

Chemical Waste Treatment Centre
Operation Report
Apr 96 - Dec 96

I. INTRODUCTION

This Operation Report is prepared by EPD for the Environment and Planning Committee (EPC) of the Kwai Tsing District Board. It outlines the activities of the Chemical Waste Treatment Centre (CWTC) and provides a summary of environmental performance of the plant.

The environmental performance summary as shown in Section II of this report covers the result of environmental monitoring from April 96 to December 96.

II. ENVIRONMENTAL PERFORMANCE SUMMARY

Enviropace are required to undertake regular checks on environmental performance of the operation of the plant. These include the following:

- Effluent discharge monitoring
- Stack gas monitoring
- Stabilised residue monitoring

Effluent Discharge

Effluent from the CWTC treatment processes has to meet very strict discharge limits on pollutant concentration. Multiple processes are employed inside the CWTC to treat all liquid wastes to ensure a safe waste management system. Automatic monitoring of pH and temperature are conducted to facilitate immediate warning on any significant change detected in the composition of the effluent, such that prompt corrective response can be effected.

Effluent from the plant is discharged in batches. Each batch is sampled and analyzed, and discharges are permitted only if limits are met. Tables 1 to 9 show the summary of effluent quality from April 96 to December 96. No exceedances in effluent discharge limits were observed.

Stack Gas

Air emissions from the incineration system are closely monitored by a comprehensive management and monitoring programme to ensure that the system is operating safely and in an environmentally acceptable manner.

A continuous monitoring system on key parameters is installed in the incinerator stack to ensure combustion and air pollutant removal processes are functionally well. Furthermore, the incinerator is equipped with an automatic waste feed cut-off system. In the event that the continuous monitoring system picks up any potential sign of exceedance of any of the control parameters, waste feed to the incinerator will be stopped automatically. The result for Stack Gas Monitoring from April 96 to December 96 are attached in Tables 10 to 18 and compliance in all stack gas control parameters has been achieved.

Stabilised Residue

All solid wastes and process residues at the CWTC are detoxified, chemically stabilized and physically immobilized to an environmentally benign state. Samples of the stabilized materials have to pass a series of analytical tests, proven to be innocuous before being sent to an off-site landfill for final disposal.

The summaries of result for Stabilized Residue from April 96 to December 96 are attached in Tables 19 to 27. All of the test parameters fell within the control limits and no exceedances occurred.

Table 1

Chemical Waste Treatment Centre
Effluent Discharge Summary (April 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.6 - 9.7	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 28	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	205 - 807.7	475.7
Total Sulphides (mg/l)	10	< 2.07	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 58	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.47	N/A
Total Residual Chlorine (mg/l)	1	< 1	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	42.3 - 135	70.2
Temperature (°C)	43	22 - 38	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.39	
Copper (mg/l)	2	< 0.72	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 6.87	
Boron (mg/l)	5	< 4.6	
Iron (mg/l)	10	< 2	

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 2

Chemical Waste Treatment Centre
Effluent Discharge Summary (May 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.6 - 9.7	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 22	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	98.7 - 920.4	557.7
Total Sulphides (mg/l)	10	< 1	N/A
Total Cyanide (mg/l)	0.1	< 0.07	N/A
Total Suspended Solids (mg/l)	100	< 55.5	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.42	N/A
Total Residual Chlorine (mg/l)	1	< 0.85	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	20 - 145.2	76.6
Temperature (°C)	43	26 - 38	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 1.52	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 7.69	
Boron (mg/l)	5	< 4.9	
Iron (mg/l)	10	< 2	N/A

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 3

Chemical Waste Treatment Centre
Effluent Discharge Summary (June 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.9 - 9.8	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 29.8	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	327 - 1212	637.1
Total Sulphides (mg/l)	10	< 2.1	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 32.2	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	0.1-0.49	N/A
Total Residual Chlorine (mg/l)	1	< 0.98	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	20 - 106.8	66.7
Temperature (°C)	43	29 - 40	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 1.1	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1.2	
Total Toxic Metals # (mg/l)	10	< 7.5	
Boron (mg/l)	5	< 4.97	
Iron (mg/l)	10	< 2	

