TEST REPORT

Technical Report	**(7222)117-0158**	June 23rd,2022
Date Received	June 3rd ,2022	Page 1 of 26

Factory Company Name：	GIZA SPINNING AND WEAVING COMPANY
Factory Address:	KAFR HAKIM, KERDASA, 12875 GIZA/EGYPT
Project No.:	N/A
Client Reference No.:	N/A
Sampling Method:	I001) Incoming water – Grab I002) Raw Wastewater – 6 hours - Time – weighted Composite I003) Treated Wastewater – 6 hours - Time – weighted Composite
Sample Pick Up Date:	May 30th,2022
Wastewater Discharge to:	Municipal ETP
On-Site Effluent Treatment Plant (ETP):	Yes
Discharge Type:	Indirect Discharge
Off-site ETP name (if applicable):	Abu Rawash Station ETB
Off-site ETP address (if applicable):	Abu Rawash – Giza – Egypt
Local Regulation: / Ordinance / requirements related to wastewater discharged are followed:	Fees In exchange for the burdens of treating wastewater for industrial facilities in accordance to Ministerial Resolution No. 44 of 2000. (See Appendix D)
Permit Validation Date:	The permit could not be validated
Parameters Exceeded Local Regulation	N/A
Legal compliance:	Comply
Conventional Parameters Overall Category:	Comply with discharge license criteria
Test Period:	June 3rd,2022- June 22nd,2022
Sample Description:	I001) Colorless liquid – Incoming water I002) Dark Red liquid– Raw Wastewater I003) Light Yellow/Light Blue liquid – Treated Wastewater
Parameters exceeded maximum holding time:	N/A

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Consumer Products Services, Inc.
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REMARK1: Analysis of Table-1A conventional parameters, except pH, temperature, heavy metals, coliform have subcontracted to local accredited laboratories. (Accreditation number no: AB-0363-T AB-0012-T AB-0241-T)

REMARK2: Please refer to discharge criteria of the offsite ETP attached at the end of this report.

REMARK

If there are questions or concerns on this report, please contact the following persons:

General enquiry and invoicing	Kerem Can	Kerem.can@bureauveritas.com
Technical enquiry-Chemical	Ayca Cevikus	Ayca.cevikus@bureauveritas.com

This report shown the test result of the auxiliary chemical and/or raw material samples, which collected during particular factory audit. The results of this report shall not be used for any regulatory compliance purposes.

* The sampling is agreed with client.

PREPARED BY:

Ayca Cevikus
MEA CDM &CSR Manager

Kerem Can
General Manager, CPS Turkey

Executive Summary

1A) Conventional	I001	I002	I003
Temperature	NR	NR	N/A
TSS			☐
COD			☐
Total-N			N/A
pH Value			☐
Color [m^{-1}] (436nm; 525nm; 620nm)			N/A
BOD_5			☐
Ammonium-N			N/A
Total-P			N/A
AOX			N/A
Oil and Grease			☐
Phenol			N/A
Coliform			N/A
Persistent Foam			N/A
ANIONS - Cyanide			N/A
ANIONS - Sulfide			N/A
ANIONS - Sulfite			N/A
1B) Conventional Parameters – METALS	N/A	N/A	N/A

Note / Key :
- ☐ – Meet discharge license criteria
- ■ – Exceeding discharge license criteria
- NR – Not Requested / Not required
- N/A – Not Applicable

ZDHC MRSL Substances	I001	I002	I003
2A) APs and APEOs	NR	o	o
2B) Chlorobenzenes and Chlorotoluenes	NR	o	o
2C) Chlorophenols	NR	o	o
2D) Azo Dyes	NR	o	o
2E) Carcinogenic Dyes	NR	o	o
2F) Disperse Dyes	NR	o	o
2G) Flame Retardants	NR	o	o
2H) Glycols	NR	o	o
2I) Halogenated Solvents	NR	o	o
2J) Organotin Compounds	NR	o	o
2K) Perfluorinated and Polyfluorinated	NR	o	o
2L) Phthalates	o	●	o
2M) Poly Aromatic Hydrocarbons	NR	o	o
2N) Volatile Organic Compounds	NR	o	o

Note / Key :
- ● – Detected
- o – Not Detected
- NR – Not Requested
- N/A – Not Applicable

Objective

The environment samples were tested for below parameters.

1A) Conventional Parameters
1B) Conventional Parameters – METALS
2A) APs and APEOs
2B) Chlorobenzenes and Chlorotoluenes
2C) Chlorophenols
2D) Azo Dyes
2E) Carcinogenic Dyes
2F) Disperse Dyes
2G) Flame Retardants
2H) Glycols
2I) Halogenated Solvents
2J) Organotin Compounds
2K) Perfluorinated and Polyfluorinated Chemicals
2L) Phthalates
2M) Poly Aromatic Hydrocarbons
2N) Volatile Organic Compounds

Sampling Plan

Basically, three environment samples were sampled per factory, including 1) Incoming water; 2) Raw Wastewater and 3) Discharged Wastewater (treated wastewater). Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite grab samples (agreed with client.). Composite sampling shall be performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample shall be of equal volume. Wastewater and freshwater samples should, as much as possible, be collected simultaneously, during the time that PU is in normal operation. The sampling shall aim to analyse the snapshot of water quality characteristics of the operating PU. Under no circumstance shall samples be taken during times when the production process is not running or the wastewater is diluted due to heavy rainfall, etc.

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.
- Field data records are attached in Appendix C.

