



TEST REPORT

Technical Report: (6216)203-0129

Aug. 11, 2016

Date Received: July 21, 2016

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Factory Company Name: 5102
Factory Address: TAIWAN (R.O.C.)

Project No.: /
Client Reference No.: /
Sample Type: Grab Sample*
Sample Pick Up Date: July 21, 2016
Test Period: July 21, 2016 to Aug. 11, 2016

Sample Description: Sample received is stated to be:
I001) Wastewater after treatment

REMARK

If there are questions or concerns on this report, please contact: chemical.inquiry@tw.bureauveritas.com

This report shown the test result of the environment samples of above factory which collected on specific date and time. The results of this report shall not be used for any regulatory compliance purposes.

* The grab sampling is agreed with client.

BUREAU VERITAS CONSUMER PRODUCTS
SERVICES (H.K.) LIMITED, TAIWAN BRANCH

PREPARED BY : Jack Chiu

QUEENY CHEN
SENIOR MANAGER
ANALYTICAL DEPARTMENT

C/N AY/JK

Photo of the Sampling Location & Sample



Executive Summary

Traditional Parameters	I001
Color	See result in page 4 - 6
pH Value	
Total Suspended Solids (TSS)	
Total Dissolved Solids (TDS)	
Biochemical Oxygen Demand (BOD ₅)	
Chemical Oxygen Demand (COD)	
Sulfide	
Total Phenolics	
Ca & Mg Hardness	

Note / Key :

- ● – Detected
- – Not Detected

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Objective

The environment sample was also tested for below General Parameters.

General Parameters

- 1) Color
- 2) pH Value
- 3) Total Suspended Solids (TSS)
- 4) Total Dissolved Solids (TDS)
- 5) Biochemical Oxygen Demand (BOD₅)
- 6) Chemical Oxygen Demand (COD)
- 7) Sulfide
- 8) Total Phenolics
- 9) Ca & Mg Hardness

Sampling Plan

Basically, one environment sample (Wastewater after treatment at discharge point) was sampled per factory. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is grab sampling (agreed with client.). Grab samples are discrete samples that are taken at a location to provide a 'snapshot' of the water quality characteristics at that time. For the purposes of quantifying water or wastewater constituents, grab samples will show the concentrations at that location and time of sampling. They will not provide any information about the concentrations outside that point in time.

Remark :

- Sampling procedure is with reference to below standards:
 - 1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
 - 2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
 - 3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
 - 4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.

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Test Result

General Parameters

Color

Test Method : With reference to ISO 7887: 2011

Tested Item(s)	Result	Unit	Conclusion
I001	114	Pt-Co	DATA

pH Value

Test Method : With reference to APHA 4500-H+ B:2012 & U. S. EPA 150.2

Test Item(s)	Unit	Result
-	-	I001
Parameter	-	-
Temp. of sample	deg. C	34.9
pH value of sample	-	7.7
Conclusion	-	DATA

Note:

Temp. = Temperature

deg. C = degree Celsius (°C)

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

U. S. EPA = United States Environmental Protection Agency

Total Suspended Solids (TSS)

Test Method : With reference to APHA 2540 D:2012

Tested Item(s)	Result	Unit	Conclusion
I001	ND	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 5

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

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Test Result

Total Dissolved Solids (TDS)

Test Method : With reference to APHA 2540 C:2012

Tested Item(s)	Result	Unit	Conclusion
I001	1250	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 10

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

Biochemical Oxygen Demand (BOD₅)

Test Method : With reference to APHA 5210 B:2012

Tested Item(s)	Result	Unit	Conclusion
I001	21.8	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 2

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

Chemical Oxygen Demand (COD)

Test Method : With reference to APHA 5220 B:2012 & U. S. EPA 410.3

Tested Item(s)	Result	Unit	Conclusion
I001	130	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 2

