP	III	75	ST/SP	III

## 2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020

## 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Selangor	Sg. Sepang	Sg. Sepang	3	75	ST/SP	III	78	ST/SP	II
Selangor / Putrajaya / N.Sembilan	Sg. Langat	Sg. Balak	1	56	T/P	III	71	ST/SP	III
		Sg. Batang Benar	1	67	ST/SP	III	74	ST/SP	III
		Sg. Batang Labu	8	72	ST/SP	III	79	ST/SP	II
		Sg. Batang Nilai	2	72	ST/SP	III	78	ST/SP	II
		Sg. Buan	1	76	ST/SP	III	80	ST/SP	II
		Sg. Langat	9	72	ST/SP	III	77	ST/SP	II
		Sg. Limau Manis	1	74	ST/SP	III	71	ST/SP	III
		Sg. Pajam	2	63	ST/SP	III	73	ST/SP	III
Selangor / W.P.Kuala Lumpur	Sg. Klang	Sg. Sering	1	60	ST/SP	III	69	ST/SP	III
		Sg. Ampang	2	60	ST/SP	III	64	ST/SP	III
		Sg. Batu	5	70	ST/SP	III	68	ST/SP	III
		Sg. Belongkong	1	67	ST/SP	III	69	ST/SP	III
		Sg. Bunos	3	67	ST/SP	III	70	ST/SP	III
		Sg. Damansara	5	62	ST/SP	III	65	ST/SP	III
		Sg. Gombak	5	63	ST/SP	III	73	ST/SP	III
		Sg. Jinjang	4	66	ST/SP	III	64	ST/SP	III
		Sg. Keroh	3	60	ST/SP	III	64	ST/SP	III
		Sg. Klang	13	58	T/P	III	61	ST/SP	III
		Sg. Kuyoh	2	51	T/P	IV	62	ST/SP	III
		Sg. Penchala	3	64	ST/SP	III	60	ST/SP	III
		Sg. Pusu	1	67	ST/SP	III	71	ST/SP	III
		Sg. Toba	1	59	T/P	III	61	ST/SP	III
Sg. Untut	1	54	T/P	III	64	ST/SP	III		
Melaka	Sg. Duyong	Sg. Duyong	3	71	ST/SP	III	65	ST/SP	III
	Sg. Kesang	Sg. Chin-Chin	3	73	ST/SP	III	78	ST/SP	II
		Sg. Kesang	3	72	ST/SP	III	77	ST/SP	II
		Sg. Tangkak	1	64	ST/SP	III	67	ST/SP	III

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020  
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Melaka	Sg. Seri Melaka	Sg. Air Salak	1	65	ST/SP	III	62	ST/SP	III
		Sg. Seri Melaka	1	65	ST/SP	III	65	ST/SP	III
Melaka / N.Sembilan	Sg. Melaka	Sg. Durian Tunggal	1	73	ST/SP	III	79	ST/SP	II
		Sg. Malim	2	58	T/P	III	67	ST/SP	III
		Sg. Melaka	14	71	ST/SP	III	78	ST/SP	II
		Sg. Putat	2	58	T/P	III	60	ST/SP	III
		Sg. Rembia	2	66	ST/SP	III	73	ST/SP	III
N.Sembilan	Sg. Lukut	Sg. Lukut	1	69	ST/SP	III	74	ST/SP	III
N.Sembilan / Melaka	Sg. Baru	Sg. Baru	1	68	ST/SP	III	74	ST/SP	III
	Sg. Linggi	Sg. Empangan Terip	1	72	ST/SP	III	80	ST/SP	II
		Sg. Kayu Ara	1	62	ST/SP	III	77	ST/SP	II
		Sg. Linggi	6	77	ST/SP	II	79	ST/SP	II
		Sg. Ngoi Ngoi	1	73	ST/SP	III	76	ST/SP	III
		Sg. Paroi	1	76	ST/SP	III	78	ST/SP	II
		Sg. Senawang	1	74	ST/SP	III	73	ST/SP	III
		Sg. Temiang	2	68	ST/SP	III	78	ST/SP	II
Johor	Sg. Air Baloi	Sg. Air Baloi	3	49	T/P	IV	60	ST/SP	III
	Sg. Batu Pahat	Sg. Amran	1	74	ST/SP	III	75	ST/SP	III
		Sg. Batu Pahat	1	56	T/P	III	66	ST/SP	III
		Sg. Berlian	1	79	ST/SP	II	78	ST/SP	II
		Sg. Simpang Kiri	3	61	ST/SP	III	67	ST/SP	III
	Sg. Benut	Sg. Benut	4	65	ST/SP	III	75	ST/SP	III
		Sg. Pinggan	1	61	ST/SP	III	60	ST/SP	III
	Sg. Endau	Sg. Jebong	1	61	ST/SP	III	74	ST/SP	III
		Sg. Lenga	1	60	ST/SP	III	68	ST/SP	III
		Sg. Melatai	1	63	ST/SP	III	70	ST/SP	III
		Sg. Mengkibol	3	74	ST/SP	III	77	ST/SP	II
Sg. Pamol		1	65	ST/SP	III	72	ST/SP	III	
Sg. Singol		1	55	T/P	III	79	ST/SP	II	

## 2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020

## 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor	Sg. Johor	Sg. Anak Sg. Sayong	2	77	ST/SP	II	80	ST/SP	II
		Sg. Berangan	1	67	ST/SP	III	71	ST/SP	III
		Sg. Bukit Besar	2	76	ST/SP	III	75	ST/SP	III
		Sg. Chemangar	1	72	ST/SP	III	70	ST/SP	III
		Sg. Lebam	1	85	B/C	II	79	ST/SP	II
		Sg. Pantii	1	72	ST/SP	III	79	ST/SP	II
		Sg. Sebol	1	69	ST/SP	III	73	ST/SP	III
		Sg. Semenchu	1	35	T/P	IV	66	ST/SP	III
		Sg. Serai	1	57	T/P	III	67	ST/SP	III
		Sg. Temoh	1	64	ST/SP	III	74	ST/SP	III
	Sg. Tiram	4	79	ST/SP	II	76	ST/SP	III	
	Sg. Kaw. Pasir Gudang	Sg. Lato	1	58	T/P	III	62	ST/SP	III
		Sg. Masai	1	50	T/P	IV	63	ST/SP	III
	Sg. Kim-Kim	Sg. Kim-Kim	2	67	ST/SP	III	74	ST/SP	III
	Sg. Pontian Besar	Sg. Air Hitam	2	80	ST/SP	II	71	ST/SP	III
		Sg. Pontian Besar	5	67	ST/SP	III	73	ST/SP	III
	Sg. Pulai	Sg. Pulai	2	72	ST/SP	III	80	ST/SP	II
		Sg. Ulu Choh	1	67	ST/SP	III	72	ST/SP	III
	Sg. Rambah	Sg. Rambah	2	62	ST/SP	III	68	ST/SP	III
	Sg. Sedili Besar	Sg. Mupur	1	47	T/P	IV	67	ST/SP	III
	Sg. Sedili Kecil	Sg. Anak Sedili Kecil	2	56	T/P	III	64	ST/SP	III
		Sg. Bahan	2	76	ST/SP	III	74	ST/SP	III
	Sg. Segget	Sg. Segget	5	52	T/P	III	65	ST/SP	III
	Sg. Skudai	Sg. Melana	2	68	ST/SP	III	78	ST/SP	II
		Sg. Skudai	9	57	T/P	III	66	ST/SP	III

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020  
2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor / N.Sembilan / Pahang	Sg. Muar	Sg. Gemas	2	67	ST/SP	III	72	ST/SP	III
		Sg. Kelamah	1	79	ST/SP	II	71	ST/SP	III
		Sg. Merbudu	1	65	ST/SP	III	63	ST/SP	III
		Sg. Merlimau	1	59	T/P	III	70	ST/SP	III
		Sg. Pagoh	1	67	ST/SP	III	66	ST/SP	III
		Sg. Senarut	1	66	ST/SP	III	75	ST/SP	III
		Sg. Serom	1	55	T/P	III	63	ST/SP	III
		Sg. Simpang Loi	1	78	ST/SP	II	77	ST/SP	II
		Sg. Tenang	1	68	ST/SP	III	79	ST/SP	II
Pahang / N.Sembilan	Sg. Pahang	Sg. Kundang	1	86	B/C	II	79	ST/SP	II
Pahang	Sg. Balok	Sg. Balok	2	68	ST/SP	III	69	ST/SP	III
		Sg. Panjang	1	86	B/C	II	76	ST/SP	III
		Sg. Yior	1	64	ST/SP	III	62	ST/SP	III
	Sg. Bebar	Sg. Serai	2	81	B/C	II	79	ST/SP	II
		Sg. Belat	1	79	ST/SP	II	80	ST/SP	II
	Sg. Kuantan	Sg. Galing Besar	2	61	ST/SP	III	64	ST/SP	III
		Sg. Pinang	1	89	B/C	II	80	ST/SP	II
		Sg. Talam	1	69	ST/SP	III	72	ST/SP	III
	Sg. Rompin	Sg. Bakar	1	71	ST/SP	III	75	ST/SP	III
		Sg. Sepayang	1	84	B/C	II	77	ST/SP	II
Sg. Tonggok	Sg. Tonggok	2	70	ST/SP	III	76	ST/SP	III	
Terengganu	Sg. Chukai	Sg. Bungkus	1	82	B/C	II	80	ST/SP	II
		Sg. Chukai	1	80	ST/SP	II	80	ST/SP	II
		Sg. Ruang	2	73	ST/SP	III	67	ST/SP	III
	Sg. Kemaman	Sg. Neram	1	31	T/P	IV	75	ST/SP	III
	Sg. Marang	Sg. Kerak	1	81	B/C	II	79	ST/SP	II
	Sg. Merchang	Sg. Landas	1	65	ST/SP	III	71	ST/SP	III
		Sg. Merchang	1	72	ST/SP	III	71	ST/SP	III
Sg. Terengganu	Sg. Pueh	2	69	ST/SP	III	73	ST/SP	III	

## 2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020

## 2 (c) : Water Quality Status of Slightly Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Kelantan	Sg. Golok	Sg. Tasik Garu	1	76	ST/SP	III	80	ST/SP	II
	Sg. Kelantan	Sg. Aring	1	76	ST/SP	III	79	ST/SP	II
		Sg. Isos	1	73	ST/SP	III	73	ST/SP	III
		Sg. Penangau	1	82	B/C	II	78	ST/SP	II
		Sg. Rasau	1	81	B/C	II	80	ST/SP	II
	Sg. Kemasin	Sg. Gali	1	76	ST/SP	III	79	ST/SP	II
	Sg. Pengkalan Chepa	Sg. Alor B	1	48	T/P	IV	65	ST/SP	III
		Sg. Alor Lintah	1	61	ST/SP	III	76	ST/SP	III
		Sg. Keladi	1	78	ST/SP	II	76	ST/SP	III
		Sg. Pengkalan Chepa	2	59	T/P	III	73	ST/SP	III
Sg. Pengkalan Datu	Sg. Pasir Hor	1	67	ST/SP	III	73	ST/SP	III	
Sabah	Sg. Kalumpang	Sg. Pang Burong 2	1	76	ST/SP	III	69	ST/SP	III
	Sg. Likas	Sg. Darau	1	76	ST/SP	III	80	ST/SP	II
		Sg. Likas	2	78	ST/SP	II	78	ST/SP	II
Sg. Sembulan	Sg. Sembulan	2	77	ST/SP	II	79	ST/SP	II	
Sarawak	Sg. Miri	Sg. Lutong	2	86	B/C	II	78	ST/SP	II
	Sg. Niah	Sg. Sekaloh	2	81	B/C	II	75	ST/SP	III
	Sg. Rajang	Sg. Daro	1	76	ST/SP	III	80	ST/SP	II
		Sg. Jemoreng	1	78	ST/SP	II	80	ST/SP	II
		Sg. Meradong	1	86	B/C	II	80	ST/SP	II
		Sg. Pila Parit	1	81	B/C	II	62	ST/SP	III
	Sg. Sadong	Sg. Karangan	2	78	ST/SP	II	74	ST/SP	III
	Sg. Sarawak	Sg. Kelantan	1	84	B/C	II	74	ST/SP	III
		Sg. Maong Kiri	1	76	ST/SP	III	72	ST/SP	III
		Sg. Samarahan	2	70	ST/SP	III	74	ST/SP	III
Sg. Semenggoh		1	77	ST/SP	II	71	ST/SP	III	
Sg. Tabuan	1	73	ST/SP	III	77	ST/SP	II		

2 (c) : Status Kualiti Air bagi Sungai Sederhana Tercemar, 2020  
2 (c) : *Water Quality Status of Slightly Polluted Rivers, 2020*

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Sarawak	Sg. Saribas	Sg. Saribas	1	80	ST/SP	II	74	ST/SP	III
	Sg. Sibuti	Sg. Kabuloh	2	68	ST/SP	III	71	ST/SP	III

**Nota / Note**

B/C : Bersih/*Clean*

ST/SP : Sederhana Tercemar/*Slightly Polluted*

T/P : Tercemar/*Polluted*



## 2 (d) : Status Kualiti Air bagi Sungai Tercemar, 2020

2 (d) : *Water Quality Status of Polluted Rivers, 2020*

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
P.Pinang	Sg. Jawi	Sg. Chempedak	1	54	T/P	III	47	T/P	IV
		Sg. Jawi	1	49	T/P	IV	55	T/P	III
		Sg. Tengah	1	61	ST/SP	III	49	T/P	IV
	Sg. Juru	Sg. Permatang Rawa	2	64	ST/SP	III	59	T/P	III
		Sg. Rambai	2	51	T/P	IV	57	T/P	III
P.Pinang / Kedah	Sg. Perai	Sg. Air Melintas	1	54	T/P	III	58	T/P	III
		Sg. Kereh	3	57	T/P	III	55	T/P	III
Kedah	Sg. Merbok	Sg. Bakar Arang	1	59	T/P	III	56	T/P	III
Selangor / W.P.Kuala Lumpur	Sg. Klang	Sg. Air Busuk	1	59	T/P	III	41	T/P	IV
		Sg. Kerayong	4	54	T/P	III	58	T/P	III
Selangor	Sg. Sepang	Sg. Rambai	1	21	T/P	V	25	T/P	V
N.Sembilan / Melaka	Sg. Linggi	Sg. Tuang	1	57	T/P	III	57	T/P	III
		Sg. Tuang	1	58	T/P	III	59	T/P	III
Melaka	Sg. Duyong	Sg. Punggur	2	51	T/P	IV	51	T/P	IV
		Sg. Merlimau	5	49	T/P	IV	56	T/P	III
Johor	Sg. Batu Pahat	Sg. Panchor	1	58	T/P	III	59	T/P	III
		Sg. Semberong	2	55	T/P	III	58	T/P	III
		Sg. Simpang Kanan	2	56	T/P	III	59	T/P	III
		Sg. Temehel	1	48	T/P	IV	57	T/P	III
	Sg. Danga	Sg. Danga	2	46	T/P	IV	57	T/P	III
	Sg. Kaw. Pasir Gudang	Sg. Buluh	1	41	T/P	IV	41	T/P	IV
		Sg. Perembi	1	42	T/P	IV	57	T/P	III
		Sg. Tukang Batu	1	37	T/P	IV	42	T/P	IV
	Sg. Kempas	Sg. Kempas	2	40	T/P	IV	32	T/P	IV
	Sg. Pontian Besar	Sg. Ayer Merah	1	46	T/P	IV	43	T/P	IV
Sg. Sanglang	Sg. Sanglang	1	60	ST/SP	III	59	T/P	III	

2 (d) : Status Kualiti Air bagi Sungai Tercemar, 2020  
2 (d) : Water Quality Status of Polluted Rivers, 2020

NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	BILANGAN STESEN/ NUMBER OF STATIONS	2019			2020		
				IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	IKA / WQI	KATEGORI/ CATEGORY	KELAS/ CLASS
Johor	Sg. Tebrau	Sg. Bala	1	42	T/P	IV	55	T/P	III
		Sg. Pandan	1	43	T/P	IV	46	T/P	IV
		Sg. Plentong	1	52	T/P	III	56	T/P	III
		Sg. Sebulung	1	38	T/P	IV	53	T/P	III
		Sg. Sengkuang	1	35	T/P	IV	52	T/P	III
		Sg. Tampoi	1	44	T/P	IV	52	T/P	III
		Sg. Tebrau	5	56	T/P	III	58	T/P	III
Johor / N.Sembilan / Pahang	Sg. Muar	Sg. Sarang Buaya	1	70	ST/SP	III	58	T/P	III

**Nota / Note**

B/C : Bersih/Clean

ST/SP : Sederhana Tercemar/Slightly Polluted

T/P : Tercemar/Polluted



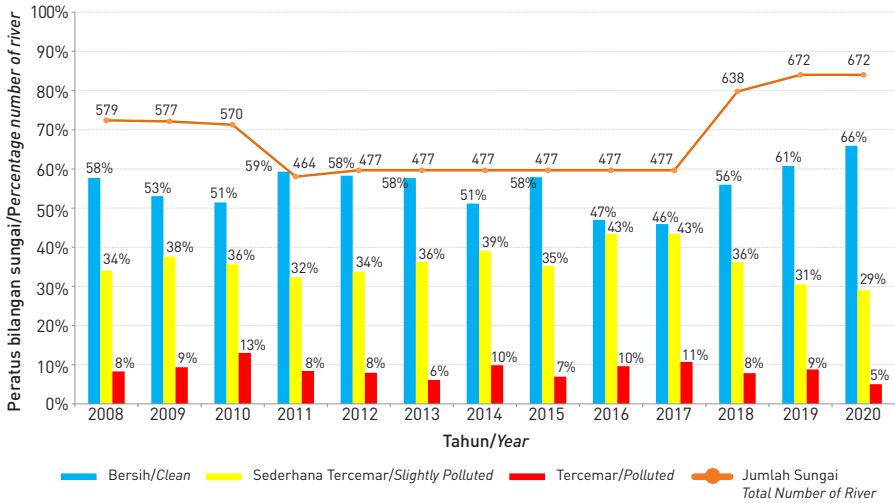
2 (e) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan BOD, AN dan SS, 2020  
Table 2 (e) : The Polluted Rivers and Classes Based on BOD, AN and SS, 2020

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	STATUS 2020			KELAS BERDASARKAN/ CLASS BASED ON		
				IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	BOD	AN	SS
1.	P.Pinang	Sg. Jawi	Sg. Chempedak	47	T/P	IV	IV	V	IV
			Sg. Jawi	55	T/P	III	IV	V	III
			Sg. Tengah	49	T/P	IV	IV	V	III
2.	P.Pinang / Kedah	Sg. Juru	Sg. Permatang Rawa	59	T/P	III	IV	V	I
			Sg. Rambai	57	T/P	III	IV	V	I
			Sg. Air Melintas	58	T/P	III	IV	V	III
3.	Kedah	Sg. Merbok	Sg. Kereh	55	T/P	III	IV	V	III
			Sg. Bakar Arang	56	T/P	III	V	IV	I
4.	Selangor / W.P.Kuala Lumpur	Sg. Klang	Sg. Air Busuk	41	T/P	IV	V	V	II
			Sg. Kerayong	58	T/P	III	IV	V	II
5.	Selangor	Sg. Sepang	Sg. Rambai	25	T/P	V	V	V	III
			Sg. Tuang	57	T/P	III	IV	V	II
6.	N.Sembilan/ Melaka	Sg. Tuang	Sg. Tuang	59	T/P	III	IV	V	III
			Sg. Duyong	51	T/P	IV	IV	V	II
7.	Melaka	Sg. Merlimau	Sg. Merlimau	56	T/P	III	III	IV	I
			Sg. Panchor	59	T/P	III	III	IV	I
8.	Johor	Sg. Batu Pahat	Sg. Semberong	58	T/P	III	II	III	II
			Sg. Simpang Kanan	59	T/P	III	II	IV	I