Test Result

1A) Conventional Parameters

Temperature

Test Method : Measurement by U. S. EPA170.1

Tested Item(s)	Result	Unit	Conclusion
I003	▲5.1 / max. 32.3 °C	deg. C	DATA

Note:

deg. C = degree Celsius (°C)

Discharge License Criteria: Not Applicable

Total Suspended Solids (TSS)

Test Method : Reference to APHA 2540 D

Tested Item(s)	Result	Unit	Conclusion
I003	8 (Comply with discharge license)	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria:3000 mg/L

Chemical Oxygen Demand (COD)

Test Method : Reference to APHA 5220 D

Tested Item(s)	Result	Unit	Conclusion
I003	213.5 (Comply with discharge license)	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: 5000 mg/L

Total Nitrogen (Total-N)

Test Method : Reference to APHA 4500-Norg:B, SM 4500-NO3:E

Tested Item(s)	Result	Unit	Conclusion
I003	8.38	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not applicable

pH Value

Test Method : Reference to U. S. EPA 150.1

-	**Unit**	**Result**
Test Item(s)	-	I003
Parameter	-	-
Temp. of sample	deg. C	25
pH value of sample	-	7 (Comply with discharge license)
Conclusion	-	DATA

Note:

Temp. = Temperature deg. C = degree Celsius (°C)

Discharge License Criteria: 6-9.5

Color [m^{-1}] (436nm; 525nm; 620nm)

Test Method : With reference to ISO 7887-B

Tested Item(s)	**Result**	**Unit**	**Conclusion**
I003	1.5;0.8;1	m^{-1}	DATA

Note:

Discharge License Criteria: Not Applicable

Biochemical Oxygen Demand (BOD_5)

Test Method : Reference to APHA 5210B (5 days)

Tested Item(s)	**Result**	**Unit**	**Conclusion**
I003	59.2 (Comply with discharge license)	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: 2000 mg/L

Ammonium Nitrogen

Test Method : Reference to APHA 4500 NH_3 B,F

Tested Item(s)	**Result**	**Unit**	**Conclusion**
I003	3.91	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not Applicable

Total Phosphorus (Total-P)

Test Method : Reference to APHA 4500-P B,C

Tested Item(s)	Result	Unit	Conclusion
I003	0.68	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not applicable

Adsorbable Organic Halogens (AOX)

Test Method : Reference to ISO 9562

Tested Item(s)	Result	Unit	Conclusion
I003	0.29	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not Applicable

Oil and Grease

Test Method : Reference to ISO 9377-2

Tested Item(s)	Result	Unit	Conclusion
I003	<0.003 (Comply with discharge license)	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: 1000 mg/L

Phenol

Test Method : Reference to APHA 5530 B, D

Tested Item(s)	Result	Unit	Conclusion
I003	<0.1	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not Applicable

Coliform

Test Method : Reference to ISO 9308-1

Tested Item(s)	Result	Unit	Conclusion
I003	500	bacteria/ 100 mL	DATA

Note:
bacteria/100 mL = bacteria per 100 milliliters
Discharge License Criteria: Not Applicable

Remark: Due to the colonies is huge, result of coliform content is base on sample having dilution factor 100 times

Persistent Foam

Test Method : Visual

Tested Item(s)	Result	Unit	Conclusion
I003	No foam	-	DATA

Discharge License Criteria: Not Applicable

ANIONS - Cyanide

Test Method : Reference to APHA 4500-CN C/ APHA 4500-CN E

Tested Item(s)	Result	Unit	Conclusion
I003	<0.01	mg/L	DATA

Note:
mg/L = milligram per liter

Discharge License Criteria: Not Applicable

ANIONS - Sulfide

Test Method : Reference to APHA 4500 S^{2-}D

Tested Item(s)	Result	Unit	Conclusion
I003	0.099	mg/L	DATA

Note:
mg/L = milligram per liter

Discharge License Criteria: Not Applicable

ANIONS - Sulfite

Test Method : Reference to SM 4500-SO3-2 C

Tested Item(s)	Result	Unit	Conclusion
I003	0.29	mg/L	DATA

Note:

mg/L = milligram per liter

Discharge License Criteria: Not Applicable

1B) Conventional Parameters – METALS

Heavy Metals	**I001** ***(mg/L)***	**I002** ***(mg/L)***	**I003** ***(mg/L)***
Antimony(Sb) Discharge License Criteria: Not applicable	ND	0.006	0.0306
Chromium(Cr), total Discharge License Criteria: Not applicable	ND	0.0128	0.001
Cobalt(Co) Discharge License Criteria: Not applicable	ND	ND	ND
Copper(Cu) Discharge License Criteria: Not applicable	ND	0.1023	0.011
Nickel (Ni) Discharge License Criteria: Not applicable	0.001	0.007	0.0051
Silver (Ag) Discharge License Criteria: Not applicable	ND	ND	ND
Zinc(Zn) Discharge License Criteria: Not applicable	ND	0.1613	0.0546
Arsenic (As) Discharge License Criteria: Not applicable	ND	0.0023	ND
Cadmium(Cd) Discharge License Criteria: Not applicable	ND	ND	ND
Chromium VI(CrVI) Discharge License Criteria: Not applicable	ND	ND	ND
Lead(Pb) Discharge License Criteria: Not applicable	0.0016	0.0018	ND
Mercury (Hg) Discharge License Criteria: Not applicable	ND	ND	ND

2L) Phthalates

Phthalates	**I001** ***(µg/L)***	**I002** ***(µg/L)***	**I003** ***(µg/L)***
Butyl benzyl phthalate (BBP)	ND	ND	ND
Dibutyl phthalate (DBP)	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	ND	17	ND
Di-n-octyl phthalate (DNOP)	ND	ND	ND
Di-iso-nonyl phthalate (DINP)	ND	ND	ND
Di-iso-decyl phthalate (DIDP)	ND	ND	ND
Diethyl phthalate (DEP)	ND	ND	ND
Di-n-propyl phthalate (DPRP)	ND	ND	ND
Di-iso-butyl phthalate (DIBP)	ND	ND	ND
Di-cyclohexyl phthalate (DCHP)	ND	ND	ND
Di-n-hexyl phthalate (DnHP)	ND	ND	ND
Dinonyl phthalate (DNP)	ND	ND	ND
Di-iso-octyl phthalate (DIOP)	ND	ND	ND
Dimethoxyethyl phthalate (DMEP)	ND	ND	ND
1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	ND	ND	ND
1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	ND	ND	ND

