

KEMENTERIAN TENAGA, SAINS, TEKNOLOGI, ALAM SEKITAR DAN PERUBAHAN IKLIM

Bil	Berita	Media	Capaian Berita Penuh
7 APRIL 2019 (AHAD)			
1.	<u>Tan Boon Teik : Hard for Lynas to continue operations due to increased operating costs; Huge funds needed to build facilities</u>	Nanyang Siang Pau	Rujuk lampiran 1
2.	<u>120 wakil menuntut ganti rugi</u>	Harian Metro	Rujuk lampiran 2
3.	<u>120 residents to sue authorities, factories over Sungai Kim Kim incident</u>	New Straits Times	Rujuk lampiran 3
4.	<u>Waste oil factory raided for illegally burning slop</u>	Oriental Daily	Rujuk lampiran 4
5.	<u>7 law enforcement units joint together</u>	Kwong Wah Online	Klik pada tajuk berita
6.	<u>Foreign garbage invaded residential area</u>	Kwong Wah Online	Klik pada tajuk berita
7.	<u>The grave sweepers</u>	eastcoast.chinapress.com.my	Klik pada tajuk berita
8.	<u>Claims for affected residents</u>	johor.chinapress.com.my	Klik pada tajuk berita
9.	<u>Penduduk bengang kilang buat pembakaran terbuka</u>	Harian Metro	Klik pada tajuk berita
10.	<u>JAS aktif pelan hadapi musim kering</u>	selangorkini.my	Klik pada tajuk berita
11.	<u>Gambut Trail Run beri kesedaran cegah</u>	selangorkini.my	Klik pada tajuk berita

Bil	Berita	Media	Capaian Berita Penuh
	pembakaran		
12.	Jadi mata dan telinga, lapor aktiviti pembakaran terbuka	selangorkini.my	Klik pada tajuk berita
13.	Pollution in Kelantan not serious, at minimal level	www2.nst.com.my	Klik pada tajuk berita
14.	70 police reports filed in Sungai Kim Kim pollution case	The Star Online	Klik pada tajuk berita
6 APRIL 2019 (SABTU)			
15.	<u>'L-licence' ministers must buck up</u>	Focus Malaysia	Rujuk lampiran 5
16.	<u>PM: Firm can continue ops only if it decontaminates materials</u>	New Straits Times	Rujuk lampiran 6
17.	<u>Ship out waste; Lynas able continue operate</u>	Oriental Daily	Rujuk lampiran 7
18.	<u>Ahmad Tajuddin terima pingat kebesaran daripada Jepun</u>	Utusan Malaysia	Rujuk lampiran 8
19.	<u>New waste committee must get tough</u>	New Straits Times	Rujuk lampiran 9
20.	<u>Rare earth raw materials import into Malaysia must be clean up first; Operation of Lynas has new condition</u>	Nanyang Siang Pau	Rujuk lampiran 10
21.	<u>CAP, SAM HEAD REJECTS LYNAS' CLAIMS</u>	New Straits Times	Rujuk lampiran 11
22.	120 mangsa pencemaran kimia fail saman	Berita Harian	Klik pada tajuk berita

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
7 APRIL 2019 (AHAD)			
23.	<u>Solar lights brighten up lives of 30 villagers</u>	New Sunday Times	Rujuk lampiran 12
24.	<u>Toxic waste alert!</u>	The Star	Rujuk lampiran 13
25.	<u>Plastic bags or paper?</u>	New Sunday Times	Rujuk lampiran 14
26.	<u>The search for another Earth</u>	New Sunday Times	Rujuk lampiran 15
27.	<u>Evolusi Kereta Terbang</u>	Mingguan Malaysia	Rujuk lampiran 16
28.	<u>No water for thousands Sungai Sayong turns toxic</u>	The Sunday Star	Rujuk lampiran 17
29.	<u>A bright idea to save costs and to deter crime</u>	The Sunday Star	Rujuk lampiran 18
6 APRIL 2019 (SABTU)			
30.	<u>Villagers blame tin mining activities</u>	The Star	Rujuk lampiran 19

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
7 APRIL 2019 (AHAD)			
31.	<u>Death toll from Iran flooding reaches 70</u>	The Sunday Star	Rujuk lampiran 20



32.	<u>Dark Matter: Ready to see a black hole?</u>	New Sunday Times	Rujuk lampiran 21
33.	<u>Tinggal Kenangan</u>	Harian Metro	Rujuk lampiran 22
34.	<u>Deep trouble</u>	The Sunday Star	Rujuk lampiran 23
6 APRIL 2019 (SABTU)			
35.	<u>19 juta kanak-kanak Bangladesh terancam</u>	Berita Harian	Rujuk lampiran 24
36.	<u>Climate change blights Bangladesh children's lives</u>	The Star	Rujuk lampiran 25
37.	<u>Semua hangus</u>	Harian Metro	Rujuk lampiran 26

LAMPIRAN 1

NANYANG SIANG PAU (PRIME NEWS): MUKA SURAT 17

TARIKH: 7 APRIL 2019 (AHAD)

陈文德：须耗巨资建设施 成本剧增莱纳斯难续营运

(关丹 6 日讯) 拯救大马委员会主席陈文德认为，如果莱纳斯想继续运作，同时需符合政府定下的条件，就须耗费另一笔资金，这近乎不符经济逻辑，这意味着，该厂几乎不可能继续营运下去。

他说，莱纳斯在这严格条件下，若想营运下去，就需建立昂贵的稀土提炼设施，况且还背负巨额债务。

“莱纳斯若想在我国继续提炼稀土元素，成本将加倍激增，导致失却竞争力及市场优势。”

他接受电访时，如是回应首相敦马哈迪医生表示莱纳斯可继续在大马运作，只要把稀土原料运入我国前净化，如是认为。

另外，提到企业有意收购莱纳斯，他认为，相关集团拥有雄厚资金，或许可直接在澳洲设立提炼厂的前置设备，进行初步的提炼，把可能产生具放射性废料的提炼过程在澳洲进行，然后把废料运回矿地埋藏。

“接下来的提炼步骤，可在大马的莱纳斯厂房进行最后的加工及完成产品。”

此外，他指出，该委员会下周三拉大队到国会声援能源科艺环境部长杨美盈之行，如期进行。

另一方面，莱纳斯稀土厂公关主任米米说，莱纳斯依然等着内阁做正式宣布，目前暂不作任何回应。

LAMPIRAN 2
HARIAN METRO (SETEMPAT): MUKA SURAT 8
TARIKH: 7 APRIL 2019 (AHAD)

120 wakil tuntut ganti rugi

Pasir Gudang: Lebih 120 wakil penduduk yang terjejas dengan insiden pencemaran sisa kimia di Sungai Kim Kim, 7 Mac lalu menuntut ganti rugi di atas kecuaihan pihak berwajib sehingga membawa bencana di kawasan berkenaan.

Peguambela dan Peguamcara yang mewakili penduduk, Kamarudin Ahmad berkata, sehingga kini pihaknya masih mengumpul maklumat sebelum memfailkan saman yang dijangka dilaksanakan Jun depan.

Katanya, wakil penduduk sudah diberi penerangan hak mereka. Asas tuntutan ganti rugi mangsa adalah kecuaihan pihak berkuasa dan kilang yang menjadi punca pencemaran ini berlaku bermula 7 Mac lalu sehingga menyebabkan kira-kira 5,000 orang mendapatkan rawatan.

"Dalam kalangan mangsa ada yang mengalami simptom seperti muntah, sesak nafas, sesak dada, pengsan dan masalah urat saraf.

"Kita bimbang kesan jangka panjang mangsa ini kerana itu kita membuat tuntutan ganti rugi.

"Ada unsur kecuaihan bermula dengan kerajaan negeri, Jabatan Alam Sekitar, Jabatan Pengairan dan Saliran, Majlis Perbandaran Pasir Gudang dan kita mengenal pasti pihak kilang terbabit," katanya di Ibu Pejabat Polis Daerah (IPD) Seri Alam di sini, semalam.

Kamarudin berkata, tuntutan ganti rugi khas tertumpu kepada kos perubatan mangsa seperti perubatan, perjalan dan kos pemeriksaan kesihatan yang dibuat di pusat perubatan swasta.

"Kami akan cuba mendapatkan laporan kesihatan dan tidak bergantung hanya pada satu laporan (laporan kesihatan hospital kerajaan).

"Kami masih mengumpul maklumat dan tindakan yang akan diambil bagi pihak mangsa," katanya.

LAMPIRAN 3
NEW STRAITS TIMES (NEWS): MUKA SURAT 8
TARIKH: 7 APRIL 2019 (AHAD)

NEGLECT

120 residents to sue authorities, factories over Sungai Kim Kim incident

JOHOR BARU: A group of Pasir Gudang residents affected by the Sungai Kim Kim chemical dumping incident will file a civil suit against the authorities and factories involved.

The group is claiming negligence and will name the state government, Department of Environment, Drainage and Irrigation Department, Pasir Gudang Municipal Council and the fac-

ties involved as defendants.

Counsel Kamarudin Ahmad, who is representing the group, said they were claiming damages as the incident caused them to suffer health issues.

"Due to the incident, residents suffered from symptoms like breathing difficulties and vomiting. One family claimed that their child suffered from nerve damage and could not walk. We are

also worried about the long-term effects of the incident."

He was speaking after accompanying several residents to lodge reports on the matter at the Seri Alam district police headquarters in Pasir Gudang here.

Kamarudin said there were about 120 residents in the group.

"We plan to file the suit in early June. By then, I expect the num-

ber (of residents) to increase because, at the moment, most of the affected residents do not know their rights or where to turn to for assistance.

"We are gathering information on the case, including the health reports of affected residents."

He said he was told that another group of residents was planning to undertake a similar legal action.