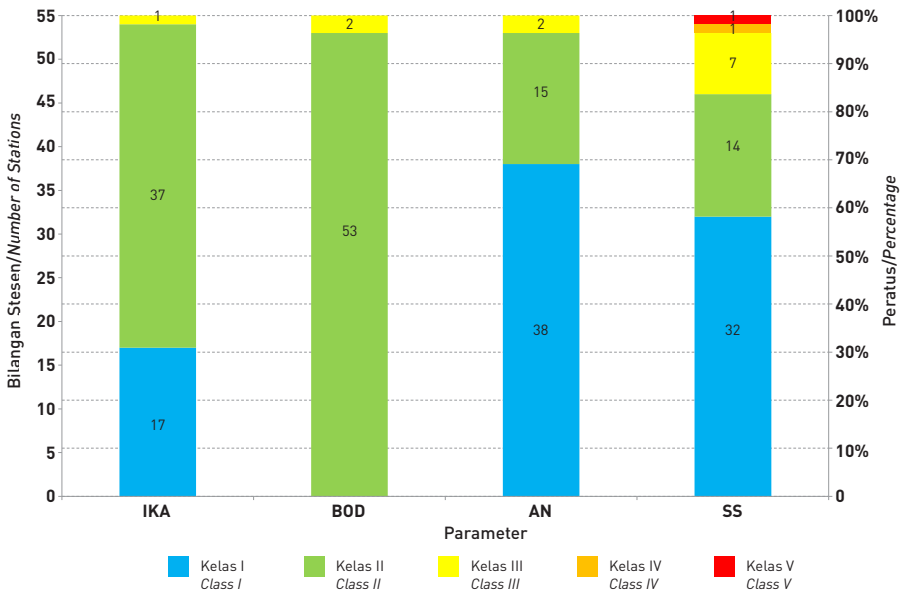
2 (e) : Sungai Tercemar dan Kelas Kualiti Air Berdasarkan BOD, AN dan SS, 2020  
2 (e) : *The Polluted Rivers and Classes Based on BOD, AN and SS, 2020*

BIL./ NO.	NEGERI/ STATE	LEMBANGAN SUNGAI/ RIVER BASIN	SUNGAI/ RIVER	STATUS 2020		KELAS BERDASARKAN/ CLASS BASED ON			
				IKA/ WQI	KATEGORI/ CATEGORY	KELAS/ CLASS	BOD	AN	SS
8.	Johor	Sg. Batu Pahat	Sg. Temehel	57	T/P	III	IV	V	II
			Sg. Danga	57	T/P	III	III	V	II
			Sg. Buluh	41	T/P	IV	V	III	II
		Sg. Kaw. Pasir Gudang	Sg. Perembi	57	T/P	III	IV	V	II
			Sg. Tukang Batu	42	T/P	IV	V	V	II
			Sg. Kempas	32	T/P	IV	V	V	III
		Sg. Pontian Besar	Sg. Ayer Merah	43	T/P	IV	V	V	I
			Sg. Sanglang	59	T/P	III	IV	II	IV
			Sg. Bala	55	T/P	III	IV	V	II
		Sg. Tebrau	Sg. Pandan	46	T/P	IV	V	V	II
			Sg. Plentong	56	T/P	III	IV	V	II
			Sg. Sebulung	53	T/P	III	V	V	I
		Sg. Muar	Sg. Sengkuang	52	T/P	III	V	V	I
Sg. Tampoi	52		T/P	III	IV	V	I		
Sg. Tebrau	58		T/P	III	IV	V	II		
9.	Johor / N.Sembilan/ Pahang	Sg. Muar	Sg. Sarang Buaya	58	T/P	III	III	II	II

2 (f) : Tren Kualiti Air Sungai, 2008-2020  
2 (f) : River Water Quality Trend, 2008-2020



2 (g) : Kualiti Air Sungai di Stesen di Hulu Muka Sauk, 2020  
2 (g) : River Water Quality at Stations Upstream of Water Intakes, 2020



3 (a) : Parameter Kualiti Air Marin, 2020  
3 (a) : Marine Water Quality Parameters, 2020

BIL./ NO.	PARAMETER/ PARAMETERS	KOD/ CODE	UNIT/ UNIT
<b>PENGUKURAN IN-SITU / IN-SITU MEASUREMENTS</b>			
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
<b>PENGUKURAN MAKMAL / LABORATORY MEASUREMENTS</b>			
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 (VI) / <i>Chromium (VI)</i>	Cr <sup>6+</sup>	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.	Ammonia Tidak Terion / <i>Unionized Ammonia</i>	NH <sub>3</sub>	µg/l
13.	Amoniakal Nitrogen / <i>Ammoniacal Nitrogen</i>	NH <sub>3</sub> -N	µg/l
14.	Nitrit / <i>Nitrite</i>	NO <sub>2</sub>	µg/l
15.	Nitrat / <i>Nitrate</i>	NO <sub>3</sub>	µg/l
16.	Fosfat / <i>Phosphate</i>	PO <sub>4</sub>	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/100ml
20.	<i>Faecal Coliform</i>	FC	cfu/100ml
21.	<i>Escherichia coli</i>	<i>E. coli</i>	cfu/100ml
22.	<i>Enterococci</i>	-	cfu/100ml
23.	<i>Polycyclic Aromatic Hydrocarbons</i>	PAHs	µg/l

3 (b) : Standard Kualiti Air Marin Malaysia  
3 (b) : 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
				Muara Sungai / Estuaries		
	Habitat Marin Sensitif/ Sensitive Marine Habitats	Perikanan (Termasuk Marikultur)/ Fisheries (including Mariculture)	Industri, Aktiviti Komersial & Kawasan Kediaman Pesisir Pantai/ Industry, Commercial Activities & Coastal Settlements	Dataran Pantai/ Coastal Plain	Lagun/ Lagoon	Rangkaian Kompleks/ Complex Distributary Network
Oksigen Terlarut <i>Dissolved Oxygen</i> (mg/l)	>6.0	>5.0	>3.0	>5.0	>5.0	>5.0
Jumlah Pepejal Terampai <i>Total Suspended Solids</i> (mg/l)	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>Cyanide</i>	2.00	7.00	14.00	5.00	5.00	5.00

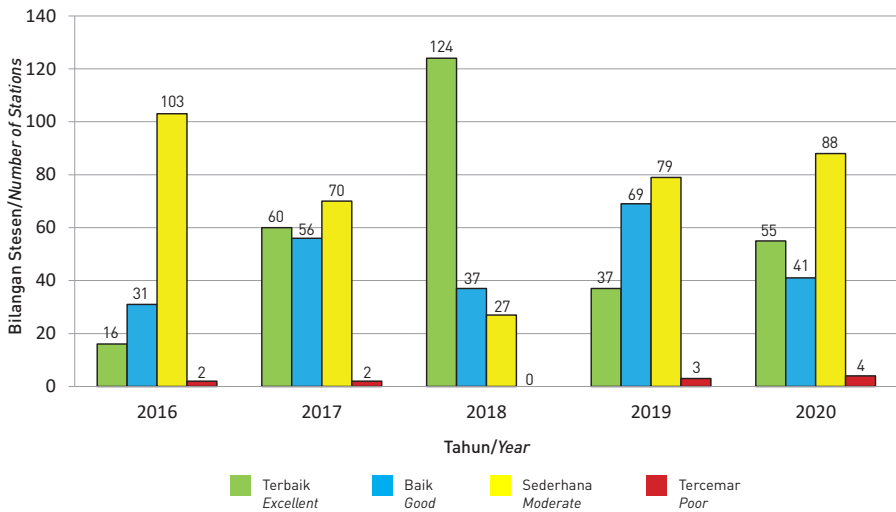
3 (b) : Standard Kualiti Air Marin Malaysia  
3 (b) : Malaysian Marine Water Quality Standards

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	
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
Tributyltin (TBT)	0.001	0.010	0.050	0.002	0.002	0.002
Polycyclic Aromatic Hydrocarbon (PAH)	100.0	200.0	1000.0	5.0	5.0	5.0
Jumlah Fenol <i>Total Phenol</i>	1.0	10.0	100.0	10.0	10.0	10.0
Minyak & Gris <i>Oil &amp; Grease</i> (mg/l)	0.01	0.14	5.00	1.00	1.00	1.00
Faecal Coliform (Cfu/100ml)	70	70	70	70	70	70
Suhu <i>Temperature</i> ( $^{\circ}\text{C}$ )	$\leq 2^{\circ}\text{C}$ bertambah melebihi ambien maksimum $\leq 2^{\circ}\text{C}$ increase over maximum ambient					
pH	6.5 - 9.0					
Marine Litter	Bebas dari marine litter <i>Free from marine litter</i>					

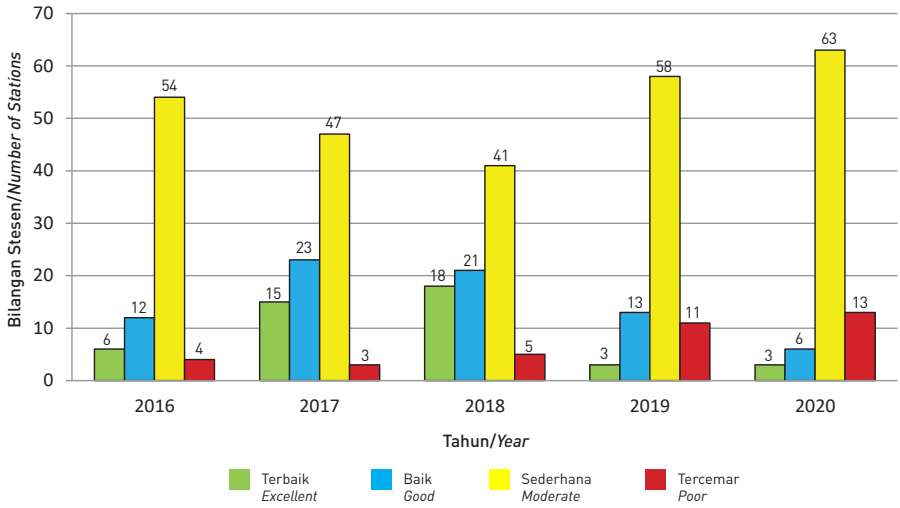
3 (c) : Klasifikasi Indeks Kualiti Air Marin Malaysia (IKAMM)  
3 (c) : *Malaysian Marine Water Quality Index (MMWQI) Classification*

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

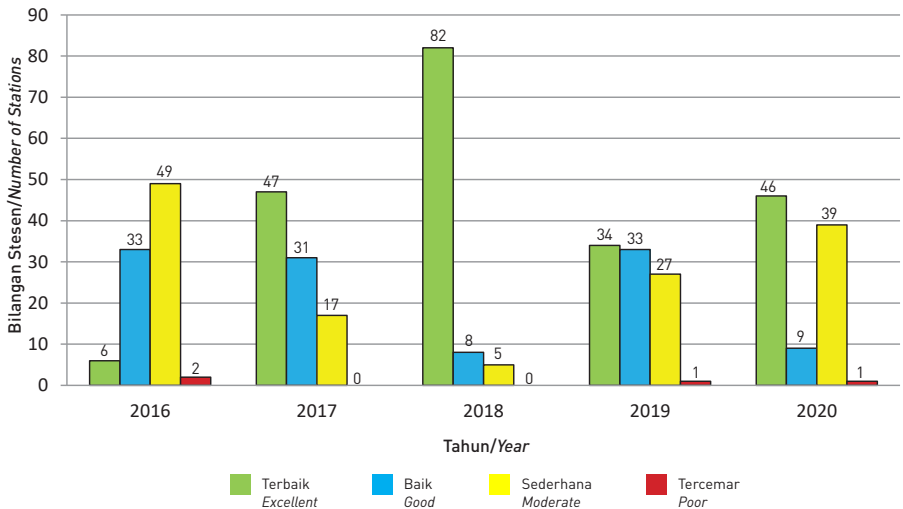
3 (d) : Tren Status Kualiti Air Marin bagi Pantai, 2016-2020  
3 (d) : *Trend of Marine Water Quality Status for Coastal, 2016-2020*



3 (e) : Tren Status Kualiti Air Marin bagi Muara Sungai, 2016-2020  
3 (e) : Trend of Marine Water Quality Status for Estuary, 2016-2020



3 (f) : Tren Status Kualiti Air Marin bagi Pulau, 2016-2020  
3 (f) : Trend of Marine Water Quality Status for Island, 2016-2020



3 (g) : Senarai Stesen Pengawasan Kualiti Air Marin dengan Status Kategori Tercemar dan Peratusan Sub-Indeks mengikut Parameter, 2020

3 (g) : List of Marine Water Quality Monitoring Stations under the Category of Poor Status and their Sub-Index Percentages by Parameter, 2020

NEGERI/ STATE	KLASIFIKASI STESEN/ STATION CLASSIFICATION	LOKASI/ LOCATION	ID STESEN/ STATION ID	IKAMM/ MMWQI CATEGORY	KATEGORI IKAMM/ MMWQI CATEGORY	PERATUSAN SUB INDEKS (%)/ SUB INDEX PERCENTAGES (%)						
						OKSIGEN TERLARUT/ DISSOLVED OXYGEN	AMONIA TIDAK IONIZED AMMONIA	FAECAL COLIFORM	JUMLAH PEPAJAL TOTAL SUSPENDED SOLID	NITRAT/ NITRATE	FOSFAT/ PHOSPHATE	
Johor	Pantai <i>Coastal</i>	Pantai Stulang Laut	MMJC004	48	Tercemar <i>Poor</i>	81	93	8	94	68	60	
Johor	Pantai <i>Coastal</i>	Hadapan HSAJB	MMJC007	49	Tercemar <i>Poor</i>	72	93	8	94	68	63	
Johor	Pantai <i>Coastal</i>	Pantai Lido	MMJC008	44	Tercemar <i>Poor</i>	75	94	8	94	71	55	
Sarawak	Pantai <i>Coastal</i>	Pantai Mukah	MMQC017	49	Tercemar <i>Poor</i>	99	95	8	88	46	68	
Pulau Pinang	Muara Sungai <i>Estuary</i>	Kuala Sungai Jawi	MMPE001	38	Tercemar <i>Poor</i>	52	78	8	84	90	40	
Pulau Pinang	Muara Sungai <i>Estuary</i>	Kuala Sungai Juru	MMPE002	30	Tercemar <i>Poor</i>	10	82	8	87	73	10	
Pulau Pinang	Muara Sungai <i>Estuary</i>	Kuala Sungai Perai	MMPE005	43	Tercemar <i>Poor</i>	30	92	8	92	74	89	
Pulau Pinang	Muara Sungai <i>Estuary</i>	Kuala Sungai Pinang (Balik Pulau)	MMPE007	48	Tercemar <i>Poor</i>	92	99	8	43	91	93	

3 (g) : Senarai Stesen Pengawasan Kualiti Air Marin dengan Status Kategori Tercemar dan Peratusan Sub-Indeks mengikut Parameter, 2020  
3 (g) : List of Marine Water Quality Monitoring Stations under the Category of Poor Status and their Sub-Index Percentages by Parameter, 2020

NEGERI/ STATE	KLASIFIKASI STESEN/ STATION CLASSIFICATION	LOKASI/ LOCATION	ID STESEN/ STATION ID	IKAMM/ MMWQI CATEGORY	KATEGORI IKAMM/ MMWQI CATEGORY	PERATUSAN SUB INDEKS [%]/ SUB INDEX PERCENTAGES [%]						
						OKSIGEN TERLARUT/ DISSOLVED OXYGEN	AMONIA TIDAK IONIZED AMMONIA	FAECAL COLIFORM	JUMLAH PEPAJAL TERPAJAL/ TOTAL SUSPENDED SOLID	NITRAT/ NITRATE	POSFAT/ PHOSPHATE	
Perak	Muara Sungai <i>Estuary</i>	Kuala Sungai Tanjung Piandang	MMAE004	38	Tercemar <i>Poor</i>	10	95	8	79	88	61	
Perak	Muara Sungai <i>Estuary</i>	Kuala Sungai Sepetang	MMAE005	48	Tercemar <i>Poor</i>	74	99	8	78	63	82	
Selangor	Muara Sungai <i>Estuary</i>	Kuala Sungai Langat (Ujgra)	MMBE004	44	Tercemar <i>Poor</i>	83	93	8	86	41	88	
Selangor	Muara Sungai <i>Estuary</i>	Kuala Sungai Klang	MMBE005	35	Tercemar <i>Poor</i>	10	88	8	90	83	66	
Selangor	Muara Sungai <i>Estuary</i>	Kuala Sungai Langat (Lumut)	MMBE006	45	Tercemar <i>Poor</i>	46	96	8	90	66	77	
Selangor	Muara Sungai <i>Estuary</i>	Kuala Sungai Selangor	MMBE008	45	Tercemar <i>Poor</i>	65	98	8	42	56	88	
Selangor	Muara Sungai <i>Estuary</i>	Kuala Sungai Tengi	MMBE009	43	Tercemar <i>Poor</i>	78	98	8	47	74	91	
Johor	Muara Sungai <i>Estuary</i>	Kuala Sungai Segget	MMJE001	41	Tercemar <i>Poor</i>	81	88	8	94	41	53	

- 3 (g) : Senarai Stesen Pengawasan Kualiti Air Marin dengan Status Kategori Tercemar dan Peratusan Sub-Indeks mengikut Parameter, 2020  
 3 (g) : List of Marine Water Quality Monitoring Stations under the Category of Poor Status and their Sub-Index Percentages by Parameter, 2020

NEGERI/ STATE	KLASIFIKASI STESEN/ STATION CLASSIFICATION	LOKASI/ LOCATION	ID STESEN/ STATION ID	IKAMM/ MMWQI CATEGORY	KATEGORI IKAMM/ MMWQI CATEGORY	PERATUSAN SUB INDEKS (%)/ SUB INDEX PERCENTAGES (%)						
						OKSIGEN TERLARUT/ DISSOLVED OXYGEN	AMONIA TIDAK TERION/ UNIONIZED AMMONIA	FAECAL COLIFORM	JUMLAH PEJAL/ TOTAL SUSPENDED SOLID	NITRAT/ NITRATE	FOSFAT/ PHOSPHATE	
Johor	Muara Sungai <i>Estuary</i>	Kuala Sungai Laloh	MMJE002	42	Tercemar <i>Poor</i>	10	95	8	94	90	81	
Selangor	Pulau <i>Island</i>	Lumut	MMBR003	46	Tercemar <i>Poor</i>	63	94	8	94	80	74	

**Nota/ Note:**

Sub-Indeks yang memberikan nilai 49% dan ke bawah dijadikan sebagai tanda aras ditandakan warna merah bermaksud kemerosotan pada IKAMM/  
 A Sub-index of 49% and below is a benchmark and marked in red which indicates a decline in MMWQI

3 (h) : Senarai Stesen Pantai dengan Status Kategori Terbaik, 2020  
3 (h) : Coastal Stations under the Category of Excellent Status, 2020

BIL./NO.	NEGERI/STATE	LOKASI/LOCATION
1	Pahang	Pantai Legenda A
2	Pahang	Pantai Cherating (Legend A)
3	Terengganu	Pantai Tok Jembal
4	Kedah	Pantai Tengah
5	Pahang	Pantai Cherating (Legend B)
6	Pahang	Pantai Legenda B
7	Johor	Pantai Desaru
8	Pahang	Pantai Teluk Cempedak B
9	Terengganu	Pantai Rhu 10
10	Kedah	Pantai Kok

**Nota/ Note:**

Senarai menunjukkan sepuluh (10) stesen teratas dengan status kategori terbaik/  
The list shows the top ten (10) stations with the Excellent Category

3 (i) : Senarai Stesen Pulau dengan Status Kategori Terbaik, 2020  
3 (i) : Island Stations under the Category of Excellent Status, 2020

BIL./NO.	NEGERI/STATE	LOKASI/LOCATION
1	Terengganu	Ekor Tebu
2	Kedah	Payar
3	Kedah	Pasir
4	Pahang	Sepui
5	Terengganu	Perhentian Besar (West)
6	Terengganu	Perhentian Kecil
7	Terengganu	Lang Tengah
8	Melaka	Undan (Point A)
9	Melaka	Undan (Point B)
10	Pahang	Cebeh