Others Priority Chemical Groups

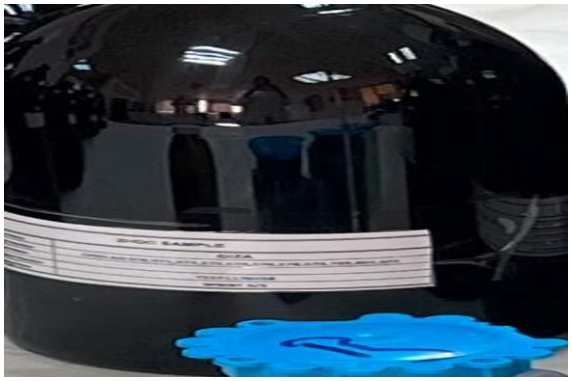
	I001 ***(ug/L)***	**I002** ***(ug/L)***	**I003** ***(ug/L)***
2A) APs and APEOs	NR	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	NR	ND	ND
2C) Chlorophenols	NR	ND	ND
2D) Azo Dyes	NR	ND	ND
2E) Carcinogenic Dyes	NR	ND	ND
2F) Disperse Dyes	NR	ND	ND
2G) Flame Retardants	NR	ND	ND
2H) Glycols	NR	ND	ND
2I) Halogenated Solvents	NR	ND	ND
2J) Organotin Compounds	NR	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	NR	ND	ND
2M) Poly Aromatic Hydrocarbons	NR	ND	ND
2N) Volatile Organic Compounds	NR	ND	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 ppb as unit.
- ppm = part(s) per million; ppb = part(s) per billion.
- NR-Not Requested

APPENDIX A - Photo of the Sample/ Sampling Location

I001) Sampling Point N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″	I001) Sampling Point Surrounding Environment N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″
	
I001) All sampled bottles with label	I001) pH value
	
I001) Sample for Phthalate Testing	I001) Packaging
	

I002) Sampling Point N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″ 	I002) Sampling Point Surrounding Environment N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″ 
I002) All sampled bottles with label 	I002) pH value 
I002) Sample for Phthalate Testing 	I002) Packaging 

I003) Sampling Point N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″	I003) Sampling Point Surrounding Environment N/S 30° 4′ 59.10″ E/W 31° 6′ 54.63″
	
I003) All sampled bottles with label	I003) pH value
	
I003) Sample for Phthalate Testing	I003) Packaging
	

APPENDIX B

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
2A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Nonylphenol NP, mixed isomers	Various (incl. 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3)	5	0.4	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS) OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2) APEO 1-18
	Octylphenol OP, mixed isomers	Various (incl. 140-66-9, 1806-26-4, 27193-28-8)	5	0.4	
	Octylphenol ethoxylates (OPEO)	Various (incl. 9002-93-1, 9036-19-5, 68987-90-6)	5	0.4	
	Nonylphenol ethoxylates (NPEO)	Various (inc. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0)	5	0.4	
2B. Chlorobenzenes and Chlorotoluenes	Monochlorobenzene	108-90-7	0.2	0.2	USEPA 8260B,8270D. Dichloromethane extraction followed by GC/MS
	1,2-Dichlorobenzene	95-50-1	0.2	0.2	
	1,3-Dichlorobenzene	541-73-1	0.2	0.2	
	1,4-Dichlorobenzene	106-46-7	0.2	0.2	
	1,2,3-Trichlorobenzene	87-61-6	0.2	0.2	
	1,2,4-Trichlorobenzene	120-82-1	0.2	0.2	
	1,3,5-Trichlorobenzene	108-70-3	0.2	0.2	
	1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	0.2	
	1,2,3,5-Tetraclorobenzene	634-90-2	0.2	0.2	
	1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	0.2	
	Pentachlorobenzene	608-93-5	0.2	0.2	
	Hexachlorobenzene	118-74-1	0.2	0.2	
	2-Chlorotoluene	95-49-8	0.2	0.2	
	3-Chlorotoluene	108-41-8	0.2	0.2	
	4-Chlorotoluene	106-43-4	0.2	0.2	
	2,3-Dichlorotoluene	32768-54-0	0.2	0.2	
	2,4-Dichlorotoluene	95-73-8	0.2	0.2	
	2,5-Dichlorotoluene	19398-61-9	0.2	0.2	
	2,6-Dichlorotoluene	118-69-4	0.2	0.2	
	3,4-Dichlorotoluene	95-75-0	0.2	0.2	
	3,5-Dichlorotoluene	25186-47-4	0.2	0.2	
	2,3,4-Trichlorotoluene	7359-72-0	0.2	0.2	
	2,3,6-Trichlorotoluene	2077-46-5	0.2	0.2	
	2,4,5-Trichlorotoluene	6639-30-1	0.2	0.2	
	2,4,6-Trichlorotoluene	23749-65-7	0.2	0.2	
	3,4,5-Trichlorotoluene	21472-86-6	0.2	0.2	
	2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.2	
	2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.2	
	2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.2	
	Pentachlorotoluene	877-11-2	0.2	0.2	
2C. Chlorophenols	2-Chlorophenol	95-57-8	0.5	0.05	USEPA 8270 D Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC/MS
	3-Chlorophenol	108-43-0	0.5	0.05	
	4-Chlorophenol	106-48-9	0.5	0.05	
	2,3-Dichlorophenol	576-24-9	0.5	0.05	
	2,4-Dichlorophenol	120-83-2	0.5	0.05	
	2,5-Dichlorophenol	583-78-8	0.5	0.05	

