

Table G.1(i) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. N ^o or Code	Material/ Substance ⁽¹⁾	CAS Number	Danger ⁽²⁾ Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R ⁽³⁾ - Phrase	S ⁽³⁾ - Phrase
	Sodium Metabulphite	7681-57-4	Harmful	0.250	0.20	Chromium removal/WWTP	22,31,41	26,39,46
	Trimite Granodine 606	Not available	No hazard classification	0.1	0.12	Iron Phosphate pre-paint protection	Not available	26, 37/39
	Gramos Metfin CH3524		Corrosive	0.025		Clear chromate conversion coating		23,25,26,38,45,53,36/37/39,60
	Chromium trioxide	1333-82-0					9,45,46,62/26,24/255,48/23, 35, 42/43, 50/53	
	Potassium fluorotitanate	240-696-9					25, 20/21	
	Gramos Metfin CH3520		Toxic, Corrosive	0.025		Iridescent chromate conversion coating		23,25,26,38,45,53,36/37/39,27/28,57,60,61
	Chromium trioxide	1333-82-0					9,45,46,62,26,24/25,48/23,35,42/43,50/53	
	Hydrofluoric acid	7664-39-3					26/27/28,35	
	Nitric acid	7697-37-2					8,35	
	Sodium Tungstat Dihydrate	13472-45-2					20/21/22,36	
	Gramos Metfin CH3521		Toxic, Corrosive	0.025	0.025	Replenishing solution		23,25,26,38,45,53,36/37/39,27/28,57,60,61
	Chromium trioxide	1333-82-0					9,45,46,62,26,24/25,48/23,35,42/43,50/53	
	Hydrofluoric acid	7664-39-3					26/27/28,35	
	Nitric acid	7697-37-2					8,35	
	Sodium Tungstate Dihydrate	13472-45-2					20/21/22,36	

- Notes:
1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
 2. c.f. Article 2(2) of SI N^o 77/94
 3. c.f. Schedules 9 and 10 of SI No 62/2004

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Ref. No or Code	Material/ Substance(1)	CAS Number	Danger(2) Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R(3) - Phrase	S(3) - Phrase
	Carbon Chemicals Auxiclean 414		Toxic, Corrosive, Harmful, Irritant	0.15	.60	Acid etching solution		26,28,24/25,37/39
	<i>Inorganic mineral acid</i>	7664-38-2					34	
	<i>Surfact</i>	9916-45-9					41	
	<i>Butyl Glycol</i>	111-76-2					20/21/22,37	
	<i>Sequesting Agent</i>	526-95-4					N/a	
	<i>Hydrofluoric acid</i>	7664-39-3					26/27/28,35	
	MacDermid Iridite NCP	12021-95-3	Harmful	0.025	0.025	Chrome free chromate	23/24/25,34	51,36/37,60
	Slotopas Z21 Blue/22			0.075	0.48	Trivalent clear passivation.		23.4,24/25,36,53,45,61
	<i>Sodium fluoride</i>	7681-49-4					25,32,36/38	
	<i>Cobalt sulfate</i>	231-66-8					49,22,42/43,50/53	
	Slotopas G 11		Toxic	0.025	0.15	Trivalent iridescent passivation		23.4,24/25,36,53,45,61
	<i>Sodium fluoride</i>	7681-49-4					25,32,36/38	
	<i>Cobalt sulfate</i>	231-66-8					49,22,42/43,50/53	
	MacDermid Iridite LY-FPC		Very toxic, Corrosive	0.025	0.045	Iridescent passivation.		23,26,36/37/39,45,53,60
	<i>Chromium trioxide</i>	1333-82-0					9,45,46,62,24/25,48/23,35,42/43,50/53	
	<i>Nitric acid</i>	7697-37-2					8,35	
	<i>Sulphuric acid</i>	7664-93-9					35	
	Slotoclean AK 161		Corrosive	0.12	0.160	Alkaline immersion degreasing		20,25,26,36/37/39,45,60
	<i>Sodium hydroxide</i>	1310-73-2					35	
	<i>Disodium metasilicate</i>	6834-93-0					34,37	
	Slotoclean EL31		Corrosive	0.22	0.300	Alkaline electrolytic degreasing.		36/37/39,45
	<i>Sodium hydroxide</i>	1310-73-2					35	
	<i>Disodium metasilicate</i>	6834-93-0					34,37	
	Sodium Hydroxide	1310-73-2	Corrosive	0.30	0.800	Pearl grade caustic.	35	1/2 ,26,37/39,45