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

U. S. EPA = United States Environmental Protection Agency

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Test Result

Sulfide

Test Method : With reference to APHA 4500 S2- D:2011

Tested Item(s)	Result	Unit	Conclusion
I001	ND	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 0.005

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

Total Phenolics

Test Method : With reference to EPA 420.1 or HJ 503:2009

Tested Item(s)	Result	Unit	Conclusion
I001	ND	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 0.01

Ca & Mg Hardness

Test Method : With reference to APHA 2340 C:2011, 3500-Ca:2011 & 3500-Mg:1997

-	Unit	Result
Tested Item(s)	-	I001
Parameter	-	-
Total Hardness	mg/L	80.7
Conclusion	-	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 5

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

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TEST REPORT

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Aug. 04, 2016

Date Received: July 21, 2016

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Factory Company Name: 5102
Factory Address: TAIWAN (R.O.C.)
Project No.: /
Client Reference No.: /
Sample Type: Grab Sample*
Sample Pick Up Date: July 21, 2016
Test Period: July 21, 2016 to Aug. 04, 2016

Sample Description: Sample received is stated to be:
I001) Wastewater after treatment

REMARK

If there are questions or concerns on this report, please contact: chemical.inquiry@tw.bureauveritas.com

This report shown the test result of the environment samples of above factory which collected on specific date and time. The results of this report shall not be used for any regulatory compliance purposes.

* The grab sampling is agreed with client.

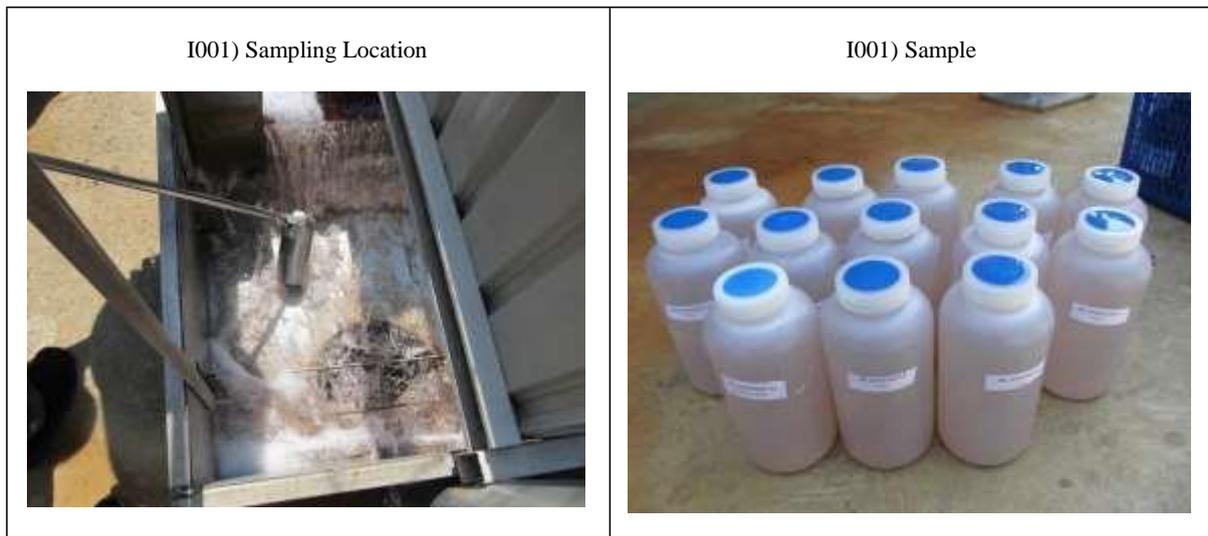
BUREAU VERITAS CONSUMER PRODUCTS
SERVICES (H.K.) LIMITED, TAIWAN BRANCH

PREPARED BY : Jack Chiu

QUEENY CHEN
SENIOR MANAGER
ANALYTICAL DEPARTMENT

C/N AY/JK

Photo of the Sampling Location & Sample



Executive Summary

11 Priority Chemical Groups	I001
Phthalates	o
Brominated and Chlorinated Flame Retardants	o
Azo Dyes	o
Organotin Compounds	o
Chlorobenzenes	●
Chlorotoluenes	o
Brominated and Chlorinated Solvents	o
Chlorophenols	o
Short-Chained Chlorinated Paraffins	o
Heavy Metals	●
APs and APEOs	o
Perfluorinated Chemicals	o