The dumping of chemical substances into Sungai Kim Kim on March 7 led to 5,848 people seeking medical treatment after inhaling toxic fumes from the river.

The last victim was released from hospital on March 25.

Two directors of a used tyre processing factory were charged at the Sessions Court with 15 offences under two environmental regulations.

LAMPIRAN 4
ORIENTAL DAILY (ODN METRO): MUKA SURAT 23
TARIKH: 7 APRIL 2019 (AHAD)

2019年4月7日 • 星期日

全国 | 東方日報 | A23



吴玉仙（右）向媒体展示报案书。左为黄国来。



再度非法烧油泥 废油工厂遭取缔

「波德申丹C新村内的废油处理工厂早前频密燃烧油泥，以致村内环境受到污染，因此该厂于今年1月份遭到环境局取缔。」

波德申6日讯 | 已被法庭勒令需在今年5月份迁走逾2万桶废油的非法处理废油工厂，今早再度非法燃烧油泥，污染环境，再度遭到取缔！

有关非法处理废油工厂是设立在波德申丹C新村内的私人地段，由于该工厂早前频密燃烧油泥，以致村内环境受到污染外，也传出阵阵难闻的异味，因此该厂于今年1月份遭到环境局取缔，并控上法庭，而法庭也勒令负责人必须在今年5月前迁走逾2

万桶废油。

虽然限期未到，但有关工厂近期却频密在凌晨时分燃烧油泥，今早更是猖狂的于早上7时许就开始燃烧，难闻的异味令当地居民非常难受；场内也可见该厂拥有大量的废油桶。

工厂负责人发飙

接获投报的环境局及警方上门取缔时，在村民及朱湖州议员叶朝政助理吴玉仙带领下抵达现

场，惟遭到工厂负责人发飙，破口大骂指大家为他制造不必要的麻烦等，场面一度陷入僵局。

无论如何，环境局较后已取走燃烧中的油泥样本，以进行化验。

朱湖州议员叶朝政的助理吴玉仙表示，她是在接获丹C新村村长黄国来投诉后，前往了解情况。

「执法单位进入时，也在现场发现3处燃烧点，油泥尚在燃烧中。」

▲在警方的陪同下，环境局官员进入工厂范围了解情况。

她指出，在向环境局投诉后，官员基于那是私人地无法当下前往展开取缔行动，因此惟有等她报案后再由警方陪同下，进入展开调查。

她也表示，虽然法庭勒令该工厂必须在5月前搬迁，惟在这段时间负责人频密的燃烧油泥，这已严重影响到丹C新村逾百户居民。

无论如何，她希望有关单位能够有效的解决此问题。



▲非法处理废油工厂燃烧油泥，发出难闻异味，令村民非常难受。现场被发现共有3处燃烧点。

LAMPIRAN 5
FOCUS MALAYSIA (FOCUS VIEW): MUKA SURAT 4
TARIKH: 6 APRIL 2019 (SABTU)

'L-licence' ministers must buck up

It is confusing when cabinet ministers openly contradict and criticise one another. It depicts a lack of camaraderie, common sense and experience, or all three.

No wonder then that chairman of the Council of Eminent Persons (CEP) Tun Daim Zainuddin had likened some ministers to "L-licence holders", a term used to describe learner drivers.

As "L-licence ministers", Daim advised them to learn to work with one another to ensure policies and government machinery work smoothly. If only some ministers like Entrepreneur Development Minister Datuk Seri Mohd Redzuan Yusof paid more attention to it instead of shooting from the hip now and then.

Redzuan had attracted ridicule from fellow Malaysians when he publicly announced that the government was planning to launch a flying car. As it turns out, the flying car is probably a drone-type vehicle.

More recently, Redzuan again found himself in the centre of a storm when he publicly criticised Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin for not allowing controversial rare earth company Lynas to continue operating its plant in Gebeng, Pahang. He said

the government will allow Lynas to operate as jobs and foreign investments were at stake.

Deputy Prime Minister Datuk Seri Dr Wan Azizah Wan Ismail weighed in on the issue, saying Redzuan could comment on Lynas as investments also came under his ministry.

For the record, foreign investments usually fall under the purview of the Ministry of International Trade and Industry and its unit, the Malaysian Investment Development Authority. The DPM's statement contradicts Fuziah Salleh, Deputy Minister in the Prime Minister's Department on Islamic Affairs, who said Redzuan should not interfere as the issue of Lynas' waste management does not come under his ministry. Even the Parliamentary Caucus on Monitoring Lynas expressed surprise at Redzuan's statement.

Redzuan could have just called Yeo to discuss the Lynas issue privately. Thankfully, Yeo, although much younger than him, had chosen to be tactful and not react publicly.

There will always be seemingly overlap in jurisdiction among ministries. The important thing is for them to learn to work together. L-licence ministers? Daim is spot on.

FocusM

LAMPIRAN 6
NEW STRAITS TIMES (NEWS): MUKA SURAT 10
TARIKH: 6 APRIL 2019 (SABTU)

PM: Firm can continue ops only if it decontaminates materials

PUTRAJAYA: Lynas Malaysia Sdn Bhd can continue operating in Malaysia, but only if raw materials are decontaminated before being brought here from Australia.

Prime Minister Tun Dr Mahathir Mohamad said this would ensure that the materials that entered into Malaysia would be in smaller volumes and the waste produced would not be danger-

ous to anybody.

He said the government had opened up the rare earth material processing business to other companies, which are willing to buy up or acquire the business.

"These companies have given us the promise that in the future, before sending the raw materials to Malaysia, they would firstly clean them up, which means they would crack and decontaminate

them in some way with regards to radioactivity.

"Lynas can continue if they can promise that the materials will be cracked and cleaned before being brought into Malaysia," he said at the Prime Minister's Office here.

Dr Mahathir's statement clarified the status of the project amid conflicting statements by several ministers on the issue.

Recently, Entrepreneur Development Minister Datuk Seri Mohd Redzuan Md Yusof said the government had not decided on the Lynas project and the radioactive waste would be returned to Australia.

On the other hand, Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin in December ordered Lynas to ship its radioactive waste

back to Australia before its operating permit could be renewed.

Lynas has been operating a processing plant in Gebeng, Kuantan, refining rare earth ore from the its mine in Western Australia for the past six years.

However, there have been claims that the plant's activities posed health hazards as they produce toxic and radioactive waste.

LAMPIRAN 7
ORIENTAL DAILY (NATION): MUKA SURAT 3
TARIKH: 6 APRIL 2019 (SABTU)

废料运出国外 莱纳斯可续营运

布城5日讯 | 首相敦马哈迪表示，大马莱纳斯稀土厂可以继续在我国营运，前提是必须先净化带入我国的原材料，以及将废料运出国外。

「但是，他们到底将废料运去哪里？难道他们想运去澳洲？但是澳洲拒绝接收，我们当然也不能接收。」

他说，马来西亚已向其他公司开放稀土采矿业务，只要符合条件，政府会允许他们开展业务。

「我们已将业务开放给其他人，还有其他公司愿意收购莱纳斯。」

「他们承诺，未来将先清理和净化原材料的放射性物质，才送入我国，因此原材料抵达时，体积将变得较小，其废料也不会危害任何人。」

他今日在主持内阁会议后召开记者会时说，今日的内阁会议做出这项决定。

他提及，政府开出的条件不仅限于莱纳斯，而是所有能够做出这种承诺的公司。

总部设于澳洲的莱纳斯在彭

亨关丹拥有一家稀土厂，基于对废物管理的担忧，该工厂面临著营运许可证更新的问题。

大马原子能执照局给予莱纳斯营运许可证将在今年9月2日到期，早前一众内阁部长对是否更新莱纳斯营运许可证各持不同看法，引起混淆。

未决定废料是否运走

能源、工艺、科学、气候变化及环境部长杨美盈曾在去年12月表明，莱纳斯必须把水沥滤净化固体废料运出国，否则无法更新营运许可证。

但是，企业部长礼端最近则表示，政府不会关闭莱纳斯稀土厂，并希望借此吸引更多国内外投资者，继续在我国投资生产类似产品。

他也说，政府已决定让莱纳斯继续在我国运营，但还未对莱

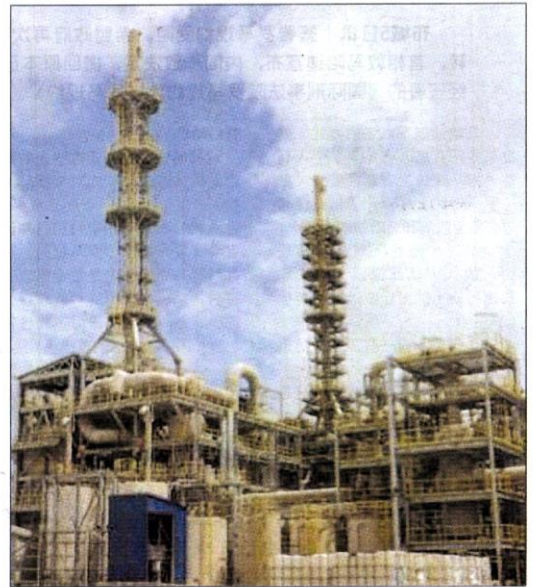
纳斯是否应将其废料运回澳洲做出决定。

首相署副部长兼关丹区国会议员傅芝雅随后「打脸」礼端表示，关丹欢迎外来投资项目，但绝对不是莱纳斯。

副首相拿督斯里旺阿兹莎过后受询时为部长们护航，她认为，这是部长之间的健康辩论，以便在莱纳斯课题上可以想出更好的解决方案。

根据大马莱纳斯稀土厂最新的文告表示，该厂产出的镧系元素浓缩物（原料）和水沥滤净化固体（WLP）一样是含有较低水平的自然放射性物质。

该公司说，WLP含有自然放射性物质（NORM）的说法，已获国际原子能总署（IAEA）和希盟政府的莱纳斯评估委员会的证实，而大马莱纳斯的运作模式是低风险、符合相关法规，及有适当的残留物存储设施。



内阁议决莱纳斯稀土厂可继续营运，惟带入我国的原材料须事先经过净化。

LAMPIRAN 8
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 45
TARIKH: 6 APRIL 2019 (SABTU)

Ahmad Tajuddin terima pingat kebesaran daripada Jepun

KUALA LUMPUR 5 April - Pengerusi Sirim Bhd., Tan Sri Dr. Ahmad Tajuddin Ali menerima pingat kebesaran daripada kerajaan Jepun atas sumbangannya dalam menggalakan kerjasama ekonomi Malaysia dengan negara matahari terbit itu.