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	Sodium Cyanide	143-33-9	Toxic, dangerous for environment	0.35	1.55	Solid brick form cyanide	26/27/28,32,50/53	1/2,28,45,56,63,36/37/39
	Hydrochloric Acid 36%	7647-01-0	Corrosive	0.8	1.01	Pickling solution 18% in line.	34,37	1/2,26,45
	Crystalite R130H Brightener		Harmful	0.22		Aldehyde-free cyanide zinc brightener		Not available
	<i>Benzyl nicotinate</i>	94-44-0					36	
	<i>Hexamethylylene tetramine</i>	20368-76-7					21/22,36/38	
	Crysta DS-Doctor Solution		Corrosive	0.22	0.60	Purifier and conditioner.		26,36/37/39,45,60
	<i>Sodium polysulphides</i>	1344-08-7					22,31,34,50	
	<i>Sodium hydroxide</i>	1310-73-2					35	
	Nitric Acid 60%	7697-37-2	Corrosive	0.05	0.10	pH Adjustment.	35	23,26,36/37/39,45
	Sodium Hypochlorite		Corrosive	0.6	6.8	Cyanide treatment.		
	<i>Sodium hypochlorite</i>	7681-52-9					31,34,50,35	1/2, 28,45,50,61
	<i>Sodium hydroxide</i>	1310-73-2					35	
	Metstrip SV3452		Corrosive, Toxic	0.05	0.20	Paint Stripper.		24/25,26,35,36/37/39,45
	<i>Dichloromethane</i>	75-09-2					40	
	<i>Formic Acid</i>	64-18-6					35	
	<i>Dodecyl benzene</i>	85117-49-3					22,34	
	<i>Distillates (petroleum), Hydrotreated light</i>	64742-47-8					Not available	
	FSW R7K69		Highly flammable, irritant	0.025	0.125	Paint Thinners		36/37/62
	<i>Xylene</i>	1330-20-7						
	<i>Toluene</i>	108-88-3						
	<i>Methyl isobutyl ketone</i>	108/10-1						
	FSW V66v27		Harmful	0.025	0.085	Paint Hardner		22,23,36/37,45,63
	<i>Ethylbenzene</i>	100-41-4					11,20	
	<i>Toluene-diisocyanate</i>	26471-62-5					40,26,36/37/38,42/43,52,53	
	<i>Xylene</i>	1330-20-7					10,20/21,38	
	<i>2-methoxy-1-methylethyl acetate</i>	108-65-6					10,36	

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Table G.1(i) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