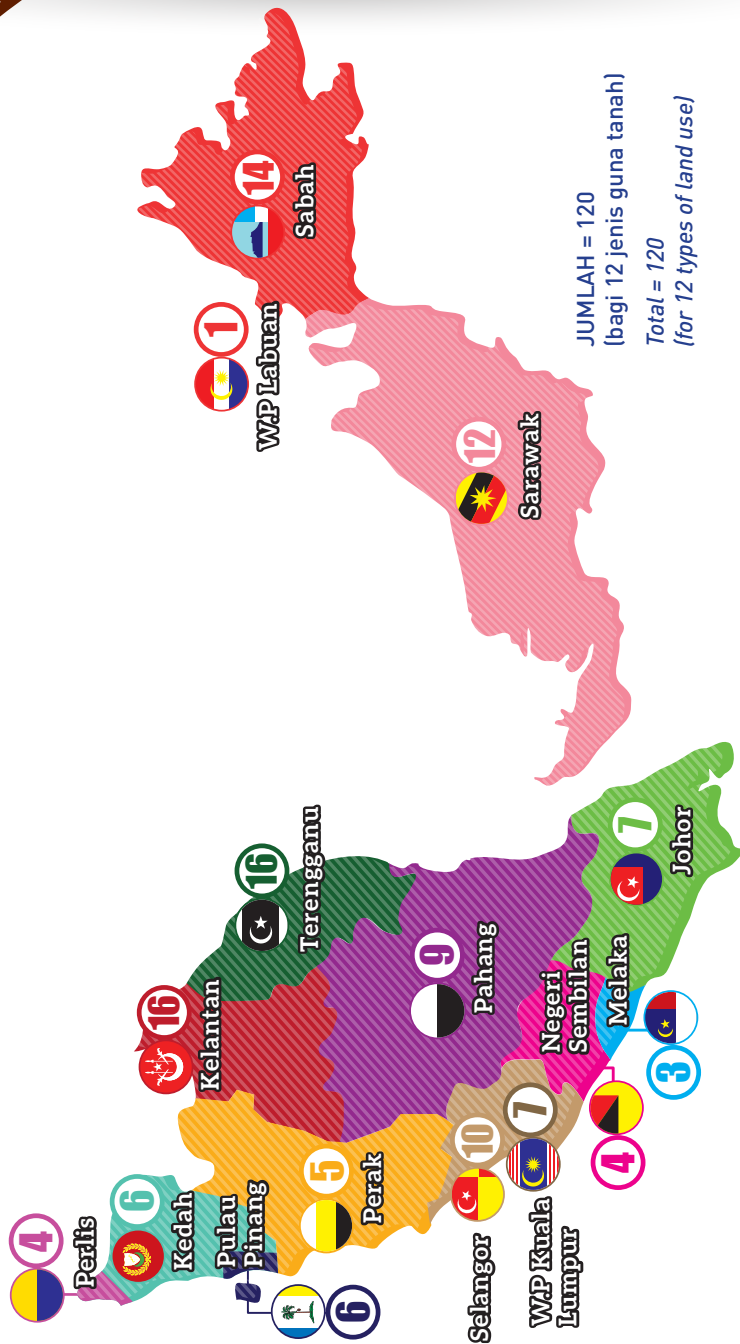
**Nota/ Note:**

Senarai menunjukkan sepuluh (10) stesen teratas dengan status kategori terbaik/  
The list shows the top ten (10) stations with the Excellent Category

3 (j) : Senarai Stesen Muara Sungai dengan Status  
Kategori Terbaik, 2020  
3 (j) : Estuaries Stations under the Category of Excellent Status, 2020

BIL./NO.	NEGERI/STATE	LOKASI/LOCATION
1	Terengganu	Tioxide Utara (Kg. Bukit Kuang, Kijal)
2	Terengganu	Tioxide Selatan (KSB, T. Kalong)
3	Pahang	Kuala Nenas

Jumlah Telaga Pengawasan bagi Setiap Negeri Seluruh Malaysia, 2020.  
*Monitoring Wells for Each State of Malaysia, 2020.*



JUMLAH = 120  
(bagi 12 jenis guna tanah)  
Total = 120  
(for 12 types of land use)

Peta Malaysia : Jumlah Telaga Pengawasan bagi Setiap Negeri Seluruh Malaysia, 2020  
*Malaysia Map : Monitoring Wells for Each States of Malaysia, 2020*

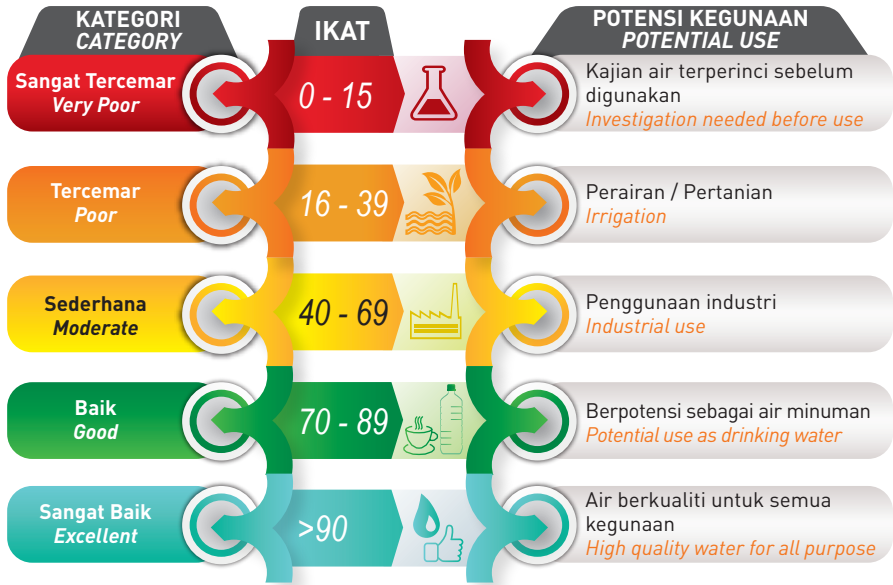
4 (a) : Taburan Stesen Pengawasan Kualiti Air Tanah  
di Malaysia Mengikut Jenis Kategori Guna Tanah, 2020  
*4 (a) : Distribution of Groundwater Quality Monitoring  
Stations (Wells) in Malaysia by Land Use Category, 2020*

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 &amp; Suburban</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		

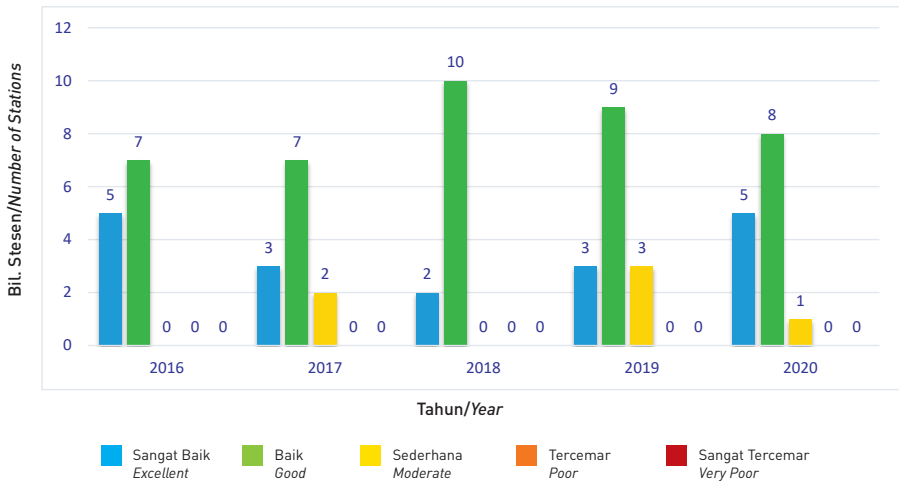
4 (a) : Taburan Stesen Pengawasan Kualiti Air Tanah di Malaysia Mengikut Jenis Kategori Guna Tanah, 2020  
4 (a) : *Distribution of Groundwater Quality Monitoring Stations (Wells) in Malaysia by Land Use Category, 2020*

KATEGORI/ CATEGORY	BILANGAN TELAGA/ NUMBER OF WELLS	NEGERI/ STATE	BILANGAN TELAGA/ NUMBER OF WELLS
Bekas Tapak Pelupusan Sampah <i>Former 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>Used Mining (Gold Mines)</i>	3	Sarawak	3
Bekalan Air <i>Water Supply</i>	5	Sabah	1
		Sarawak	4
Bekas Tapak Pelupusan Bangkai Haiwan <i>Dead Animal Burial Areas</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 Landfill</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

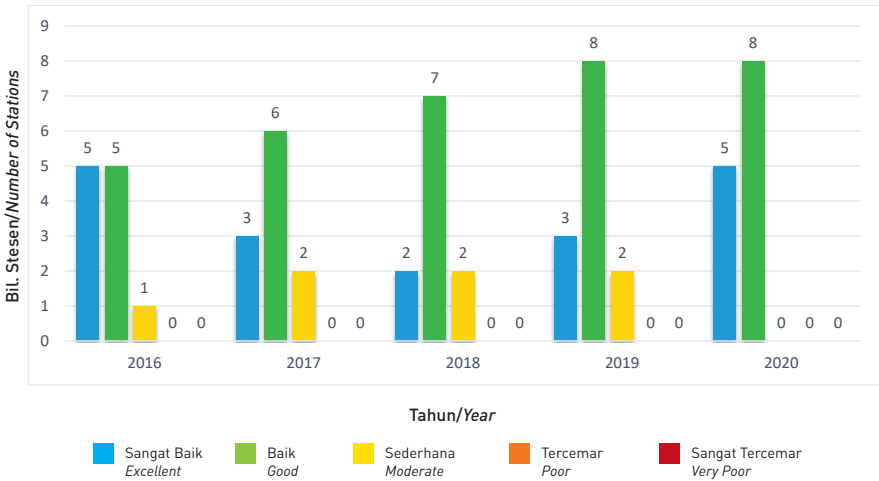


4 (c) : Tren Indeks Kualiti Air Tanah Kawasan Pertanian (2016-2020)  
4 (c) : Trends of Groundwater Quality Index for Agriculture (2016-2020)



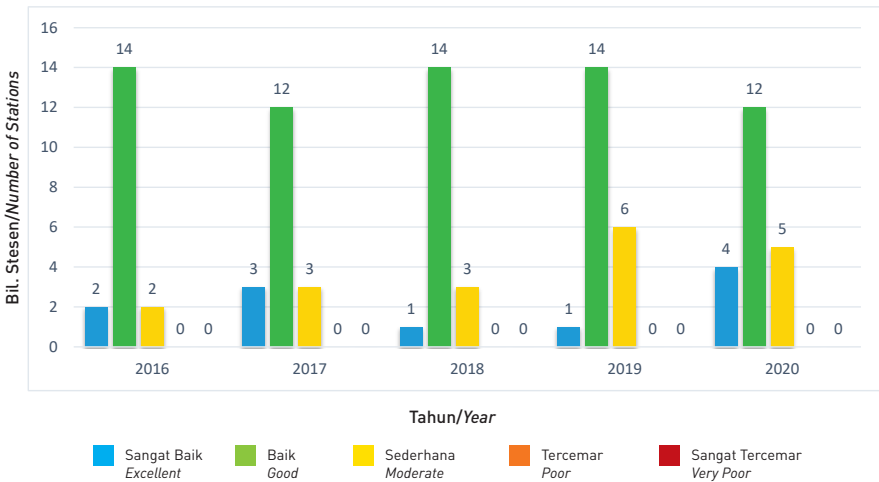
4 (d) : Tren Indeks Kualiti Air Tanah Bandar dan Pinggir Bandar (2016-2020)

4 (d) : Trends of Groundwater Quality Index for Urban and Sub-Urban (2016-2020)

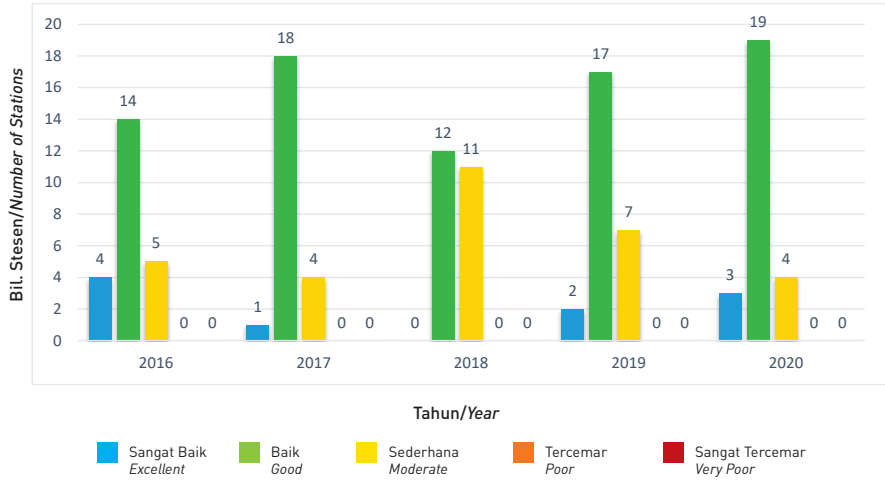


4 (e) : Tren Indeks Kualiti Air Tanah bagi Tapak Perindustrian (2016-2020)

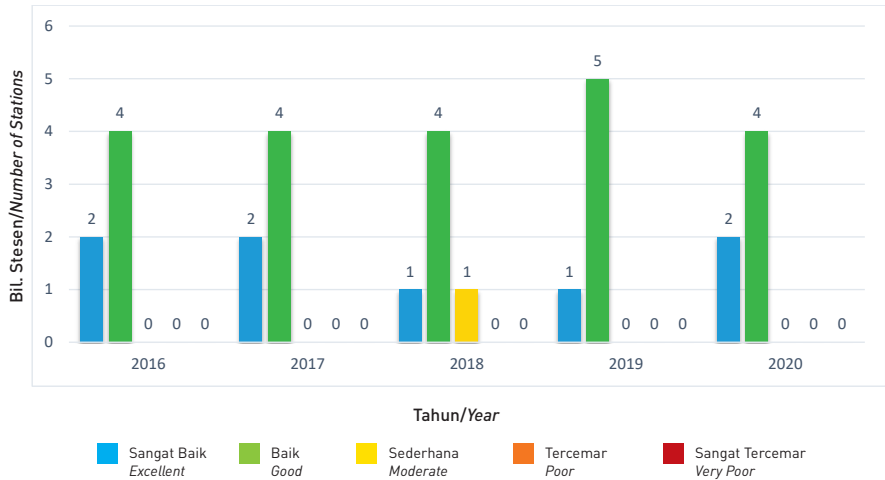
4 (e) : Trends of Groundwater Quality Index for Industrial Sites (2016-2020)



**4 (f) : Tren Indeks Kualiti Air Tanah bagi Bekas Tapak Pelupusan Sampah (2016-2020)**  
*4 (f) : Trends of Groundwater Quality Index for Used Solid Waste Landfills (2016-2020)*

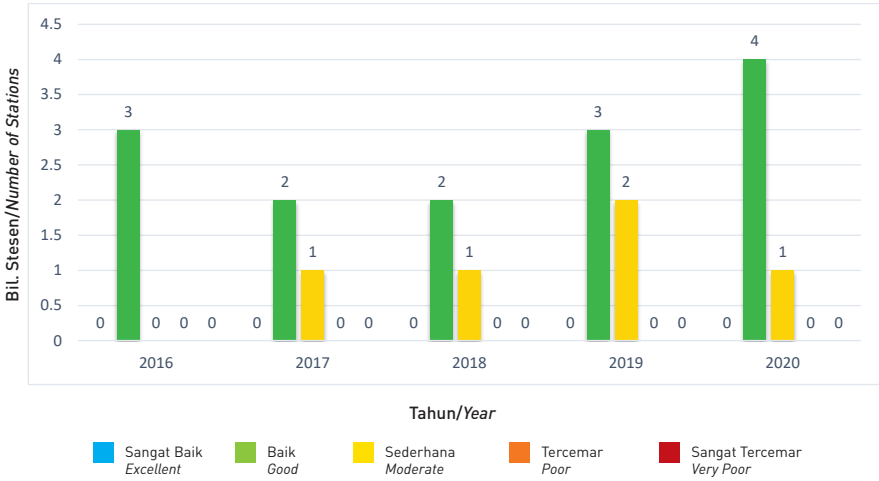


**4 (g) : Tren Indeks Kualiti Air Tanah bagi Padang Golf (2016-2020)**  
*4 (g) : Trends of Groundwater Quality Index for Golf Course (2016-2020)*



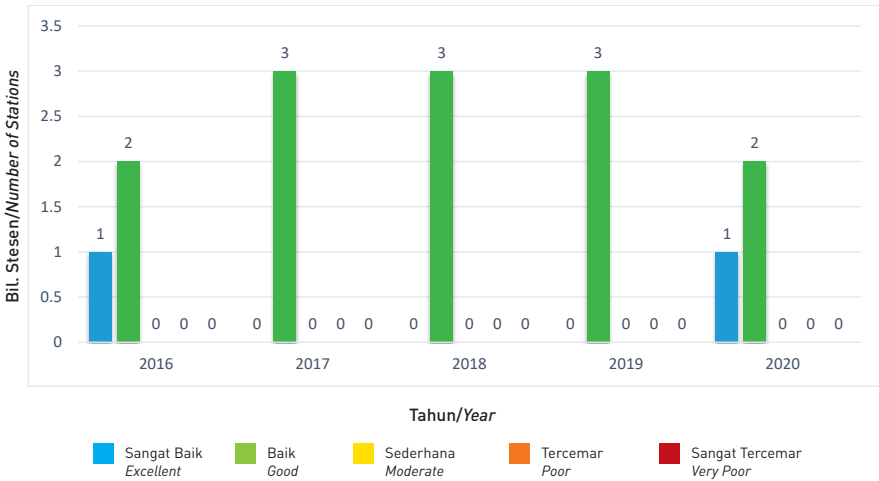
4 (h) : Tren Indeks Kualiti Air Tanah bagi Luar Bandar (2016-2020)

4 (h) : Trends of Groundwater Quality Index for Rural (2016-2020)

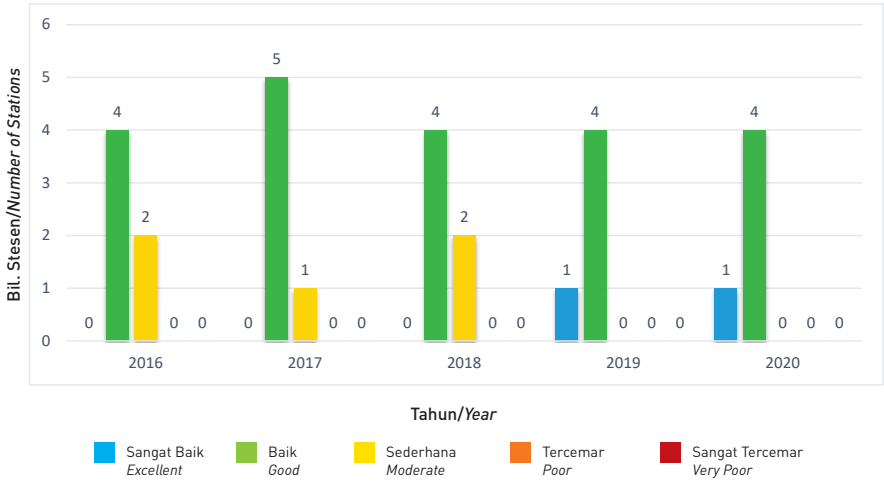


4 (i) : Tren Indeks Kualiti Air Tanah bagi Bekas Lombong Emas (2016-2020)

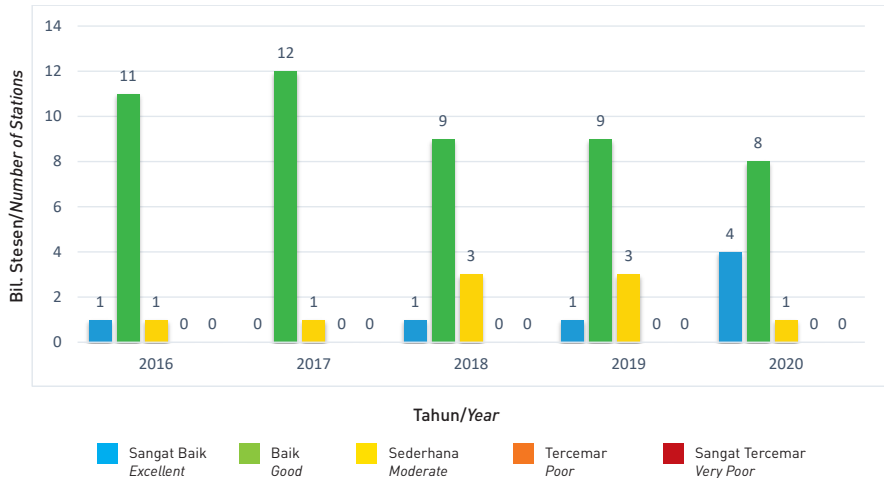
4 (i) : Trends of Groundwater Quality Index for Used Mining (Gold Mine) (2016-2020)



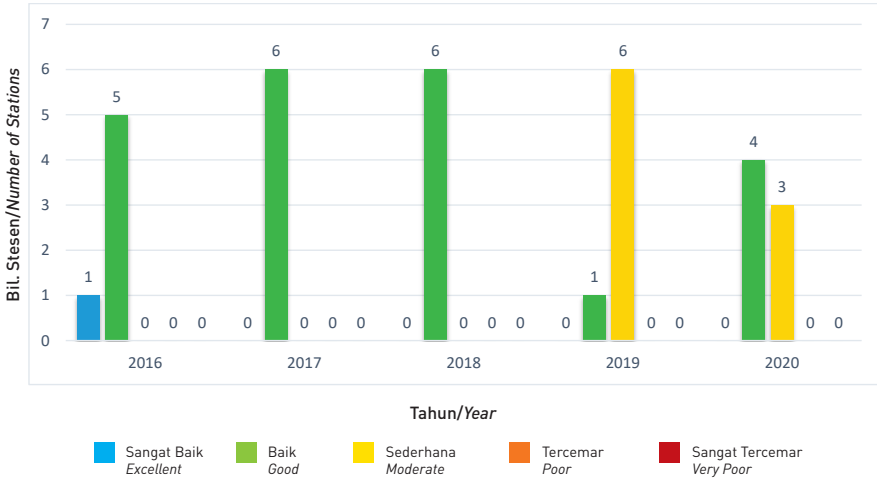
4 (j) : Tren Indeks Kualiti Air Tanah bagi Bekalan Air (2016-2020)  
4 (j) : Trends of Groundwater Quality Index for Water Supply (2016-2020)