Note / Key :

- ● – Detected
- o – Not Detected

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Objective

The environment sample was tested for below 11 Priority Chemical Groups according to the Joint Roadmap: Toward Zero Discharge of Hazardous Chemicals.

11 Priority Chemical Groups

- 1) Phthalates
- 2) Brominated and Chlorinated Flame Retardants
- 3) Azo Dyes
- 4) Organotin Compounds
- 5) Chlorobenzenes/ Chlorotoluenes
- 6) Brominated and Chlorinated Solvents
- 7) Chlorophenols
- 8) Short-Chained Chlorinated Paraffins
- 9) Heavy Metals
- 10) APs and APEOs
- 11) Perfluorinated Chemicals

Sampling Plan

Basically, one environment sample (Wastewater after treatment at discharge point) was sampled per factory. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is grab sampling (agreed with client.). Grab samples are discrete samples that are taken at a location to provide a 'snapshot' of the water quality characteristics at that time. For the purposes of quantifying water or wastewater constituents, grab samples will show the concentrations at that location and time of sampling. They will not provide any information about the concentrations outside that point in time.

Remark :

- Sampling procedure is with reference to below standards:
 - 1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
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 - 3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
 - 4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix B.

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Test Result

11 Priority Chemical Groups

Chlorobenzenes

Test results of Chlorobenzenes are as below.

Chlorobenzenes	I001
Chlorobenzene	0.00019
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene, 1,4-Dichlorobenzene	ND
1,2,3-Trichlorobenzene	ND
1,2,4-Trichlorobenzene	ND
1,3,5-Trichlorobenzene	ND
1,2,3,4-Tetrachlorobenzene	ND
1,2,3,5-Tetrachlorobenzene, 1,2,4,5-Tetrachlorobenzene	ND
Pentachlorobenzene	ND
Hexachlorobenzene	ND

Heavy Metals

Test results of Heavy Metals are as below.

Heavy Metals	I001
Arsenic (As)	ND
Cadmium (Cd)	ND
Mercury (Hg)	ND
Lead (Pb)	0.004
Antimony (Sb)	0.342
Cobalt (Co)	ND
Nickel (Ni)	0.001
Copper (Cu)	0.073
Zinc (Zn)	0.034
Chromium (Cr)	0.006
Manganese (Mn)	0.044
Chromium VI (Cr VI)	ND
Tin (Sn)	ND
Cyanide (CN ⁻)	ND

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Others Priority Chemical Groups

	I001
Phthalates	ND
Brominated and Chlorinated Flame Retardants	ND
Azo Dyes	ND
Organotin Compounds	ND
Chlorotoluenes	ND
Brominated and Chlorinated Solvents	ND
Chlorophenols	ND
Short-Chain Chlorinated Paraffins	ND
APs and APEOs	ND
Perfluorinated Chemicals	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- All results are in ppm as unit.
- ppm = part(s) per million.