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 4

Chemical Waste Treatment Centre
Effluent Discharge Summary (July 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.7 - 9.5	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 75.2	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	221.9 - 1200	710.95
Total Sulphides (mg/l)	10	< 4.45	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 89.9	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.43	N/A
Total Residual Chlorine (mg/l)	1	< 0.77	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	35.6 - 109	72.3
Temperature (°C)	43	27 - 42	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 2	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 6.8	
Boron (mg/l)	5	< 6.8	
Iron (mg/l)	10	< 2	N/A

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 5

Chemical Waste Treatment Centre
Effluent Discharge Summary (August 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	7 - 7.9	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 24.8	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	313.3 - 723.3	520.3
Total Sulphides (mg/l)	10	< 1.4	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 61.4	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.49	N/A
Total Residual Chlorine (mg/l)	1	< 0.6	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	< 111	72.3
Temperature (°C)	43	35 - 42	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 0.56	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 6.65	
Boron (mg/l)	5	< 5	
Iron (mg/l)	10	< 2	N/A

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 6

Chemical Waste Treatment Centre
Effluent Discharge Summary (September 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.5 - 9.2	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 95.3	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	203.7 - 538.4	371
Total Sulphides (mg/l)	10	< 5.1	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 96.1	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.4	N/A
Total Residual Chlorine (mg/l)	1	< 0.7	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	82.5	N/A
Temperature (°C)	43	38 - 43	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 1.5	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 7.7	
Boron (mg/l)	5	< 5	
Iron (mg/l)	10	< 2	

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 7

Chemical Waste Treatment Centre
Effluent Discharge Summary (October 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.6 - 9.1	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 20	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	283.7 - 456.4	370
Total Sulphides (mg/l)	10	< 8.4	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 95.8	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.4	N/A
Total Residual Chlorine (mg/l)	1	< 0.9	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	< 118.6	N/A
Temperature (°C)	43	31 - 42	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 0.8	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 6.9	
Boron (mg/l)	5	< 4.7	
Iron (mg/l)	10	< 2	

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 8

Chemical Waste Treatment Centre
Effluent Discharge Summary (November 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6.2 - 9.7	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 20	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	315.2 - 1068.2	690
Total Sulphides (mg/l)	10	< 6.3	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 57.9	N/A
Oil and Grease (mg/l)	20	< 17.3	N/A
Total Phenols (mg/l)	0.5	< 0.45	N/A
Total Residual Chlorine (mg/l)	1	< 0.7	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	< 150.7	N/A
Temperature (°C)	43	32 - 43	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 0.5	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 6.69	
Boron (mg/l)	5	< 4.8	
Iron (mg/l)	10	< 2	

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 9

Chemical Waste Treatment Centre
Effluent Discharge Summary (December 1996)

Parameters	Control Limits	Result	Mean
pH	6-10	6 - 9.8	N/A
Total Kjeldahl Nitrogen (mg/l)	100	< 51.5	N/A
Total Phosphate (mg/l)	10	< 2	N/A
Total Sulphate (mg/l)	2000	295.2 - 821.3	558
Total Sulphides (mg/l)	10	< 5.6	N/A
Total Cyanide (mg/l)	0.1	< 0.03	N/A
Total Suspended Solids (mg/l)	100	< 45	N/A
Oil and Grease (mg/l)	20	< 15	N/A
Total Phenols (mg/l)	0.5	< 0.3	N/A
Total Residual Chlorine (mg/l)	1	< 0.97	N/A
Anionic Detergents (mg/l)	15	< 3	N/A
Dissolved TOC (mg/l)	200	< 87	N/A
Temperature (°C)	43	22 - 43	N/A
Floatable Substances (mg/l)	Not to be detected	Not detected	Not detected
Toxic Metals :			
Arsenic (mg/l)	2	< 0.1	N/A
Barium (mg/l)	5	< 1	
Cadmium (mg/l)	0.1	< 0.1	
Chromium (mg/l)	1	< 0.3	
Copper (mg/l)	2	< 1	
Lead (mg/l)	2	< 1	
Manganese (mg/l)	5	< 0.2	
Mercury (mg/l)	0.05	< 0.05	
Nickel (mg/l)	2	< 1	
Silver (mg/l)	2	< 0.4	
Tin (mg/l)	5	< 1	
Zinc (mg/l)	2	< 1	
Total Toxic Metals # (mg/l)	10	< 7.2	
Boron (mg/l)	5	< 4.6	
Iron (mg/l)	10	< 2	N/A