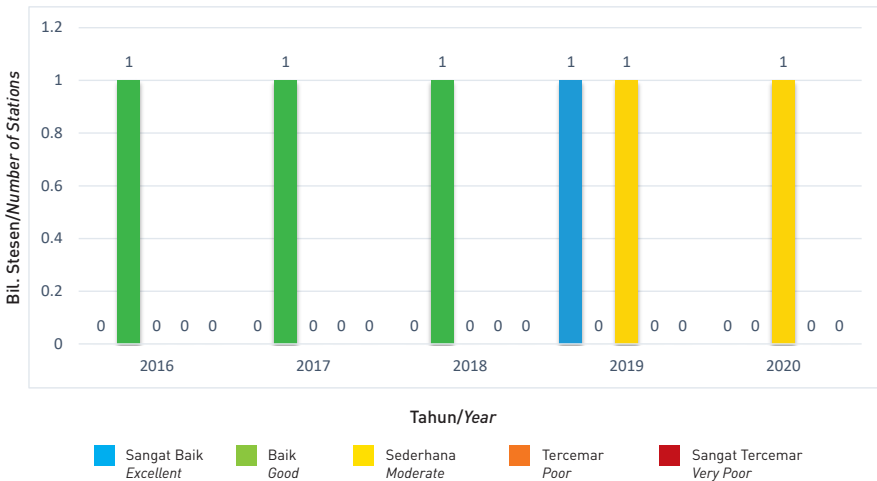
4 (k) : Tren Indeks Kualiti Air Tanah bagi Bekas Tapak Pelupusan Bangkai Haiwan (2016-2020)  
4 (k) : Trends of Groundwater Quality Index for Dead Animal Burial Areas (2016-2020)



4 (l) : Tren Indeks Kualiti Air Tanah bagi Akuakultur (2016-2020)  
4 (l) : Trends of Groundwater Quality Index for Aquaculture (2016-2020)



4 (m) : Tren Indeks Kualiti Air Tanah bagi Peranginan (2016-2020)  
4 (m) : Trends of Groundwater Quality Index for Resorts (2016-2020)



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

\* Diambil dari Class IIA, National Water Quality Standards

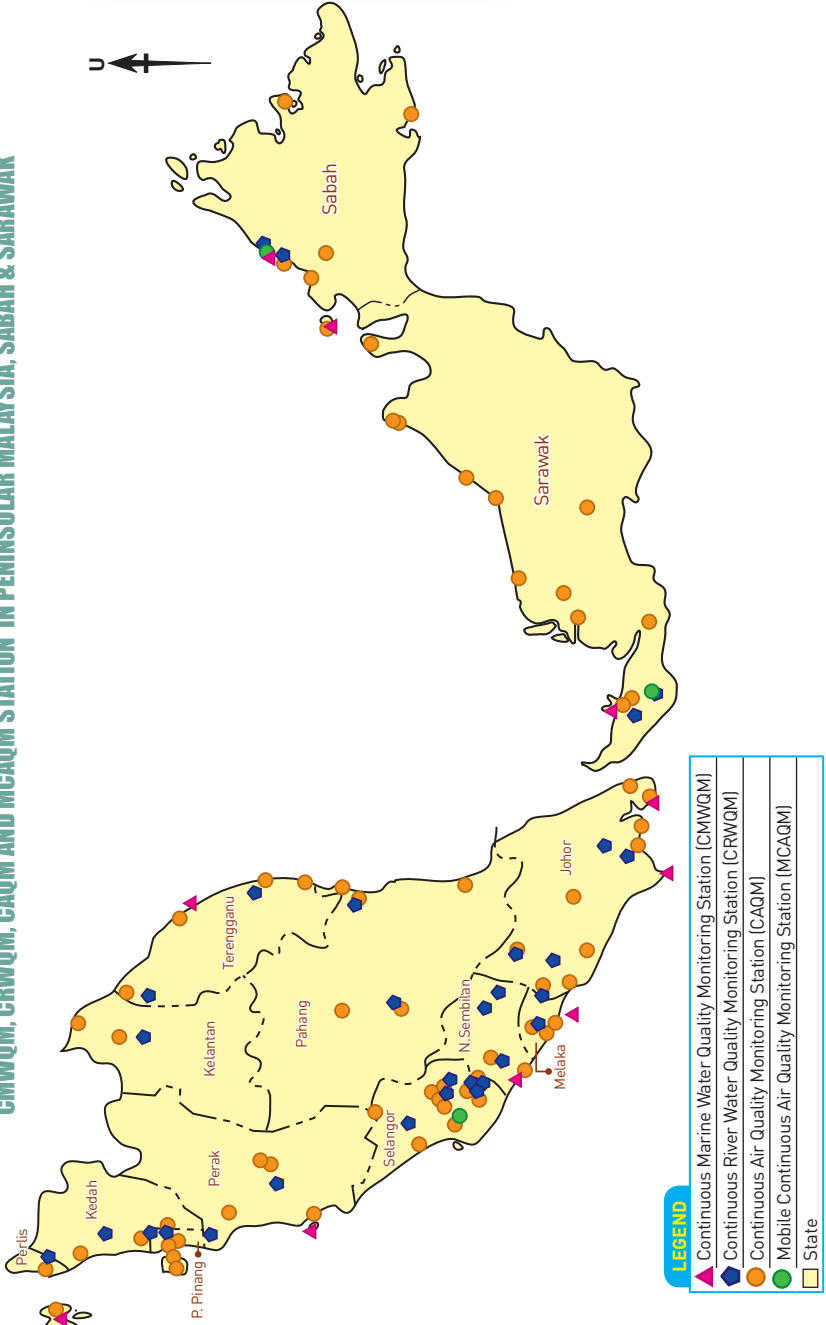
4 (o) : Peratusan Julat Nilai Pemuatan, 2020

*4 (o) : Percentage Of Compliance, 2020*

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

5 (a) : Taburan Lokasi Stesen Automatik bagi Pengawasan Kualiti Udara, Air Sungai dan Air Marin, 2020  
5 (a) : Distribution of the Locations for Air, River Water and Marine Water Quality Monitoring Automatic Stations, 2020

**CMWQM, CRWQM, CAQM AND MCAQM STATION IN PENINSULAR MALAYSIA, SABAH & SARAWAK**



5 (b) : Bilangan Stesen Pengawasan Kualiti Alam Sekitar di Malaysia  
 5 (b) : The Number of Environmental Quality Monitoring Station in Malaysia

KOMPONEN/ COMPONENT	STESEN AUTOMATIK/ AUTOMATIC STATION	STESEN MANUAL/ MANUAL STATION	STESEN BERGERAK/ MOBILE STATION
Udara <i>Air</i>	65	14	3
Air Sungai <i>River Water</i>	30	1353	7
Air Marin <i>Marine Water</i>	10	368	4
<b>Jumlah Stesen</b> <i>Total No. of Stations</i>	<b>105</b>	<b>1735</b>	<b>14</b>

5 (c) : Bilangan Persampelan Manual Tahun 2020  
 5 (c) : The Number of Manual Samplings in Year 2020

KOMPONEN/ COMPONENT	STESEN MANUAL/ MANUAL STATION	FREKUENSI PERSAMPELAN/ SAMPLING FREQUENCY	BILANGAN PERSAMPELAN/ TOTAL NO. OF SAMPLING
Udara <i>Air</i>	14	Setiap 6 hari Every 6 days	854
Air Sungai <i>River Water</i>	1353	6 kali setahun 6 times a year	8098
Air Marin <i>Marine Water</i>	368	6 kali setahun 6 times a year	2208

6 (a) : Lesen-Lesen yang Dikeluarkan bagi Kemudahan Pemerohehan Kembali, Pengolahan & Pelupusan Buangan Terjadual yang Diluluskan oleh Jabatan Alam Sekitar, 2020  
 6 (a) : Licenses Issued for Recovery Facilities Processing Hazardous Waste Disposal Approved by the Department of Environment, 2020

BIL	KEMUDAHAN	JUMLAH LESEN DIKELUARKAN MENGIKUT NEGERI													JUMLAH		
		JOHOR	KEDAH	KELANTAN	MELAKA	N.SEMBILAN	PAHANG	PERAK	PERLIS	P.PINANG	SABAH	SARAWAK	SELANGOR	TERENGGANU		W. PERSEKUTUAN KUALA LUMPUR	W. PERSEKUTUAN LABUAN
1.	Pembawa Yang Ditetapkan <i>Prescribed Conveyance</i>	64	24	4	22	23	7	29	1	49	8	28	71	5	5	5	345
	Penstoran Luar Tapak <i>Off Site Storage</i>	5	1	1	3	2	2	1	0	1	6	23	1	0	0	6	52
2.	Pemerohehan Kembali Luar Tapak <i>Off Site Recovery</i>																
a.	Pemerohehan Kembali Luar Tapak (bukan e-Waste) <i>Off Site Recovery (none e-waste)</i>	36	13	0	12	17	8	23	1	20	2	4	48	6	0	2	192
b.	Pemerohehan Kembali Luar Tapak (penuh e-Waste) <i>Off Site Recovery (full e-Waste)</i>	1	0	0	0	1	0	0	0	10	0	0	1	0	0	0	13
c.	Pemerohehan Kembali Luar Tapak (separata e-Waste) <i>Off Site Recovery (partial e-Waste)</i>	24	10	3	9	6	0	2	0	19	1	5	20	2	5	0	106
3.	Penunu Buangan Terjadual <i>Schedule Waste Incinerator</i>	6	0	0	0	2	1	4	0	1	0	8	2	2	0	1	27
4.	Pengolahan Di Tanah <i>Land Treatment Facilities</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Pengolahan Luar Tapak <i>Off Site Treatment Facilities</i>	1	0	0	1	2	0	2	0	0	0	0	2	0	0	1	9
6.	Tapak Pelupusan Selamat <i>Secured Landfill</i>	1	1	0	0	1	1	0	0	0	0	1	0	1	0	0	6
7.	Bil. Lesen / No. of License	138	49	8	47	56	19	61	2	100	18	71	145	16	10	15	755
	Bil. Premis / No. of Premises	74	25	4	25	33	12	32	1	51	10	43	74	11	5	10	410

6 (b) : Jumlah Buangan Terjadual yang Dihasilkan mengikut  
Kod Buangan Terjadual, 2020

6 (b) : Quantity of Scheduled Wastes Generated by Scheduled Waste Code, 2020

NO.	NAMA BUANGAN/ NAME OF WASTE	KOD BUANGAN/ WASTE CODE	KUANTITI BUANGAN/ QUANTITY OF WASTE	
			(MT/Tahun) (MT/Year)	Peratusan/ Percentage (%)
1	Dros/sanga/klinker/abu <i>Dross/slag/clinker/ash</i>	SW104	3,078,454.72	42.84
2	Enap cemar logam berat / <i>Heavy metal sludges</i>	SW204	1,389,730.52	19.34
3	Gypsum / <i>Gypsum</i>	SW205	403,713.80	5.62
4	Buangan pelarut organic bukan terhalogen <i>Waste of non-halogenated solvent</i>	SW322	310,522.69	4.32
5	Campuran buangan terjadual dan buangan tidak terjadual <i>Mixture of scheduled waste &amp; non-scheduled waste</i>	SW422	230,147.36	3.20
6	Minyak pelincir terpakai / <i>Spent lubricating oil</i>	SW305	229,887.16	3.20
7	Buangan getah atau lateks yang mengandungi logam berat <i>Rubber/latex waste containing heavy metal</i>	SW321	200,855.67	2.80
8	Emulsi minyak mineral-air terpakai <i>Spent mineral oil-water emulsion</i>	SW307	125,285.22	1.74
9	Bekas tercemar / <i>Used container</i>	SW409	116,872.80	1.63
10	Buangan kimia / <i>Lab waste</i>	SW429	112,634.25	1.57
11	Enap cemar yang mengandungi fluoride <i>Sludge containing fluoride</i>	SW207	111,260.04	1.55
12	Tanah/puing tercemar <i>Contaminated soil/debris</i>	SW408	104,534.64	1.45
13	Dadah terbuang / <i>Expired drug</i>	SW403	100,767.14	1.40
14	Buangan elektronik / <i>E-waste</i>	SW110	94,008.90	1.31
15	Asid terpakai / <i>Spent acids</i>	SW206	84,566.54	1.18
16	Sisa dari pengolahan atau pemerolehan kembali buangan terjadual <i>Residue from recovery</i>	SW501	73,401.98	1.02
17	Kain buruk, plastik, kertas atau turas tercemar <i>Rags/plastics/papers contaminated with scheduled waste</i>	SW410	58,930.87	0.82
18	Buangan patogenik/klinikal <i>Pathogenic/clinical waste</i>	SW404	39,883.32	0.56
19	Enap cemar mineral / <i>Mineral sludges</i>	SW427	32,401.76	0.45
20	Campuran minyak-air / <i>Oil-water mixture</i>	SW309	28,617.42	0.40
21	Buangan minyak atau enap cemar berminyak <i>Waste oil/oily sludges</i>	SW311	28,386.55	0.40

6 (b) : Jumlah Buangan Terjadual yang Dihasilkan mengikut  
Kod Buangan Terjadual, 2020

6 (b) : Quantity of Scheduled Wastes Generated by Scheduled Waste Code, 2020

NO.	NAMA BUANGAN/ NAME OF WASTE	KOD BUANGAN/ WASTE CODE	KUANTITI BUANGAN/ QUANTITY OF WASTE	
			(MT/Tahun) (MT/Year)	Peratusan/ Percentage (%)
22	Buangan dakwat dan cat / <i>Waste of inks and paints</i>	SW417	27,934.18	0.39
23	Buangan kimia <i>Waste of batteries containing cadmium/mercury/lithium</i>	SW103	25,561.98	0.36
24	Buangan resin yang mengandungi pelarut organik <i>Waste of resin containing organic</i>	SW325	22,312.72	0.31
25	Buangan fotografi / <i>Photographic waste</i>	SW423	20,514.12	0.29
26	Buangan mangkin / <i>Waste catalyst</i>	SW202	19,085.41	0.27
27	Enap cemar dakwat dan cat <i>Ink and paints sludges</i>	SW416	14,294.93	0.20
28	Minyak/enap cemar daripada loji penapisan minyak <i>Oil/sludges from oil refinery</i>	SW314	12,146.77	0.17
29	Alkali terpakai / <i>Spent alkalis</i>	SW401	9,966.60	0.14
30	Alkali terpakai dengan pH $\geq$ 11.5 <i>Spent alkalis with pH <math>\geq</math> 11.5</i>	SW402	9,355.61	0.13
31	Produk dakwat, cat, pigmen atau lakuer yang tidak mengikut spesifikasi <i>Discarded of ink/paint/pigment/lacquer containing organic solvent</i>	SW418	8,823.77	0.12
32	Minyak hidraulik terpakai / <i>Spent hydraulic oil</i>	SW306	8,189.39	0.11
33	Buangan pelarut organik terhalogen <i>Waste of halogenated solvents</i>	SW323	6,333.12	0.09
34	Klinker, sanga dan abu dari penunu buangan terjadual <i>Clinker, slag and ashes from incinerator</i>	SW406	6,279.55	0.09
35	Karbon teraktif terpakai <i>Contaminated activated carbon</i>	SW411	6,036.75	0.08
36	Larutan alkali berair terpakai yang mengandungi sianida <i>Spent aqueous alkaline containing cyanide</i>	SW414	6,009.62	0.08
37	Buangan cecair terma / <i>Waste of thermal fluids</i>	SW327	3,981.38	0.06
38	Buangan bateri asid plumbum <i>Waste of acid lead batteries</i>	SW102	3,558.96	0.05
39	Asid organik terpakai / <i>Spent organic acids</i>	SW301	3,124.69	0.04
40	Buangan pelekat/glu yang mengandungi pelarut organik <i>Adhesive/glue containing organic solvent</i>	SW303	2,985.57	0.04
41	Campuran buangan terjadual <i>Mixture of scheduled wastes</i>	SW421	2,934.31	0.04

6 (b) : Jumlah Buangan Terjadual yang Dihasilkan mengikut  
Kod Buangan Terjadual, 2020

6 (b) : Quantity of Scheduled Wastes Generated by Scheduled Waste Code, 2020

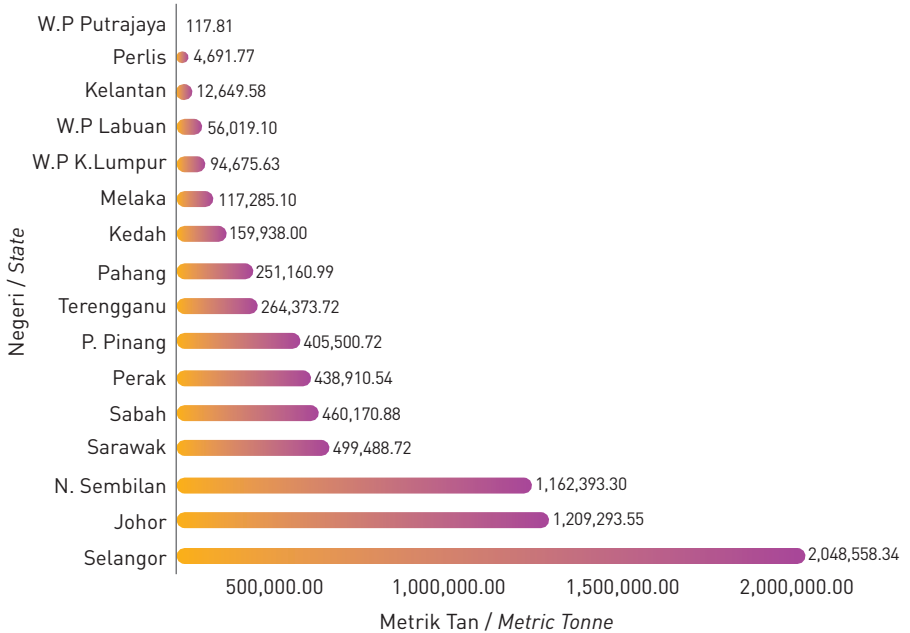
NO.	NAMA BUANGAN/ NAME OF WASTE	KOD BUANGAN/ WASTE CODE	KUANTITI BUANGAN/ QUANTITY OF WASTE	
			(MT/Tahun) (MT/Year)	Peratusan/ Percentage (%)
42	Sisa berminyak dari bengkel automotive <i>Oily residue from workshop</i>	SW312	2,841.05	0.04
43	Buangan mengandungi merkuri <i>Waste containing mercury/compound</i>	SW109	1,639.51	0.02
44	Enap cemar dari tangki penyimpanan minyak mineral <i>Sludges from mineral oil storage tank</i>	SW310	1,276.99	0.02
45	Buangan mengandungi formaldehid <i>Waste containing formaldehyde</i>	SW320	753.48	0.01
46	Buangan Asbestos / <i>Asbestos</i>	SW201	749.12	0.01
47	Tar atau sisa bertar dari loji penapisan minyak <i>Tar residue from oil refinery/petrochemical plant</i>	SW315	569.30	0.01
48	Buangan farmaseutikal / <i>Discarded drug</i>	SW405	550.89	0.01
49	Buangan sisa penyulingan tidak berair terhalogen atau bukan terhalogen yang terhasil daripada proses pemerolehan kembali pelarut organik <i>Waste of halogenated or unhalogenated non-aqueous distillation residues arising from organic solvents recovery process</i>	SW324	535.49	0.01
50	Tanah yang dicemari dengan minyak daripada penapisan <i>Contaminated oil from re-refining/used lubricating oil</i>	SW313	528.30	0.01
51	Buangan makmal / <i>Chemical waste</i>	SW430	392.96	0.01
52	Enap cemar yang distabilkan / <i>Stabilized sludges</i>	SW203	246.40	0.00
53	Buangan fluks / <i>Flux waste</i>	SW302	227.76	0.00
54	Sisa dari pemerolehan kembali likuor penjerukan asid <i>Residue from recovery of acid pickling liquor</i>	SW106	154.83	0.00
55	Buangan racun perosak / <i>Pesticide</i>	SW425	125.95	0.00
56	Enap cemar dari tangki minyak <i>Oil tankers sludges</i>	SW308	104.20	0.00
57	Diisosiyanat terpakai / <i>Spent di-isocyanates</i>	SW419	63.19	0.00
58	Produk racun perosak yang tidak mengikut spesifikasi <i>Off-spec pesticide/herbicides/biocides</i>	SW426	36.26	0.00
59	Buangan fenol <i>Waste of phenols/its compound</i>	SW319	30.63	0.00
60	Buangan yang mengandungi peroksida <i>Waste containing peroxides</i>	SW432	25.88	0.00