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APPENDIX A

List of Phthalates :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.001	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Butyl benzyl phthalate (BBP)	85-68-7	10	Di-iso-butyl phthalate (DIBP)	84-69-5
2	Dibutyl phthalate (DBP)	84-74-2	11	Di-cyclohexyl phthalate (DCHP)	84-61-7
3	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	12	Di-n-hexyl phthalate (DnHP)	84-75-3
4	Di-n-octyl phthalate (DNOP)	117-84-0	13	Dinonyl phthalate (DNP)	84-76-4
5	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0	14	Di-iso-octyl phthalate (DIOP)	27554-26-3
6	Di-iso-decyl phthalate (DIDP)	26761-40-0 & 68515-49-1	15	Dimethoxyethyl phthalate (DMEP)	117-82-8
7	Dimethyl phthalate (DMP)	131-11-3	16	1,2-benzenedicarboxylic acid, di-C7-11 branched alkyl ester and linear alkyl ester (DHNUP)	68515-42-4
8	Diethyl phthalate (DEP)	84-66-2	17	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl ester, C7-rich (DIHP)	71888-89-6
9	Di-n-propyl phthalate (DPRP)	131-16-8	18	Di-pentylphthalate	131-18-0

List of Brominated and Chlorinated Flame Retardants :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 527 and with reference to U. S. EPA 8321B. (For Wastewater)			Each (PBBs & PBDEs): 0.00005; Each (TRIS, TBBPA & HBCDD): 0.0005; Each (Others): 0.025 TCEP: 0.00005; TDCP: 0.0005	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Polybromobiphenyls (PBBs)	Various	6	Hexabromocyclododecane (HBCDD)	Various
2	Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	7	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0
3	Polybromodiphenyl ethers (PBDEs)	Various	8	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8
4	Tetrabromobisphenol A (TBBPA)	79-94-7	9	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8
5	Bis(2,3-dibromopropyl) phosphate	5412-25-9	-	-	-

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List of Aromatic Amines in Azo Colorants :					
No.	Test Method			Reporting Limit	Unit
1	With reference to German Standard DIN 38407-16, with reference to European Standard EN 14362-1 incorporating Corrigendum and with reference to European Standard EN 14362-3. (For Wastewater)			Each: 0.0001	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	4-Aminodiphenyl (Biphenyl-4-ylamine or Xenylamine)	92-67-1	18	o-Toluidine (2-Aminotoluene)	95-53-4
2	Benzidine	92-87-5	19	4-Methyl-m-phenylenediamine (2,4-Toluenediamine)	95-80-7
3	4-Chloro-o-toluidine	95-69-2	20	2,4,5-Trimethylaniline	137-17-7
4	2-Naphthylamine	91-59-8	21	o-Anisidine (2-Methoxyaniline)	90-04-0
5	o-Aminoazotoluene (4-Amino-2',3'-dimethylazobenzene or 4-o-tolyazo-o-toluidine)	97-56-3	22	4-Aminoazobenzene (p-Aminoazobenzene)	60-09-3
6	5-nitro-o-toluidine (2-Amino-4-nitrotoluene)	99-55-8	23	2,4-Xylidine (2,4-dimethylaniline)	95-68-1
7	4-Chloroaniline (p-Chloroaniline)	106-47-8	24	2,6-Xylidine (2,6-dimethylaniline)	87-62-7
8	4-Methoxy-m-phenylenediamine (2,4-Diaminoanisole)	615-05-4	25	Aniline	62-53-3
9	4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline)	101-77-9	26	1,4-Phenylenediamine	106-50-3
10	3,3'-Dichlorobenzidine (3,3'-Dichlorobiphenyl-4,4'-ylenediamine)	91-94-1	27	2-Chloroaniline	95-51-2
11	3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	28	5-Nitro-o-anisidine	99-59-2
12	3,3'-Dimethylbenzidine (4,4'-Bi-o-tolidine)	119-93-7	29	m-Toluidine	108-44-1
13	4,4'-Methylenedi-o-toluidine (3,3'-Dimethyl-4,4'-diaminodiphenylmethane)	838-88-0	30	N,N-Diethylaniline	91-66-7
14	p-Cresidine (6-Methoxy-m-toluidine)	120-71-8	31	N-Ethylaniline	103-69-5
15	4,4'-Methylene-bis-(2-chloroaniline) (2,2'-Dichloro-4,4'-methylene-dianiline)	101-14-4	32	N-Methylaniline	100-61-8
16	4,4'-Oxydianiline	101-80-4	33	p-Toluidine	106-49-0
17	4,4'-Thiodianiline	139-65-1	-	-	-