Duta Besar Jepun ke Malaysia, Dr, Makio Miyagawa berkata, Ahmad Tajuddin mempunyai kerjaya yang cemerlang dalam sektor kerajaan dan korporat selain pernah menerajui beberapa organisasi.

“Antara jawatan yang per-

nah disandang Ahmad Tajuddin sebelum ini ialah Pengerusi Eksekutif Tenaga Nasional Berhad (TNB), Pengerusi Gas Malaysia Snd. Bhd. dan Pengerusi Suruhanjaya Tenaga Malaysia.

“Semasa menjadi Pengerusi Suruhanjaya Tenaga, Ahmad Tajuddin telah menganjurkan persidangan pertama berkaitan bekalan dan permintaan tenaga selain menyediakan peluang berharga buat Jepun berkongsi pengetahuan serta pengalaman dengan negara ini,” katanya dalam kenyataan di sini hari ini.



AHMAD TAJUDDIN ALI

LAMPIRAN 9

NEW STRAITS TIMES (LETTERS): MUKA SURAT 52

TARIKH: 6 APRIL 2019 (SABTU)

SUNGAI KIM KIM ISSUE

New waste committee must get tough

THE setting up of the Toxic Waste Management and Scheduled Waste National Committee is timely and must be supported by all parties as it could tackle indiscriminate disposal of hazardous waste.

It was reported that the Department of Environment (DoE) had completed the final draft of the establishment of the committee following the chemical spill at Sungai Kim Kim in Pasir Gudang, Johor.

The draft will be sent to the Energy, Science, Technology, Environment and Climate Change Ministry for approval.

I believe the committee is the highest platform that could make decisions on how to better manage toxic waste so that the Sungai Kim Kim incident does not recur.

Apart from DoE and other agencies, the committee should include experts from the institutions of higher learning and the private sector.

They must study how the toxic and scheduled waste is being handled in developed countries in a way that does not harm their people and the environment.

They must find ways to strengthen enforcement based on existing laws, especially the Environment Quality Act 1974 and the Environmental Quality (Scheduled Wastes) Regulations 2005.

Despite having the legislation that regulates 77 types of hazardous waste, illegal dumping is rampant due to a lack of enforcement, while the culprits are more interested in evading disposal fees and waste levy.

The incident at Sungai Kim Kim is only the tip of the iceberg.

Apart from illegal dumping by irresponsible people, toxic waste could also originate from rubbish dumps and landfills. Most of our landfills and dumpsites are not properly designed, and gases and leachates are poorly collected and treated before being released into the environment. That is why the air near such landfills or dumpsites has an overpowering stench.

Polluted water from such landfills and dumpsites would leach into the ground and contaminate it with hazardous substances.

To compound matters, irresponsible people are disposing of hazardous wastes at the landfills, while more illegal dumpsites are cropping up to cater to the in-



Waste management personnel checking toxic waste containers dumped in Pasir Gudang, Johor, recently. FILE PIC

creasing demand.

The committee should propose an amendment to the present law to compel those who dump chemicals to pay the cost of rehabilitation of the environment and

treatment of people who suffer from their irresponsible act.

TAN SRI LEE LAM THYE

Chairman, National Institute of Occupational Safety and Health

LAMPIRAN 10
NANYANG SIANG PAU (NATION): MUKA SURAT 3
TARIKH: 6 APRIL 2019 (SABTU)

稀土原料运入马须先清理

莱纳斯营运有新条件

(布城 5 日讯) 内阁今日讨论莱纳斯稀土厂废料处理的课题，并设定新的条件，只要莱纳斯承诺，把稀

土原料运入我国前先清理，才在我国加工，这样在减少废料的辐射量下，就可继续在我国营运。

首相敦马哈迪医生今午在项记者会上说，莱纳斯要把废料运出大马，澳洲却不允许，所以它不能做到，因此，政府决定增设上述

新的条件。

他说，目前有其他企业有意收购莱纳斯，有关企业承诺先清理原料后再运入大马加工。

“我们已开放了稀土给其他企业公司，只要符合政府条件，就可以收购莱纳斯。”

他说，运入的原料先清理，辐射量就少了，加工后的

废料也减少污染的问题。

“其他的企业可以这么做，莱纳斯也可以承诺在澳洲原料经过提炼和清理才运入我国，该厂就可以继续营运。”

LAMPIRAN 11
NEW STRAITS TIMES (NEWS / NATION): MUKA SURAT 10
TARIKH: 6 APRIL 2019 (SABTU)

RADIOACTIVE MATERIAL DISPOSAL

CAP, SAM HEAD REJECTS LYNAS' CLAIMS

Its explanation on waste is unscientific and defies logic, says NGOs' president

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THE Consumers Association of Penang (CAP) and Sahabat Alam Malaysia (SAM) have slammed Lynas Malaysia Sdn Bhd for accusing them of making claims that were "false" and "ignored scientific facts".

The non-governmental organisations (NGOs) said Lynas should stop misleading the public about its waste.

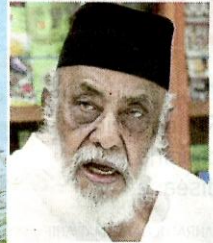
CAP and SAM president S.M. Mohamed Idris said the NGOs could not be simply dismissed as being unqualified.

He said the groups learnt from their experience with the Asian Rare Earth (ARE) plant in Bukit Merah, Ipoh.

He added that even though the raw materials used and the final product in the Lynas plant differed from what were used and produced in the ARE plant, the waste generated by both plants was similar.

This, he said, was because they contained uranium and thorium, which posed major challenges in terms of their management and disposal.

"That is the truth. We must not be fooled or lulled into thinking that the radioactive waste is not a problem and that it can be diluted. We are talking about the



Employees at a guard post of the Lynas Advanced Material Plant in Gebeng last month. Consumers Association of Penang and Sahabat Alam Malaysia president S.M. Mohamed Idris (inset) says it is misleading of Lynas to claim as 'scientific fact' that the water leached purification residue is 'naturally occurring'. FILE PIX

safety of millions and billions of years to come. No one can guarantee that.

"Lynas must not be allowed to wriggle from its undertaking to the government. If it cannot meet the condition of removing the radioactive waste back to Australia, it should not be allowed to operate any further.

"Why should the Malaysian government and its people pay the price for generations to come, for the profits of one company?

"The ARE waste, which is being kept in Kledang Range, Perak, is the responsibility of the Atomic Energy Licensing Board and the Perak government.

"It poses a huge challenge in

ensuring that the permanent disposal facility is managed in a safe manner for hundreds, millions and billions of years to come," said Idris.

"In relation to the Lynas waste, the best option in safeguarding public health and the environment is to send it back to Australia, so that the Malaysian government does not have the responsibility of managing this waste, which will remain radioactive for a long time."

Idris said it was misleading for Lynas to claim as "scientific fact" that the water leach purification (WLP) residue was "naturally occurring".

Earlier this week, the two NGOs

had claimed that the waste from the WLP process should be removed from Malaysia, as it could not be regarded as naturally occurring radioactive material (NORM), but was in fact technologically-enhanced, and had been made dangerous due to technological processes.

Idris said: "It is misleading of Lynas to claim as 'scientific fact' that the WLP residue is 'naturally occurring'. Lynas claims that there is no technological enhancement of the low level, naturally occurring radionuclides (thorium and uranium). This is unscientific, and defies common sense and logic."

According to Idris, the fact of

the matter was that the feed-stock that was processed by the Lynas plant had been brought from Australia and removed from its natural state.

Once the NORM elements were removed from the ground and technologically processed, they could no longer be referred to as "naturally occurring" as they were no longer in their natural state, he added.

He said any removal and processing of radioactive materials turned them into technologically-enhanced NORM or TENORM (technologically enhanced naturally occurring radioactive material).

"To call them NORM is scientifically misleading."

LAMPIRAN 12
NEW SUNDAY TIMES (NATION / NEWS): MUKA SURAT 9
TARIKH: 7 APRIL 2019 (AHAD)

COLLABORATION WITH UKM

SOLAR LIGHTS BRIGHTEN UP LIVES OF 30 VILLAGERS

MPB/NSTP voluntary
brigade installs 7
solar streetlights
on remote island

SHARIFAH MAHSINAH ABDULLAH
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FOR years, 30 villagers from nine families living on a remote island called Kampung Che Soh here had relied on only one electric pole to light up their area.

However, the villagers, who are mostly fishermen received good news on Friday.

Seven Alpha solar streetlights were installed on their island, courtesy of Media Prima Bhd (MPB) and Universiti Kebangsaan Malaysia (UKM).

MPB Group Corporate Communications Department general manager Azlan Abdul Aziz said the project was an initiative of UKM's Burhanuddin

Helmi Club.

He said five voluntary brigade members from MPB and the New Straits Times Press took part in the project, the first collaboration with UKM for the Tumpat area.

Fisherman Kamarulzaman Omar, 58, who represented the villagers, thanked MPB and UKM for their generosity.