6 (b) : Jumlah Buangan Terjadual yang Dihasilkan mengikut  
Kod Buangan Terjadual, 2020

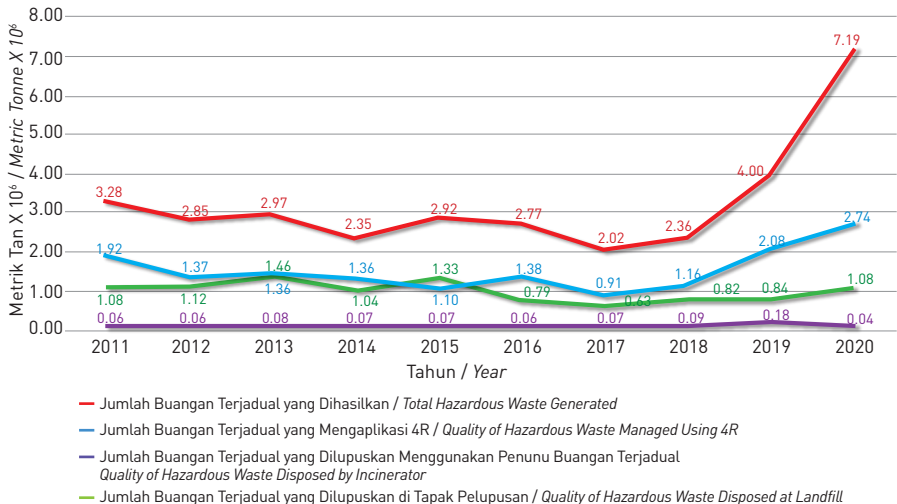
6 (b) : Quantity of Scheduled Wastes Generated by Scheduled Waste Code, 2020

NO.	NAMA BUANGAN/ NAME OF WASTE	KOD BUANGAN/ WASTE CODE	KUANTITI BUANGAN/ QUANTITY OF WASTE	
			(MT/Tahun) (MT/Year)	Peratusan/ Percentage (%)
61	Agen pengoksidaan terpakai <i>Spent oxidizing agent</i>	SW424	22.81	0.00
62	Buangan daripada operasi pengawetan kayu <i>Waste from wood containing heavy metals</i>	SW428	15.83	0.00
63	Buangan yang mengandungi arsenik <i>Waste containing arsenic</i>	SW101	13.53	0.00
64	Enap cemar asid / <i>Acid sludges</i>	SW316	12.63	0.00
65	Buangan dari pengilangan bahan letupan <i>Waste from manufacturing/processing or use of explosive</i>	SW431	7.32	0.00
66	Buangan yang mengandungi BFT dan TFT <i>Waste containing pcb or pct</i>	SW318	4.56	0.00
67	Enap cemar yang mengandungi sianida <i>Sludges containing cyanide</i>	SW412	1.74	0.00
68	Buangan sebatian fosforus organik <i>Waste of organic phosphorus compound</i>	SW326	1.29	0.00
69	Sanga kuprum / <i>Copper slag</i>	SW107	1.24	0.00
70	Garam terpakai yang mengandungi sianida <i>Spent salt containing cyanide</i>	SW413	0.92	0.00
71	Sisa dari pemprosesan zink <i>Zink residue</i>	SW108	0.47	0.00
72	Minyak pelindapan terpakai yang mengandungi sianida <i>Spent quenching oil containing cyanide</i>	SW415	0.19	0.00
73	Buangan yang mengandungi dioksin atau furan <i>Waste containing dioxins or furans</i>	SW407	0.11	0.00
74	Sebatian organologam terpakai <i>Spent of organometallic compound</i>	SW317	0.10	0.00
75	Kek tekan daripada prapengolahan lai sabun gliserol <i>Cake from glycerol soap iye</i>	SW304	0.07	0.00
76	Enap cemar galvanik / <i>Galvanic sludges</i>	SW105	-	0.00
77	Larutan resap dari tapak pelupusan buangan terjadual <i>Leachate from scheduled waste landfill</i>	SW420	-	0.00
<b>JUMLAH / TOTAL</b>			<b>7,185,227.76</b>	<b>100.00</b>

**6 (c) : Penghasilan Buangan Terjadual mengikut Negeri 2020**  
*6 (c) : Distribution of Scheduled Waste Generated by State 2020*



**6 (d) : Trend Pengurusan Buangan Terjadual, 2011-2020**  
*6 (d) : Scheduled Waste Management Trend, 2011-2020*



6 (e) : Kemudahan yang Mengendalikan Buangan Terjadual, 2020

6 (e) : Facilities Handling Scheduled Wastes, 2020

NO.	KEMUDAHAN/ FACILITIES	(MT/TAHUN) (MT/YEAR)	PERATUSAN/ PERCENTAGE (%)
1	Pengurusan Khas / <i>Special Waste Management</i>	2,168,426.92	30.18
2	Pengolahan Dalam Tapak / <i>On-site Treatment</i>	1,104,481.07	15.37
3	Kemudahan Pemerolehan Kembali Luar Tapak Tempatan <i>Local Off-Site Recovery Facilities</i>	546,290.52	7.60
4	Penstoran Dalam Tapak / <i>On-site Storage</i>	2,983,676.57	41.53
5	Kualiti Alam Sdn Bhd	142,479.00	1.98
6	Kemudahan Buangan Klinikal (Penunu Buangan Klinikal, Gelombang Mikro dan Tapak Pelupusan Selamat) <i>Clinical Waste Facilities (Incinerator, Microwave and Secured Landfill)</i>	39,883.32	0.56
7	Kemudahan Luar Negara (Ekspot) <i>Foreign Facilities (Export)</i>	168,001.594	2.34
8	Trienekens (Sarawak) Sdn Bhd	31,988.77	0.45
<b>JUMLAH / TOTAL</b>		<b>7,185,227.76</b>	<b>100.00</b>



6 (f) : Buangan Terjadual yang Diuruskan Di Bawah  
Pengurusan Khas, 2020

6 (f) : Scheduled Waste Managed Under Special Management, 2020

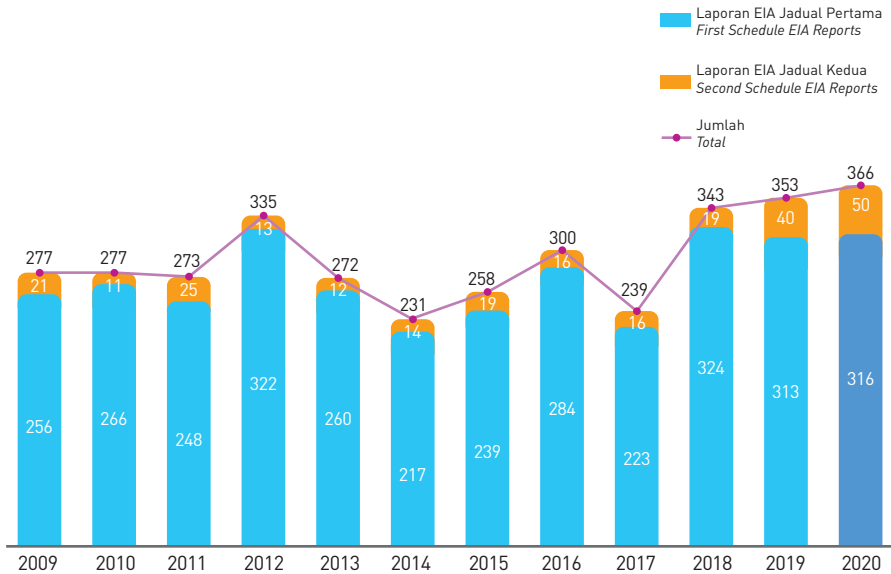
NO.	KATEGORI BUANGAN/ WASTE CATEGORY	KOD BUANGAN/ WASTE CODE	SUMBER/ SOURCE	METRIK TAN/ TONNES	PERATUS/ PERCENTAGE (%)	KAEDAH PELUPUSAN/ METHOD OF DISPOSAL
1	Enap cemar Logam Berat <i>Heavy Metal Sludge</i>	SW 204	Loji Rawatan Air Minuman <i>Drinking Water Treatment Plant</i>	1,067,377.38	49.22	Tapak Pelupusan Sanitari <i>Sanitary Landfill</i>
			Industri <i>Industry</i>	6,348.70	0.29	
					48,734.45	2.25
2	Fly Ash & Bottom Ash <i>Fly Ash &amp; Bottom Ash</i>	SW 104	Coal-Fired Power Plant <i>Coal-Fired Power Plant</i>	896,270.09	41.33	Guna semula sebagai bahan mentah pembuatan produk <i>Reuse as raw material for product</i>
			Industri <i>Industry</i>	140,443.27	6.48	
3	Enap cemar mengandungi Flouride <i>Sludge Containing Flouride</i>	SW 207	Industri <i>Industry</i>	866.68	0.04	Guna semula sebagai bahan mentah pembuatan produk <i>Reuse as raw material for product</i>
4	Buangan yang mengandungi formaldehid, resin, serbuk epoksi terbuang <i>Waste Containing Formaldehyde, resin, discarded epoxy powder</i>	SW 320, 325, 418	Industri <i>Industry</i>	663.58	0.03	Tapak Pelupusan Sanitari <i>Sanitary Landfill</i>

6 (f) : Buangan Terjadual yang Diuruskan Di Bawah  
Pengurusan Khas, 2020

6 (f) : *Scheduled Waste Managed Under Special Management, 2020*

NO.	KATEGORI BUANGAN/ WASTE CATEGORY	KOD BUANGAN/ WASTE CODE	SUMBER/ SOURCE	METRIK TAN/ TONNES	PERATUS/ PERCENTAGE (%)	KAEDAH PELUPUSAN/ METHOD OF DISPOSAL
5	Abu dari enapcemar kertas <i>Ash of Paper Sludge</i>	SW 406	Industri <i>Industry</i>	3,531.45	0.16	Tapak Pelupusan Sanitari <i>Sanitary Landfill</i>
6	Activated Carbon Terpakai <i>Spent activated carbon</i>	SW411	Industri <i>Industry</i>	3,728.00	0.17	Guna semula sebagai bahan mentah pembuatan produk <i>Reuse as raw material for product</i>
7	Enap Cemar Mineral <i>Mineral sludge</i>	SW 427	Industri <i>Industry</i>	456.00	0.02	Guna semula sebagai bahan agen peneutralan <i>Reuse as neutralizing agent</i>
8	Buangan daripada bahan letupan terpakai <i>Waste from the use of explosives</i>	SW431	Industri <i>Industry</i>	7.32	0.00	Kaedah pembakaran <i>Slow Burning method</i>
<b>JUMLAH / TOTAL</b>				<b>2,168,426.92</b>	<b>100.00</b>	

**7 (a) : Bilangan Laporan EIA yang Diterima mengikut Tahun**  
*7 (a) : The Number of EIA Reports Received by Years*

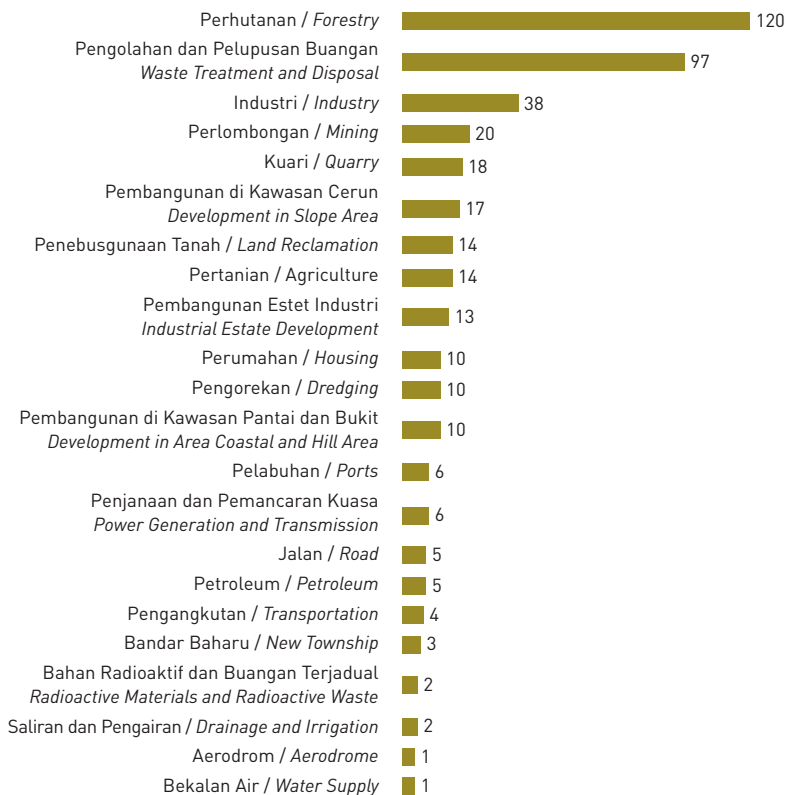


**\* Jumlah kumulatif Laporan EIA diterima daripada tahun 2009-2020 - 3,524 Laporan EIA**  
*Total cumulative of EIA Reports received from year 2009-2020 - 3,524 EIA Reports*



7 (b) : Bilangan Laporan EIA yang Diterima mengikut Aktiviti yang Ditetapkan, 2020

7 (b) : The Number of EIA Reports Received by Prescribed Activities, 2020



7 (c) : Jumlah Keseluruhan Jururunding Berdaftar Sehingga 31 Disember 2020

7 (c) : Number of Registered Consultants Until 31 December 2020

KATEGORI/ CATEGORY	JUMLAH/ TOTAL	PERATUSAN [%]/ PERCENTAGE [%]
EIA Consultant	158	17.1
Subject Consultant	122	13.2
Subject Specialist	96	10.4
Assistant Consultant	547	59.3
Jumlah / Total	923	100

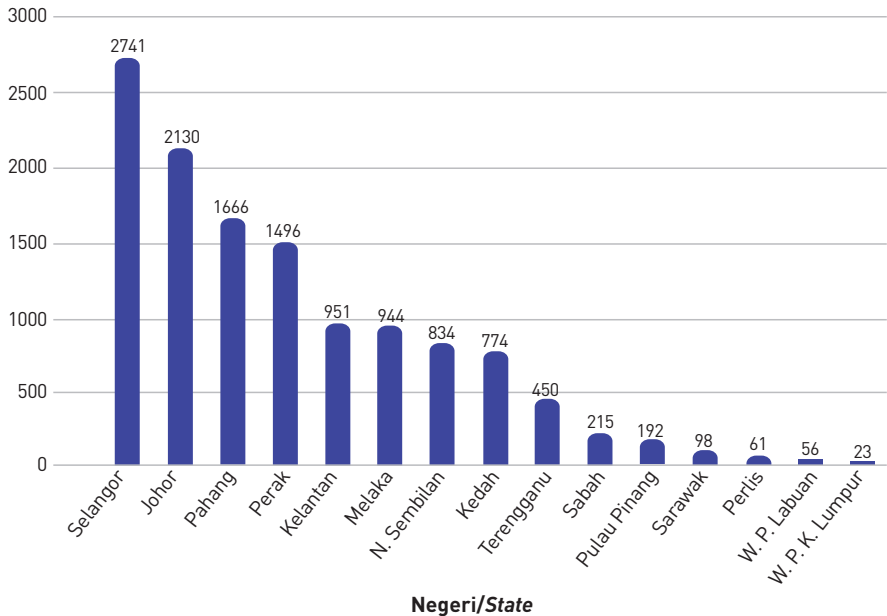
7 (d) : Jumlah Permohonan Juruaudit Alam Sekeliling yang Diluluskan bagi Tahun 2020

7 (d) : Number of Approved Environmental Auditor Applications in 2020

JENIS PERMOHONAN/ TYPES OF APPLICANT	JUMLAH PERMOHONAN/ NO. OF APPLICANTS	JUMLAH LULUS/ NO. OF APPLICATIONS APPROVED	PERATUSAN LULUS/ PERCENTAGE APPROVED
Baharu / New	15	11	73 %
Pembaharuan / Renew	20	16	80 %

7 (e) : Bilangan Input Alam Sekitar kepada Perancangan Pembangunan mengikut Negeri, 2020

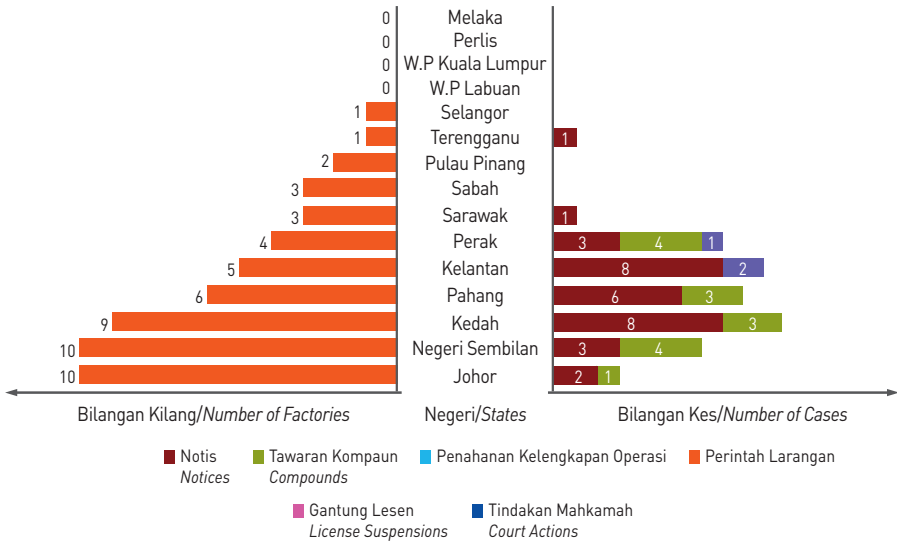
7 (e) : The Number of Environmental Input for Development Planning by States, 2020



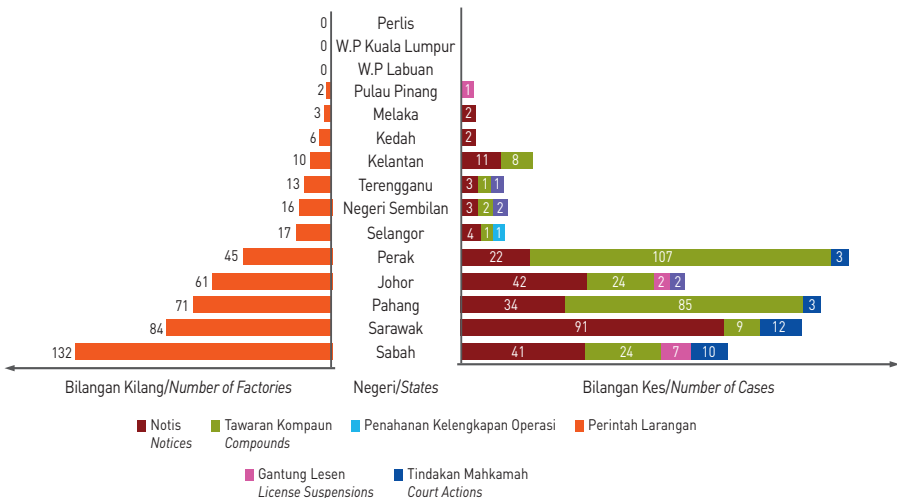
\* Jumlah Input Alam Sekitar kepada Perancangan Pembangunan diterima pada tahun 2020 - 12,631 permohonan

Total Environmental Input For Development Planning received in year 2020 - 12,631 application

8 (a) : Bilangan Kilang Getah Asli Mentah dan Tindakan Undang-Undang Terhadap Kilang Getah Asli Mentah, 2020  
 8 (a) : Number of Raw Natural Rubber Factories and Legal Actions Against Raw Natural Rubber Factories, 2020

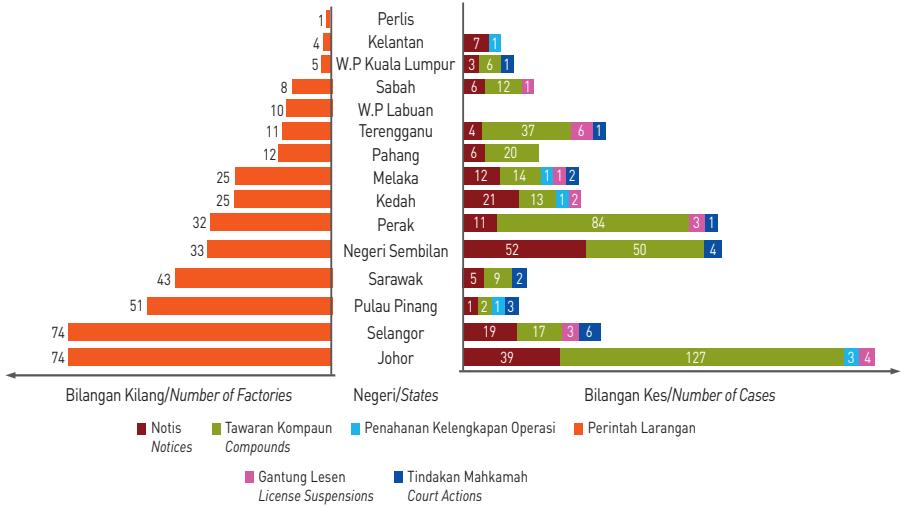


8 (b) : Bilangan Kilang Minyak Kelapa Sawit Mentah dan Tindakan Undang-Undang Terhadap Kilang Minyak Kelapa Sawit Mentah, 2020  
 8 (b) : Number of Raw Natural Rubber Factories and Legal Actions Against Raw Natural Rubber Factories, 2020



