LEGISLATIVE COUNCIL
Question On Notice

Tuesday, 18 September 2018

1657. Hon Robin Chapple to the Minister for Environment; Disability Services

Regarding the maximum microgram per cubic metre (density) limit on PM10 dust and allowable annual exceedances of this limit in the Port Hedland region, I ask:
(a) have there been any exceedances of the interim 70 micrograms per cubic metre limit on PM10 dust and allowable 10 annual 24-hour exceedances for the time in which it was implemented;
(b) if yes to (a):
(i) how many exceedances occurred;
(ii) on what dates did the exceedances occur;
(iii) where did the exceedances occur; and
(iv) by how much was the limit exceeded; and
(c) have dust levels increased since the maximum PM10 dust density allowable was increased from the national standard of 50 to 70?

Answer

In 2010 the Port Hedland Dust Management Taskforce published the *Port Hedland Air Quality and Noise Management Plan.* The Management Plan established an interim air quality guideline measure for PM_{10} of 70 micrograms per cubic metre ($\mu g/m^3$) averaged over 24 hours, for the residential area east of Taplin Street. On 15 October 2018, the Government endorsed the recommendation in the *2016 Port Hedland Dust Management Taskforce Report to Government* that the current interim guideline should continue and that it should apply to all residential areas of Port Hedland.

(a) Yes.

(b) (i) – (iv) I table exceedance data from the Port Hedland Industries Council (PHIC) for the monitoring locations east of Taplin Street, including the background location (Yule). The exceedance data is provided for the period January 2012 to September 2018.
[See tabled paper no.]

(c) Ambient air quality monitoring in Port Hedland commenced in January 2012, after the interim air quality guideline measure was established. I table calendar year average PM_{10} concentrations for each Port Hedland monitoring location (where available). Overall, the monitoring data does not show any clear trend.
[See tabled paper no.]

Hon Stephen Dawson MLC
MINISTER FOR ENVIRONMENT; DISABILITY SERVICES

Table 1 Exceedance data since 2012 for Neptune, Yule and Taplin PHIC monitoring locations

