

F.A.O. Merion Bowen. Swansea,
Bridgend Leap.
Davies Bros. (Waste) Ltd E.P.O.
Tythegston Landfill Site Tythegston BRIDGEND CF32 0NE
Tel. 01656-788815 Fax. 01656-722673
Sal.

FAX Transmission

DATE 28/10/97
FROM CLIVE EDWARDS
TO MERION BOWEN
COMPANY ENVIRONMENT AGENCY
FAX No: 01792-470068
SUBJECT FILTER CAKE
No. of PAGES (TOTAL) 4

MESSAGE

Merion

Further our telephone conversation,
attached is detail of filter cake and
comments of Clifton Parish.

We believe advise one ton per month for
disposal.

Please confirm your decision if we can
dispose ^{the} waste at Tythegston

Regards

Clive.

Please advise if any of this transmission is illegible

Table 3.2

Analyses for Alumax Aluminium Hydroxide Sludge (a)

Determinand	Results		
	GB2886(a)	T282360 ^b	FUR 5322 ^c
Volatile solids	nd ^(d)	nd	nd
Dry matter	nd	nd	nd
Fluoride	nd	<10	100
pH	7.8	11.9	8.6
Nickel	<0.9	24	<10
Cobalt	nd	nd	11
Manganese	nd	nd	33
Chromium	173	153	61 (total)
Chromium (VI)	23.2	3	1
Aluminium	nd	326250	63400
Zinc	21	131	34
Copper	28	76	22
Iron	nd	nd	548
Silver	nd	nd	<10
Cadmium	<0.9	0.34	<1
Arsenic	<0.9	nd	265
Barium	nd	nd	<10
Lead	<1.8	35	<10
Mercury	<100 µg	nd	260 µg
Selenium	<100 µg	nd	60
Boron (water soluble)	<0.8	nd	nd
Free sulphur	<400	nd	nd
Sulphide content	<10	nd	nd
Total sulphates	8713	nd	nd
Polycyclic aromatic hydrocarbons	1.6	nd	nd
Trace organics	nd	nd	nd
Total phenol	1.86	nd	2
Total cyanide	9.91	nd	5
Free cyanide content	na ^(e)	nd	nd
Thiocyanate	na	nd	nd

(a) All units are mg/kg unless otherwise stated.

(b) Runcorn Works: Analysis by SGS United Kingdom Ltd, report date 1 July 1997 (Ref: NWM662).

(c) Llantrisant works: Analysis by Wallace Evans, report dated 23 June 1992.

(d) Llantrisant works: Analysis by Leigh Analytical Services for Hills Aggregates, dated 16 September 1992.

(e) nd-not determined

(f) na-not available

- 1) IF Cr VI levels exceed ^{or equal} 0.1%
the waste is special by H7. Carcinogenic.
- 2) IF Cr III & $Al_2(OH)_3$ exceed or equal
25% the waste will be special by H5 Harmful.
- 3) IF $pH \geq 11.5$ - waste will be special by H8 Corrosive.

uses a local site. The Runcorn plant was not treating the filter cake as Special whereas the Llantrisant plant was.

Copies of the relevant carrier registration certificates and waste management site licenses are included in Annex A.

Table 3.1 Analyses for Alumax Chromium Hydroxide Sludge ^(a)

Determined	Results			
	GR2857 ^(b)	T282361 ^c	T2872 ^(d)	PLR 561 ^(e)
Volatile solids	nd ^(f)	nd	20%	nd
Dry matter	nd	nd	34.9%	nd
Fluoride	nd	44.7	nd	258
pH	7.7	10.7	8.5	6.9
Cobalt	nd	nd	nd	8
Nickel	<1	34	1560	<10
Manganese	nd	nd	nd	37
Chromium	30100	382000 (total)	119000	27800 ^g
Chromium (VI)	783.5	280	nd	nd ^p
Aluminium	nd	263900	nd	34400
Zinc	66	366	7800	158
Copper	33	118	1560	26
Iron	nd	nd	nd	1320
Cadmium	<1	1	156	<1
Silver	nd	nd	nd	<10
Arsenic	168	nd	nd	5
Barium	nd	nd	nd	23
Lead	2.8	38	1560	10
Mercury	<100 µg	nd	nd	226 µg
Selenium	<100 µg	nd	nd	20
Boron (water soluble)	<0.8	nd	nd	nd
Free sulphur	<400	nd	nd	nd
Sulphide content	218.7	nd	nd	nd
Total sulphates	1803	nd	nd	nd
Polyaromatic hydrocarbons	1.3	nd	nd	nd
Trace organics	nd	nd	12.5	nd
Total phenol	2.1	nd	nd	8
Total cyanide	12.96	nd	nd	14
Free cyanide content	na ^(g)	nd	nd	nd
Thiocyanate	na	nd	nd	nd

(a) All units are mg/kg unless otherwise stated

(b) Runcorn Works: Analysis by SGS United Kingdom Ltd, report date 1 July 1997 (Ref. NWM652).

(c) Llantrisant works: Analysis by Wallace Evans, report dated 23 June 1992

(d) Llantrisant works: Analysis by UK Waste on discharge to Avonmouth works, dated 7 February 1997.

(e) Llantrisant works: Analysis by Leigh Analytical Services for Hills Aggregates, dated 16 September 1992.

(f) nd-not determined

(g) na-not available

Asiantacth yr Amgylchedd
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ASIANANTH YR
AMGYLCHEDD
ENVIRONMENT
AGENCY

ffôn/fax

I/To: Edward Warner

Oddi wrth/From Clifford Parish

Company BRM

Dyddiad/Date 15 August 1997

Rhif ffacs/ 01865 384823

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Fax number

Special Waste Regulations 1996 - Aluminium and Chromium Hydroxide Sludge.

From the information shown on the two analysis sheets fax to our office on the 11th inst, we would not initially consider these wastes to be subject to the above regulations.

Our assessment would be that the concentrations are not equal or in excess of the threshold limits and the wastes based on these samples would not be classed as special.

As there was no information in respect to the disposal area, we have assumed that in contacting our area office the wastes in question will be consigned to S.E. Wales, if this is not the case I would strongly advise you to obtain the views of the Environment Agency area responsible for disposal before carrying out the movement of these wastes.

I would also remind you that while we may not consider them special they will still be difficult wastes subject to the "Duty of Care" and requiring treatment or disposal at suitably licenced facilities.

If I can be of any further assistance, please do not hesitate in contacting me

Clifford Parish

Clifford Parish
Area Technical Support Officer
S.E. Area Waste Regulation

15/8/97

N. A. W.

Os yw'r ffacs yma'n anghyflawn neu'n aneglur, ffoniwch

If this fax is incomplete or illegible, please telephone: 01222 770088 ex. 2151