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	Polane T Linear white		Flammable	0.2	0.556	Two pack Polurethane paint		16
	<i>Cyclohexane</i>	108-94-1					10,20	
	<i>Ethylbenzene</i>	100-41-4					11,20	
	<i>Toluene</i>	108-88-3					11,20,11,63,48/20,38,67	
	<i>Xylene</i>	1330-20-7					10,20/21,38	
	<i>Butanone</i>	Butano					11,36,66,67	
	<i>N-Butyl acetate</i>	123-86-4					10,66,67	
	<i>Titanium oxide</i>	13463-67-7					Not available	
	<i>Hydrated magnesium silicate</i>	14807-96-6					Not available	
	Polane T Ral 1018 yellow		Flammable	T included		Two pack Polurethane paint		16
	<i>Cyclohexane</i>	108-94-1		in Polane T			10,20	
	<i>Ethylbenzene</i>	100-41-4		Linear white			11,20	
	<i>Toluene</i>	108-88-3					11,20,11,63,48/20,38,67	
	<i>Xylene</i>	1330-20-7					10,20/21,38	
	<i>Butanone</i>	Butano					11,36,66,67	
	<i>N-Butyl acetate</i>	123-86-4					10,66,67	
	<i>Hydrated magnesium silicate</i>	14807-96-6					Not available	
	<i>Titanium dioxide</i>	13463-67-7					Not available	
	<i>2-methoxy-methylethyl acetate</i>	108-5-6					10,36	
	Polane T carbide black		Flammable	T included		Two pack Polurethane paint		23.50,24/25
	<i>Toluene</i>	108-88-3		in Polane T			11,20	36,51
	<i>Ethylbenzene</i>	100-41-4		Linear white			11,20	
	<i>Xylene</i>	1330-20-7					10,20/21,38	
	<i>Methyl ethyl ketone</i>	78-93-3					11,36,66,67	
	<i>Cyclohexane</i>	108-94-1					10,20	
	<i>Talc</i>	123-86-4					10,66,67	
	<i>Carbon black</i>	14807-96-6					Not available	
	<i>N-Butyl acetate</i>	1333-86-4					Not available	

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	Trimite 98/SAP 2		Flammable	0.025	0.230	Chrome free etch primer		7,36/37/39,46,26,61
	<i>Butanone</i>	78-93-3					11,36,66,67	
	<i>Zinc phosphate</i>	7541-51-3					50/53	
	<i>Butan-1-ol</i>	71-36-3					10,22,37/38,41,67	
	<i>2-Methylpropan-1-ol</i>	78-83-1					10,37/38,41,67	
	<i>1-Methoxypropan-2-ol</i>	107-98-2					10	
	Trimite Sar2		Corrosive, Flammable	0.025	0.165	Chrome Free Etch primer Compound		7,36/37/39,46
	<i>Phosphoric acid</i>	7664-38-2					34	
	<i>Butanone</i>	78-93-3					11,36,66,67	
	<i>Butan-1-ol</i>	71-36-3					10,22,37/38,41,67	
	PT1002		Harmful	0.025	0.085	Thinners		7,36/37/39,46
	n-butyl acetate	123-86-4					10,66,67	
	Xylene	1330-20-7					20/21,38	
	J2511 Hardner		Harmful	0.025	0.070	Paint Hardner		7,36/37/39,46
	Isocyanate prepolymer						Not available	
	n-butyl acetate	123-86-4					10,66,67	
	1-Methoxypropyl-2-acetate	108-65-6					36	
	Xylene	1330-20-7					20/21,38	
	Toluene di-isocyanate							
	Standard Thinners		Harmful, highly flammable	0.1	1.5	Cellulose Thinners		2,9,13,18,25,26,37,46,51,56,64
	<i>2-methoxy-1-methylethyl acetate</i>	108-65-6					10,36	
	<i>Acetone</i>	67-64-1					11,36,66,67	
	<i>Butan-2-ol</i>	78-92-2					10,36/37,67	
	<i>Butyl acetate</i>	123-86-4					10,66,67	
	<i>Ethyl acetate</i>	141-78-6					11,36,66,67	
	<i>Methanol</i>	67-56-1					11,23/24/25,39/23/24/25	
	<i>Toluene</i>	108-88-3					11,20	