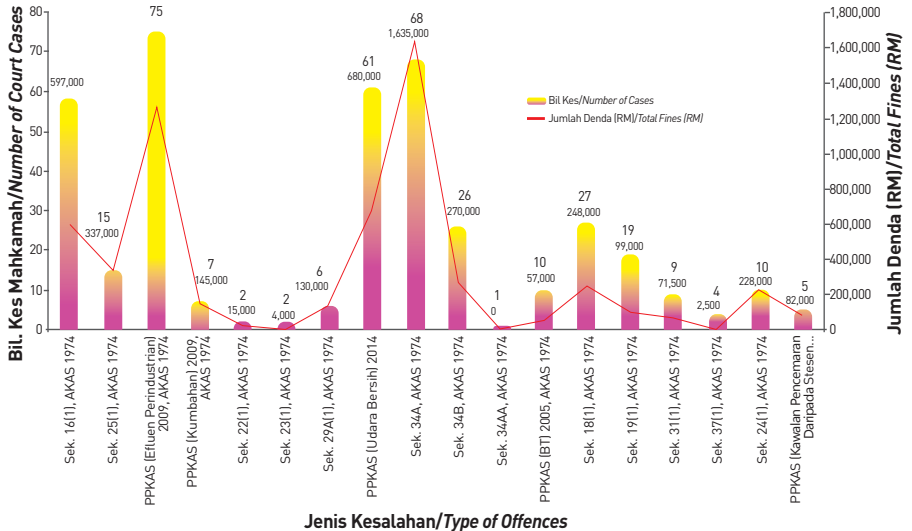
**8 (c) : Bilangan Kemudahan Pengolahan dan Pelupusan Buangan Terjadual dan Tindakan Undang-Undang Terhadap Kemudahan Pengolahan dan Pelupusan Buangan Terjadual, 2020**

*8 (c) : Number and Legal Actions Against Facilities for the Treatment and Disposal Facilities of Scheduled Wastes, 2020*

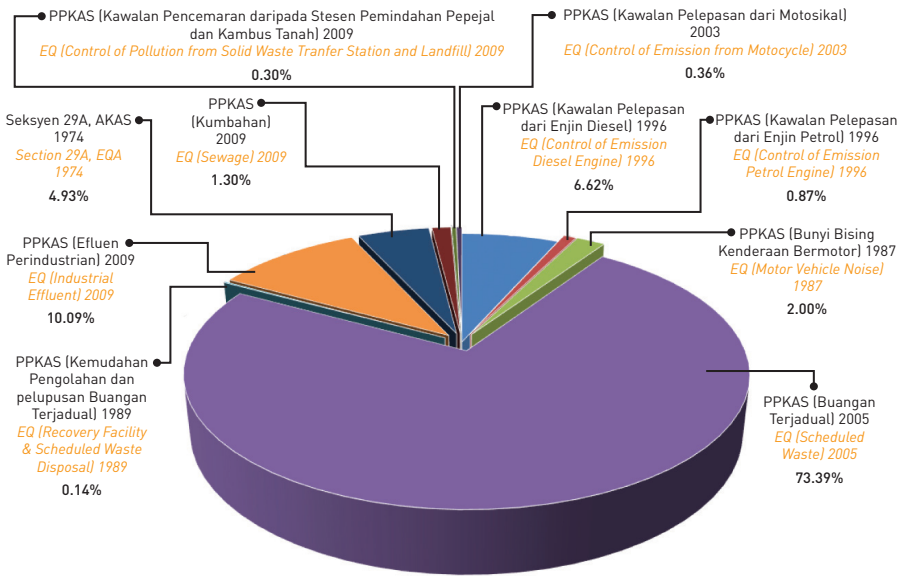


**8 (d) : Bilangan Kes Mahkamah dan Denda, 2020**

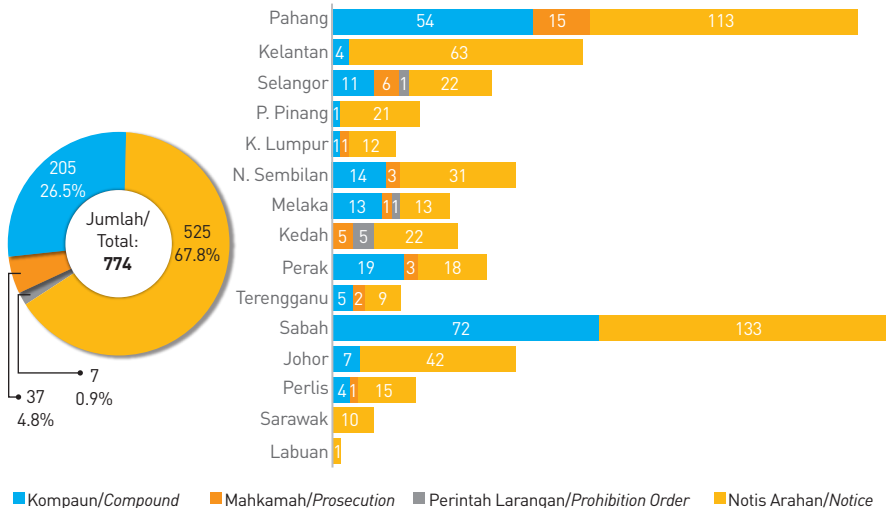
*8 (d) : Number of Court Cases and Fines, 2020*



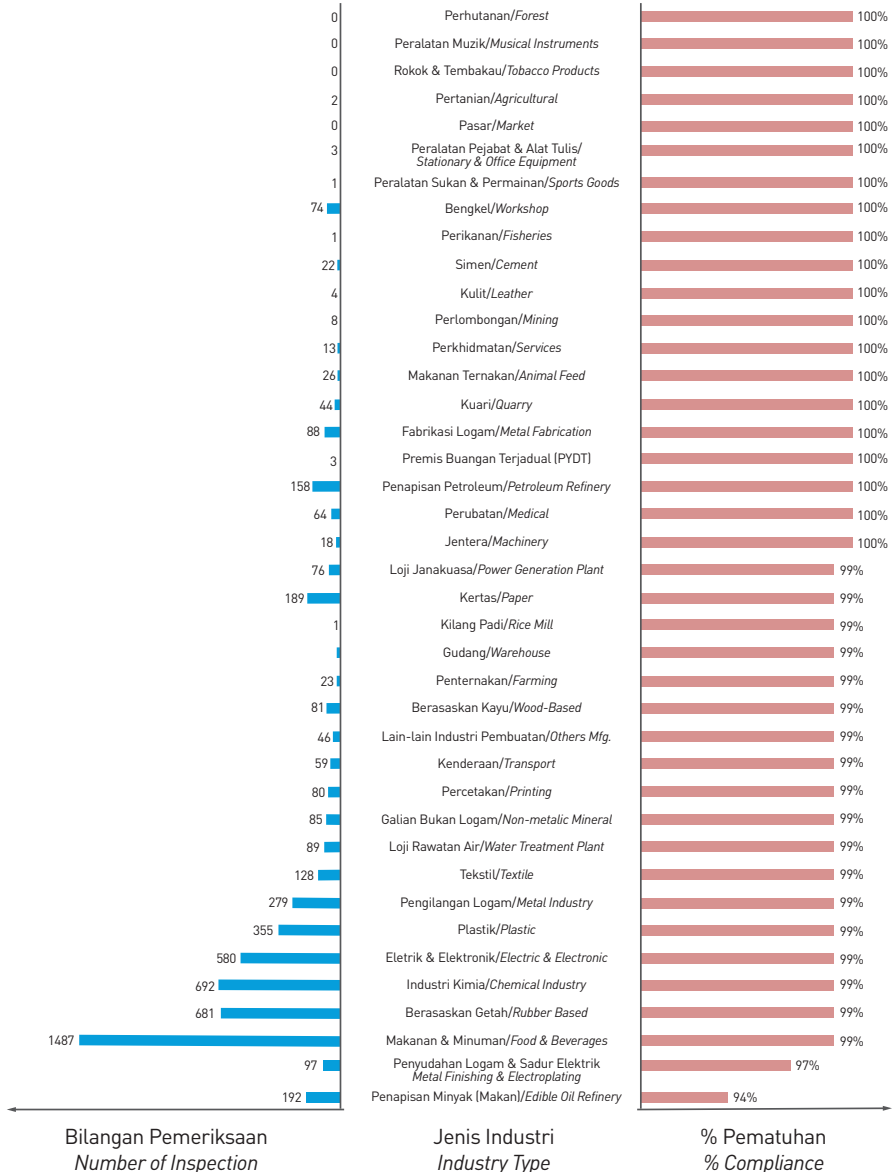
8 (e) : Bilangan Kes Kompaun mengikut Pecahan PPKAS, 2020  
8 (e) : Number of Compound Cases According to Environmental Quality Regulations, 2020



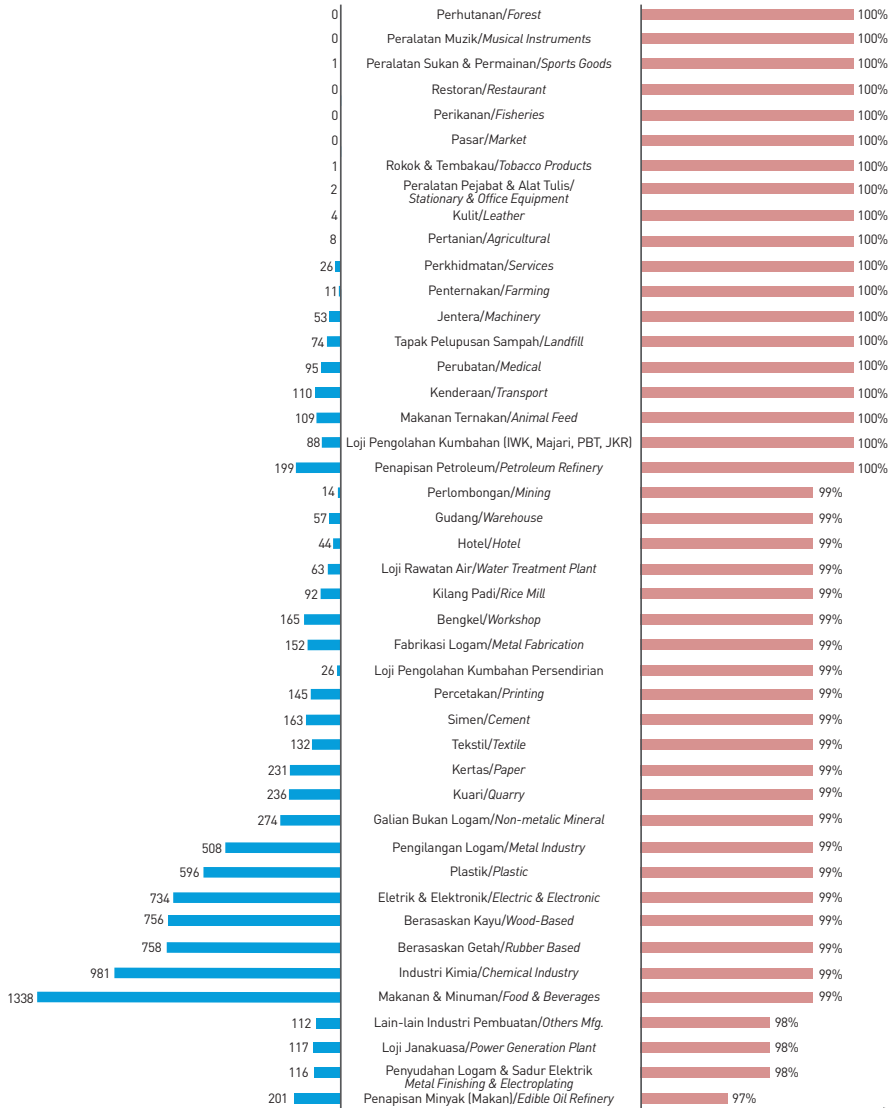
8 (f) : Tindakan Susulan Penguatkuasaan Projek EIA Tahun 2020  
8 (f) : Follow Up Action of EIA Enforcement Investigations Year 2020



**8 (g) : Status Pematuhan Industri Terhadap  
Peraturan-Peraturan Kualiti Alam Sekeliling (Efluen) 2009, 2020**  
*8 (g) : Compliance Status to the Environmental Quality (Effluen)  
Regulations 2009, 2020*



8 (h) : Status Pematuhan Industri Terhadap  
Peraturan-Peraturan Kualiti Alam Sekeliling (Udara Bersih) 2014, 2020  
8 (h) : Compliance Status to the Environmental Quality (Clean Air)  
Regulations 2014, 2020

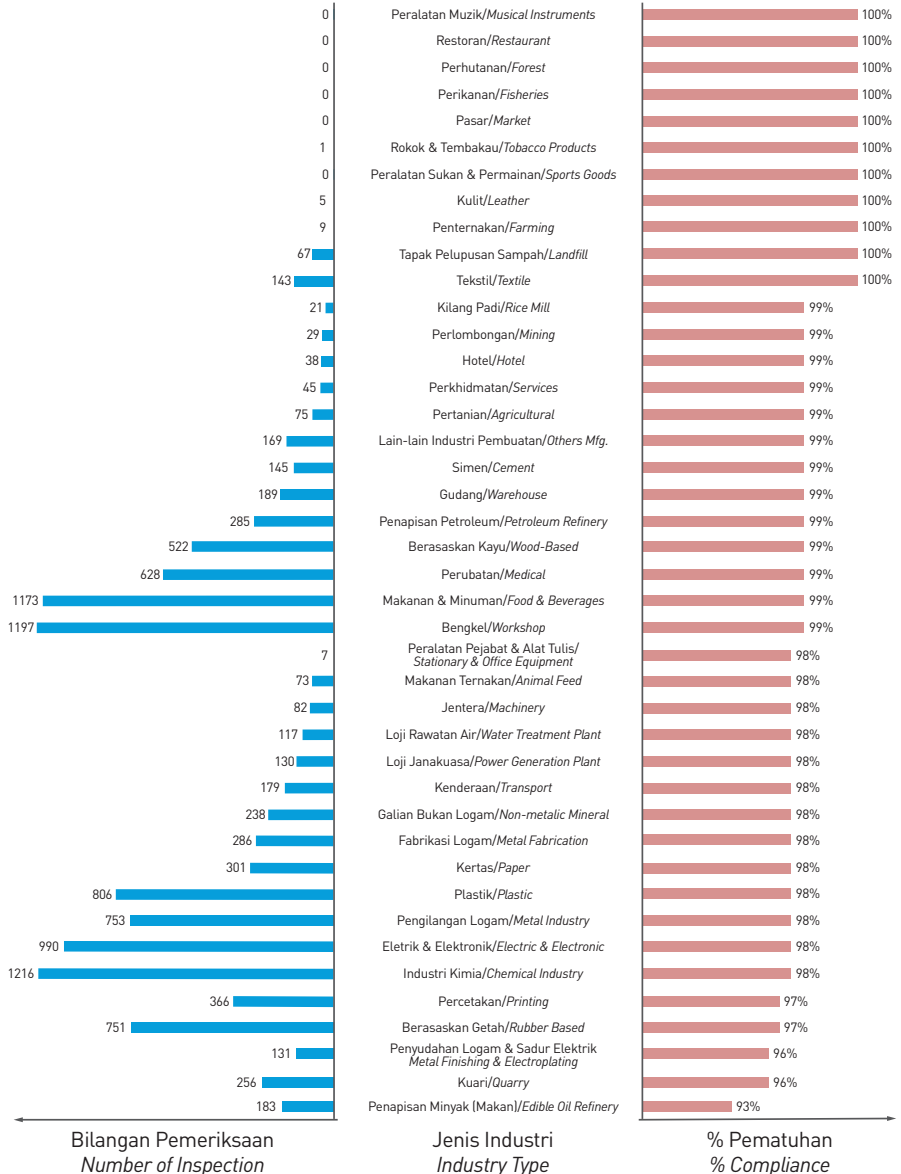


Bilangan Pemeriksaan Permis  
Number of Premises Inspection

Jenis Industri  
Industry Type

% Pematuhan  
% Compliance

**8 (i) : Status Pematuhan Industri Terhadap Peraturan-  
Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005, 2020**  
*8 (i) : Compliance Status to the Environmental Quality (Scheduled Wastes)  
Regulations 2005, 2020*



9 (a) : Pencapaian CEPA Ibu Pejabat bagi Tahun 2020

9 (a) : Achievement of DOE Headquarters on CEPA Program 2020

BIL./NO.	PROGRAM/PROGRAMME	BUTIRAN/DETAILS
1.	Bengkel Latihan Pentadbir Negeri Sistem My RAS (JAS Negeri dan Ibu Pejabat).	Bengkel Latihan ini dilaksanakan pada 27-28 Februari 2020 bertempat di Bilik ICT Aras 3, Jabatan Alam Sekitar Putrajaya.
2.	Program Gotong Royong bersama Rakan Alam Sekitar & Sahabat Sungai Langat.	Program Gotong Royong Pembersihan & Kelestarian Sungai Langat dilaksanakan pada setiap Sabtu setiap bulan. (10 Program)
3.	Program Enviro Hiking di Gunung Angsi, Negeri Sembilan.	Program dilaksanakan pada 18 Julai 2020 di Gunung Angsi, Negeri Sembilan. (2 Program)
4.	Program Beach Clean Up bersama komuniti dan NGO di Pantai Kelanang, Selangor.	Program dilaksanakan pada 11 Ogos 2020 di Pantai Kelanang, Selangor.
5.	Program Gotong Royong Hari Malaysia Bersama <i>Malaysian Green Technology and Climate Change Centre</i> (MGTC).	Program dilaksanakan pada 16 September 2020 (Rabu) bertempat di Tasik Cempaka, Bandar Baru Bangi.
6.	Program Sukarelawan Gotong Royong Bersama <i>World Cleanup Day 2020</i> , Tanjung Piai, Johor.	Program dilaksanakan pada 19 September 2020, Terminal Bas Kukup, Tanjung Piai, Johor.
7.	Program Gotong Royong Bina Denai Sungai Sembah, Selangor.	Program dilaksanakan pada 3 Oktober 2020 di Sungai Sembah, Selangor.
8.	Aktiviti Berbasikal Rakan Alam Sekitar bersama KASA.	Program dilaksanakan pada 24 Jun 2020 dan 8 Julai 2020 di Sungai Sembah, Selangor.
9.	Pameran Alam Sekitar ( <i>Inisiatif Mestecc</i> ) Walkabout di Kuala Lumpur,	Program dilaksanakan pada 11 Februari 2020 di Kuala Lumpur.
10.	Pameran Alam Sekitar di Majlis Apresiasi Jabatan Alam Sekitar.	Program dilaksanakan pada 12 Februari 2020 di Dewan Baiduri, JAS. Ibu Pejabat.
11.	Pameran Alam Sekitar di JAS Ibu Pejabat. (Lawatan YB. Menteri Alam Sekitar dan Air ke JAS Ibu Pejabat).	Program dilaksanakan pada di Dewan Baiduri, JAS. Ibu Pejabat.
12.	Persidangan Wanita Dan Alam Sekitar (WAS 2020).	Tempat : Online Tema : Wanita Inspirasi Kelestarian Alam Sekitar Penyertaan Awam: 9,060 (melalui media Sosial Jabatan)
13.	Webinar ASEAN Series 1	Tema : <i>A Stronger ASEAN Response to Potential Transboundary Haze Events in The Wake of Pandemic</i> Tarikh : 4 Ogos 2020 Penyertaan : Bahagian Udara Penganjur : Sekretariat Asean