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	2,6-Dichlorophenol	87-65-0	0.5	0.05	
	3,4-Dichlorophenol	95-77-2	0.5	0.05	
	3,5-Dichlorophenol	591-35-5	0.5	0.05	
	2,3,4-Trichlorophenol	15950-66-0	0.5	0.05	
	2,3,5-Trichlorophenol	933-78-8	0.5	0.05	
	2,3,6-Trichlorophenol	933-75-5	0.5	0.05	
	2,4,5-Trichlorophenol	95-95-4	0.5	0.05	
	2,4,6-Trichlorophenol	88-06-2	0.5	0.05	
	3,4,5-Trichlorophenol	609-19-8	0.5	0.05	
	2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	0.05	
	2,3,4,6-Tetrachlorophenol	58-90-2	0.5	0.05	
	2,3,5,6-Tetrachlorophenol	935-95-5	0.5	0.05	
	Pentachlorophenol (PCP)	87-86-5	0.5	0.05	
2D. Dyes - Azo (Forming Restricted Amines)	4,4`-Methylene-bis-(2-chloro-aniline)	101-14-4	0.1	0.2	EN 14362. Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC/MS
	4,4'-methylenedianiline	101-77-9	0.1	0.2	
	4,4`-Oxydianiline	101-80-4	0.1	0.2	
	4-Chloroaniline	106-47-8	0.1	0.2	
	3,3`-Dimethoxybenzidine	119-90-4	0.1	0.2	
	3,3`-Dimethylbenzidine	119-93-7	0.1	0.2	
	6-methoxy-m-toluidine (p-Cresidine)	120-71-8	0.1	0.2	
	2,4,5-Trimethylaniline	137-17-7	0.1	0.2	
	4,4`-Thiodianiline	139-65-1	0.1	0.2	
	4-Aminoazobenzene	60-09-3	0.1	0.2	
	4-Methoxy-m-phenylenediamine	615-05-4	0.1	0.2	
	4,4`-Methylene-di-o-toluidine	838-88-0	0.1	0.2	
	2,6-Xylidine	87-62-7	0.1	0.2	
	o-Anisidine	90-04-0	0.1	0.2	
	2-Naphthylamine	91-59-8	0.1	0.2	
	3,3`-Dichlorobenzidine	91-94-1	0.1	0.2	
	4-Aminodiphenyl	92-67-1	0.1	0.2	
	Benzidine	92-87-5	0.1	0.2	
	o-Toluidine	95-53-4	0.1	0.2	
	2,4-Xylidine	95-68-1	0.1	0.2	
	4-Chloro-o-toluidine	95-69-2	0.1	0.2	
	4-Methyl-m-phenylenediamine	95-80-7	0.1	0.2	
	o-Aminoazotoluene	97-56-3	0.1	0.2	
	5-nitro-o-toluidine	99-55-8	0.1	0.2	
2E. Dyes-Carcionogenic or Equivalent Concern	C.I. Direct Black 38	1937-37-7	500	10	Liquid Extraction LC/MS
	C.I. Direct Blue 6	2602-46-2	500	10	
	C.I. Acid Red 26	3761-53-3	500	10	
	C.I. Basic Red 9	569-61-9	500	10	
	C.I. Direct Red 28	573-58-0	500	10	
	C.I. Basic Violet 14	632-99-5	500	10	
	C.I. Disperse Blue 1	2475-45-8	500	10	
	C.I. Disperse Blue 3	2475-46-9	500	10	
	C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	500	10	
	C.I. Basic Green 4	569-64-2	500	10	

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(malachite green chloride)				
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	10	
	C.I. Basic Green 4(malachite green)	10309-95-2	500	10	
	Disperse Orange 11	82-28-0	500	10	
2F. Dyes-disperse (sensitizing)	Disperse Yellow 1	119-15-3	50	2	Liquid Extraction LC/MS
	Disperse Blue 102	12222-97-8	50	2	
	Disperse Blue 106	12223-01-7	50	2	
	Disperse Yellow 39	12236-29-2	50	2	
	Disperse Orange 37/59/76	13301-61-6	50	2	
	Disperse Brown 1	23355-64-8	50	2	
	Disperse Orange 1	2581-69-3	50	2	
	Disperse Yellow 3	2832-40-8	50	2	
	Disperse Red 11	2872-48-2	50	2	
	Disperse Red 1	2872-52-8	50	2	
	Disperse Red 17	3179-89-3	50	2	
	Disperse Blue 7	3179-90-6	50	2	
	Disperse Blue 26	3860-63-7	50	2	
	Disperse Yellow 49	54824-37-2	50	2	
	Disperse Blue 35	12222-75-2	50	2	
	Disperse Blue 124	61951-51-7	50	2	
	Disperse Yellow 9	6373-73-5	50	2	
	Disperse Orange 3	730-40-5	50	2	
	Disperse Blue 35	56524-77-7	50	2	
2G. Flame Retardants	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	5	1	ISO 22032, USEPA527 and USEPA8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
	Decabromodiphenyl ether (DecaBDE)	1163-19-5	5	1	
	Tris(2,3-dibromopropyl) phosphate (TRIS/TDBPP)	126-72-7	5	1	
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9	5	1	
	Octabromodiphenyl ether (OctaBDE)	32536-52-0	5	1	
	Bis(2,3-dibromopropyl) phosphate (BIS/BDBPP)	5412-25-9	5	1	
	Tris(aziridinyl)-phosphineoxide (TEPA)	545-55-1	5	1	
	Polybromobiphenyls (PBBs)	59536-65-1	5	1	
	Tetrabromobisphenol A (TBBPA)	79-94-7	5	1	
	Hexabromocyclododecane (HBCDD)	3194-55-6	5	1	
	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	5	1	
	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	5	1	
	Short chain chlorinated paraffins (SCCPs) (C10-C13)	85535-84-8	5	1	
2H. Glycols	Bis(2-methoxyethyl)-ether	111-96-6	50	10	US EPA 8270