"All this while, we (villagers) have been living in darkness and relied only on one electric pole to light up our village.

"If we needed to go out at night, we had to use torchlights.

"Many of us prohibited our children, especially our daughters, from going out at night.

"We wanted to prevent untoward incidents from happening to them as our village is surrounded by thick bushes and a river," said the father of seven at Kampung Che Soh yesterday.

Kamarulzaman said the solar streetlights were installed in the darkest areas of the village, including near the mosque and school.



A voluntary brigade member from Media Prima Bhd and the New Straits Times Press installing an Alpha solar streetlight in Kampung Che Soh, Tumpat, yesterday. PIC BY NIK ABDULLAH NIK OMAR

LAMPIRAN 13

THE SUNDAY STAR (HEALTH): MUKA SURAT 6

TARIKH: 7 APRIL 2019 (AHAD)

Tell Me About ...

Dr Y. L. M

I WAS quite appalled by what happened at Sungai Kim Kim in Pasir Gudang, Johor. It is such an irresponsible act to dump toxic waste into a river that is near human habitation, not to mention home to a lot of fish and aqua life. But what exactly is toxic waste?

Toxic waste is a general term that we use to refer to chemical compounds that are produced by industries.

These compounds can cause physiological damage to humans and other living things if they are breathed in or ingested.

Toxic waste can also be called chemical waste.

It is not only Malaysia, but the United States also has a major toxic waste disposal problem.

Where does toxic waste come from?

Many industries such as manufacturing (e.g. mobile phone, computer and television production), farming, automotive (e.g. car batteries), construction, laboratories and hospitals, produce by-products.

These by-products may contain radiation, chemicals, heavy metals and bacteria/viruses.

Toxic waste does not only come from industries. It can come from your household items, like pesticides, paint and discarded computer equipment.

If you don't dispose of them properly, you too can fall ill.

Ok, that's scary! What types of compounds comprise toxic waste? I need to look out for them!

The United Nations Environment Program (UNEP) classifies 11 substances as toxic waste.

They are, in alphabetical order:

- **Arsenic:** This is used in making electrical circuits and pesticides, and as wood preservative.

It can cause cancer and ingesting

Toxic waste alert!

There are 11 substances classified as toxic waste by the United Nations Environment Program.



A Fire and Rescue Department Hazardous Materials Unit (Hazmat) officer walks away from bags containing toxic chemicals cleared from Sungai Kim Kim in this filepic.

too much arsenic can kill you, as you have no doubt heard.

- **Asbestos:** This was used in the past for building insulation.

Some construction companies still use it to manufacture roofs and brakes.

If you inhale asbestos fibres, this can cause a type of lung cancer called mesothelioma, as well as asbestosis.

- **Cadmium:** This is found in batteries and plastics. It can cause lung damage, digestive track problems and kidney disease.

- **Chromium:** This is used as a brick lining for high-temperature industrial furnaces.

It is also used in steelmaking, chrome plating, dyes, pigments, wood preserving and leather-tanning.

It can cause cancer and chronic bronchitis.

- **Clinical waste:** Used syringes and medication bottles can spread

bacteria and viruses. These are bio-hazards.

- **Cyanide:** This is used in some pesticides and chemicals that kill rats.

It can lead to paralysis, fits and respiratory distress.

- **Lead:** Found in batteries, paints and gunpowder. This can damage your nerves, brain, reproductive system and kidneys.

- **Mercury:** People used this for dental fillings in the past. It is still used in batteries and the production of chlorine gas.

It can lead to birth defects, as well as kidney and brain damage.

- **PCBs (polychlorinated biphenyls):** These are used in many manufacturing processes, paints and sealants.

This can damage your nervous, reproductive and immune systems, as well as your liver.

- **POPs (persistent organic pollutants):** These are found in che-

micals and pesticides. They also lead to nervous and reproductive system problems.

These are particularly dangerous because they can accumulate in the food chain and environment.

They can be moved from continent to continent through sea and wind.

- **Strong acids and alkalis:** These are used in manufacturing. They can destroy your body tissue obviously.

How do I avoid these toxic wastes?

It depends a lot on your profession. Sometimes, you just can't!

However, appropriate safety measures can and must be taken.

If you work in manufacturing, your employer should take appropriate care of your working conditions.

You need to wear gloves, masks,

scrubs, protective overalls etc. You should be trained through a safety course.

If you work in the healthcare sector, then you will also be taught to be careful about needles and syringes, and how to dispose of them properly in specialised bins for biological waste.

When dealing with cancer drugs and other cytotoxics, you will be also asked to wear masks.

There are warning labels on how to use detergents, acids and pesticides in your home.

You should read those warning labels and keep those chemicals properly - out of harm's way and your children's hands.

Help! I have been exposed! What do I do now?

Most toxic chemicals can only do you harm when they come in contact with your body or if you swallow them.

So if toxic chemicals come in contact with your skin, for example, you should quickly wash it off with water and go to the hospital emergency department immediately.

If you breathe in or ingest toxic chemicals and you start having difficulty in breathing, go immediately to the hospital emergency department.

Different chemicals require different methods of treatment, and only trained doctors will know what to do.

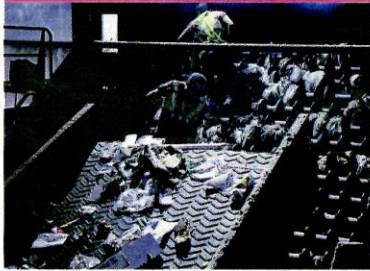
Don't attempt to treat yourself!

Dr YLM graduated as a medical doctor, and has been writing for many years on various subjects such as medicine, health, computers and entertainment. For further information, email starhealth@thestar.com.my. The information contained in this column is for general educational purposes only. Neither *The Star* nor the author gives any warranty on accuracy, completeness, functionality, usefulness or other assurances as to such information. *The Star* and the author disclaim all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.

LAMPIRAN 14

NEW SUNDAY TIMES (SUNDAY VIBES): MUKA SURAT 24

TARIKH: 7 APRIL 2019 (AHAD)



Workers removing plastic bags from clogged rollers at a recycling plant in Westborough, Massachusetts. PICTURE BY CHARLES KRUPA FOR ASSOCIATED PRESS



Reusable bag are only sustainable options if you use them very frequently. PICTURE BY DAVID MCNEW FOR GETTY IMAGES.



Plastic bags have become a highly visible sign of waste. PICTURE BY BRYAN THOMAS FOR THE NEW YORK TIMES

THE decision in many parts of the world including New York State to ban single-use plastic bags from retail stores makes it a good time to revisit everyone's favourite environmental quandary: paper or plastic?

Unfortunately, there's not a simple answer on whether paper or plastic bags are better for the environment. They both have downsides, but there are a few broad lessons to keep in mind when you're hitting the grocery store.

Plastic bags, which often take centuries to decompose, can create a dreadful waste problem even though they're far from the largest source of plastic waste in America — about 12 per cent of the total.

On the other hand, paper bags typically require more energy and greenhouse gas emissions to produce, which isn't great from a global warming standpoint.

Reusable bags can be a decent compromise, provided you hold onto them and use them often. Ultimately, though, what you put inside the bag, particularly your food choices, will most likely matter a lot more for the environment than what type of bag you use.

THE TROUBLE WITH PLASTIC BAGS: LITTER

American shoppers use more than 100 billion lightweight polyethylene plastic bags each year, and only a small portion is ever recycled. Most recycling centres can't deal with them — they just clog up the machinery — and so the majority of plastic bags end up in landfills, where they can take up to 1,000 years to degrade.

To be fair, a plastic bag doesn't cause too much harm sitting in a landfill. The bigger problem arises when people don't dispose of their bags properly, and the plastic ends up fluttering around in the

wild, clogging up waterways and threatening wildlife.

San Jose, California, for instance, found that plastic bags made up about 12 per cent of the litter in its creeks before implementing a local bag ban in 2012. And, just last week, a dead sperm whale washed ashore in Indonesia with two dozen plastic bags in its gut, along with other trash.

So, even though plastic bags are only a small fraction of America's overall plastic trash, they've become a highly visible sign of waste.

THE TROUBLE WITH PAPER BAGS: CARBON EMISSIONS

So does that mean paper bags, which degrade more easily, are a better option? Not necessarily. Climate change has become the biggest environmental issue of our time, so it's worth looking at things from an emissions standpoint. And on that score, paper bags fare worse.

Even though paper bags are made from trees, which are, in theory, a renewable resource, it takes significantly more energy to create pulp and manufacture a paper bag than it does to make a single-use plastic bag from oil.

Back in 2011, Britain's Environment Agency conducted a life-cycle assessment of various bag options, looking at every step of the production process. The conclusion?

You'd have to reuse a paper bag at least three times before its environmental impact equalled that of a high-density polyethylene plastic bag used only once. And if plastic bags were reused repeatedly, they looked even better.

Paper bags can more easily be recycled or even composted, but the British study found that even these actions didn't make a huge difference in the broader analysis. Unless you're reusing your paper bags a lot, they look like a poorer option from a global warming standpoint.

REUSABLE BAGS ARE A DECENT OPTION — IF YOU ACTUALLY REUSE THEM

That same British analysis also looked into reusable options, like heavier, more durable plastic bags or cotton bags. And it found that these are only sustainable options if you use them very frequently.

Making a cotton shopping bag is hardly cost-free. Growing cotton requires a fair bit of energy, land, fertiliser and pesticides, which can have all sorts of environmental effects — from greenhouse gas emissions to nitrogen pollution in waterways.

The study found that an avid shopper would have to reuse his or her cotton bag 131 times before it had a smaller global warming impact than a lightweight plastic bag used only once. And, depending on the make, more durable plastic bags would

have to be used at least 4 to 11 times before they made up for their heftier upfront climate costs.

