WRITTEN QUESTION TO THE MINISTER FOR TRANSPORT AND TECHNICAL SERVICES BY DEPUTY M.R. HIGGINS OF ST. HELIER
ANSWER TO BE TABLED ON TUESDAY 19th MARCH 2013

Question

Will the Minister set out for members in detail all health screening of Transport and Technical Services employees who have worked at the Bellozanne facility together with frequency of testing, types of testing and anonymised results?

Answer

In answering this question we are assuming the term Bellozanne facility relates to the Energy from Waste Plant.

The first records of employees at the Bellozanne Energy from Waste Plant undergoing any occupational health surveillance was in 1991. It is understood this was at the suggestion of the current Chief Medical Officer of Health. Subsequently the Department was advised on the biological monitoring by the Occupational Health service provider to the States of Jersey at the time (BMI Health Services and then Capita), with all results being reviewed by a UK Health and Safety Executive approved Occupational physician.

A sampling regime was set up to monitor staff that worked in the EFW plant, maintenance staff who might occasionally work there, or staff that transported incinerator top or bottom ash. The sampling concentrated on the heavy metals lead and cadmium, and the biological sampling carried out was on a voluntary basis and continued until 2006.

The Department followed the requirements of the UK "*Control of Lead at Work Regulations 1998 (updated in 2002) Approved Code of Practice*". This provided an appropriate protocol for sampling and indicated the actions to be taken by the employer if certain action levels were reached.

The Control of Lead at Work Regulations sets a number of conditions for the employer including an action level of 50 µ gms/deci liter of blood as the level at which an employer has to check that their safety controls to prevent lead exposure are working. And also an action level of 60 µ gms/deci liter where the employee must be withdrawn from working where lead exposure is occurring.

The sampling indicated that none of the action levels set out in the Approved Code of practice had been reached. – Ref Graph and data for lead

Alongside lead, Cadmium was also sampled for and the reference point used to determine high exposures were the average levels determined by the World health Organization as an international average blood level for a smoker.

The levels for Cadmium were within the average levels expected within the international population as a whole, 0-3.0 µ gms/lt of blood for non-smokers and up to 6.0 µ gms/ litre for a smoker.

There were no results that indicated that exposure was any higher than could be expected of an average smoker.

After 2006 the biological sampling regime was stopped as the results were low enough that under the Control of Lead at Work requirements the employer was no longer required to carry out any biological monitoring. At the same time the sampling for Cadmium was halted as levels were not indicating any issues. These decisions were taken in conjunction with the Occupational Health physician at the time.

From approximately 1999 to the present day other forms of occupational health surveillance are being been carried out and continue to be carried out based on occupational health risk assessments of the work staff undertake. Groups therefore receive regular appointments for checks such as hearing, lung function, and skin checks, depending on where they work. Information on these results is held by the Occupational health Service provider, AXA.