Parameters	Control Limits	Result	Mean
Pesticides :			
Aldrin (mg/l)	0.01	< 0.01	N/A
BHCS (mg/l)	0.01	< 0.01	
DDT (mg/l)	0.01	< 0.01	
Semi-volatile Compounds :			
Benzo (A) Pyrene (mg/l)	0.1	< 0.1	N/A
Volatile Compounds :			
1,1,1-Trichloroethane (mg/l)	0.05	< 0.05	N/A
Polychlorinated Biphenyls :			
Total PCBs (mg/l)	0.003	< 0.003	N/A
Radioactive Substances :			
Gross (pc/l)	10000	< 10000	N/A
Radium-226 (pc/l)	30	< 30	
Strontium-90 (pc/l)	100	< 100	

Total toxic metals include: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Silver, Tin, Zinc.

Table 10

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (April 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.5 - 5.1	1.6
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.3	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.3	N/A
Hydrogen Sulphide (mg/m ³)	5	< 2.1	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	3.4 - 18.4	12.5
Sulphur Dioxide (mg/m ³)	750	67 - 409.1	326.9
Hydrochloric Acid (mg/m ³)	38	5.2 - 14.3	7.6
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.55	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 0.8	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.8	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.002	N/A
Cadmium (mg/m ³)	3	< 0.031	
Antimony (mg/m ³)	3	< 0.31	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.31	N/A
Copper (mg/m ³)	10	< 0.31	
Arsenic (mg/m ³)	10	< 0.002	
Nickel (mg/m ³)	10	< 0.31	
Chromium (mg/m ³)	10	< 0.031	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.305	N/A
Dioxin (ng/m ³)	0.1	0.0078	N/A

Table 11

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (May 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.6 - 2.1	0.9
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.4	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	Not detected	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	6.8 - 22.6	16.8
Sulphur Dioxide (mg/m ³)	750	16.2 - 623.9	289.6
Hydrochloric Acid (mg/m ³)	38	4 - 9.6	6.8
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.437	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 0.9	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.9	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.006	N/A
Cadmium (mg/m ³)	3	< 0.029	
Antimony (mg/m ³)	3	< 0.288	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.288	N/A
Copper (mg/m ³)	10	< 0.288	
Arsenic (mg/m ³)	10	< 0.001	
Nickel (mg/m ³)	10	< 0.288	
Chromium (mg/m ³)	10	< 0.029	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.213	N/A
Dioxin (ng/m ³)	0.1	0.0155	N/A

Table 12

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (June 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	1.1 - 2.1	1.6
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.9	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	< 0.3	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	0.6 - 14.8	5.6
Sulphur Dioxide (mg/m ³)	750	1 - 271.8	92.5
Hydrochloric Acid (mg/m ³)	38	5.3 - 8.5	6.6
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.684	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 1.1	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 1	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.008	N/A
Cadmium (mg/m ³)	3	< 0.034	
Antimony (mg/m ³)	3	< 0.336	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.336	N/A
Copper (mg/m ³)	10	< 0.336	
Arsenic (mg/m ³)	10	< 0.002	
Nickel (mg/m ³)	10	< 0.336	
Chromium (mg/m ³)	10	< 0.034	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.416	N/A
Dioxin (ng/m ³)	0.1	0.0098	N/A