So if you're going to opt for a reusable bag for environmental reasons, make sure you actually reuse it — often.

WHAT'S IN THE BAG MOST LIKELY MATTERS MORE THAN THE BAG ITSELF

It never hurts to think about bag choices. But keep in mind that if you're going to the grocery store, the food you purchase and place in that bag probably has a vastly bigger effect on the environment than whatever you use to haul it home.

Our global food system, after all, is responsible for one-quarter of humanity's planet-warming greenhouse gas emissions — with meat and dairy having a disproportionately large impact. By contrast, packaging makes up only about 5 per cent of the food system's footprint. Compared with, say, the effects of clearing away vast swaths of forest to grow feed or raise livestock, our bags are a much smaller deal.

Put another way, a pound of beef bought at the supermarket will have roughly 25 times the global warming impact as the disposable plastic bag it's carried in. So if you're looking for ways to slim down your personal carbon footprint, taking a closer look at your dietary choices isn't a bad place to start.

NYT

Plastic bags or paper?

Here's what to consider when you hit the grocery store, writes **Brad Plumer**

LAMPIRAN 15

NEW SUNDAY TIMES (SUNDAY VIBES): MUKA SURAT 42

TARIKH: 7 APRIL 2019 (AHAD)

THERE are many science fiction novels, TV shows and movies about mankind's search for other planets that could be habitable. The search for other Earth-like planets is something that clearly resonates among us.

The reason could be our survival instinct. One day, our earth might not be habitable anymore or it might be overcrowded and we might have to colonise space in order to survive. But it could also be just a natural curiosity about life beyond planet Earth. Could there be other life forms out there?

We are still far from having the necessary technology to travel to distant planets like they do in *Star Trek* but NASA's new Transiting Exoplanet Survey Satellite (TESS) will go a long way in helping us narrow down the search for other potentially habitable planets.

There are countless stars out there, so there is a necessity to narrow down the search. And space scientists have done just that. Out of the 400,000 bright stars observable by TESS, scientists have picked out 200,000 which are most likely to host exoplanets similar to Earth. Researchers from three universities: Cornell University, Lehigh University and Vanderbilt University (all in the USA) have narrowed that list further down to 1822 stars.

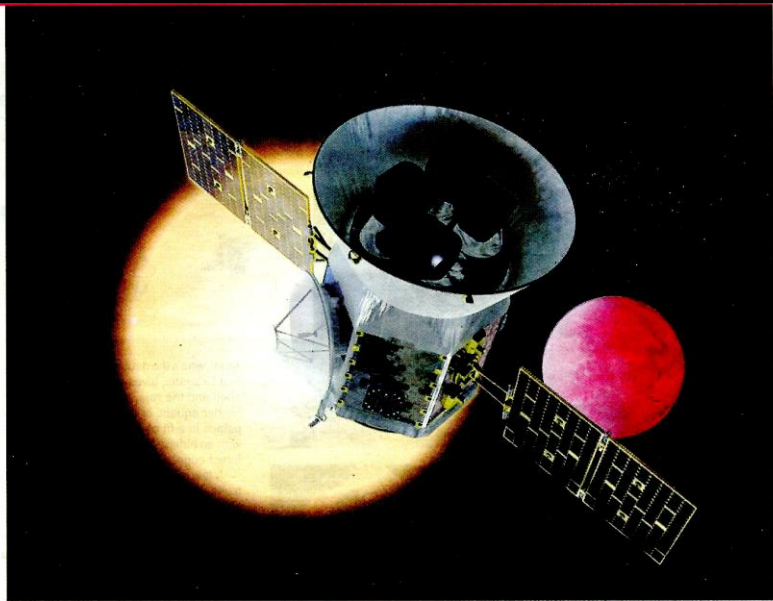
The new catalogue of 1822 stars was presented last month in the journal, *The Astrophysical Journal Letters*, in a paper entitled: TESS Habitable Zone Star Catalog.

Lead author Lisa Kaltenegger said: "Life could exist on all sorts of worlds, but the kind we know can support life is our own, so it makes sense to first look for Earth-like planets. This catalogue is important for TESS because anyone working with the data wants to know around which stars we can find the closest Earth-analogues."

She noted there is no telling just how many planets NASA's TESS will actually come across in the coming years but was positive about the outlook, saying the odds were stacked "in our favour". She added: "Some studies indicate that there are many rocky planets in the habitable zone of cool stars, like the ones in our catalogue. We're excited to see what world's we'll find."



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TESS sails past a rocky planet orbiting a star. ILLUSTRATION BY NASA

The search for another Earth

METHODOLOGY

The new catalogue takes into account a few factors that play a role in locating Earth-size planets such as how long the planet takes to orbit its host star, how likely we are to observe it crossing the face of its host star twice, how much radiation the planet receives, and the size of its host star.

Generally, TESS will look at cool dwarf stars burning between 2427°C and 4727°C degrees, which are roughly half as hot as our own Sun and are approximately four light years away from Earth.

TESS will observe each of these stars for tiny drops in brightness caused by planets passing in front of them. Currently this is the best way to detect planets.

Figuring out the distance between a planet and its star requires detecting two transits across the star. The 1822 stars in the new catalogue are ones from which TESS could detect two planetary transits during its mission. Those orbital periods place them squarely in the habitable zone of their star.

The habitable zone is the area around a star at which water can be liquid on a

planet's surface, which is ideal for sustaining life. "Some studies indicate that there are many rocky planets in the habitable zone of cool stars, like the ones in our catalogue," Kaltenegger said. "We're excited to see what worlds we'll find."

Eventually, the team hopes to use the James Webb Space Telescope, slated to launch two years from now in 2021, to examine exoplanets for chemical clues that show what their atmospheres are made of and whether they are ideal for life.

Of course figuring out whether life actually exists on Earth-like planets is a different kettle of fish. It may actually require sending a probe there to examine the planets' surfaces. That's a different challenge on a completely different scale.

Whether there are other potentially habitable planets out there and whether life already exists in such planets are things that have intrigued us for generations. It will be a long time before we can get some definitive answers but TESS is a great leap forward in our quest to find such planets.



TESS's mission started last year when a SpaceX rocket launched it into space.

TESS FACTOIDS

NASA's Transiting Exoplanet Survey Satellite (TESS) is the first space-based, all-sky surveyor to search for alien worlds.

It was launched on April 18, 2018, with a SpaceX Falcon 9 rocket from Space Launch Complex 40 at Cape Canaveral Air Force Station in Florida.

NASA describes TESS as being somewhere between the size of a refrigerator and a stacked washer and dryer.

It will take TESS two weeks to circle Earth. It is equipped with four

cameras that will allow it to view 85 per cent of the entire sky.

Its four wide-field cameras will view the sky in 26 segments, each of which it will observe one by one.

In its first year of operation, it will map the 13 sectors that make up the southern sky.

The following year, it will scour the northern sectors. It will search for exoplanets orbiting stars less than 300 light-years away to help uncover clues on the possibility of life elsewhere in the universe.

LAMPIRAN 16
MINGGUAN MALAYSIA (RENCAM): MUKA SURAT 19
TARIKH: 7 APRIL 2019 (AHAD)



LAMPIRAN 16 (SAMB.) MINGGUAN MALAYSIA (RENCAM): MUKA SURAT 20 TARIKH: 7 APRIL 2019 (AHAD)



KERETA terbang pertama dunia, Aerocar.

Kereta terbang: Fantasi atau realiti

Susunan
**SHARAIEMI SHAIK
AHMEDULLAH**

“PEGANG kata-kata ini, pada masa hadapan kombinasi kereta dan kapal terbang akan wujud. Kamu boleh senyum mengejek, tetapi ia akan menjadi kenyataan satu hari nanti.” Ini antara petikan terkenal yang pernah diungkapkan oleh Henry Ford pada tahun 1940 mengenai kereta terbang.

Sembilan tahun selepas itu, seorang jurutera penerbangan terkenal, Moulton Taylor telah mencipta dan berjaya menerbangkan kereta terbang yang dikenali sebagai Aerocar, sekali gus membuktikan teori ‘mustahil’ Ford mampu direalisasikan. Kenderaan ini mempunyai dua tempat duduk sebelah-menyebelah, empat tayar, sayap dan satu enjin model Lycoming O-320 manakala kipas pula terletak di bahagian ekor belakang. Aerocar mampu terbang pada kelajuan 160 kilometer per jam (km/j) dan dijual pada harga AS\$25,000 ketika itu.

Sayangnya, impian untuk melihat model ini terbang di ruang udara dan di jalan raya tidak menjadi kenyataan apabila pengeluarannya dihentikan dan hanya enam model contoh berjaya disiapkan. Bagaimanapun, Aerocar kekal sebagai satu-satunya kereta terbang dalam dunia yang mempunyai sijil sah untuk terbang dan dipandu di lebuhraya.

Sehingga kini model-model contoh Aerocar masih wujud, tiga model fasa pertama dengan nombor pendaftaran N101D dimiliki oleh Greg Herrick; N102D pernah dimiliki oleh pengacara televisyen, Bob Cummings dan sekarang dibaik pulih oleh Ed Sweeney manakala Aerocar dengan nombor pendaftaran N103D tidak lagi berfungsi namun dalam simpanan Mildred

PROTOTAIPE kereta terbang yang dinamakan Vector di pameran di Pavilion Kementerian Pembangunan Usahawan (MED) pada Pameran Udara dan Maritim Antarabangsa Langkawi 2019.

Felling. Bagi model fasa kedua, hanya sebuah pernah dibina dan sekarang dimiliki oleh Sweeney.