Graph – 1 - Biological Sampling - Blood Lead Averages Per Sample Group

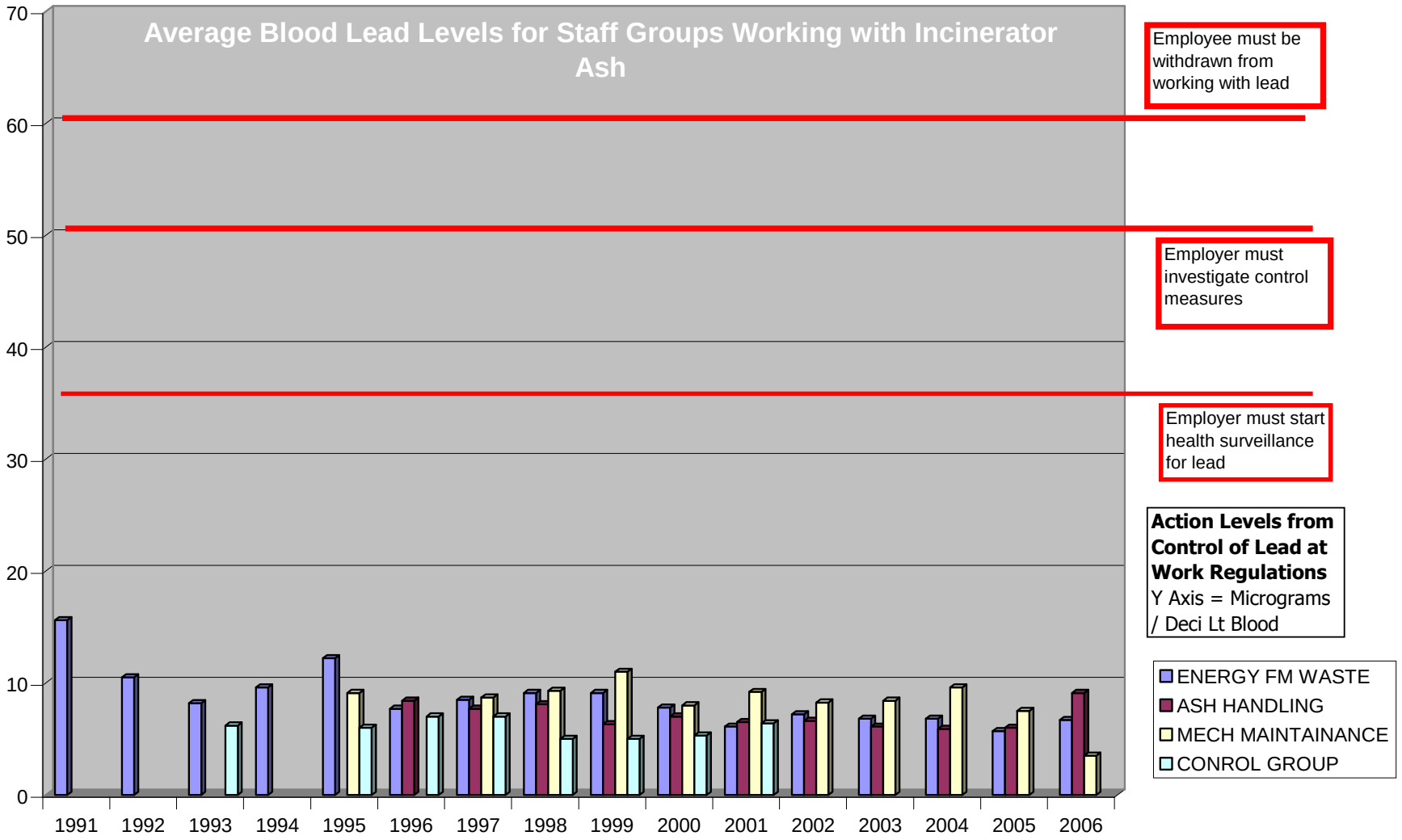

Table 1 - Biological Sampling - Anonymous Blood Lead Data - Micrograms / Deci Ltr

Energy from Waste Plant Staff - Ranked

	91	92	93	94	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006
1	27	19	14	14	21	12	15	15	15	17	19	13	15	7	10	14
2	23	17	13	8	17	11	13	13	13	12	10	13	7	6	7	6
3	16	10	10	7	15	10	12	12	12	12	9	11	7	5	5	5
4	14	9	9		15	10	11	9	9	12	9	10	7	5	5	5
5	13	8	9		14	10	10	7	7	10	7	9	6	5	5	5
6	13	6	9		14	9	9	7	7	10	6	9	5	5	5	5
7	13	5	8		12	8	8	5	5	10	6	7	5	5	5	5
8	12		8		12	8	7	5	5	9	6	7	5	5	5	5
9	10		8		12	8	7			7	5	6	5	5	5	5
10			8		11	8	7			7	5	5	5	5		
11			7		10	7	7			7	5	5				
12			5		10	6	7			6	5	5				
13			5		9	6	7			6	5	5				
14			5		6	6	6			6	5	5				
15			5		5	6	6			6	5	5				
16						5	5			5	5	5				
17						5				5	5	5				
18						5				5	5	5				
19										5	5					
20										5	5					
21										5						
22										5						
Total	**141**	**74**	**123**	**29**	**183**	**140**	**137**	**73**	**73**	**172**	**132**	**130**	**67**	**53**	**52**	**55**
Av	**15.6**	**10.5**	**8.2**	**9.6**	**12.2**	**7.7**	**8.5**	**9.1**	**9.1**	**7.8**	**6**	**7.22**	**6.7**	**5.3**	**5.7**	**6.7**

Table 2 - Biological Sampling - Anonymous Blood Lead Data - Micrograms / Deci Ltr

Non Energy from Waste Plant Staff - Ranked

	91	92	93	94	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006
1	18	45	29	11	17	23	18	15	27	11	13	15	11	15	15	24
2	11	21	10		13	14	12	14	13	13	12	13	10	9	11	18
3	11		9		11	12	12	12	10	11	11	12	10	9	11	16
4			8		10	11	10	10	8	10	9	10	10	7	10	16
5			8		10	10	10	8	6	10	8	10	7	7	10	14
6			7		9	10	10	8	6	8	7	8	7	7	9	11
7			7		8	9	9	7	6	7	7	7	7	5	7	10
8			5		7	9	9	7	5	6	7	6	6	5	7	10
9			5		7	8	9	7	5	6	6	6	6	5	6	6
10			5		7	8	9	6	5	6	6	5	6	5	6	6
11					7	7	8	5	5	6	6	5	5	5	5	5
12					6	7	8	5	5	5	5	5	5	5	5	5
13					6	7	7	5	5	5	5	5	5	5	5	5
14					6	6	7		5	5	5	5	5	5	5	5
15					5	6	7			5	5	5	5		5	5
16					5	5	7			5	5	5	5		5	5
17						5	6			5	5	5	0		5	5
18						5	6			5	5	5			5	5
19						5	6			5	5	5				5
20						5	5			5	5	8				5
21						5	5			5		6				5
22						5	5					5				5
23						5	5									5
24							5									
25							5									
26							5									
Total	40	66	93	11	134	187	205	109	111	144	137	156	110	94	132	196
Av	13.3	33	9.3	11	8.3	8.1	7.8	8.3	7.9	6.8	6.8	7.09	6.8	6.8	7.3	8.5