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	Trimate Plastilac AE251		Harmful	0.15	0.355	Two pack Polurethane paint		7,36/37/39,46
	1-Methoxypropyl-2-acetate	108-5-6					36	
	Xylene	1330-20-7					20/21,38	
	N_butyl acetate	123-86-4					10,66,67	
	Anoprime	Not available	Harmful	0.1	0.250	Yellow Primer	20/21,22,37	Not available
	A1 Series Powder	n/a	Non-harmful	Not available		Dry powder paint	Not available	38,24/25
	E1 Series Powder	n/a	Non-harmful	Not available		Dry powder paint	36/38,43	38,24/25
	Ral 5002	Not available	Non-harmful	Not available		Dry powder paint	Not available	Not available
	MP490E/ Ral 7016	Not available	Non-harmful	Not available		Dry powder paint	Not available	Not available
	PFM 7558/Ral 9005	Not available	Non-harmful	Not available		Dry powder paint	Not available	38,24/25
	P4M5835 / Ral 9005	Not available	Irritant	Not available		Dry powder paint	36/38, 43	24,36,37
	<i>Trimellictic acid triglycidylester</i>							
	P8010 Series		Harmful, Irritant, Toxic to environment	Not available		Dry powder paint		22,38,20/21,24/25
	<i>Pyromellitic acid mono (phenylimidazoline)</i>	54553-90-1					51/53	
	<i>Caprolactam</i>	105-60-2					20/22,36/37/38	
	<i>2-Mercaptobenzothiazole</i>	149-30-4					43,50/53	
	<i>Zinc-2-mercaptobenzothiazole</i>	155-04-4					43	
	<i>2-Phenyl-2-imidazoline</i>	936-49-2					22,38,41,50/53	
	ER242	n/a	Non-harmful	Not available		Dry powder paint	Not available	38,24/25
	Ral 9006		Non-harmful	Not available		Dry powder paint		Not available
	<i>Titanium dioxide</i>	13463-67-7					Not available	
	<i>mica</i>	12001-26-2					Not available	

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Table G.1(ii) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. N ^o or Code	Material/ Substance ⁽¹⁾	TA Luft Class 1, 2 or 3	Odour			EU Lists I and II (Tick and specify Group/Family Number)			
			Odourous Yes/No	Description	Threshold $\mu\text{g}/\text{m}^3$	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
						List I	List II +129 ⁴	List I	List II
	Sodium Metabulphite		yes	Sulphurous					
	Trimite Granodine 606								
	Gramos Metfin CH3524								
	<i>Chromium trioxide</i>						yes		yes
	<i>Potassium fluorotitanate</i>								
	Gramos Metfin CH3520						yes		yes
	<i>Chromium trioxide</i>								
	<i>Hydrofluoric acid</i>								
	<i>Nitric acid</i>								
	<i>Sodium Tungstat Dihydrate</i>								
	Gramos Metfin CH3521								
	<i>Chromium trioxide</i>						Yes		yes
	<i>Hydrofluoric acid</i>								
	<i>Nitric acid</i>								
	<i>Sodium Tungstate Dihydrate</i>								
	Carbon Chemicals Auxiclean 414								
	<i>Inorganic mineral acid</i>								
	<i>Surfact</i>								
	<i>Butyl Glycol</i>								
	<i>Sequesting Agent</i>								
	<i>Hydrofluoric acid</i>								
	MacDermid Iridite NCP								

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			Odourous Yes/No	Description	Threshold µg/m ³	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
						List I	List II +129 ⁴	List I	List II
	Slotopas Z21 Blue/22								
	<i>Sodium fluoride</i>								
	<i>Cobalt sulfate</i>								yes
	Slotopas G 11								
	<i>Sodium fluoride</i>								
	<i>Cobalt sulfate</i>								yes
	MacDermid Iridite LY-FPC								
	<i>Chromium trioxide</i>						yes		yes
	<i>Nitric acid</i>								
	<i>Sulphuric acid</i>								
	Slotoclean AK 161								
	<i>Sodium hydroxide</i>								
	<i>Disodium metasilicate</i>								
	Slotoclean EL31								
	<i>Sodium hydroxide</i>								
	<i>Disodium metasilicate</i>								
	Sodium Hydroxide								
	Sodium Cyanide								yes
	Hydrochloric Acid 36%								
	Crystalite R130H Brightner								
	<i>Benzyl nicotine</i>								
	<i>Hexamethylene tetramine</i>								