Selain itu, Persatuan Pesawat Eksperimen (EAA) turut membina semula model prototipe klasik Aerocar. Biar pun diberikan nafas baharu semua ciri-ciri prototipe asal versi Taylor terutamanya di bahagian dalam masih dikekalkan antaranya stereng berbentuk bulat, butang suis lampu isyarat, butang hon dan sistem gear yang dihubungkan melalui lantai.

Lebih menarik, kereta terbang ini bukan sahaja boleh bertukar daripada mod memandu dan terbang dengan mudah tetapi sayapnya juga boleh dilipat. Ini membolehkan kereta terbang tersebut dipandu di jalan raya tanpa perlu membuka bahagian sayap, ekor dan kipas seperti model prototipe asal.

EVOLUSI KERETA TERBANG

Selepas berapada dekad, beberapa syarikat permotoran dunia juga tidak ketinggalan untuk membangunkan model kereta terbang yang lebih canggih, selamat dan boleh dijual.

Antaranya kereta terbang Transition keluaran syarikat Terrafugia yang bakal

menjengah pasaran Amerika Syarikat pada tahun ini. Dijual pada harga kira-kira AS\$400,000 (RM1.6 juta) seunit, Transition dilengkapi dengan empat tayar iaitu masing-masing dua di hadapan dan belakang, sayap boleh dilipat dan kipas di bahagian kiri serta kanan bagi membolehkannya terbang dan bergerak di atas jalan raya.

Kenderaan ini yang menggunakan enjin empat silinder elektrik hibrid mampu terbang sejauh 640 kilometer dengan pecutan terpacut 160 km/j pada aras ketinggian 9,000 kaki.

Biarpun menjadi kenderaan pertama yang mendapat pengiktirafan untuk dipandu di jalan raya dan ruang udara di Amerika Syarikat, kenderaan ini hanya boleh berlepas dan mendarat di lapangan terbang kecil, tetapi paling penting pemandu kereta terbang ini juga perlu memiliki lesen juruterbang.

Turut tidak mahu ketinggalan dalam penciptaan kereta terbang pertama dunia ialah syarikat automobol dari Belanda. Kereta terbang PAL-V yang pertama kali dibangunkan kira-kira 11 tahun lalu telah mula dilancarkan modelnya yang sebenar dikenali sebagai PAL-V

Liberty untuk jualan melalui dalam talian sejak dua tahun lalu.

Model ini yang hanya akan dikeluarkan sebanyak 90 unit bermula pada harga 300,000 euro (RM1.38 juta) dan dijangka diserahkan kepada

pelanggan yang telah membuat tempahan pada tahun hadapan. Sementara itu, kereta terbang Aeromobol keluaran

sebuah syarikat yang bertapak di Slovakia pula telah mula membuat pratempahan sejak dua tahun lalu. Bagaimanapun, kereta terbang ini yang harganya kira-kira AS\$1.3 juta (RM5.2 juta) juga hanya akan diserahkan kepada pelanggan pada tahun hadapan.

Seperti Transition, pemandu PAL-V Liberty dan Aeromobol juga perlu mempunyai lesen juruterbang yang sah selain lesen memandu.

KERETA TERBANG DI MALAYSIA

Di Malaysia, impian untuk melihat kereta terbang di ruang udara tetap ada. Biarpun seperti sukar untuk merealisasikan hasrat ini dalam waktu terdekat, impian untuk menyaksikan kereta terbang pertama buatan tempatan semakin hampir menjadi kenyataan.

Dalam Pameran Udara dan Maritim Antarabangsa Langkawi (LIMA) 2019, baru-baru ini model skala kecil kereta terbang, Vector yang dibangunkan oleh sebuah syarikat tempatan, Aerodyne Sdn. Bhd. (Aerodyne) telah ditunjukkan buat pertama kali kepada umum. Dijangkakan prototipe sebenar kereta terbang ini yang sedang dibangunkan di Jepun oleh rakyat Malaysia siap sepenuhnya hujung tahun ini.

Biarpun dikritik hebat kerana tidak kelihatan seperti kereta terbang buatan syarikat automobol antarabangsa lain, syarikat Aerodyne mempertahankan reka bentuk kenderaan terbang ini sebagai berkonsep dron dengan direka untuk membawa penumpang, penghantaran kargo dan tujuan pengawasan.

KERETA terbang Transition keluaran syarikat Terrafugia.



LAMPIRAN 17
THE SUNDAY STAR (NATION): MUKA SURAT DEPAN
TARIKH: 7 APRIL 2019 (AHAD)



NO WATER FOR THOUSANDS

Sungai Sayong turns toxic

A burst reservoir at a bio-composite centre in Johor Baru sent high levels of ammonia into Sungai Sayong, about 85km from Sungai Kim Kim. Five treatment plants have shut down – and taps ran dry for 300,000 residents in Johor. > See page 4 for reports by MOHD FARHAAN SHAH, VENESA DEVI and REMAR NORDIN

LAMPIRAN 17 (SAMB.)
THE SUNDAY STAR (NATION): MUKA SURAT 4
TARIKH: 7 APRIL 2019 (AHAD)

Ammonia pollutes Sg Sayong

Taps run dry for 300,000 residents in Johor Baru

Reports by MOHD FARHAAN SHAH,
 VENESA DEVI and REMAR NORDIN
 newsdesk@thestar.com.my

JOHOR BARU: At least 300,000 people in this capital are affected by water disruptions since Thursday after high levels of ammonia seeped into Sungai Sayong a day earlier.

Other districts where the taps ran dry were Kulai and parts of Kota Tinggi. Supply has been restored gradually.

As at 4pm yesterday, 123,565 users in Johor Baru alone remained without supply.

The latest water pollution in the state comes barely a month after the Sungai Kim Kim contamination sent thousands to hospitals in Pasir Gudang.

Sungai Sayong is the creek that supplies raw water to Sungai Johor, which is a main river. Sungai Kim Kim is about 85km away. Ammonia was found in Sungai Sayong on Wednesday.

This was confirmed by Johor International Trade, Investment and Utility Committee chairman Jimmy Puah Wee Tse the next day.

He explained then that the leak came from a bio-composite centre next to an oil palm

factory in Sedenak at about 7am on Wednesday.

A reservoir burst when the ammonia-contaminated water, which had hit maximum level, flowed into Sungai Sayong. The Sayong 1 and Sayong 2 water treatment plants had to be shut down as they could not process raw water due to the high levels of ammonia.

The Semangar and Sungai Johor water treatment plants could not be operated either as raw water had reached them.

Tai Hong water treatment plant, which is operated by the Public Utility Board (PUB), has also suspended operations.

Yesterday, Rambah SAJ said the Semangar and Sungai Johor water treatment plants had resumed operations.

"So has the Tai Hong treatment plant," it said.

Puah said the authorities had taken the necessary action against the perpetrators by cancelling their raw water abstraction licence.

"We would also issue them a compound with an appropriate quantum," he said.

"The Johor government will not compromise with irresponsible quarters. Johor Water Regulatory Body (Bakaj) has cancelled its

water abstraction licence with immediate effect," he said yesterday.

On water disruptions around here, Puah said the authorities had now entered the last phase for a full resumption of water supply.

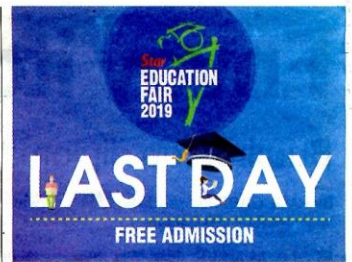
"At the moment, I would like to apologise to all the affected users following the action of an irresponsible company that polluted Sungai Sayong and Sungai Johor.

"The ammonia level was too high, forcing the closure of all main plants in Sungai Johor," he said but pointed out that after three days, the ammonia level had dropped to an acceptable level.

"However, there are still almost 24,713 accounts that are affected and the government, together with Bakaj, PUB and Rambah SAJ, is working closely to make sure the issue will be resolved soon."

Johor Green Earth Society president P. Sivakumar said the river pollution was a clear indication of the importance of protecting the main water source.

"I believe the authorities need to beef up enforcement and monitor our rivers closely," he said, adding that there should be a blueprint on water management in Johor as the state was undergoing robust development.



06-07 APR SUNWAY
 11AM-7PM | CONVENTION CENTRE

70 police reports filed in Sungai Kim Kim pollution case

PASIR GUDANG: A total of 70 police reports have been filed by the affected families of the Sungai Kim Kim hazardous gas pollution.

Lawyer Kamarudin Ahmad said the reports were made against the state government, Department of Environment, Drainage and Irrigation Department, Pasir Gudang Municipal Council and the factory involved.

He said the reports were for the victims to claim for damages due to the negligence of the government and parties involved.

"This is the second time we have gathered victims of Sungai Kim Kim and given them a briefing on what are their rights in the cases and what they can do," he said at IPD Seri Alam here.

Kamarudin added that this was the most appropriate action to take in order to protect the interests of the victims.

"Some of the victims suffered chest pain, nausea, breathing difficulties and even fainted, and received treatment in the Intensive Care Unit (ICU).

"We are still waiting for other victims' medical reports before we proceed to file claims for damages from the responsible parties by early June," he said.

Kamarudin is expecting more victims to file police reports.

Seri Alam OCPD Supt Ismail Dollah confirmed receiving the police reports.

It was recently reported that thousands of people had to be treated at hospitals following the Sungai Kim Kim incident which happened early last month.

Three people, including two used tyre processing company directors, a lorry driver and the factory have been charged at the Sessions Court here for polluting Sungai Kim Kim.

Residents running out of patience

JOHOR BARU: Residents and business owners are getting increasingly frustrated over the water disruptions that sometimes last 72 hours or more.

Rozita Ramli, 54, said Rambah SAJ should have sent out notifications about the disruptions.

"Taps began running dry since Thursday," said the restaurateur.

"We are left to fend on our own," she said. "And it's affecting our businesses."