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	2-ethoxyethanol	110-80-5	50	10	Liquid Extraction LC/MS
	2-ethoxyethyl acetate	111-15-9	50	10	
	Ethylene glycol dimethyl ether	110-71-4	50	10	
	2-methoxyethanol	109-86-4	50	10	
	2-methoxyethylacetate	110-49-6	50	10	
	2-methoxypropylacetate	70657-70-4	50	10	
	Triethylene glycol dimethyl ether	112-49-2	50	10	
2I. Halogenated Solvents	1,2-Dichloroethane	107-06-2	1	2	USEPA 8260B Headspace GC/MS or Purgeand-Trap-GC/MS
	Methylene Chloride	75-09-2	1	2	
	Trichloroethylene	79-01-6	1	2	
	Tetrachloroethylene	127-18-4	1	2	
2J. Organotin Compounds	Mono-, di- and tri-methyltin derivatives	Multiple	0.01	0.2	ISO 17353 Derivatisation with NaB(C2H5) GC/MS
	Mono-, di- and tri-butyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-phenyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-octyltin derivatives	Multiple	0.01	0.2	
	Monomethyltin	Multiple	0.01	0.2	
	Dimethyltin	Multiple	0.01	0.2	
	Trimethyltin	Multiple	0.01	0.2	
	Monobutyltin	Multiple	0.01	0.2	
	Dibutyltin	Multiple	0.01	0.2	
	Tributyltin	Multiple	0.01	0.2	
	Monophenyltin	Multiple	0.01	0.2	
	Diphenyltin	Multiple	0.01	0.2	
	Triphenyltin	Multiple	0.01	0.2	
	Monooctyltin	Multiple	0.01	0.2	
	Dioctyltin	Multiple	0.01	0.2	
	Trioctyltin	Multiple	0.01	0.2	
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.01	0.10	DIN 38407-42 (modified) Ionic PFC: Concentration or direct injection, LC/MS(-MS); Non-ionic PFC (FTOH): derivatisation with acetic anhydride, followed by GC/MS
	Perfluoro-n-octanoic acid (PFOA)	335-67-1	0.01	0.10	
	Perfluorobutanesulfonic acid (PFBS)	29420-49-3, 29420-43-3	0.01	0.10	
	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	0.01	0.10	
	8:2 FTOH	678-39-7	1	1	
	6:2 FTOH	647-42-7	1	1	
2L. Phthalates (including all other esthers of phthalic acid)	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	2	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Dimethoxyethyl phthalate (DMEP)	117-82-8	10	2	
	Di-n-octyl phthalate (DNOP)	117-84-0	10	2	
	Di-iso-decyl phthalate (DIDP)	26761-40-0	10	2	
	Di-iso-nonyl phthalate (DINP)	28553-12-0	10	2	
	Di-n-hexyl phthalate	84-75-3	10	2	

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(DnHP)				
	Dibutyl phthalate (DBP)	84-74-2	10	2	
	Butyl benzyl phthalate (BBP)	85-68-7	10	2	
	Dinonyl phthalate (DNP)	84-76-4	10	2	
	Diethyl phthalate (DEP)	84-66-2	10	2	
	Di-n-propyl phthalate (DPRP)	131-16-8	10	2	
	Di-iso-butyl phthalate (DIBP)	84-69-5	10	2	
	Di-cyclohexyl phthalate (DCHP)	84-61-7	10	2	
	Di-iso-octyl phthalate (DIOP)	27554-26-3	10	2	
	1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	10	2	
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	2	
2M. Poly Aromatic Hydrocarbons (PaHs)	Benzo[a]pyrene (BaP)	50-32-8	1	0.2	DIN 38407-39 Solvent extraction GC/MS
	Anthracene	120-12-7	1	0.2	
	Pyrene	129-00-0	1	0.2	
	Benzo[ghi]perylene	191-24-2	1	0.2	
	Benzo[e]pyrene	192-97-2	1	0.2	
	Indeno[1,2,3-cd]pyrene	193-39-5	1	0.2	
	Benzo[j]fluoranthene	205-82-3	1	0.2	
	Benzo[b]fluoranthene	205-99-2	1	0.2	
	Fluoranthene	206-44-0	1	0.2	
	Benzo[k]fluoranthene	207-08-9	1	0.2	
	Acenaphthylene	208-96-8	1	0.2	
	Chrysene	218-01-9	1	0.2	
	Dibenz[a,h]anthracene	53-70-3	1	0.2	
	Benzo[a]anthracene	56-55-3	1	0.2	
	Acenaphthene	83-32-9	1	0.2	
	Phenanthrene	85-01-8	1	0.2	
	Fluorene	86-73-7	1	0.2	
	Naphthalene	91-20-3	1	0.2	
2N. Volatile Organic Compound (VOCs)	Benzene	71-43-2	1	2	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS
	Xylene	1330-20-7	1	2	
	o-cresol	95-48-7	1	2	
	p-cresol	106-44-5	1	2	
	m-cresol	108-39-4	1	2	
1A. Conventional Parameters	Temperature	—	N/A	N/A	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels
	TSS	—	N/A	N/A	
	COD	—	N/A	N/A	
	Total-N	—	N/A	N/A	
	pH	—	N/A	N/A	
	Color [m^{-1}] (436nm; 525nm; 620nm)	—	N/A	N/A	
	BOD5	—	N/A	N/A	

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg) /(ppm)	
	Ammonium-N	–	N/A	N/A	(Foundational, Progressive, and Aspirational). Cyanide: With reference to APHA 4500 CN—B,C&E and followed by UV analysis
	Total-P	–	N/A	N/A	
	AoX	–	N/A	N/A	
	Oil and Grease	–	N/A	N/A	
	Phenol	–	N/A	N/A	
	Coliform(bacteria/100ml)	–	N/A	N/A	
	Persistent Foam	–	Not visible	Not visible	
	ANIONS				
	Cyanide(CN-)	Various (incl. 57-12-5)	0.02	1	
	Sulfide	–	N/A	N/A	
	Sulfite	–	N/A	N/A	
Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (mg/L) / (ppm)	Sludge (mg/kg) / (ppm)	
1B. Conventional Parameters - **METALS**	Antimony(Sb)	7440-36-0	0.001	N/A	Various Acid Digestion with ICP analysis please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Foundational, Progressive, and Aspirational). Cr(VI): Various Solvent extraction and derivatisation followed by UV analysis
	Chromium(Cr), total	7440-47-3	0.001	N/A	
	Cobalt(Co)	7440-48-4	0.001	N/A	
	Copper(Cu)	7440-50-8	0.001	N/A	
	Nickel (Ni)	7440-02-0	0.001	N/A	
	Silver (Ag)	7440-22-4	0.001	N/A	
	Zinc(Zn)	7440-66-6	0.001	N/A	
	Arsenic (As)	7440-38-2	0.001	2	
	Cadmium(Cd)	7440-43-9	0.0001	2	
	Chromium VI(CrVI)	18540-29-9	0.001	2	
	Lead(Pb)	7439-92-1	0.001	2	
	Mercury (Hg)	7439-97-6	0.00005	0.2	
3. Conventional Parameters	Dry mass (total solids)	–	N/A	N/A	US EPA 160.3 / 209A