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List of Organotin Compounds :					
No.	Test Method			Reporting Limit	Unit
1	With reference to European Standard EN ISO 17353. (For Wastewater)			Each: 0.00001	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Monobutyltin (MBT)	Various	7	Trioctyltin (TOT)	Various
2	Dibutyltin (DBT)		8	Tripropyltin (TPT)	
3	Diocetyl tin (DOT)		9	Monooctyltin (MOT)	
4	Tributyltin (TBT)		10	Trimethyltin (TMT)	
5	Triphenyltin (TPhT)		11	Tetrabutyltin (TebT)	
6	Tricyclohexyltin (TCyHT)		12	Dimethyltin (DMT)	
List of Chlorobenzenes :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8260B and with reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.00002	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Chlorobenzene	108-90-7	6	1,3,5-Trichlorobenzene	108-70-3
2	1,2-Dichlorobenzene	95-50-1	7	1,2,3,4-Tetrachlorobenzene	634-66-2
3	1,3-Dichlorobenzene, 1,4-Dichlorobenzene	541-73-1, 106-46-7	8	1,2,3,5-Tetrachlorobenzene, 1,2,4,5-Tetrachlorobenzene	634-90-2, 95-94-3
4	1,2,3-Trichlorobenzene	87-61-6	9	Pentachlorobenzene	608-93-5
5	1,2,4-Trichlorobenzene	120-82-1	10	Hexachlorobenzene	118-74-1
List of Chlorotoluenes :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8260B and with reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.00002	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	2-Chlorotoluene	95-49-8	7	2,6-Dichlorotoluene	118-69-4
2	3-Chlorotoluene	108-41-8	8	3,4-Dichlorotoluene	95-75-0
3	4-Chlorotoluene	106-43-4	9	2,3,6-Trichlorotoluene	2077-46-5
4	2,3-Dichlorotoluene	32768-54-0	10	2,4,5-Trichlorotoluene	6639-30-1
5	2,4-Dichlorotoluene	95-73-8	11	Tetrachlorotoluene	Various
6	2,5-Dichlorotoluene	19398-61-9	12	Pentachlorotoluene	877-11-2

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List of Brominated and Chlorinated Solvents :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8260B. (For Wastewater)			Each: 0.1	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	1,2-Dichloroethane	107-06-2	13	Bromodichloromethane	75-27-4
2	1,1-Dichloroethylene	75-35-4	14	Bromoform	75-25-2
3	Methylene Chloride	75-09-2	15	Chlorodibromomethane	124-48-1
4	cis-1,2-Dichloroethylene	156-59-2	16	Chloroethane	75-00-3
5	trans-1,2-Dichloroethylene	156-60-5	17	Dibromomethane	74-95-3
6	Chloroform	67-66-3	18	1,1-Dichloroethane	75-34-3
7	1,1,1-Trichloroethane	71-55-6	19	trans-1,3-Dichloropropene	10061-02-6
8	Carbon Tetrachloride	56-23-5	20	Hexachlorobutadiene	87-68-3
9	Trichloroethylene	79-01-6	21	1,1,2,2-Tetrachloroethane	79-34-5
10	1,1,2-Trichloroethane	79-00-5	22	Vinyl chloride	75-01-4
11	1,1,1,2-Tetrachloroethane	630-20-6	23	Hexachloroethane	67-72-1
12	Tetrachloroethylene	127-18-4	24	Pentachloroethane	76-01-7