Table 13

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (July 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.1 - 2.8	1.6
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.6	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	Not detected	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	8.6 - 14	10.9
Sulphur Dioxide (mg/m ³)	750	1.4 - 131.7	49.7
Hydrochloric Acid (mg/m ³)	38	4.2 - 14.9	7.8
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.59	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 0.9	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.9	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.012	N/A
Cadmium (mg/m ³)	3	< 0.032	
Antimony (mg/m ³)	3	< 0.317	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.317	N/A
Copper (mg/m ³)	10	< 0.317	
Arsenic (mg/m ³)	10	< 0.002	
Nickel (mg/m ³)	10	< 0.317	
Chromium (mg/m ³)	10	< 0.032	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.34	N/A
Dioxin (ng/m ³)	0.1	0.0218	N/A

Table 14

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (August 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	1.3 - 2.4	1.7
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.7	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	Not detected	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	0.8 - 29.5	15.1
Sulphur Dioxide (mg/m ³)	750	0.7 - 109.2	55
Hydrochloric Acid (mg/m ³)	38	5.7 - 14.8	11.5
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.385	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 1	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 1	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.05	N/A
Cadmium (mg/m ³)	3	< 0.028	
Antimony (mg/m ³)	3	< 0.277	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.277	N/A
Copper (mg/m ³)	10	< 0.277	
Arsenic (mg/m ³)	10	< 0.001	
Nickel (mg/m ³)	10	< 0.277	
Chromium (mg/m ³)	10	< 0.028	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.168	N/A
Dioxin (ng/m ³)	0.1	0.0667	N/A

Table 15

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (September 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.2 - 2.3	1
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 2.8	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.3	N/A
Hydrogen Sulphide (mg/m ³)	5	Not detected	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	18.1 - 19.6	18.9
Sulphur Dioxide (mg/m ³)	750	0.3 - 183	95.6
Hydrochloric Acid (mg/m ³)	38	8.4 - 27	17.2
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.399	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 0.8	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.9	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.045	N/A
Cadmium (mg/m ³)	3	< 0.028	
Antimony (mg/m ³)	3	< 0.280	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.280	N/A
Copper (mg/m ³)	10	< 0.280	
Arsenic (mg/m ³)	10	< 0.001	
Nickel (mg/m ³)	10	< 0.280	
Chromium (mg/m ³)	10	< 0.028	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.177	N/A
Dioxin (ng/m ³)	0.1	0.0399	N/A

Table 16

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (October 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.6 - 8.3	1
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 4.8	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.5	N/A
Hydrogen Sulphide (mg/m ³)	5	Not detected	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	< 8.9	N/A
Sulphur Dioxide (mg/m ³)	750	< 319.2	N/A
Hydrochloric Acid (mg/m ³)	38	< 6.7	N/A
Total Phosphorus (as P) (mg/m ³)	7.5	< 2.03	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 1.2	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 1.6	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.021	N/A
Cadmium (mg/m ³)	3	< 0.04	
Antimony (mg/m ³)	3	< 0.405	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.405	N/A
Copper (mg/m ³)	10	< 0.405	
Arsenic (mg/m ³)	10	< 0.002	
Nickel (mg/m ³)	10	< 0.405	
Chromium (mg/m ³)	10	< 0.04	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.71	N/A
Dioxin (ng/m ³)	0.1	0.068	N/A

Table 17

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (November 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.2 - 3.9	N/A
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 4.2	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	4.6	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	< 41.7	N/A
Sulphur Dioxide (mg/m ³)	750	< 168.5	N/A
Hydrochloric Acid (mg/m ³)	38	< 10.9	N/A
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.748	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 1	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.9	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.05	N/A
Cadmium (mg/m ³)	3	< 0.035	
Antimony (mg/m ³)	3	< 0.35	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.35	N/A
Copper (mg/m ³)	10	< 0.35	
Arsenic (mg/m ³)	10	< 0.002	
Nickel (mg/m ³)	10	< 0.35	
Chromium (mg/m ³)	10	< 0.035	
Total of Toxic Metals I & II (mg/m ³)	10	< 1.52	N/A
Dioxin (ng/m ³)	0.1	Note (1)	N/A

Note: (1) Sampling suspended because of clinical waste trial burn.