	Neptune (Jan 2012 to Sep 2018)									Yule (Jan 2012 to Sep 2018)									Taplin (Jan 2012 to Sep 2018)								
Total number of exceedances	2012	2013	2014	2015	2016	2017	2018	Monitor reading (ug/m^3)	Exceedance amount (ug/m^3)	2012	2013	2014	2015	2016	2017	2018	Monitor reading (ug/m^3)	Exceedance amount (ug/m^3)	2012	2013	2014	2015	2016	2017	2018	Monitor reading (ug/m^3)	Exceedance amount (ug/m^3)
	10	2	14	24	4	3	0			10	9	5	5	0	2	0			15	6	10	11	4	7	3		
Dates of exceedances of $70ug/m^3$	11/10/2012							277.1	207.1	11/10/2012							270.7	200.7	13/09/2012							73.5	3.5
	25/10/2012							104.7	34.7	25/10/2012							104.7	34.7	11/10/2012							292.3	222.3
	30/10/2012							83.3	13.3	28/10/2012							72.1	2.1	12/10/2012							92.8	22.8
	8/11/2012							70.9	0.9	10/11/2012							105.3	35.3	25/10/2012							106.0	36.0
	9/11/2012							152.3	82.3	13/11/2012							147.3	77.3	28/10/2012							76.3	6.3
	10/11/2012							105.9	35.9	9/12/2012							101.3	31.3	29/10/2012							75.3	5.3
	13/11/2012							106.3	36.3	20/12/2012							271.9	201.9	30/10/2012							95.4	25.4
	20/12/2012							127.7	57.7	21/12/2012							79.1	9.1	8/11/2012							118.5	48.5
	21/12/2012							223.0	153.0	26/12/2012							112.2	42.2	9/11/2012							174.7	104.7
	31/12/2012							83.7	13.7	27/12/2012							408.6	338.6	10/11/2012							123.1	53.1
	7/02/2013							80.0	10.0	1/01/2013							70.1	0.1	11/11/2012							73.6	3.6
	14/12/2013							221.5	151.5	2/01/2013							72.6	2.6	13/11/2012							120.3	50.3
	14/01/2014							96.7	26.7	3/01/2013							106.3	36.3	20/12/2012							127.6	57.6
	15/01/2014							74.0	4.0	11/01/2013							361.4	291.4	21/12/2012							225.0	155.0
	17/01/2014							72.8	2.8	12/01/2013							252.0	182.0	31/12/2012							85.8	15.8
	21/01/2014							94.3	24.3	20/01/2013							70.7	0.7	19/01/2013							72.8	2.8
	22/01/2014							78.4	8.4	22/01/2013							244.7	174.7	4/10/2013							77.6	7.6
	12/02/2014							92.9	22.9	14/12/2013							173.5	103.5	13/10/2013							71.7	1.7
	13/06/2014							83.5	13.5	29/12/2013							180.7	110.7	14/12/2013							247.5	177.5
	9/11/2014							86.3	16.3	14/01/2014							84.6	14.6	17/12/2013							79.9	9.9
	14/11/2014							188.7	118.7	9/11/2014							88.1	18.1	22/12/2013							71.3	1.3
	16/12/2014							70.8	0.8	14/11/2014							151.4	81.4	14/01/2014							88.0	18.0
	17/12/2014							73.4	3.4	15/11/2014							124.4	54.4	17/01/2014							83.2	13.2
	18/12/2014							87.8	17.8	25/12/2014							79.2	9.2	1/08/2014							90.4	20.4
	24/12/2014							81.3	11.3	4/01/2015							74.2	4.2	19/09/2014							72.1	2.1
	25/12/2014							71.9	1.9	8/01/2015							101.0	31.0	21/09/2014							81.5	11.5
	1/01/2015							71.3	1.3	23/01/2015							88.2	18.2	1/10/2014							89.8	19.8
	2/01/2015							76.6	6.6	19/12/2015							73.3	3.3	14/11/2014							181.9	111.9
	3/01/2015							71.6	1.6	26/12/2015							70.6	0.6	7/12/2014							75.9	5.9
	5/01/2015							81.9	11.9	7/07/2017							73.5	3.5	24/12/2014							78.1	8.1
	8/01/2015							85.2	15.2	12/07/2017							114.7	44.7	25/12/2014							71.5	1.5
	9/01/2015							80.3	10.3										5/01/2015							74.9	4.9
	22/01/2015							79.2	9.2										9/01/2015							75.4	5.4
	23/01/2015							81.3	11.3										22/01/2015							75.1	5.1
	24/01/2015							72.1	2.1										8/09/2015							71.9	1.9
	25/01/2015							83.8	13.8										21/09/2015							80.2	10.2
	22/02/2015							82.0	12.0										25/10/2015							71.7	1.7
	30/11/2015							73.9	3.9										14/11/2015							73.3	3.3
	1/12/2015							106.6	36.6										1/12/2015							94.7	24.7
	2/12/2015							70.3	0.3										19/12/2015							78.7	8.7
	3/12/2015							85.0	15.0										20/12/2015							86.7	16.7
	4/12/2015							101.6	31.6										26/12/2015							77.5	7.5
	5/12/2015							111.8	41.8										26/02/2016							109.3	39.3
	6/12/2015							87.8	17.8										28/06/2016							78.6	8.6
	7/12/2015							84.1	14.1										22/11/2016							80.1	10.1
	8/12/2015							108.8	38.8										26/11/2016							80.6	10.6
	9/12/2015							93.6	23.6										2/03/2017							74.4	4.4
	10/12/2015							80.3	10.3										20/10/2017							76.8	6.8
	11/12/2015							75.8	5.8										26/11/2017							76.5	6.5
	12/12/2015							72.8	2.8										14/12/2017							73.1	3.1
	10/05/2016							70.9	0.9										15/12/2017							73.5	3.5
	22/11/2016							104.4	34.4										16/12/2017							81.0	11.0
	30/12/2016							71.9	1.9										30/12/2017							71.9	1.9
	31/12/2016							81.5	11.5										9/01/2018							71.9	1.9
	6/01/2017							72.1	2.1										25/01/2018							74.6	4.6
	7/01/2017							79.3	9.3										15/02/2018							71.0	1.0
	8/01/2017							70.7	0.7																		

Table 2 Calendar year averages of PM_{10} for each monitoring site ($\mu g/m^3$)

	Kingsmill	**Neptune**	**Richardson**	**Taplin**	**Yule**
01/01/2012 to 31/12/2012	N/A	N/A	43.2	35	17.8
01/01/2013 to 31/12/2013	42	27.2	36.9	34.2	19.8
01/01/2014 to 31/12/2014	50	36.5	41.7	39.7	19.2
01/01/2015 to 31/12/2015	48.4	34.1	36.1	33.8	22.1
01/01/2016 to 31/12/2016	40.5	28.9	36.7	32.1	15
01/01/2017 to 31/12/2017	41.5	N/A	42.5	36.4	19
01/01/2018 to 06/09/2018	42.1 (part)	24.1 (part)	46.7 (part)	25.5 (part)	12.2 (part)