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			Odourous Yes/No	Description	Threshold µg/m ³	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
						List I	List II +129 ⁴	List I	List II
	Crysta DS-Doctor Solution								
	<i>Sodium polysulphides</i>								
	<i>Sodium hydroxide</i>								
	Nitric Acid 60%								
	Sodium Hypochlorite								
	<i>Sodium hypochlorite</i>								
	<i>Sodium hydroxide</i>								
	Metstrip SV3452		yes	solvent					
	<i>Dichloromethane</i>	III						yes	
	<i>Formic Acid</i>								
	<i>Dodecyl benzene</i>								
	<i>Distillates (petroleum), Hydrotreated light</i>							yes	
	FSW R7K69		yes	solvent					
	<i>Xylene</i>	II					Yes		
	<i>Toluen</i>	II					yes		
	<i>Methyl Isobutyl ketone</i>								
	FSW V66v27								
	<i>Ethylbenzene</i>	II							
	<i>Toluene-diisocyanate</i>								
	<i>Xylene</i>	II					yes		
	<i>2-methoxy-1-methylethly acetate</i>	II							
	Polane T Linear white		Yes	solvent					
	<i>Cyclohexane</i>	II							
	<i>Ethylbenzene</i>	II							
	<i>Toluene</i>	II					Yes		
	<i>Xylene</i>	II					yes		
	<i>Butanone</i>								

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			Odourous Yes/No	Description	Threshold	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
					µg/m ³	List I	List II +129 ⁴	List I	
	<i>N-Butyl acetate</i>								
	<i>Titanium oxide</i>								yes
	<i>Hydrated magnesium silicate</i>								
	Polane T Ral 1018 yellow		Yes	solvent					
	<i>Cyclohexane</i>	II							
	<i>Ethylbenzene</i>	II							
	<i>Toluene</i>	II							
	<i>Xylene</i>	II					Yes		
	<i>Butanone</i>						yes		
	<i>N-Butyl acetate</i>								
	<i>Hydrated magnesium silicate</i>								
	<i>Titanium dioxide</i>								yes
	<i>2-methoxy-methylethyl acetate</i>	II							
	Polane T carbide black		Yes	solvent					
	<i>Toluene</i>	II					Yes		
	<i>Ethylbenzene</i>	II							
	<i>Xylene</i>	II					yes		
	<i>Methyl ethyl ketone</i>								
	<i>Cyclohexanone</i>	II							
	<i>Talc</i>								
	<i>Carbon black</i>								
	<i>N-Butyl acetate</i>	III							
	Trimite 98/SAP 2		yes	solvent					
	<i>Butanone</i>								
	<i>Zinc phosphate</i>								yes
	<i>Butan-1-ol</i>								
	<i>2-Methylpropan-1-ol</i>								
	<i>1-Methoxypropan-2-ol</i>								

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			Odourous Yes/No	Description	Threshold	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
					µg/m ³	List I	List II +129 ⁴	List I	
	Trimate Sar2		yes	solvent					
	<i>Phosphoric acid</i>								
	<i>Butanone</i>								
	<i>Butan-1-ol</i>								
	PT1002		yes	solvent					
	n-butyl acetate	III							
	Xylene	II					yes		
	J2511 Hardner		yes	solvent					
	Isocyanate prepolymer								
	n-butyl acetate	III							
	1-Methoxypropyl-2-acetate								
	Xylene	II					yes		
	Toluene di-isocyanate								
	Trimate Plastilac AE251		yes	solvent					
	1-Methoxypropyl-2-acetate								
	Xylene		II				yes		
	N-butyl acetate	III							
	Standard Thinners		yes	solvent					
	<i>2-methoxy-1-methylethyl acetate</i>								
	<i>Acetone</i>	III							
	<i>Butan-2-ol</i>								
	<i>Butyl acetate</i>	III							
	<i>Ethyl acetate</i>	III							
	<i>Methanol</i>								
	<i>Toluene</i>	II							
	Anoprime								
	A1 Series Powder								