Graph – 1 - Biological Sampling - Blood Cadmium Averages Per Sample Group

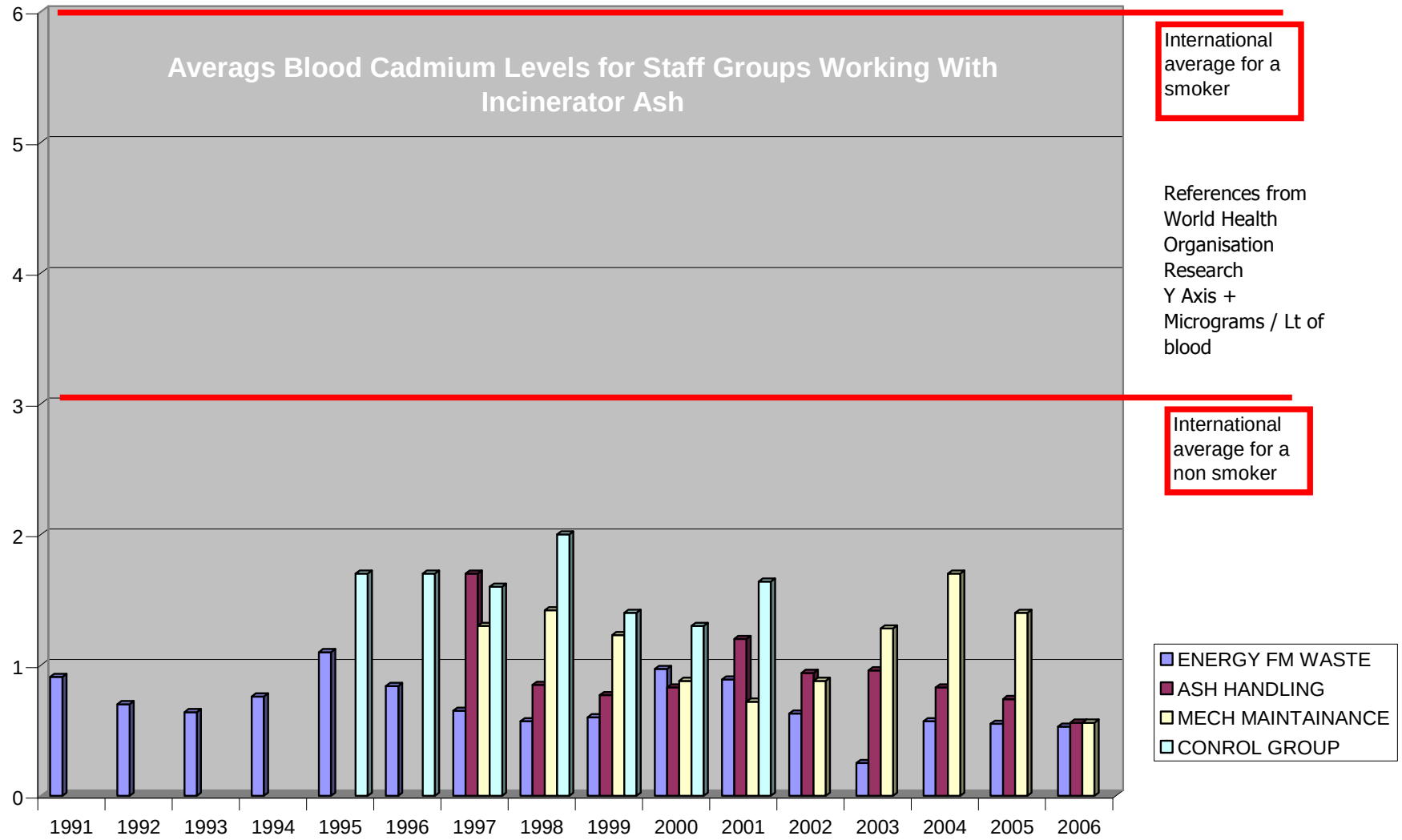

Table 1 - Biological Sampling - Anonymous Blood Cadmium Data - Micrograms / Ltr

Energy from Waste Plant Staff - Ranked

	91	92	93	94	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006
1	1.5	1.6	1.6	1.3	1.9	1.8	1	0.9	1.2	1.6	1.2	1.6	1.2	1.1		0.7
2	1.3	0.7	1	0.5	1.4	1.7	0.9	0.6	0.9	1.2	1.1	1.5	1.1	0.6		0.6
3	0.9	0.6	0.8	0.5	1.3	1.3	0.8	0.6	0.6	1.2	1.1	0.9	0.8	0.5		0.5
4	0.9	0.5	0.7		1.3	1.2	0.8	0.5	0.5	1.2	1	0.9	0.8	0.5		0.5
5	0.8	0.5	0.5		1.3	0.8	0.8	0.5	0.5	1.1	0.9	0.9	0.7	0.5		0.5
6	0.8	0.5	0.5		1.2	0.8	0.7	0.5	0.5	1	0.9	0.9	0.7	0.5		0.5
7	0.7	0.5	0.5		1	0.8	0.7	0.5	0.5	1	0.9	0.8	0.7	0.5		0.5
8	0.7		0.5		1	0.8	0.6	0.5	0.5	1	0.9	0.8	0.7	0.5		0.5
9	0.6		0.5		0.9	0.8	0.6		0.5	1	0.9	0.8	0.6	0.5		0.5
10			0.5		0.9	0.7	0.6		0.5	1	0.8	0.7	0.6	0.5		
11			0.5		0.9	0.7	0.5		0.5	0.9	0.8	0.7	0.6			
12			0.5		0.9	0.6	0.5		0.5	0.9	0.8	0.7	0.5			
13			0.5		0.9	0.6	0.5			0.9	0.7	0.7	0.5			
14			0.5		0.8	0.6	0.5			0.9	0.7	0.6	0			
15			0.5		0.8	0.5	0.5			0.9		0.5	0			
16						0.5	0.5			0.9		0.5	0			
17						0.5				0.9		0.5				
18						0.5				0.8		0.5				
19										0.8						
20										0.8						
21										0.7						
22										0.7						
Total	8.2	4.9	9.6	2.3	16.5	15.2	10.5	4.6	7.2	21.4	12.7	14.5	9.5	5.7		4.8