Note / Key :

ppm = part(s) per million; ppb = part(s) per billion
U. S. EPA = United States Environmental Protection Agency
APHA = American Public Health Association

APPENDIX C – Onsite Field Data Record Sheet

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

General Data

Laboratory Sample Number:	72221170158
Client Name:	GIZA SPINNING AND WEAVING COMPANY
Field Contact Person:	Mohamed Elhindy Phone No: +20238900210 Ext 250
Project (Facility Name and Address):	KAFR HAKIM, KERDASA,12875 GIZA-EGYPT
Sampling Location / Description:	INCOMING
Sample Identification:	Zero discharge with sampling plan
Sample Type:	Grab sample
Name of Sampler:	Mr Adel Mohamed Mohamed Abou-Zeid
Discharge mode:	Direct discharge to environment (Specify destination: River, Sea, Stream…) OR Indirect discharge to sewage treatment plant
Date of collection:	30.5.2022
Factory Type:	Dyeing / Printing / Washing / Finishing / Others (please specify):
	*Note: It would be selected more than one

Field Data for Wastewater

Arrival Time:			Departure Time:						
Field Parameters	pH :		Temp : °C		Color :		Flow rate : (volume/min)		
Control No. of field equipment									
Factory with effluent treatment plant:			(Yes)			No			
Sample matrix:	x	Incoming water (If required)							
		Wastewater before treatment							
		Wastewater after treatment – water at discharge point							
Sampler container number									
	1	2	3	4	5	6	7	8	
Recording time: ID									
Recording time: Time	9:30am								
pH :	7								
Temp (°C) :	26°C								
Color (visual estimation):	Transparent								
Flow rate (volume/time)									
Volume collected, mL									
Total volume collected		Remark: Total volume collected must be greater than total of sample size required							

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	1. Phthalate	√	1000 mL total or 1000 mL each	Amber Glass,washed with nitric acid,	Without adding acid Store sample at 2-8°C
	2. Chlorobenzenes, Chlorotoluene & PAH	√			
	3. SCCPs	√			
	4. APS	√			
5. APEOs		√	100 mL		
6. Chlorophenols & Cresols		√	100 mL		
7. Flame retardant		√	500 mL		
8. Dyes		√	10 mL		
9. Glycol		√	50 mL		
10. *Pesticides			1000 mL		
11. *Nitrosamine			10 mL		
12. Banned Azodyes		√	2000 mL		
13. *Free primary aromatic amines			500 mL		
14. Organotin Compounds		√	500 mL		
15. VOC & Halogenated Solvents (Remark 6)		√	10 mL		Fill to full container without air gap; acidify to pH 2 with HCl and store sample at 2-8°C
16. PFCs (Remark 6)		√	2 mL	PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

Tests (Conventional Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	17. Total suspened solids (TSS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid;	Without adding acid Store sample at 2-8°C
	18. Total dissolved solids (TDS)				
19. 5 day Biochemical Oxygen Demand (BOD5)			1000 mL		
20. Colour			100 mL		
21. Heavy Metals except Cr(VI) & Total-P (Remark 6)		√	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO_3 and store at 2-8°C
22. Cyanide			500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% $Na_2S_2O_5$, and store sample at 2-8°C
23. Cr(VI)		√	95 mL	Amber Glass; washed with nitric acid	Filter by 0.45μm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)			150 mL		Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
25. Phenols			500 mL		
26. Oil and Grease & Total Hydrocarbon			1000 mL		
27. Formaldehyde			25 mL		Fill to full container without air gap; acidify to pH 2 with H_2SO_4 and store sample at 2-8°C
28. Sulfide (Remark 5)			50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH Store sample at 2-8°C
29. Total Coliform (Remark 6)			125 mL	PE, clean, sterile, non-reactive	Add 0.05 ml of 10% $Na_2S_2O_3$ Store sample at 2-8°C
30. Faecal Coliform (Remark 6)			125 mL		
31. Persistent foam			N.A.	Foam higher than 45 cm (visual estimation): ___Yes / No___	
32. Sulfite			100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA, 0.5g zinc acetate Store sample at 2-8°C
33. Total-N			100 mL	Amber Glass;washed with nitric acid;	Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
34. Ammonium-N			500 mL		
35. Adsorbable organically bound halogens (AOX)			100 mL		
36. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphno; Alage;			1000 mL		Without adding acid Store sample at 2-8°C
37. Sulphate			100 mL		
38. Chloride			100 mL		
39. Others:					
Observation/ Remark:					

*Remarks:

1. Individual sampling can be performed upon request
2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
3. Scope of ZDHC guideline: Parameter 1-9, 12, 14-17, 19-26, 28, 29, 31-35
   Scope of synthetic leather industry: Parameter 1-9, 12, 14-21, 23-26, 28, 30, 31, 33, 34, 37, 38
   Scope of MMCF: Parameter 5, 15, 17, 19-21, 23 - 26, 28, 33-36
   Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guidline, they are tested upon request.
4. Refer to CPSD-AN-G00019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.
5. Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
6. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by: _____ Date: _____

Full name:

Comment from factory

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in desinated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signatory of Factory Representative: Mohamed Elhady Date: 30 May, 2022

/2221170158-GIZA-incoming

Giza Spinning & Weaving

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FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

General Data

Laboratory Sample Number:	72221170158
Client Name:	GIZA SPINNING AND WEAVING COMPANY
Field Contact Person:	Mohamed Elhindy Phone No:+20238900210 Ext 250
Project (Facility Name and Address):	KAFR HAKIM, KERDASA,12875 GIZA-EGYPT
Sampling Location / Description:	BEFORE TREATMENT
Sample Identification:	Zero discharge with sampling plan
Sample Type:	Composite Sample
Name of Sampler:	Mui Adel Mohamed Mohamed Abou-Zeid
Discharge mode:	Direct discharge to environment (Specify destination: River, Sea, Stream ...) OR Indirect discharge to sewage treatment plant
Date of collection:	30.5.2022
Factory Type:	Dyeing / Printing / Washing / Finishing / Others (please specify):
	*Note: It would be selected more than one