9 (a) : Pencapaian CEPA Ibu Pejabat bagi Tahun 2020

9 (a) : Achievement of DOE Headquarters on CEPA Program 2020

BIL./ NO.	PROGRAM/ PROGRAMME	BUTIRAN/ DETAILS
14.	Webinar ASEAN Series 2	Tema : ASEAN Youth and The Wise on Resilience in Adversity Tarikh : 24 Ogos 2020 Penyertaan : JAS staf Penganjur : Sekretariat ASEAN
15.	Webinar ASEAN Series 3	Tema : Webinar Provisional Programme of 10 <sup>th</sup> Regional 3R and Circular Economy Forum in Asia and the Pacific Tarikh : 24 November 2020, 1, 8, 14, 17 dan 22 Disember 2020 Penyertaan : JAS staf (Bah KS, Bah BB, Bah K) Penganjur : Kerajaan Jepun (Ministry Of Environment Japan) dan Sekretariat Asean
16.	Webinar ASEAN Series 4	Tema : ASEAN Youth Building Back Better Tarikh : 30 November 2020 Penyertaan : JAS Staf Penganjur : Sekretariat ASEAN
17.	Walkabout Inisiatif MESTECC 2020	Tempat : Connexion Conference & Event Centre (CECC) Nexus, Bangsar South Kuala Lumpur Tarikh : 11 Februari 2020 Bilangan Penyertaan & Outreach : 19,838 orang
18.	Majlis Perhimpunan Bulanan Bil 1/2020 & Apresiasi JAS 2019	Tempat : Dewan Baiduri Tarikh : 12 Februari 2020 Bilangan Penyertaan & Outreach : 2,483 orang
19.	Sambutan Hari Bumi Peringkat Kebangsaan	Tema : Tindakan Menangani Perubahan Iklim. Tempat : Secara Maya Tarikh : 22 April 2020 Bilangan Penyertaan & Outreach : 1,038,170 orang
20.	Hari Alam Sekitar Sedunia World Environment Day (WED)	Tema : Waktunya Untuk Alam #TimeforNature Tempat : Secara Maya Tarikh : 5 Jun 2020 Bilangan Penyertaan & Outreach : 17,160 orang Program ini disambut bersama Hari Lautan Sedunia 2020 dan Hari Segitiga Terumbu Karang.
21.	Sambutan Hari Alam Sekitar Negara 2020 Peringkat Kebangsaan	Kempen : Pengumpulan Buangan Elektrikal & Elektronik; Kempen Hindari Plastik Sekali Guna; Penhijauan Bumi – Penanaman Pokok; dan Denai Sungai Kebangsaan;

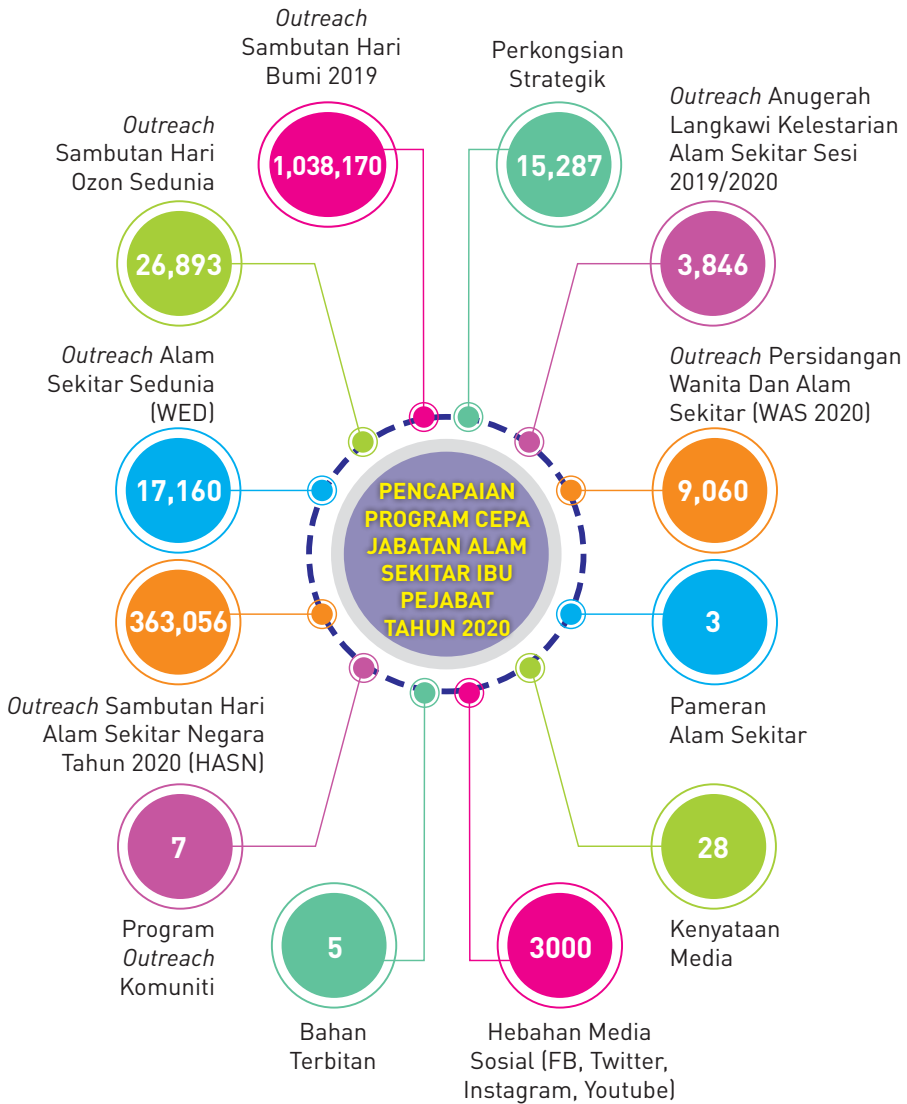
9 (a) : Pencapaian CEPA Ibu Pejabat bagi Tahun 2020

9 (a) : Achievement of DOE Headquarters on CEPA Program 2020

BIL./NO.	PROGRAM/PROGRAMME	BUTIRAN/DETAILS
		Tema : Alam Sekitar Tanggungjawab Bersama. Tarikh : 21- 24 Oktober 2020 Bilangan Penyertaan & Outreach : 363,056 orang
22.	Sambutan Hari Ozon Sedunia	Tema : Ozon untuk kehidupan. Tempat : Hotel Le Meridien, Putrajaya Tarikh : 23 September 2020 Bilangan Penyertaan & Outreach : 26,893 orang
23.	Sesi Dialog dengan Industri	Tanya Eco Siri 1 Tempat : Zoom Webinar Tarikh : 18 Jun 2020 Bilangan Penyertaan & Outreach : 9,569 orang Tanya Eco Siri 2 Tempat : Zoom Webinar Tarikh : 25 Jun 2020 Bilangan Penyertaan & Outreach : 1,245 orang Webinar HASN #2 Tempat : Zoom Webinar Tarikh : 13 Oktober 2020 Bilangan Penyertaan & Outreach : 2,107 orang Webinar HASN #3 Tempat : Zoom Webinar Tarikh : 21 Oktober 2020 Bilangan Penyertaan & Outreach : 2,366 orang
24.	Anugerah Langkawi Kelestarian Alam Sekitar Sesi 2019/2020	Tempat : Secara Maya Tarikh : 1 Feb – 31 Ogos 2020 Bilangan Penyertaan & Outreach : 3,856 orang
25.	Lawatan SLAAS ke Sekolah	Tarikh : 18 Ogos 2020 Tempat : SK (Felda) Lui Selatan Perasmi : Wakil JPN dan PPD Kuala Pilah Penyertaan Fizikal : 5 Penyertaan Online : 0
26.	Mesyuarat Penyelarasan Majlis Promosi SLAAS	Tarikh : 1 Oktober 2020 Tempat : SK (Felda) Lui Selatan Perasmi : Pengerusi - Guru Besar SK (Felda) Lui Selatan Penyertaan Fizikal : 40 Penyertaan Online : 0

9 (a) : Pencapaian CEPA Ibu Pejabat bagi Tahun 2020  
9 (a) : Achievement of DOE Headquarters on CEPA Program 2020

BIL./ NO.	PROGRAM/ PROGRAMME	BUTIRAN/ DETAILS
27.	Bengkel Promosi SLAAS Bersama JPN Negeri Sembilan	Tarikh : 8 Oktober 2020 Tempat : Garden View Hotel Bahau (Era Hotel) Perasmi : Pengarah JPN Negeri Sembilan Penyertaan Fizikal : 130 Penyertaan Online : 0
28.	Bengkel Pementapan Garis Panduan Sekolah Lestari-Anugerah Alam Sekitar dan Program <i>Training For Trainers</i>	Tempat : Bayou Lagoon Resort, Melaka Tarikh : 13-15 Julai 2020 Bilangan Penyertaan : 24 Orang (Urusetia JAS Ibupejabat, JAS Negeri & Yayasan Bank Rakyat)
29.	Bengkel Kampus Lestari-Anugerah Alam Sekitar (KLAAS)	Tempat : Bayou Lagoon Park Resort, Melaka Tarikh : 15 Julai 2020 hingga 17 Julai 2020 Kehadiran : Telah dihadiri oleh seramai empat penceramah dari UPM, UIAM, UM dan UKM, seorang pegawai UKM LESTARI dan seramai 13 peserta dari JAS Negeri (unit Pendidikan) dan juga lima orang urus setia dari Bahagian Komunikasi Strategik, JAS Ibu Pejabat.
30.	Bengkel Infografik	Tempat : Bilik ICT, Jabatan Alam Sekitar Tarikh : 15-16 Januari 2020 Bilangan Penyertaan : 60 (Penyertaan warga JAS HQ)
31.	Bengkel Digital Literasi Maklumat	Tempat : Bilik ICT, Jabatan Alam Sekitar Tarikh : 13 Februari 2020 Bilangan Penyertaan : 30 orang (Penyertaan warga JAS HQ)
32.	Bengkel EKMC dan EMUSEUM	Tempat : Zoom Meeting Tarikh : 6 April 2020 Bilangan Penyertaan : 30 orang (Penyertaan warga JAS HQ dan Negeri)
33.	Laporan Kualiti Alam Sekeliling 2019	Penerbitan
34.	Laporan Tahunan Jabatan Alam Sekitar 2019	Penerbitan
35.	Buku Kompedium Jabatan Alam Sekitar Keluaran 1: 2020	Penerbitan
36.	eBuletin Jabatan Alam Sekitar 2020	Penerbitan
37.	Coffee Table Book HASN 2019	Penerbitan
38.	Modul Latihan Industri Pelajar IPT di Jabatan Alam Sekitar	Penerbitan

Pencapaian Program CEPA JAS Tahun 2020  
*Achievements of the DOE CEPA Program in 2020*

9 (b) : Pencapaian Program CEPA JAS Negeri 2020  
9 (b) : Achievement of DOE State Office on CEPA Program 2020

BIL	PROGRAM KESEDARAN ALAM SEKITAR	SELANGOR	JOHOR	KEDAH	MELAKA	NEGERI SEMBILAN	PULAU PINANG	PERLIS	TERENGGANU	SABAH	SARAWAK	KELANTAN	WP KUALA LUMPUR	WP LABUAN	PERAK	PAHANG
<b>1</b>	<b>Kempen dan Pendidikan Alam Sekitar</b>															
i	Ceramah Alam Sekitar	12	10	10	2	27	3	10	1	60	22	15	11	2	14	8
ii	Program pengumpulan BEE/ e-waste	11	1	7	64	5	3	23	12	5	4	1	6	0	49	10
iii	Penyertaan sekolah dalam Program Sekolah Lestari- Anugerah Alam Sekitar	24	8	0	28	22	21	0	0	8	6	35	55	7	0	0
iv	Pameran Alam Sekitar	8	4	4	3	10	4	5	3	24	4	4	6	0	4	5
v	Seminar / Bengkel / Taklimat	9	7	3	11	9	18	2	0	8	17	4	4	1	6	5
vi	Kem Kesedaran Alam Sekitar	0	1	0	1	2	0	0	0	0	1	0	0	0	0	0
vii	Aktiviti Pra-sekolah (Tasaka/tadika)	0	0	3	0	2	0	0	1	0	11	6	0	0	0	2
	Jumlah Kempen dan Pendidikan Alam Sekitar	64	31	27	109	77	49	40	17	105	65	65	82	10	73	30

9 (b) : Pencapaian Program CEPA JAS Negeri 2020  
9 (b) : Achievement of DOE State Office on CEPA Program 2020

BIL	PROGRAM KESEDARAN ALAM SEKITAR	SELANGOR	JOHOR	KEDAH	MELAKA	NEGERI SEMBILAN	PULAU PINANG	PERLIS	TERENGGANU	SABAH	SARAWAK	KELANTAN	WP KUALA LUMPUR	WP LABUAN	PERAK	PAHANG
<b>2</b>	<b>Sambutan</b>															
i	Sambutan Hari Alam Sekitar Negara (HASN) [21 Okt]	4	1	1	8	1	4	2	1	5	10	1	1	1	1	0
ii	Hari Alam Sekitar Sedunia [WED] [5 Jun]	1	1	1	4	1	1	1	1	15	3	1	1	1	0	3
iii	Hari Bumi [22 April]	1	1	0	2	0	1	1	0	3	3	1	0	0	0	2
iv	Hari Ozon Sedunia [16 Sept]	1	1	0	3	1	1	1	1	0	3	1	1	1	0	0
	Jumlah Sambutan	7	4	2	17	3	7	5	3	23	19	4	3	3	1	5
<b>3</b>	<b>Rakan Alam Sekitar (RAS)</b>															
i	Pendaftaran Ahli RAS	1010	1138	456	236	1000	200	396	0	1813	1046	500	350	0	598	1200
ii	Program Kesedaran bersama ahli RAS	4	0	1	5	10	1	3	2	3	16	0	2	0	0	0
<b>4</b>	<b>Rakan Strategik (RS)</b>															
i	Kerjasama dengan Rakan Strategik (RS)	7	0	15	11	40	3	47	11	13	19	9	6	1	27	0

9 (b) : Pencapaian Program CEPA JAS Negeri 2020  
9 (b) : Achievement of DOE State Office on CEPA Program 2020

BIL	PROGRAM KESEDARAN ALAM SEKITAR	SELANGOR	JOHOR	KEDAH	MELAKA	NEGERI SEMBILAN	PULAU PINANG	PERLIS	TERENGGANU	SABAH	SARAWAK	KELANTAN	WP KUALA LUMPUR	WP LABUAN	PERAK	PAHANG
<b>5</b>	<b>Sebaran maklumat</b>															
i	Hebahlan melalui media massa (Elektronik dan cetak)	325	1	3	5	4	2	6	110	735	23	0	1	32	220	2
ii	Hebahlan melalui media sosial (FB, Twitter, Instagram, Youtube)	130	60	46	92	30	89	47	52	76	60	15	52	60	195	87
	Jumlah Sebaran maklumat	455	61	49	97	34	91	53	162	811	83	15	53	92	415	89
<b>6</b>	<b>Aktiviti Tambahan</b>															
i	Pembudayaan ESTECC di sekolah	0	0	2	0	1	0	0	3	0	16	8	0	0	0	5
ii	Minggu Sains Negara	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0
	Jumlah Aktiviti Tambahan	0	0	2	0	2	0	0	4	0	17	8	0	0	0	5
<b>JUMLAH AKTIVITI</b>		530	96	81	228	126	148	101	188	942	200	92	140	105	489	129
		3595														

Pengurusan Sumber Manusia dan Kewangan  
*Human Resource Management*

92.94%

🎯 Pengisian jawatan di JAS sehingga 31.12.2020  
*Occupancy of DOE as 31<sup>st</sup> December 2020*

🎯 Perjawatan / Position: 1,543

🎯 Pengisian / Occupancy: 1,434

🎯 Kekosongan / Vacancy: 109

100%

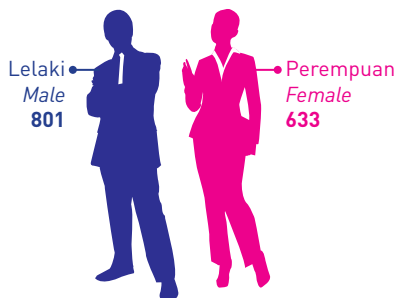
🎯 Peratusan Pegawai Menghadiri Kursus Bagi Tahun 2020  
*Percentage of officers attending courses for the year 2020*

🎯 1,381 pegawai hadir tujuh (7) hari dan lebih kursus bagi tahun 2019  
*1,381 of DOE staff attending courses for seven (7) days or more in 2019*

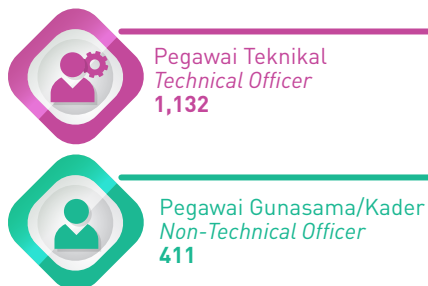
114  
orang / employees

🎯 Penerima Anugerah Perkhidmatan Cemerlang (APC) 2020  
*Recipients of Excellent Service Award (APC) 2020*

Pecahan Pegawai mengikut Jantina  
*Breakdown of Officers by Gender*



Pecahan Perjawatan  
*Breakdown of Position*



Perbelanjaan Pembangunan JAS 2020  
*Development Expenditure of DOE in 2020*

Peruntukan 2020  
*Budget Allocation in 2020*  
RM 67,595,000.00



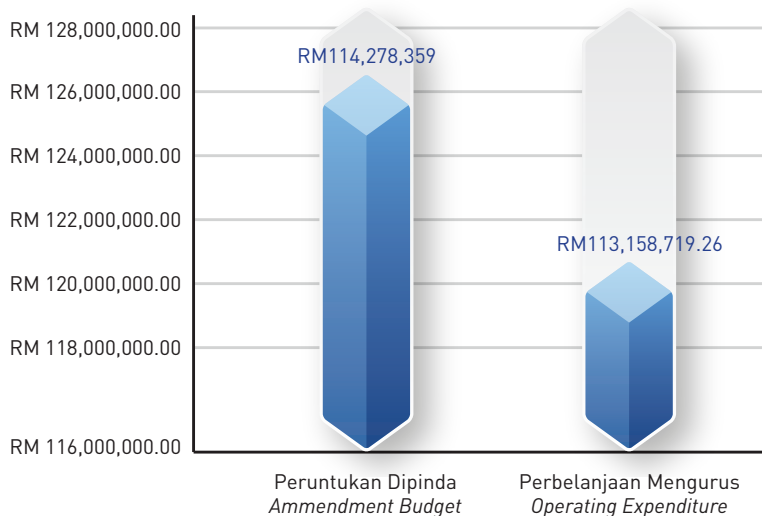
Perbelanjaan 2020  
*Expenditure in 2020*  
RM 64,414,794.71

Pengurusan Kewangan (Mengurus)  
*Financial Management*

Anggaran Belanja Mengurus 2020  
*Estimated for Management Expenditure 2020*

OBJEK AM/ GENERAL OBJECT	PERIHAL OBJEK AM/ DESCRIPTION OF GENERAL OBJECT	PERUNTUKAN DILULUSKAN/ APPROVED BUDGET (RM)	PERUNTUKAN DIPINDA/ BUDGET AMENDMENT (RM)
10000	Emolumen <i>Emolument</i>	92,357,400	89,671,059
20000	Perkhidmatan dan Bekalan <i>Services and Supplies</i>	23,037,500	23,417,300
30000	Aset / <i>Assets</i>	0.00	0.00
40000	Pemberian dan Kenaan Bayaran Tetap <i>Grants and Fixed Charges</i>	1,190,000	1,190,000
<b>JUMLAH KESELURUHAN / TOTAL</b>		<b>116,584,900</b>	<b>114,278,359</b>

Perbelanjaan Mengurus 2020  
*Operating Expenditure 2020*



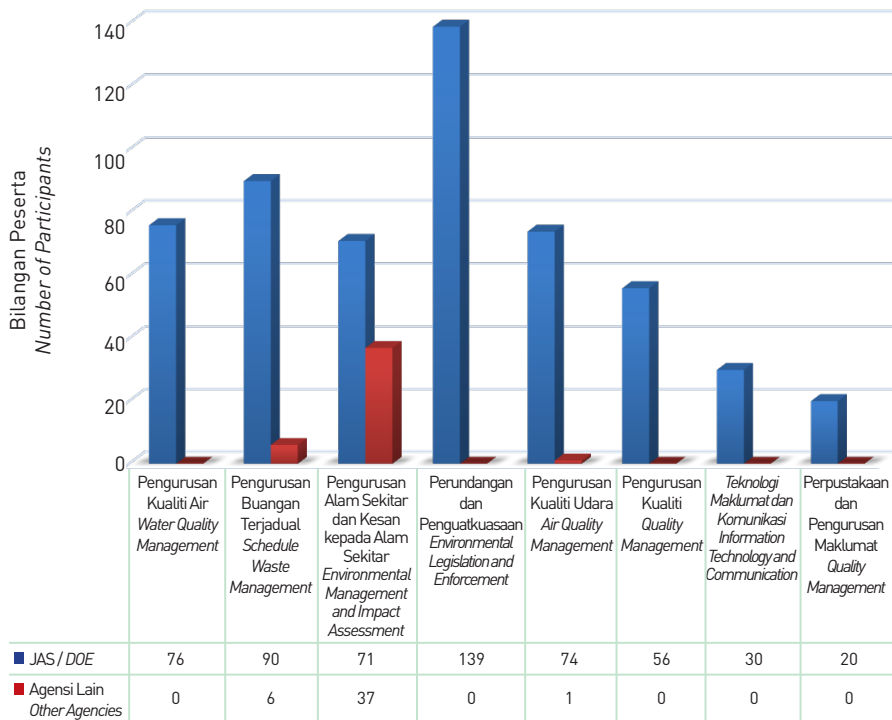
10 (a) : Program Latihan EiMAS kepada Pegawai dan Kakitangan JAS 2020