Ref. N ^o or Code	Material/ Substance ⁽¹⁾	TA Luft Class 1, 2 or 3	Odour			EU Lists I and II (Tick and specify Group/Family Number)			
			Odourous Yes/No	Description	Threshold µg/m ³	Dangerous Substances Directive 76/464/EEC		Groundwater Directive 80/68/EEC	
						List I	List II +129 ⁴	List I	
	E1 Series Powder								
	Ral 5002								
	MP490E/ Ral 7016								
	PFM 7558/Ral 9005								
	P4M5835 / Ral 9005								
	<i>Trimellitic acid triglycidylester</i>								
	P8010 Series								
	<i>Pyromellitic acid mono (phenylimidazole)</i>								
	<i>Caprolactam</i>								
	<i>2-Mercaptobenzothiazole</i>								
	<i>Zinc-2-mercaptobenzothiazole</i>								
	<i>2-Phenyl-2-imidazoline</i>								
	ER242								
	Ral 9006								
	<i>Titanium dioxide</i>								
	<i>mica</i>								

Notes (cont.): 4. The European Commission priority candidate list

ATTACHMENT I.1

An air dispersion model for the facility, *AERMOD* as agreed with the Agency, is currently being carried out by Environmental Consultancy Services, Bord na Mona Environmental Ltd. The model will be using data for the existing stacks as shown in Drawing WPP280-01-Rev-06 and will be modelled based on the proposed locations as detailed in this application. It is envisaged the air dispersion model report will be submitted subsequent to this application in June/July 2008 as agreed with the Agency.

In response to Section I.1 an assessment of atmospheric emissions will be evaluated on completion of the air dispersion model.

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H.1 MATERIALS HANDLING

- Waterford Plating Company Ltd ensures the safe handling of all materials at the facility to minimize risk to the environment.
- Wet Paint /thinners/hardener volumes only required for the day's operations are removed from the bunded areas and handled within the facility
- Used paint cans are rinsed, crushed and removed to durable plastic containment, where once a consignment has been fulfilled; the container is labeled and weighed appropriately.
- Powder paints are packaged in plastic bags and these, once redundant are segregated for hazardous disposal.
- The facility stores chemicals within two bunded storerooms, one for dry chemicals and one for wet chemicals.
- Cyanide, which is in solid block form, is handled in a double containment carrier when transferred from the designated area in the store room to the vats for electroplating activities.
- Surface treatment chemicals are measured out in the storage area, to reduce the movement of drums with the operations area.

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I.8 ENVIRONMENTAL CONSIDERATIONS AND BAT

I.8.1

Waterford Plating Company Ltd is committed to protecting the environment. BAT and BREF documents call for responsible environmental management of facilities. The installation implements BAT where possible. Environmental Management Programmes are implemented to meet BAT requirements and include:

- Environmental Policy
- Housekeeping/maintenance in place to minimise specific environmental risks
- Minimising environmental impacts where a process is re-evaluated whilst ensuring product quality between the customer and operator
- Optimise surface treatment process
- Analysis of vat solutions to ensure chemical usage is kept to a minimum
- Rinsing regimes are continuously assessed
- Responsible storage of chemicals in bunded areas
- Monitoring of utility inputs
- Waste minimisation
- Materials recovery

I.8.2

Waterford Plating Company Ltd is constantly assessing alternatives to current raw materials that may have an impact on the environment:

1.8.2.1 Cyanide

The facility is currently assessing methods to phase out the use of cyanide products in the cyanide zinc plating with the use of non-cyanide zinc plating. This is a target and objective as laid out in the environmental management programme

1.8.2.2 Solvent based paints

Arising from specific customer requisitions, the facility is at liberty to comply with the design specifications of the component. Currently c. 90% of wet paints used are solvent based. However, <3.5 litres of solvent based paints were used in 2007. Every effort is made to minimise release of VOCs to the environment, by means of an enclosed booth and abatement systems. The operator is committed to encouraging customers to re-design their finish requirements where solvent based paints can be replaced with water based paints.

1.8.2.3 Heavy Metals in Paints

Waterford Plating Company Ltd. is obliged to comply with Directive 2002/95/EC on the 'Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment', since a large makeup of their client base is for computer component parts. This 'RoHS' directive prohibits the placing on the market of electrical and electronic equipment containing lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PDBE). To this end all paint products that are used at Waterford Plating Company Ltd. on electrical and electronic equipment must comply with this directive and do not contain heavy metals.