Table 18

Chemical Waste Treatment Centre
Stack Gas Monitoring Summary (December 1996)

Parameters	Control Limits	Result	Mean
Particulates (mg/m ³)	75	0.2 - 1.2	0.63
Chlorine and Compounds (as Cl ₂) (mg/m ³)	100	< 3.6	N/A
Fluorine and Compounds (as HF) (mg/m ³)	25	< 0.4	N/A
Hydrogen Sulphide (mg/m ³)	5	< 1.8	N/A
Acidity (as Sulphuric Acid) (mg/m ³)	100	10.9 - 29.2	20.5
Sulphur Dioxide (mg/m ³)	750	< 230.8	N/A
Hydrochloric Acid (mg/m ³)	38	6.1 - 13.7	10.9
Total Phosphorus (as P) (mg/m ³)	7.5	< 1.48	N/A
Hydrogen Fluoride (mg/m ³)	7.5	< 1	N/A
Hydrogen Bromide (mg/m ³)	7.5	< 0.9	N/A
Toxic Metals I :			
Mercury (mg/m ³)	3	< 0.082	N/A
Cadmium (mg/m ³)	3	< 0.029	
Antimony (mg/m ³)	3	< 0.293	
Toxic Metals II :			
Lead (mg/m ³)	10	< 0.293	N/A
Copper (mg/m ³)	10	< 0.293	
Arsenic (mg/m ³)	10	< 0.001	
Nickel (mg/m ³)	10	< 0.293	
Chromium (mg/m ³)	10	< 0.029	
Total of Toxic Metals I & I (mg/m ³)I	10	< 1.284	N/A
Dioxin (ng/m ³)	0.1	0.0342	N/A

Table 19

Chemical Waste Treatment Centre
Stabilised Materials Summary (April 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	11.8 - 13	N/A
% Solids (%)	30 (lower limit)	56.5 - 100	80.3
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 1.4	
Copper (ppm)	-	< 9.1	
Nickel (ppm)	-	< 2.9	
Lead (ppm)	-	< 10.5	
Zinc (ppm)	-	< 2.8	
Total of copper, nickel, lead, zinc (ppm)	25	< 12.1	
Iron (ppm)	20	< 9.1	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 1	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2.4	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Table 20

Chemical Waste Treatment Centre
Stabilised Materials Summary (May 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	9.3 - 13.1	N/A
% Solids (%)	30 (lower limit)	53.5 - 100	84.4
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 0.5	
Copper (ppm)	-	< 9.4	
Nickel (ppm)	-	< 1.1	
Lead (ppm)	-	< 14	
Zinc (ppm)	-	< 11.7	
Total of copper, nickel, lead, zinc (ppm)	25	< 15.5	
Iron (ppm)	20	< 2.6	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 2.4	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Table 21