Field Data for Wastewater

Arrival Time:			Departure Time:					
Field Parameters	pH :		Temp : °C		Color :		Flow rate : (volume/min)	
Control No. of field equipment								
Factory with effluent treatment plant:			Yes		No			
Sample matrix:		Incoming water (If required)						
	x	Wastewater before treatment						
		Wastewater after treatment – water at discharge point						
Sampler container number								
	1	2	3	4	5	6	7	8
Recording time ID								
Recording time Time	10:00 am	11:00 am	12:00 pm	1:00 pm	2:00 pm	3:00 pm		
pH	8	8	8	8	8	8		
Temp (°C)	38.1°C	38.7°C	38°C	38.3°C	38.2°C	36.8°C		
Color (visual estimation):	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red		
Flow rate (volume/time)								
Volume collected, ml.								
Total volume collected		Remark: Total volume collected must be greater than total of sample size required						

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	1. Phthalate	√	1000 mL total or 1000 mL each	Amber Glass,washed with nitric acid,	Without adding acid Store sample at 2-8°C
	2. Chlorobenzenes, Chlorotoluene & PAH	√			
	3. SCCPs	√			
	4. APS	√			
5. APEOs		√	100 mL		
6. Chlorophenols & Cresols		√	100 mL		
7. Flame retardant		√	500 mL		
8. Dyes		√	10 mL		
9. Glycol		√	50 mL		
10. *Pesticides			1000 mL		
11. *Nitrosamine			10 mL		
12. Banned Azodyes		√	2000 mL		
13. *Free primary aromatic amines			500 mL		
14. Organotin Compounds		√	500 mL		
15. VOC & Halogenated Solvents (Remark 5)		√	10 mL		Fill to full container without air gap; acidify to pH 2 with HCl and store sample at 2-8°C
16. PFCs (Remark 6)		√	2 mL	PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C

7222117/0158-GIZA-before

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FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

Tests (Conventional Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	17. Total suspened solids (TSS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid Store sample at 2-8°C
	18. Total dissolved solids (TDS)				
19. 5 day Biochemical Oxygen Demand (BOD5)			1000 mL		
20. Colour			100 mL		
21. Heavy Metals except Cr(VI) & Total-P (Remark 6)		√	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO_3 and store at 2-8°C
22. Cyanide			500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% $Na_2S_2O_3$, and store sample at 2-8°C
23. Cr(VI)		√	95 mL	Amber Glass; washed with nitric acid	Filter by 0.45µm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)			150 mL		Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
25. Phenols			500 mL		
26. Oil and Grease & Total Hydrocarbon			1000 mL		
27. *Formaldehyde			25 mL		Fill to full container without air gap; acidify to pH 2 with H_2SO_4 and store sample at 2-8°C
28. Sulfide (Remark 5)			50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH Store sample at 2-8°C
29. Total Coliform (Remark 6)			125 mL	PE, clean, sterile, non-reactive	Add 0.08 ml of 10% $Na2_S2O_3$ Store sample at 2-8°C
30. Faecal Coliform (Remark 6)			125 mL		
31. Persistent foam			N.A.	Foam higher than 45 cm (visual estimation): ___Yes / No___	
32. Sulfite			100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA, 0.5g zinc acetate Store sample at 2-8°C
33. Total-N			100 mL	Amber Glass;washed with nitric acid;	Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
34. Ammonium-N			500 mL		
35. Adsorbable organically bound halogens (AOX)			100 mL		
36. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphne; Alage;			1000 mL		Without adding acid Store sample at 2-8°C
37. Sulphate			100 mL		
38. Chloride			100 mL		
39. Others:					
Observation/ Remark:					

*Remarks:

1. Individual sampling can be performed upon request.
2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
3. Scope of ZDHC guideline: Parameter 1-9, 12, 14-17, 19-26, 28, 29, 31-35
   Scope of synthetic leather industry: Parameter 1-9, 12, 14-21, 23-26, 28, 30, 31, 33, 34, 37, 38
   Scope of MMCF: Parameter 5, 15, 17, 19-21, 23 - 26, 28, 33-36
   Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guidline, they are tested upon request.
4. Refer to CPSD-AN-G00019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.
5. Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
6. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by: Mohamed Elhady
Full name:

Date:

Comment from factory

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in desinated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signatory of Factory Representative: Mohamed Elhady
/7221117/0158 GIZA before

Date: 30 May 2022

Giza Spinning & Weaving Co. (S.A.E)

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FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

General Data

Laboratory Sample Number:	72221170158
Client Name:	GIZA SPINNING AND WEAVING COMPANY
Field Contact Person:	Mohamed Elhindy Phone No:+20238900210 Ext 250
Project (Facility Name and Address):	KAFR HAKIM, KERDASA,12875 GIZA-EGYPT
Sampling Location / Description:	AFTER TREATMENT
Sample Identification:	Zero discharge with sampling plan
Sample Type:	Composite Sample
Name of Sampler:	Mai Abd Mohamed Mohamed Abou-Zeid
Discharge mode:	Direct discharge to environment (Specify destination: River, Sea, Stream…) OR Indirect discharge to sewage treatment plant
Date of collection:	30. 5. 2022
Factory Type:	Dyeing / Printing / Washing / Finishing / Others (please specify):

*Note: It would be selected more than one

Field Data for Wastewater

Arrival Time:			Departure Time:					
Field Parameters	pH :		Temp : °C		Color :		Flow rate : (volume/min)	
Control No. of field equipment								
Factory with effluent treatment plant:		Yes			No			
Sample matrix:		Incoming water (If required)						
		Wastewater before treatment						
	x	Wastewater after treatment – water at discharge point						
Sampler container number								
	1	2	3	4	5	6	7	8
Recording time ID								
Recording time Time	10:00 am	11:00 am	12:00 Pm	1:00 Pm	2:00 Pm	3:00 Pm		
pH :	7	7	7	7	7	7		
Temp (°C) :	27.2 °C	28.9 °C	29.3 °C	31.3 °C	31.7 °C	32.3 °C		
Color (visual estimation):	light yellow	l. yellow	l. yellow	light blue	l. blue	l. blue		
Flow rate (volume/time)								
Volume collected, mL								
Total volume collected		Remark: Total volume collected must be greater than total of sample size required						