10 (a) : EiMAS Training Programmes for DOE Staff 2020

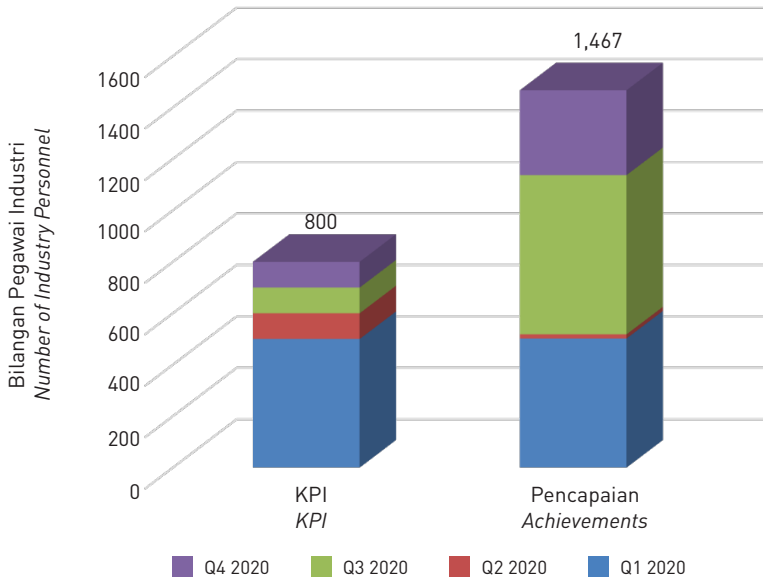


10 (b) : Bilangan Peserta JAS mengikut Kategori Kursus

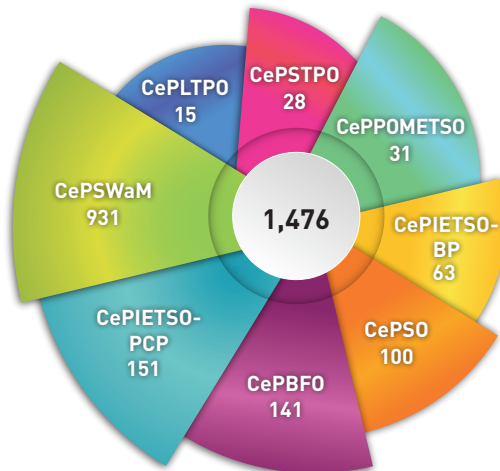
10 (b) : Number of DOE Participants by Course Category



10 (c) : Bilangan Pegawai Industri Dilatih Berbanding Petunjuk Prestasi Utama yang Ditetapkan bagi Tahun 2020  
 10 (c) : Number of Industry Personnel Trained Against Key Performance Indicator (KPI) Set for the Year 2020

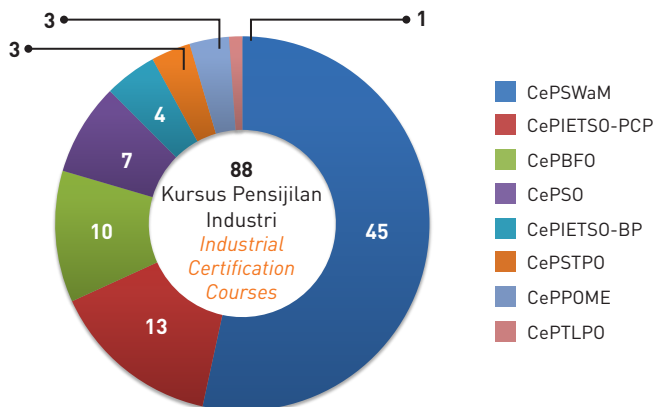


10 (d) : Pegawai Industri Dilatih mengikut Kursus Kompetensi, 2020  
 10 (d) : Number of Industry Personnel Trained According to Types of Competency Courses, 2020



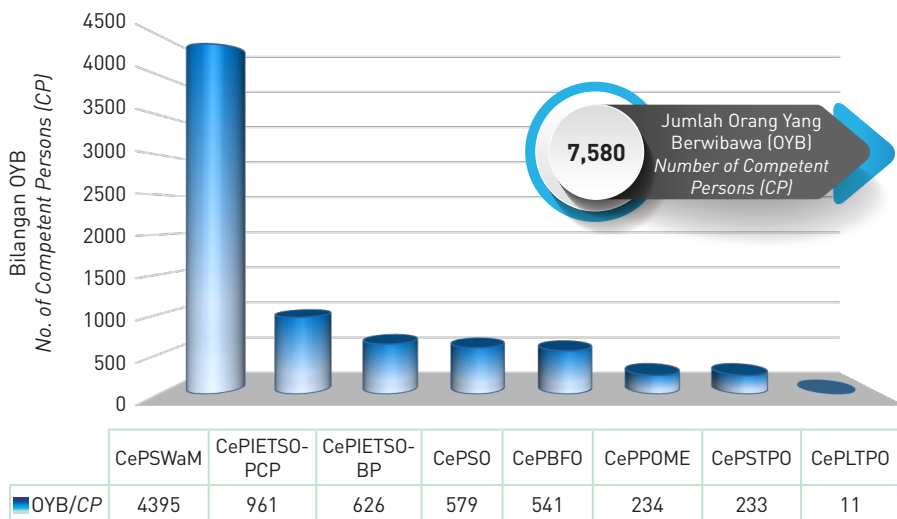
10 (e) : Bilangan Kursus Pensijilan Industri yang Dianjurkan, 2020

10 (e) : Number of Industry Certification Courses Conducted, 2020



10 (f) : Bilangan Orang yang Berwibawa (OYB) Pegawai Industri di Malaysia mengikut Jenis Pensijilan pada 31 Disember 2020

10 (f) : Number of Competent Persons of Industry Personnel in Malaysia According to Type of Certification as at 31<sup>st</sup> December 2020



10 (g) : Bilangan Kehadiran Peserta Kursus Pegawai Industri bagi 5 Tahun Terkini (2016 – 2020)  
10 (g) : Attendance of Industry Personnel as Course Participants for the Last 5 Years (2016 – 2020)



# ARKITEKTUR BISNES JAS DOE BUSINESS ARCHITECTURE

## MEDIUM PERKHIDMATAN / SERVICE MEDIUM

Aplikasi Mobil  
*Mobile Application*

Aplikasi Atas Talian  
*On-Line Application*

Portal  
*Portal*

Emel  
*Email*

Media Sosial  
*Social Media*

## PENGGUNA PERKHIDMATAN / USER

### Dalaman / *Internal*

- JAS HQ / Negeri / Cawangan  
*JAS HQ / State / Branch*
- KASA / Agensi Kerajaan Lain  
*KASA / Other Government Agencies*

### Luaran / *External*

- Premis / *Industry*
- Perunding / Juruaudit  
*Consultants / Auditors*
- Pemaju / *Developers*
- Jururunding / *Developers*
- Rakan Alam Sekitar  
*Friends of Environment*

## PERKHIDMATAN UTAMA / MAIN SERVICES

### Penilaian *Assessment*

- Penilaian Kesan Alam Sekeliling (EIA)  
*Environmental Impact Assessment (EIA)*
- Input Pembangunan  
*Development Input*
- Kebenaran Bertulis  
*Written Approval*

### Pengawasan *Monitoring*

- Pengawasan Kualiti Udara  
*Air Quality Monitoring*
- Pengawasan Kualiti Air Marin  
*Marine Water Quality Monitoring*
- Pengawasan Kualiti Air Sungai  
*River Water Quality Monitoring*
- Pengawasan Kualiti Air Tanah  
*Groundwater Quality Monitoring*
- Pengurusan Buangan Terjadual & Tanah Tercemar  
*Scheduled Waste Management & Contaminated Soil*

### Penguatkuasaan *Enforcement*

- Kawalan Premis Yang Ditetapkan  
*Control of Prescribed Premises*
- Kawalan Premis Yang Bukan Ditetapkan  
*Control of Non-Prescribed Premises*
- Maklumbalas Pengaduan Awam  
*Public Complaint Feedback*
- Tindakan Undang-Undang  
*Legal Action*
- Industri Hijau  
*Green Industry*

### Komunikasi Strategik *Strategic Communication*

- Promosi Pendidikan & Kesedaran Alam Sekitar kepada Industri  
*Promotion of Environmental Education & Awareness to Industries*
- Promosi Pendidikan & Kesedaran Alam Sekitar kepada Pelajar & Orang Awam  
*Promotion of Environmental Education & Awareness to Students & Public*
- Perhubungan Badan dan Agensi Luar Negara  
*Foreign Relations*

### Kompetensi *Competencies*

- Pelaksanaan Program Latihan / Persijilan JAS  
*DOE Training / Certification Program*
- Pelaksanaan Program Latihan / Persijilan Industri  
*Industrial Training / Certification Program*

### PERKHIDMATAN SOKONGAN / SUPPORT SERVICES

#### Pentadbiran & Kewangan *Financial Administration*

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

#### Teknologi Maklumat *Information Technology*

- Pengurusan Infrastruktur Rangkaian dan Pusat Data  
*Network Infrastructure and Data Center Management*
- Pembangunan & Penyelenggaraan Maklumat Spatial  
*Development & Maintenance of Spatial Information*
- Pembangunan & Penyelenggaraan Aplikasi  
*Application Development & Maintenance*
- Pengurusan Dasar & Latihan ICT  
*ICT Policy Management & Training*

### SISTEM APLIKASI YANG MENYOKONG PERKHIDMATAN / FUNGSI APPLICATION SYSTEM

#### Operasi *Operation*

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EQMP	MyCEP	eMAINS	eAduan	Oil Map Trajectory
eCSTP	eKASv.3	m-FORCE	OER	
MYEHS	NECC	CEMS	iRemote	APIMS (MyIPU)
VTA	SPPIH	eSWIS	HyFiS	
eKASv.4	eNotifikasi	SPEIA	ESDR	

#### Eksekutif *Executive*

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ADMS (Ramalan Pencemaran Udara)
Executive Information System (EIS EQMP)
Big Data Alam Sekitar <i>Environmental Big Data</i>
Dashboard

#### Pembangunan *Development*

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EKMC	E-Museum	GEOSPAS	Portal EIMAS	Portal GIVC
MyRAS	Portal EIA	Portal RAS	Portal EWaste	Sistem Latihan Bersepadu
NRCEP	Portal JAS	Media Sosial	Portal Intranet	
eParticipation	eLibrary / KOHA			

#### Pentadbiran *Administration*

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VIMS	Direktori	DTA
Sistem Pengurusan Fail		
1GFMAS	SPPII	eTerimaan
HRMIS	SpotMe	MySikap
MyMesyuarat	ePerolehan	
Sistem Pengurusan Aset		
ePejabat		

Petunjuk : <i>Legend :</i>	Digunakan <i>Used</i>	Dalam Pembangunan <i>In Development</i>	To Be	Sistem Agensi Pusat <i>Central Agency System</i>
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DATA / DATA

Luaran / External

- Hidrologi (JPS)  
*Hydrology (JPS)*
- Hotspot (ASMC)  
*Hotspot (ASMC)*
- Lot, Topografi (JUPEM)  
*Lot, Topography (JUPEM)*
- Cuaca (MET)  
*Weather (MET)*
- Gunatanah (Plan)  
*Land Use (PLAN)*
- Fasilitas (MACGDI)  
*Facilities (MACGDI)*
- Media Sosial  
*Social Media*

Dalaman / Internal

- Pengawasan  
*Superviso*
- Pemeriksaan  
*Inspection*
- Tindakan  
*Action*
- Pelesenan  
*License*
- Aduan  
*Complaint*
- RAS  
*RAS*
- Spatial  
*Spatial*
- EIA  
*EIA*
- IPU  
*IPU*
- KPI  
*KPI*
- Effluent  
*Effluent*
- Audit  
*Audit*
- Waste  
*Waste*
- Hotspot  
*Hotspot*
- Jururunding  
*Consultant*
- Tumpahan Minyak  
*Oil Spill*
- Juruteknik Servis  
*Service Technician*
- Penguatkuasaan  
*Enforcement*
- SIMPAS (Maklumat Premis)  
*SIMPAS (Premise Info)*
- Pelepasan Bahan Cemar Udara (CEMS)  
*Emissions of Air Pollutants (CEMS)*

AGENSI LUAR YANG BERHUBUNG DENGAN JAS  
EXTERNAL AGENCIES RELATED TO JAS

- Industri  
*Industry*
- Jururunding  
*Consultant*
- NGO  
*NGO*
- IPTA/ IPTS  
*IPTA/ IPTS*
- Rakan Strategik  
*Strategic Partner*
- Juruaudit  
*Auditor*
- Badan Kerajaan  
*Government*
- Orang Awam  
*Public*
- Pemaju Projek  
*Project Developer*

BAHAGIAN / CAWANGAN YANG DIKAWALSELIA  
REGULATED DIVISIONS / BRANCHES

- Udara  
*Air*
- EIMAS  
*EiMAS*
- Air & Marin  
*Water & Marine*
- Bahan Berbahaya  
*Hazardous Materials*
- Pentadbiran & Kewangan  
*Administration & Finance*
- ICT  
*ICT*
- Penilaian  
*Assessment*
- Penguatkuasaan  
*Enforcement*
- Komunikasi Strategik  
*Strategic Communication*

TEKNOLOGI / Technology

Pusat Data  
*Data Center*

Peralatan ICT  
*ICT Equipment*

Pangkalan Data  
*Database*

Rangkaian ICT  
*ICT Network*

Internet Benda  
*Internet of Thing*

Keselamatan ICT  
*ICT Security*

Disaster Recovery Centre  
*Disaster Recovery Centre*

Pengkomputeran Awam  
*Public Computing*

Kecerdasan Buatan  
*Artificial Intelligence*

Hub Integrasi  
*Integration Hub*

Petunjuk :  
Legend :

Sedia Ada  
*Existing*

To Be

11 (a) : Akronim Sistem Aplikasi Jabatan Alam Sekitar  
11 (a) : Acronym of JAS Application Systems

BIL./ NO.	SISTEM APLIKASI/ APPLICATION SYSTEM	URL
<b>SEKTOR OPERASI / OPERATION SECTOR</b>		
1.	Sistem Elektronik Kawalan Alam Sekitar (eKAS)	<a href="https://www.ekas.doe.gov.my">https://www.ekas.doe.gov.my</a>
2.	Sistem Continous Emission Monitoring System (CEMS)	<a href="https://cems.doe.gov.my/">https://cems.doe.gov.my/</a>
3.	Sistem Integrated Remote Monitoring System (iREMOTE)	<a href="https://iremote.doe.gov.my/">https://iremote.doe.gov.my/</a>
4.	Sistem Environmental Quality Monitoring Programme (EQMP)	<a href="https://eqmp.doe.gov.my/">https://eqmp.doe.gov.my/</a>
5.	Sistem Air Pollutant Index of Malaysia (APIMS/MyIPU)	<a href="http://apims.doe.gov.my">http://apims.doe.gov.my</a>
6.	National Environment Control Centre (NECC)	<a href="http://necc.doe.gov.my/">http://necc.doe.gov.my/</a>
7.	Electronic Certification Service Technician Programme (eCSTP)	<a href="https://ecstp.doe.gov.my/">https://ecstp.doe.gov.my/</a>
8.	Sistem Environmental Mainstreaming Tools (EMAINS)	<a href="https://emains.doe.gov.my/">https://emains.doe.gov.my/</a>
9.	Portal dan Sistem Environmentally Hazardous Substances Notification And Registration (myEHS)	<a href="https://myehs.doe.gov.my/portal/ehsnr/">https://myehs.doe.gov.my/portal/ehsnr/</a>
10.	Online Environmental Reporting (OER)	<a href="https://oer.doe.gov.my/">https://oer.doe.gov.my/</a>
11.	Sistem Mobile Enforcement (m-FORCE)	Tidak berkaitan
12.	Sistem Pengurusan dan Pemantauan Industri Hijau (SPPIH)	<a href="https://sppih.doe.gov.my/">https://sppih.doe.gov.my/</a>
13.	Sistem Electronic Aduan (eADUAN)	<a href="https://eaduan.doe.gov.my">https://eaduan.doe.gov.my</a>
14.	Sistem Notifikasi Udara (eNotifikasi)	Pembangunan
15.	Sistem Environmental Spatial Data Repository - ESDR	Pembangunan
16.	Sistem Vehicle Type Approval (VTA)	<a href="https://vta.doe.gov.my/">https://vta.doe.gov.my/</a>
17.	Sistem Certification Environmental Practitioner (myCEP)	<a href="http://speia.doe.gov.my/login">http://speia.doe.gov.my/login</a>
18.	Sistem Pemantauan EIA (SPEIA)	<a href="https://adms.doe.gov.my">https://adms.doe.gov.my</a>
19.	Sistem Air Data Management System (ADMS)	<a href="https://adms.doe.gov.my">https://adms.doe.gov.my</a>
20.	Sistem Oil Spill Trajectory	Tidak berkaitan
21.	Sistem Hydrocarbon Fingerprinting (HyFis)	<a href="https://hyfis.doe.gov.my">https://hyfis.doe.gov.my</a>

11 (a) : Akronim Sistem Aplikasi Jabatan Alam Sekitar  
*11 (a) : Acronym of JAS Application Systems*

BIL./ NO.	SISTEM APLIKASI/ APPLICATION SYSTEM	URL
<b>SEKTOR PEMBANGUNAN / DEVELOPMENT SECTOR</b>		
22.	Sistem Geospatial Alam Sekitar (GeoSpAS)	<a href="https://geospas.doe.gov.my/">https://geospas.doe.gov.my/</a>
23.	Sistem Rakan Alam Sekitar (MYRAS)	<a href="https://myras.doe.gov.my">https://myras.doe.gov.my</a>
24.	Sistem Laporan <i>Erosion &amp; Sediment Control</i> (ESC)	<a href="http://eia.doe.gov.my/">http://eia.doe.gov.my/</a>
25.	Sistem Kehadiran Pejabat (DTA)	<a href="http://dta.doe.gov.my">http://dta.doe.gov.my</a>
26.	Sistem Perpustakaan Atas Talian (KOHA)	<a href="http://elibrary.doe.gov.my">http://elibrary.doe.gov.my</a>
27.	Sistem Pengurusan Fail	<a href="http://spf.doe.gov.my">http://spf.doe.gov.my</a>
28.	Sistem Direktori JAS	<a href="http://apps.doe.gov.my/directorylogin/">http://apps.doe.gov.my/directorylogin/</a>
29.	Sistem Pengurusan Pelawat (ViMS)	<a href="http://apps.doe.gov.my/vims/">http://apps.doe.gov.my/vims/</a>
30.	Laman Web Rasmi Jabatan Alam Sekitar	<a href="https://www.doe.gov.my/portalv1">https://www.doe.gov.my/portalv1</a>
31.	Portal Informasi Alam Sekitar (myEnviro)	<a href="https://myenviro.doe.gov.my">https://myenviro.doe.gov.my</a>
32.	Laman Intranet JAS	<a href="https://www.doe.gov.my/porta_intranet">https://www.doe.gov.my/porta_intranet</a>
33.	Laman Web Enviro Knowledge Management Centre	<a href="https://enviro2.doe.gov.my/ekmc">https://enviro2.doe.gov.my/ekmc</a>
34.	Laman Web Enviro MUSEUM	<a href="https://enviro2.doe.gov.my/emuseum/">https://enviro2.doe.gov.my/emuseum/</a>
35.	Laman Web Institut Alam Sekitar Malaysia (EiMAS)	<a href="https://www.doe.gov.my/eimasv2">https://www.doe.gov.my/eimasv2</a>
36.	Laman Web Rakan Alam Sekitar	<a href="https://ras.doe.gov.my/v2/">https://ras.doe.gov.my/v2/</a>
37.	Laman Web Bahan Buangan Elektrik Isi Rumah	<a href="https://ewaste.doe.gov.my">https://ewaste.doe.gov.my</a>
38.	Laman Web Pusat Visual Industri Hijau	<a href="https://cp.doe.gov.my/cpvc/">https://cp.doe.gov.my/cpvc/</a>





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