Chemical Waste Treatment Centre
Stabilised Materials Summary (June 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	11.8 - 13	N/A
% Solids (%)	30 (lower limit)	62.3 - 100	83
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 2.1	
Copper (ppm)	-	< 4.4	
Nickel (ppm)	-	< 0.5	
Lead (ppm)	-	< 16	
Zinc (ppm)	-	< 5	
Total of copper, nickel, lead, zinc (ppm)	25	< 18	
Iron (ppm)	20	< 8.3	N/A
Sulphide (ppm)	10	< 5.8	N/A
Ammoniacal Nitrogen (ppm)	10	< 2.6	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Chemical Waste Treatment Centre
Stabilised Materials Summary (July 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	12 - 12.9	N/A
% Solids (%)	30 (lower limit)	70.1 - 100	80
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 0.5	
Copper (ppm)	-	< 11.7	
Nickel (ppm)	-	< 0.5	
Lead (ppm)	-	< 19.7	
Zinc (ppm)	-	< 19.7	
Total of copper, nickel, lead, zinc (ppm)	25	< 24.7	
Iron (ppm)	20	< 1.4	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 1.3	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Chemical Waste Treatment Centre
Stabilised Materials Summary (August 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	8.7 - 12.6	N/A
% Solids (%)	30 (lower limit)	64.3 - 100	82.2
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 0.6	
Copper (ppm)	-	< 8.5	
Nickel (ppm)	-	< 0.5	
Lead (ppm)	-	< 19.9	
Zinc (ppm)	-	< 2.2	
Total of copper, nickel, lead, zinc (ppm)	25	< 22.9	
Iron (ppm)	20	< 5	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 7.3	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Chemical Waste Treatment Centre
Stabilised Materials Summary (September 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	11.5 - 12.8	N/A
% Solids (%)	30 (lower limit)	52 - 100	82.2
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 2.2	
Copper (ppm)	-	< 14.6	
Nickel (ppm)	-	< 0.5	
Lead (ppm)	-	< 17.7	
Zinc (ppm)	-	< 5.9	
Total of copper, nickel, lead, zinc (ppm)	25	< 24.8	
Iron (ppm)	20	< 6.4	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 3.7	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Chemical Waste Treatment Centre
Stabilised Materials Summary (October 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	8.2 - 12.9	N/A
% Solids (%)	30 (lower limit)	62 - 100	79
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.02	
Total Chromium (ppm)	10	< 0.5	
Copper (ppm)	-	< 12.2	
Nickel (ppm)	-	< 1.4	
Lead (ppm)	-	< 12.9	
Zinc (ppm)	-	< 3.9	
Total of copper, nickel, lead, zinc (ppm)	25	< 25	
Iron (ppm)	20	< 1	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 5.4	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Table 26

Chemical Waste Treatment Centre
Stabilised Materials Summary (November 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	10.1 - 12.7	N/A
% Solids (%)	30 (lower limit)	55 - 100	78
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.09	
Total Chromium (ppm)	10	< 0.5	
Copper (ppm)	-	< 8.3	
Nickel (ppm)	-	< 1.4	
Lead (ppm)	-	< 11.7	
Zinc (ppm)	-	< 3.4	
Total of copper, nickel, lead, zinc (ppm)	25	< 18.9	
Iron (ppm)	20	< 5.6	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 1.3	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 15	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A

Chemical Waste Treatment Centre
Stabilised Materials Summary (December 1996)

Parameters	Control Limits	Result	Mean
Section A			
pH (water)	8 (lower limit)	9.4 - 12.8	N/A
% Solids (%)	30 (lower limit)	46.5 - 100	73.3
Toxic Metals :			
Cadmium (ppm)	0.5	< 0.5	N/A
Mercury (ppm)	0.1	< 0.06	
Total Chromium (ppm)	10	< 0.5	
Copper (ppm)	-	< 4.3	
Nickel (ppm)	-	< 0.5	
Lead (ppm)	-	< 20.2	
Zinc (ppm)	-	< 1.4	
Total of copper, nickel, lead, zinc (ppm)	25	< 24.2	
Iron (ppm)	20	< 6.9	N/A
Sulphide (ppm)	10	< 5	N/A
Ammoniacal Nitrogen (ppm)	10	< 4.3	N/A
Cyanide (ppm)	5	< 5	N/A
Section B			
Volatile Organic Contents (ppm)	5000	< 39.3	N/A
Total Organic Halides (ppm)	10	< 2	N/A
Total Chloro Phenols (ppm)	2	< 2	N/A
Polychlorinated Biphenyls (ppm)	1	< 1	N/A
TCDD equivalent (ITEF method) (ppb)	1	< 1	N/A