List of Chlorophenols :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.0005	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Pentachlorophenol	87-86-5	9	2,3-Dichlorophenol	576-24-9
2	2,3,4,5-Tetrachlorophenol	4901-51-3	10	3,4-Dichlorophenol	95-77-2
3	2,3,4,6-Tetrachlorophenol	58-90-2	11	2,4-Dichlorophenol, 2,5-Dichlorophenol, 2,6-Dichlorophenol, 3,5-Dichlorophenol	120-83-2, 583-78-8, 87-65-0, 591-35-5
4	2,3,5,6-Tetrachlorophenol	935-95-5	12	2-Chlorophenol	95-57-8
5	2,4,6-Trichlorophenol	88-06-2	13	3-Chlorophenol	108-43-0
6	2,3,5-Trichlorophenol	933-78-8	14	4-Chlorophenol	106-48-9
7	2,4,5-Trichlorophenol	95-95-4	15	4-Chloro-3-methylphenol	59-50-7
8	3,4,5-Trichlorophenol, 2,3,4-Trichlorophenol	609-19-8, 15950-66-0	16	o-Phenyphenol	90-43-7

List of Short Chain Chlorinated Paraffins :					
No.	Test Method			Reporting Limit	Unit
1	With reference to International Standard ISO 12010. (For Wastewater)			0.0004	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Short Chain Chlorinated Paraffins	85535-84-8	-	-	-

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List of Heavy Metals :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 3015A and with reference to U. S. EPA 6020A./ With reference to U. S. EPA 7196A./ With reference to APHA 4500 CN- C:2012 & APHA 4500 CN- E:2012 (For Wastewater)			Cd: 0.0001; Hg: 0.00005; CN : 0.02 Each (Others): 0.001	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Arsenic (As)	Various	8	Copper (Cu)	Various
2	Cadmium (Cd)		9	Zinc (Zn)	
3	Mercury (Hg)		10	Chromium (Cr)	
4	Lead (Pb)		11	Manganese (Mn)	
5	Antimony (Sb)		12	Chromium VI (Cr VI)	
6	Cobalt (Co)		13	Tin (Sn)	
7	Nickel (Ni)		14	Cyanide (CN)	

List of Alkylphenols & Alkylphenol Ethoxylates :					
No.	Test Method			Reporting Limit	Unit
1	With reference to ASTM International Standard ASTM D7065. (For Wastewater)			Each (OP & NP): 0.001; Each (OPEO & NPEO): 0.005	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenol (OP)	Various	5	Octylphenol monoethoxylates, OP2EO	Various
2	Nonylphenol (NP)		6	Nonylphenol monoethoxylates, NP2EO	
3	Octylphenol monoethoxylates, OP1EO		7	Octylphenolethoxylates, (n=4 to n=15)	
4	Nonylphenol monoethoxylates, NP1EO		8	Nonylphenolethoxylates, (n=4 to n=15)	

List of Perfluorinated Chemicals :					
No.	Test Method			Reporting Limit	Unit
1	In house method and analysis by Liquid Chromatograph Mass Spectrometer (LC-MS). (For Wastewater)			Each: 0.00001	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Perfluorooctanoic acid (PFOA)	335-67-1	4	Perfluorohexane sulphonates (PFHxS)	3871-99-6
2	Perfluorooctane sulphonates (PFOS)	2795-39-3	5	Perfluorobutanoic acid (PFBA)	375-22-4
3	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	6	Perfluorobutane sulphonates (PFBS)	29420-49-3

Note / Key :

ppm = part(s) per million

U. S. EPA = United States Environmental Protection Agency

APHA = American Public Health Association



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APPENDIX B

	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE FOR 11 PRIORITY CHEMICALS		CPSD-AN-00613-DATA 04
	Issue Date:	14-Dec-15	
	Version No.:	6	
	Business Line:	<i>Analytical</i>	

General Data

Laboratory Sample Number _____

Client Name MC 201600721-AT

Field Contact Person _____ Phone No: _____

Project (Facility Name and Address) _____

Sampling Location / Description _____

Sample Identification Zero discharge with sampling plan

Sample Type Grab sample

Name of Sampler David Lu

Discharge mode Direct discharge to environment (Specify destination: River, Sea, Stream...) OR Indirect discharge to sewage treatment plant