Masjid Taman Pelangi Imam Abu Ayob Ansari said the mosque managed to provide enough water for its congregation to perform the *wudhu* (ritual washing before prayer).

"I was a bit worried because hundreds of Muslims will come for the Friday prayers," said the 40-year-old.

"We're not taking things for granted and have prepared a huge water tanker for those performing prayers," he said.

A retiree, who only wanted to be known as Chan, said the water disruptions made it difficult for her to carry out her day-to-day chores.

"They (Rambah SAJ) should at least send tankers to the affected areas as we are in dire need of water to carry out our daily routine," said the 76-year-old.

"I have been waiting and waiting since Thursday and was disappointed when I did not get any response from SAJ despite several



Tough times: Retiree Chan (right) and two other Taman Pelangi residents holding empty jerrycans.

attempts to reach out to them," she said.

Another retiree, who wanted to be known as Yeo, said he was disappointed that the disruption wasn't temporary.

"It is still continuing," said the 73-year-old.

"The water that I have stored will soon run dry and the hot weather is making the situation much worse."

Student Poh Yun Ru said she and her family had made two trips to the convenience

store to get six mineral water bottles.

"My family of six has been depending on bottled water for the past three days," said the 16-year-old.

Kawsar Mahmud, 20, said bottled water was sold out at the convenience store where he worked.

"People have been coming to buy bottled water since Friday morning. More people come at night," he said.

Faulty aircon unit behind fire scare at Komtar

LAMPIRAN 18
THE SUNDAY STAR (NATION): MUKA SURAT DEPAN
TARIKH: 7 APRIL 2019 (AHAD)

A bright idea to save costs and to deter crime

Gone will be the old streetlamps from September onwards. LED lights will illuminate the roads nationwide, saving energy by as much as 50%. After that, says Housing and Local Government Minister Zuraida Kamaruddin, CCTVs will be installed at crime hotspots. 'We'll catch those who dump rubbish too.'

> See page 3 for report by YUEN MEIKENG

LAMPIRAN 18 (SAMB.)
THE SUNDAY STAR (NATION): MUKA SURAT 3
TARIKH: 7 APRIL 2019 (AHAD)

All streetlights to be LED lamps starting September

By YUEN MEIKENG
meikeng@thestar.com.my

KUALA LUMPUR: All roads nationwide will be lit with LED lamps, instead of the traditional light bulbs, in a move to save energy by as much as 50%.

Right now, about 80% of streetlamps in Malaysia use other forms of lighting apart from LED (light-emitting diodes), which are known to be more energy-efficient and environmentally friendly than incandescent bulbs.

The plan to introduce LED street lighting will be rolled out in stages beginning September, said Housing and Local Government Minister Zuraida Kamaruddin.

"We can save about 50% from current energy expenses with this move.

"The ministry will also look into having illuminated signages on shops and buildings changed to LED lighting as well," she told *Sunday Star*.

She said not only will this move be more power-saving, it will also create a more beautiful and attractive urban landscape for the people.

"We will conduct a pilot project of this in my constituency in Ampang first.

"The tender process to get contractors to conduct this project will be completed around June.

"We will then carry out the pilot project for three months.

"If all goes according to plan, we can expect to implement this on a nationwide basis in September, in stages," she said.

Zuraida said the ministry was also looking into installing CCTV cameras at hotspots to deter crime and to catch those who dump rubbish illegally as well.

"I will also start this in Ampang first before extending it to the whole country.

"Aside from curbing crime with these CCTVs, we also want to stop people, be they

“

The ministry will also look into having illuminated signages on shops and buildings changed to LED lighting as well.

Zuraida Kamaruddin

”

Malaysians or foreigners, from littering," she said.

On another matter, Zuraida said her ministry will push for more fire stations to be set up nationwide to speed up response time for emergencies.

"In view of the coming Budget 2020 and 12th Malaysia Plan, we are planning to incorporate measures to build more fire stations.

"There are currently four classes of fire stations, namely Classes A, B, C and D based on various criteria.

"I am proposing to create a new category, Class E.

"This category is for smaller scale fire stations to be set up on islands and remote areas including near longhouses in Sarawak," she said.

Such stations will be smaller with less personnel, but adequately equipped to address emergencies.

"These smaller stations will be supported by larger stations within the area which can be called for back up.

"But while waiting for the reinforcements, personnel from the Class E stations will be able to be despatched immediately to provide first responder services," Zuraida added.

It was reported that there are 258 fire stations in Malaysia.

LAMPIRAN 19
THE STAR (NATION): MUKA SURAT 3
TARIKH: 6 APRIL 2019 (SABTU)

Villagers blame tin mining activities

Polluted Sungai Rui was clear and clean 10 years ago

By MANJIT KAUR
manjit@thestar.com.my

GERIK: In recent years, villagers living near Sungai Rui here have stopped swimming in the murky river.

But it was very different just some 10 years back when the water was clear, clean, and fish could be seen swimming in it.

Residents claimed that due to tin mining activities upstream, hundreds of dead fish would be found floating on the river when it rained heavily in the past few years.

Mohd Sapuri Ahmad, 72, from Kampung Terunai along where Sungai Rui flows, said his catch had dwindled over the years.

"I catch fish part-time but I will not do so for weeks after seeing dead fish. The river is just the colour of teh tarik," he said.

His 35-year-old son Ibrahim said he used to swim in the river until the water started to become murky and silted.

"It is very sad that the once crystal clear river is now so polluted," he said.

Osman Ahmad, 70, from Kampung Bongor, who often goes fishing along the river, said he developed white patches on his right hand about 10 years ago.

"I am not sure what caused the

condition. I have also heard of people complaining of itchiness on their skin but we do not know if all this has any connection to the river's condition," he said.

Jamaliah Osman, 43, whose husband runs a workshop making awnings over at Kampung Batu 6 near the river, said during heavy rains fish would die.

"I have also seen dead iguanas ... the situation has worsened since 2015.

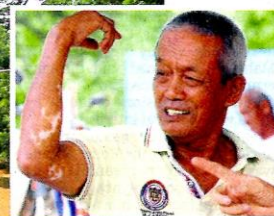
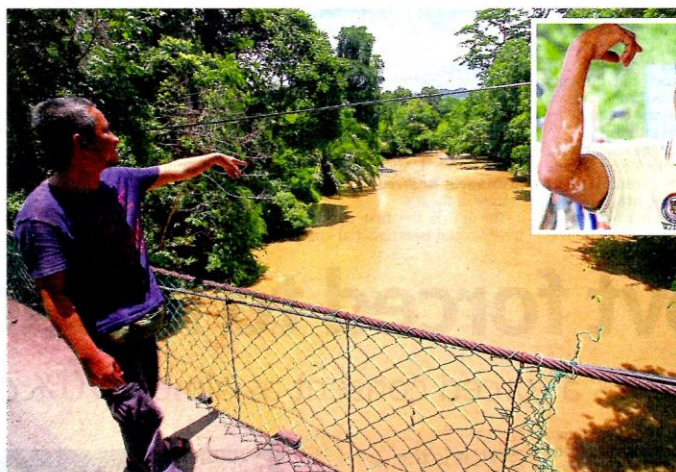
"I don't know what the tin mining companies are releasing upstream each time it rains," she alleged.

Yearly from September to December, people from as far as Kedah and other states come here to catch ikan loma, the freshwater fish found in abundance at the river when in season and popular for making pekasam (preserved fish).

Hundreds of thousands of the fish migrate from downstream Sungai Perak to lay eggs at Sungai Rui and upstream of Sungai Perak near Bersia Dam area.

Villagers interviewed blamed irresponsible tin mining activities at the upstream of Sungai Rui here for causing the river to be polluted.

Yeong Lim Leng, 66, of Kampung Baru Kuala Rui, claimed that there were several companies from China conducting mining activities in Pengkalan Hulu and that they were



Murky river: Ibrahim showing the polluted Sungai Rui. Inset: Osman showing the white patches on his right arm. —RONNIE CHIN/The Star

releasing some form of chemicals into the river.

"There are several small companies operating nearer to the upstream, and just three weeks back, the water was really murky and there was dead fish along the river," he claimed.

Yeong, who is also a Gerik district councillor, said he would raise the issue in the next board meeting.

He claimed that there was a filter placed there previously by one of the companies but that process was not being followed now, thus caus-

ing the chemicals to flow into the river directly.

"I planted lemons along the river but the trees did not survive probably due to the arsenic levels found in the water. The land is no longer suitable to plant anything," he said.

Castella Cafe owner Mohd Isa Mohammed, 47, said he was told that several illegal companies were operating upstream.

"I heard the bigger mining companies have also sublet part of the activity to the smaller ones and they probably are not adhering to the

rules and regulations," he said.

He hoped the authorities would take measures to address the problem.

On Thursday, Perak Environment Committee chairman Dr Abdul Aziz Bari said low levels of arsenic had been found in water samples taken from the river in Hulu Perak.

He said pH levels showed the presence of heavy metal, particularly a small amount of arsenic, and that the state was taking steps to prevent the situation from becoming serious.

LAMPIRAN 20
THE SUNDAY STAR (WORLD): MUKA SURAT 33
TARIKH: 7 APRIL 2019 (AHAD)

Death toll from Iran flooding reaches 70

TEHERAN: Floods in Iran since March have killed 70 people the head of the emergency services said according to the official IRNA News Agency.

"The floods also injured 791 persons of which 45 are still hospitalised," Pirhossein Koolivand, the head of the national Emergency Medical Services (EMS) Organisation said on Friday.

A report published on the EMS website showed the southern Fars Province had the highest fatalities with 23 dead.

The report also listed four people were missing. All in all 20 out of Iran's 31 provinces reported casualties from the floods.

Iran has been hit by unprece-

dent flooding across most of the country in the last 19 days.