1.8.2.4 Chromium VI

To minimise the used of Hexavalent chromium (Cr (VI) compounds, two chrome free solutions have been introduced on the line for the chromate treatment of aluminium. The introduction of chrome free colour passivation on the zinc plating line was undertaken in August 2006. To date the use of Cr(VI) in clear chromating solutions has been fully changed over to the trivalent form Cr(III) by using the product Slotopas Z21/Blue/22. Approximately 95% of the process for colour chromating solutions using Cr (VI) has been changed to Cr(III) by using the product Slotopas G10. The remaining 5% of processing using a product containing Cr(VI) arises due to customer specification for component finishing. The product MacDermid Iridite LY-FPC which contains Cr(VI) is received to the facility in soluble liquid state and the maximum stock level at any one time is 25 litres. This small percentage of customers are exempt from compliance with Directive 2002/95/EC on Restriction of Hazardous Substances.

1.8.4 Cleaner Greener Programme

Waterford Plating Company Ltd is committed to reducing contaminants and in 2006 completed a programme on a recycling initiative where the recycling of water used in the cooling of plating tanks through swills was undertaken with the extension of the swill plumbing to include on the line cleaner swills.

1.8.5 Waste Minimisation and recovery

Non-hazardous waste is in the form of general office waste cardboard packaging. Waste paint and paint sludge is collected in a can at the facility and then collected for treatment and disposal by Rilta Environmental. Sludge from the WWTP is removed and disposed of accordingly. Scrap metal, including copper wire for jigs is recycled with an approved scrap merchant. Waste cyanide drums are washed out at the facility, tested and recycled with Waste Metal Management Company.

1.8.6 WWTP Upgrade

The design of the WWTP meets the requirements of the BAT Guidance note for the Surface Treatment of Metals and Plastic Sector July 2007 where a combination of flocculation, precipitation and settlement ensure the maximum removal of contaminants from the wastewater. It has been demonstrated in Attachment E.3 that the WWTP removal efficiency of contaminants is adequate.

1.8.7 Minimise waste generation

It is policy, where practical, in the case where larger volumes are required for process in larger containers to reduce the number of smaller drums, such as 25L drums which in turn must be disposed of.

1.8.8 Asbestos Roof

The asbestos roof on Units 605/606 has been replaced with a Kingspan roof. The asbestos roof was disposed of accordingly.

1.8.9 Packaging

To minimise the production of packaging waste, Waterford Plating Company Ltd. reuses customers packaging when components finishes have been completed.

ATTACHMENT J

The Emergency Response Procedure is provided overleaf.

Processes in the facility are carried out only during normal daytime working hours, when the facility is manned.

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Waterford Plating Company Ltd. Emergency Plan & Emergency Response Procedure

Purpose:

To define the organisation of emergency action to be taken in the event of an accident or an environmental incident.

Scope:

All locations where Waterford Plating Ltd operate.

Definitions:

Emergency Plan:

A document which, for any given plant or installation, defines to the organisation of the emergency action to be taken in the event of an accident with a view to protecting company personnel, the general population and the environment in addition to restoring the installation and the environment to the least environmentally impaired state possible.

References:

Emergency Spillage Plan
Fire Brigade Procedure

Responsibility:

Environmental Officer: Edward Roche

Safety Officer: Edward Roche

Engineering Hazards: Edward Roche

Fire Safety: Gavin Jess

Environmental Impact Team: Edward Roche
David Mc Cabe
Gavin Jess

Procedure:

7.1 Common Requirements (Conditions that must be carried out for conditions 7.2 to 7.9)

- 7.1.1 Emergency procedures as laid out in the safety statement should be followed
- 7.1.2 Emergency services, follow communication procedure (7.6)

7.2 Fire

- 7.2.1 In the event of a fire, follow the procedure as laid out in the safety statement, section 9.0 for evacuation of the building
- 7.2.2 In the event of large volumes of water used, this water should be treated as a spillage, and bunding procedures should be put in place.
- 7.2.3 As soon as practicable after the fire, follow communication procedure for the EPA and Co. Co.