Date and time collected 2016/7/21 14:45PM

Factory Type Dyeing/Printing/Washing/Finishing/Other (please specify) _____

*Note: It would be selected more than one

Field Data for wastewater

Field Parameters	pH :	Temp :	Color :
Control No. of field equipment	7.64	34.6	Transparent purple

Analysis Required and Preservation Method

Factory with effluent treatment plant	Yes		No	
Sample matrix		Incoming water		
		Wastewater before treatment		
	X	Wastewater after treatment – water at discharge point		
Sampler container number				
Recording time				
Volume collected, mL				
Total volume collected	Remark: Total volumn collected must be greater than total of sample size required			
Tests	Test required	Total of sample size	Type of container	Preservation method
1. Phthalate	X	500 mL	Amber Glass, wash with nitric acid, rinse thoroughly with distilled water and dry before use	Without adding acid Store sample at 4°C
2. Brominated and chlorinated Flame retardant	X	500 mL		
3. Banned Azodyes	X	500 mL		
4. Organotin Compounds	X	500 mL		
5. SCCPs	X	500 mL		
6. Navy Blue		10 mL		

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7. Free primary aromatic amines		500 mL		
8. Dyes		500 mL		
9. Flame retardant	X	500 mL		
10. Chlorobenzenes	X	500 mL	Amber Glass, wash with nitric acid; Pre-add 6.5 mL of 2M HCl	Acidify to ~pH 2 with HCl and store sample at 4°C
11. Chlorophenols	X	500 mL		
12. APEOs/APs	X	500 mL		
13. Chlorinated Solvents	X	500 mL		Fill to full bottle without air; acidify to ~pH 2 with HCl and store sample at 4°C
14. Heavy Metals except CrVI	X	500 mL	PE, wash with nitric acid, pre-add 6.5mL of 2M HNO ₃	Acidify to pH 2 with HNO ₃ and store at 4°C
15. CrVI	X	500 mL	Amber Glass, wash with pesticide grade acetone	Fill to full bottle without air nor adding acid and store sample at 4°C
16. PFCs	X	500 mL	PE, wash with pesticide grade Acetone;	Without adding acid Store sample at 4°C
17. Cyanide	X	500 mL	Amber Glass, wash with pesticide grade acetone	Adjust pH 12 with 50% NaOH and store at 4°C

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Field Data for Sludge

Field Parameters:	pH :	Temp :	Color :
Control No. of field equipment			

Analysis Required and Preservation Method

Factory with effluent treatment plant	Yes		No	
Sample matrix	Sludge in clarifier (sedimentation tank)			
Sampler container number				
Recording time				
Tests	Test required	Total of sample size	Type of container	Preservation method
1. Phthalate		10 g	Amber Glass, wash with nitric acid	Fill to full bottle without air and store at 4oC
2. Brominated and chlorinated Flame retardant		10 g		
3. Banned Azodyes		10 g		
4. Organotin Compounds		10 g		
5. Chlorobenzenes		10 g		
6. Chlorophenols		10 g		
7. SCCPs		10 g		
8. APEOs/APs		10 g		
9. Dyes		10 g		
10. Flame retardant		10 g		
11. Heavy Metals except CrVI		10 g	PE, wash with nitric acid	Fill to full bottle without air and store at 4oC
12. CrVI		10 g	Amber Glass, wash with pesticide grade acetone	Fill to full bottle without adding acid and store at 4oC
13. Chlorinated Solvents		10 g		
14. PFCs		10 g	PE, wash with pesticide grade acetone	Fill to full bottle without air and store at 4oC
15. Cyanide		50g	Amber Glass, wash with pesticide grade acetone	Adjust pH 12 with 50% NaOH and store at 4oC

C/N AY/JK