Av	0.9	0.7	0.6	0.7	1.1	0.84	0.65	0.57	0.6	0.97	0.9	0.8	0.73	0.57		0.53

Table 2 - Biological Sampling - Anonymous Blood Cadmium Data - Micrograms / Ltr

Non Energy from Waste Plant Staff – Ranked

1	91	92	93	94	95	96	97	98	99	2000	2001	2002	2003	2004	2005	2006
2	1	2.4	4.1	1.7	3.7	3.3	3	0.5	0.8	2	1.1	2.7		2.5		1.4
3	0.7	2.4	2.2		3.6	3.2	2.2	0.9	0.7	2	1.1	2.3		1.8		0.6
4	0.7		1.5		2.7	2.7	1.7	0.7	0.7	1	2.2	1.9		1.6		0.6
5			0.8		0.8	2.3	1.6	0.5	0.6	1	0.5	1.5		1.5		0.5
6			0.6		0.8	2	1.6	0.5	0.6	1	0.8	1.3		1.4		0.5
7			0.6		0.7	1.1	1.2	0.5	0.5	1	1.5	1.2		1		0.5
8			0.5		0.7	1.1	0.8	0.5	0.5	0.9	1	1		0.7		0.5
9			0.5		0.7	0.9	0.8	0.5	0.5	0.9	1	1		0.6		0.5
10			0.5		0.7	0.9	0.8		0.5	0.9	2.4	0.8		0.5		0.5
11			0.5		0.7	0.9	0.8			0.8	1.1	0.8		0.5		0.5
12					0.7	0.8	0.8			0.8	0.5	0.8		0.5		0.5
13					0.6	0.8	0.8			0.8	0.5	0.6		0.5		0.5
14					0.6	0.8	0.8			0.7	1.3	0.6		0.5		0.5
15					0.6	0.7	0.8			0.7	0.5	0.5				0.5
16					0.6	0.7	0.7				0.5	0.5				0.5
17					0.2	0.7	0.7				0.5	0.5				0.5
18						0.5	0.6				1.3	0.5				0.5
19						0.5	0.6				0.9	0.5				
20						0.5	0.6				4.3	0.5				
21						0.5	0.6				0.7	0.5				
22						0.5	0.6				1.2	0.5				
23						0.5	0.6				1.1	0.5				
24						0.5	0.6									
25							0.5									
26							0.5									
							0.5									
Total	2.4	4.8	11.8	1.7	18.4	26.4	24.8	4.6	5.4	14.5	26	21		13.6		9.6
Av	0.8	2.4	1.8	1.7	1.15	1.1	0.9	0.57	0.6	1.03	1.1	0.9		1.04		0.56