The country's northeast was swamped on March 19 before the west and southwest of the country were inundated on March 25, killing a total of 45 people.

On April 1, the west and southwest were again swamped by floods when heavy rains returned to the area.

"2,199 rural roads and 84 bridges have been washed away," said Behnam Sa'eedi, spokesman for the National Disaster Management Organisation.

"Across 15 provinces, 141 rivers burst their banks and around 400 land slides were reported," he told state TV. — AFP



Dire straits: Iranians carrying furniture in a flooded street in the city of Poldokhtar in the Lorestan province. — AFP

LAMPIRAN 21
NEW SUNDAY TIMES (WORLD): MUKA SURAT 56
TARIKH: 7 APRIL 2019 (AHAD)

DARK MATTER

READY TO SEE A BLACK HOLE?

Astronomers to
reveal Event Horizon
Telescope pictures
on Wednesday

PARIS

THE world, it seems, is soon to see the first picture of a black hole. On Wednesday, astronomers worldwide will hold "six major press conferences" simultaneously to announce the first results of the Event Horizon Telescope (EHT), which was designed precisely for that purpose. It has been a long wait.

Of all the forces or objects in the universe that we cannot-see, including dark energy and dark matter, none has frustrated human curiosity so much as the invisible maws that shred and swallow stars like specks of dust.

Astronomers began speculating about these omnivorous "dark stars" in the 1700s, and since then, indirect evidence has slowly accumulated.

"More than 50 years ago, scientists saw that there was something very bright at the centre of our galaxy," said Paul McNamara, an astrophysicist at the European Space Agency and an expert on black holes.

"It has a gravitational pull strong enough to make stars orbit around it very quickly — as

fast as 20 years."

To put that in perspective, our Solar System takes about 230 million years to circle the centre of the Milky Way.

Eventually, astronomers speculated that these bright spots were in fact "black holes" — a term coined by American physicist John Archibald Wheeler in the mid-1960s — surrounded by a swirling band of white-hot gas and plasma.

At the inner edge of these luminous accretion disks, things abruptly go dark.

"The event horizon", aka the point-of-no-return, "is not a physical barrier, you couldn't stand on it", said McNamara.

"If you're on the inside of it, you can't escape because you would

need infinite energy. And if you are on the other side, you can, in principle."

At its centre, the mass of a black hole is compressed into a single, zero-dimensional point. The distance between this so-called "singularity" and the event horizon is the radius, or half the width, of a black hole. The EHT that collected the data for the first-ever image is unlike any ever devised.

"Instead of constructing a giant telescope, which would collapse under its own weight, we combined several observatories as if they were fragments of a giant mirror," said Michael Bremer, an astronomer at the Institute for Millimetric Radio Astronomy in Grenoble. **AFP**



A supermassive black hole with millions to billions times the mass of the sun is seen in an artist's concept illustration. REUTERS PIC

LAMPIRAN 22
HARIAN METRO (GLOBAL): MUKA SURAT 60
TARIKH: 7 APRIL 2019 (AHAD)



LAMPIRAN 23
THE STAR (ASEAN+): MUKA SURAT 25
TARIKH: 7 APRIL 2019 (AHAD)



Deep trouble

Indonesian men riding a carriage known locally as 'Dokar' or 'Andong' through a flooded street in the village of Baleendah in **Bandung**, West Java. Authorities reported one man was killed after heavy rain caused the Citarum river to overflow and submerge several subdistricts in Bandung regency. — AFP

LAMPIRAN 24
BERITA HARIAN (DUNIA): MUKA SURAT 81
TARIKH: 6 APRIL 2019 (SABTU)

19 juta kanak-kanak Bangladesh terancam

[FOTO AFP]

➔ Perubahan iklim jejas nyawa, masa depan penduduk miskin

► Dhaka

Bencana alam sekitar yang dikaitkan dengan perubahan iklim dianggap mengancam nyawa dan masa depan lebih 19 juta kanak-kanak di Bangladesh, sekali gus mendorong banyak keluarga mengahwinkan anak perempuan bawah umur mereka, kata Tabung Kanak-Kanak Pertubuhan Bangsa-Bangsa Bersatu (UNICEF), semalam.

"Perubahan iklim memburukkan lagi ancaman alam sekitar yang dihadapi keluarga penduduk termiskin di Bangladesh sekali gus menyebabkan mereka tidak mampu menjaga anak dengan memberi tempat tinggal, makanan, kesihatan dan pendidikan.

"Di Bangladesh dan seluruh dunia, perubahan iklim mempunyai potensi untuk menjejaskan keuntungan yang dicapai negara dalam kelangsungan hidup kanak-kanak dan pembangunan," kata UNICEF dalam

satu laporan.

Laporan berkata, kira-kira 12 juta kanak-kanak terjejas tinggal berhampiran sungai yang mengalir di Bangladesh dan sering menyebabkan banjir.

Selain itu, tambahan 4.5 juta kanak-kanak tinggal di kawasan pantai sering dilanda siklon termasuk setengah juta pelarian kanak-kanak Rohingya dari Myanmar yang hidup dalam pondok buhuh dan plastik.

Manakala, tiga juta kanak-kanak lagi yang tinggal di pedalaman, di mana komuniti petani berdepan kemarau panjang.

Faktor topografi rata

Keadaan topografi yang rata di Bangladesh, penduduk padat dan kelemahan infrastruktur sekian lama menjadikannya mudah terdedah kepada cuaca melampau, namun pakar menyatakan, keadaan itu akan bertambah buruk dalam tempoh beberapa tahun lagi, sejajar dengan peningkatan suhu global.

Pada 2007, siklon ganas menyorbankan hampir 4,000 orang dan menjejaskan ratusan ribu lain.

Insiden banjir besar terbaharu di Sungai Brahmaputra pada 2017 menyebabkan sekurang-kurangnya 480 klinik kesihatan setempat dinaiki air dan kira-kira 50,000 telaga tiub rosak, keperluan penting penduduk setempat.



Kira-kira 12 juta kanak-kanak terjejas tinggal berhampiran sungai yang mengalir di Bangladesh dan sering menyebabkan banjir.

Dipaksa jadi buruh

Laporan berkata, perubahan iklim adalah faktor utama yang mendorong golongan termiskin Bangladesh berhijrah ke ibu kota ini dan bandar utama lain di mana kanak-kanak dipaksa menjadi buruh dan perkahwinan bawah umur.

Laporan itu memetik kajian yang menunjukkan, Bangladesh sudah pun mempunyai enam juta pendatang iklim, satu jumlah yang mungkin meningkat dua kali ganda

menjelang 2050.

Katanya, kaitan antara perubahan iklim dan perkahwinan kanak-kanak, buruh kanak-kanak dan akses kepada pendidikan dapat dilihat di beberapa bahagian di Bangladesh.

"Perubahan iklim menjadikan penduduk semakin miskin," kata Gyas Uddin, pakar mengenai isu perlindungan kanak, dan 'kemiskinan adalah faktor utama di sebalik perkahwinan kanak-kanak bawah umur'.

AFP

LAMPIRAN 25
THE STAR (WORLD): MUKA SURAT 34
TARIKH: 6 APRIL 2019 (SABTU)

Climate change blights Bangladesh children's lives

DHAKA: Environmental disasters linked to climate change are threatening the lives and futures of over 19 million children in Bangladesh, including prompting many families to push their daughters into child marriages, Unicef said.

"Climate change is deepening the environmental threat faced by families in Bangladesh's poorest communities, leaving them unable to keep their children properly housed, fed and educated," the UN children's agency said in a report.

"In Bangladesh and around the world, climate change has the potential to reverse many of the gains that countries have achieved in child survival and development."

Around 12 million of the children most affected live in and around the powerful river systems which flow through Bangladesh and regularly burst their banks, the report said.

Another 4.5 million children live in coastal areas regularly struck by cyclones, including almost half a million Rohingya refugee children from neighbouring Myanmar living in bamboo and plastic shelters.

Bangladesh's flat topography, dense population and weak infrastructure have long made it vulnerable to extreme weather events, but experts say that these have become



Thousand-yard stare: Rohingya Muslim girl Afeefa Bebi, who crossed over from Myanmar into Bangladesh, holding her new brother born just moments ago as doctors check her mother Yasmeen Ara at a community hospital in Kutupalong, Bangladesh. — AP

more frequent in recent years as global temperatures have risen.

In 2007, a powerful cyclone killed nearly 4,000 people and affected hundreds of thousands more. The most recent major flooding of the Brahmaputra River in 2017 inundated at least 480 community health clinics and damaged some 50,000

tube wells, essential for meeting the communities' safe water needs.

The report says that climate change is a key factor pushing poorer Bangladeshis to head to the capital Dhaka and other major cities, where children risk being pushed into dangerous forms of labour and early marriage.

It cites research showing that Bangladesh has six million climate migrants already, a number that could more than double by 2050.

The connection between climate change and child marriage, child labour and access to education is evident in various parts of Bangladesh, according to the report.

"Climate change makes people poorer," said Gyas Uddin, a specialist on child protection issues, "and poverty is a major factor behind child marriage".

Despite making impressive gains in many social indicators in recent decades, child marriage remains rampant in conservative, Muslim-majority Bangladesh.

Bangladesh currently has one of the world's highest rates of child marriage with nearly a third of girls being married before the age of 15.

According to Unicef Bangladesh Child Protection Specialist Kristina Wesslund, climate change is one reason why an estimated 3.45 million Bangladeshi children are involved in child labour.

"Climate change is undoubtedly increasing the number of children pushed into the workplace, where they miss out on an education and are terribly exposed to violence and abuse," Wesslund said. — AFP

LAMPIRAN 26
HARIAN METRO (GLOBAL): MUKA SURAT 46
TARIKH: 6 APRIL 2019 (SABTU)