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	1. Phthalate	√	1000 mL total or 1000 mL each	Amber Glass,washed with nitric acid,	Without adding acid Store sample at 2-8°C
	2. Chlorobenzenes, Chlorotoluene & PAH	√			
	3. SCCPs	√			
	4. APS	√			
5. APEOs		√	100 mL		
6. Chlorophenols & Cresols		√	100 mL		
7. Flame retardant		√	500 mL		
8. Dyes		√	10 mL		
9. Glycol		√	50 mL		
10. *Pesticides			1000 mL		
11. *Nitrosamine			10 mL		
12. Banned Azodyes		√	2000 mL		
13. *Free primary aromatic amines			500 mL		
14. Organotin Compounds		√	500 mL		
15. VOC & Halogenated Solvents (Remark 6)		√	10 mL		Fill to full container without air gap; acidify to pH 2 with HCl and store sample at 2-8°C
16. PFCs (Remark 6)		√	2 mL	PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 14
	Business Line: Analytical

Tests (Conventional Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	17. Total suspened solids (TSS)	√	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid Store sample at 2-8°C
	18. Total dissolved solids (TDS)				
19. 5-day Biochemical Oxygen Demand (BOD5)		√	1000 mL		
20. Colour		√	100 mL		
21. Heavy Metals except Cr(VI) & Total-P (Remark 6)		√	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO_3 and store at 2-8°C
22. Cyanide		√	500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% $Na_2S_2O_3$, and store sample at 2-8°C
23. Cr(VI)		√	95 mL	Amber Glass; washed with nitric acid	Filter by 0.45μm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)		√	150 mL		Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
25. Phenols		√	500 mL		
26. Oil and Grease & Total Hydrocarbon		√	1000 mL		
27. *Formaldehyde			25 mL		Fill to full container without air gap; acidify to pH 2 with H_2SO_4 and store sample at 2-8°C
28. Sulfide (Remark 5)		√	50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH Store sample at 2-8°C
29. Total Coliform (Remark 6)		√	125 mL	PE, clean, sterile, non-reactive	Add 0.05 ml of 10% $Na_2S_2O_3$ Store sample at 2-8°C
30. Faecal Coliform (Remark 6)			125 mL		
31. Persistent foam		√	N.A.	Foam higher than 45 cm (visual estimation): ___ Yes / No ___	
32. Sulfite		√	100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA, 0.5g zinc acetate Store sample at 2-8°C
33. Total-N		√	100 mL	Amber Glass;washed with nitric acid;	Acidify to pH 2 with H_2SO_4 Store sample at 2-8°C
34. Ammonium-N		√	500 mL		
35. Adsorbable organically bound halogens (AOX)		√	100 mL		
36. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphne; Alage;			1000 mL		Without adding acid Store sample at 2-8°C
37. Sulphate			100 mL		
38. Chloride			100 mL		
39. Others					
Observation/ Remark:					

*Remarks:

1.Individual sampling can be performed upon request.

2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.

3. Scope of ZDHC guideline: Parameter 1-9, 12, 14-17, 19-26, 28, 29, 31-35

Scope of synthetic leather industry: Parameter 1-9, 12, 14-21, 23-26, 28, 30, 31, 33, 34, 37, 38

Scope of MMCF: Parameter 5, 15, 17, 19-21, 23 - 26, 28, 33-36

Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guidline, they are tested upon request.

4. Refer to CPSD-AN-G00019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.

5. Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.

6. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by: _____ Date: _____

Full name:

Comment from factory:

Acknowledgement by factory:

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in desinated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signatory of Factory Representative: Mohamed Elhindy

Date: 30 May, 2022

Giza Spinning & Weaving Co. (S.A.E.)

7222117O158-GIZA-after

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APPENDIX D – Limitation Value of Legal Requirements

جـدول رقم (٥)
مقابل أعباء معالجة صرف المنشآت الصناعية
المخالف لمعايير القرار الوزارى رقم ٤٤ لسنة ٢٠٠٠

الملوثـــات	التركيزات (جرام/م٣)	مقابل أعباء التنقية (جنيه / م٣)	مهلة توفيق الأوضاع
الأكسجين الحيوى	أكبر من ٦٠٠ – أقل من ٦٦٠	٣	٦ أشهر
الممتص	٦٦٠ – أقل من ٢٠٠٠	٩	٣ أشهر
(BOD)	٢٠٠٠ فأكثر	١٨	أسبوعين
الأكسجين الكيميائى	أكبر من ١١٠٠ – أقل من ٢٠٠٠	٦	٣ أشهر
الممتص	٢٠٠٠ – أقل من ٥٠٠٠	١٨	شهرين
(COD) (*)	٥٠٠٠ فأكثر	٣٠	أسبوع

(*) عند مخالفة السيب النهائى للمنشأة الصناعية فى (BOD & COD) مجتمعين يتم تخفيض مقابل الـ COD بنسبة (٤٠٪) .

الملوثـــات	التركيزات (جرام/م٣)	مقابل أعباء التنقية (جنيه / م٣)	مهلة توفيق الأوضاع
المواد الصلبة	أكبر من ٨٠٠ – أقل من ٨٨٠	٢	٦ أشهر
العالقة	٨٨٠ – أقل من ٣٠٠٠	٥	٣ أشهر
(TSS)	٣٠٠٠ فأكثر	١٥	أسبوع
الأس الهيدروجينى	أقل من ٢ وأكبر من ١٢	٦٠	أسبوع
(PH)	من ٢ وحتى ٦ ومن ٩,٥ وحتى ١٢	٣٠	أسبوعين
الزيوت والشحوم	أكبر من ١٠٠ – أقل من ١٠٠٠	١٠	شهر
(O&G)	١٠٠٠ فأكثر	٢٥	أسبوعين