7.3 Spillage's

- 7.3.1 Place a bund around the contaminated area with, earth, sand or an inert material.
- 7.3.2 Evacuate the area of contamination.
- 7.3.3 Inform the chemical engineer immediately of any spillage.
- 7.3.4 For any spillage of chemicals, refer to the Health and Safety Data Sheets Folder – Accidental release measures for materials to be used.
- 7.3.5 As per Health and Safety data sheet, add water or neutralising material to dilute the solution.
- 7.3.6 For spillage's of large volumes of Toxic, Flammable or Corrosive chemicals, the following must be carried out:
 - 7.3.6.1 Follow the above procedure.
 - 7.3.6.2 Ring the fire brigade (999) and ask for fire services.
 - 7.3.6.2.1 As soon as practicable after the incident, follow communication procedure for the EPA and Co. Co.

7.4 Leakage

- 7.4.1 For small or dripping leaks from a tank, place a drum or a beaker under the leak to contain it.
- 7.4.2 If possible transfer the solution in the tank into another tank.
- 7.4.3 All leaks of any material must be reported to the chemical engineer.
- 7.4.4 Fill in a maintenance sheet (QS024)
- 7.4.5 Leaks from drums or containers, follow spillage procedure 7.3
- 7.4.6 Place the drum into a bunded area.
- 7.4.7 If possible transfer the solution into a similar size container.

7.5 Explosion:

- 7.5.1 For an explosion, follow the same procedure for evacuation of the building as laid out in safety statement.
- 7.5.2 If a fire or a spillage occurs from the explosion, follow the procedures laid out for fire (7.2) and spillage (7.3)
- 7.5.3 Emergency Services, follow communication procedure (7.7)

7.6 Emergency Monitoring:

- 7.6.1 In the event of a spillage to the surface water or sewage drains of any chemical, monitoring of this drain must be carried out as per Condition 9 of the IPC Licence and analysis methods set out in accordance with Schedule 4 of the IPC Licence.
- 7.6.2 If soil / ground gets contaminated during an emergency, soil monitoring will be carried out by Bord Na Mona or another outside consultancy.
- 7.6.3 In the after effects of a fire, air monitoring of the surrounding and inside the building must be carried out as per Schedule 1 of the IPC Licence.
- 7.6.4 Emergency Services, follow communication procedure (7.7)

7.7 Communication

7.7.1 The following list of phone numbers should only be used in an emergency.

During Business Hours:

Fire Brigade	999
Environmental Protection Agency	Tel: 053-60600 Fax: 053-60699
Waterford Co. Co.	Tel: 051-873501 Fax: 051-870813

Outside business hours:

Fire Brigade	999
Environmental Protection Agency	Tel: 053-60600 (voice mail) Fax: 053-60699
Waterford Co. Co.	Tel: 051-873501 Fax: 051-870813

7.7.2 Fill in information sheet (QS023) and this information should be given to the EPA and GCC

7.8 Reports:

7.8.1 Following an accident, a report must be drawn up by the chemical engineer.

7.8.2 The following information must be stated in the report:

Cause of accident
Emergency action taken
Where emergency procedures fell down in the lead up to the accident
Action taken after the accident
Assign Communication sheet number

7.8.3 This report must be sent to the EPA and Waterford Co. Co.

7.9 Revision of Procedures:

7.9.1 In the event of an accident occurring, the relevant procedures shall be reviewed and upgraded as necessary following investigation of the causes, findings in the report and the potential for improvements in procedures.

7.9.2 This revision should be in conjunction with emergency services and the EPA.

Communication Sheet

QS023

For Environmental Emergency Communication

- **Name of Company:**

- **Telephone Number:**

- **Contact Person:**

- **Location of Incident:**

- **Date and Time of Incident**

- **Duration of Incident:**

- **Details of Occurrence:**

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- **Materials Emitted:**

- **Environmental significance of the incident:**

- **Weather Conditions:**

- **Vulnerable Receptors:**

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- **Weather Emergency services were contacted:**

- **Other Regulatory Bodies:** _____

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- Steps to minimise the emissions and avoid recurrence: _____

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