



TEST REPORT

Technical Report:**(6822)205-0170**

August 03, 2022

Date Received:

July 23, 2022

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Factory Company Name:

Pioneer Denim Limited

Factory Address:

Horitola, Shahapur Bazar, Madhabpur, Habiganj, 3333, Bangladesh.

Sampling Method:

I001) Raw Wastewater – 6 hours Time – weighted Composite

I002) Treated Wastewater – 6 hours Time – weighted Composite

Sample Pick Up Date:

July 23, 2022

Wastewater Discharge to:

Government Canal

On-Site Effluent Treatment Plant (ETP):

Yes

Discharge Type:

Direct Discharge

Off-site ETP name (if applicable):

Not Applicable

Off-site ETP address (if

Not Applicable

applicable):

Local Regulation: / Ordinance / requirements related to wastewater discharged are followed:

Not Applicable

Permit Validation Date:

Not Applicable

Parameters Exceeded Local Regulation

Not Applicable

Legal compliance:

Not Applicable

Conventional Parameters:

Foundational

MRSL Parameters:

Not Detected

Test Period:

July 24, 2022 To August 03, 2022

Sample Description:

I001) Blue color liquid - Raw Wastewater

I002) Brownish color liquid – Treated Wastewater

Parameters exceeded maximum holding time:

Not Applicable

Bureau Veritas**Consumer Products Services (BD) Ltd.**

Plot # 130, DEPZ Extension Area

Ganakbari, Savar, Dhaka, Bangladesh

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REMARK

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

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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.

BUREAU VERITAS
CONSUMER PRODUCTS SERVICES (BANGLADESH) LTD.

MD. RASHEDUL HAQUE
MANAGER, RSL OPERATIONS



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Executive Summary

1A) Conventional Parameters	I001	I002
Temperature	NR	<input type="checkbox"/>
TSS		<input type="checkbox"/>
COD		<input type="checkbox"/>
Total-N		<input type="checkbox"/>
pH Value		<input type="checkbox"/>
Color [m ⁻¹] (436nm; 525nm; 620nm)		<input type="checkbox"/>
BOD ₅		<input type="checkbox"/>
Ammonium-N		<input type="checkbox"/>
Total-P		<input type="checkbox"/>
AOX		<input type="checkbox"/>
Oil and Grease		<input type="checkbox"/>
Phenol		<input type="checkbox"/>
Coliform		<input type="checkbox"/>
Persistent Foam		<input type="checkbox"/>
ANIONS – Cyanide		<input type="checkbox"/>
ANIONS - Sulfide		<input type="checkbox"/>
ANIONS - Sulfite		<input type="checkbox"/>
1B) Conventional Parameters –METALS	<input type="checkbox"/>	<input type="checkbox"/>

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

Note / Key :

- ☐ - Meet Foundational Limit / Meet discharge license criteria
- ☒ - Exceed Foundational Limit / Exceed discharge license criteria
- NR - Not Requested / Not required
- D - Detected
- ND - Not Detected
- NA - Not Applicable



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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) Polycyclic Aromatic Hydrocarbons
- 2N) Volatile Organic Compounds

Sampling Plan

Two environment samples were sampled per factory, including I001) Discharged Wastewater (Raw wastewater) and I002) 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 refers to ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan
- Field data records are attached in Appendix C.



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Test Result

1A) Conventional Parameters

Temperature

Test Method : Measurement by thermometer

Tested Item(s)	Result	Unit	Conclusion
I002	34.6 (Foundational)	deg. C	DATA

Note:

deg. C = degree Celsius (°C)

Foundational Limit: ▲ 15 / max. 35°C; Progressive Limit: ▲ 10 / max. 30°C; Aspirational Limit: ▲ 5 / max. 25°C

Total Suspended Solids (TSS)

Test Method : Reference to APHA 2540D, GB 11901, ISO 11923

Tested Item(s)	Result	Unit	Conclusion
I002	4 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 50 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Chemical Oxygen Demand (COD)

Test Method : Reference to APHA 5220 D

Tested Item(s)	Result	Unit	Conclusion
I002	29 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 150 mg/L; Progressive Limit: 80 mg/L; Aspirational Limit: 40 mg/L

Total Nitrogen (Total-N)

Test Method : Reference to APHA 4500- N-C

Tested Item(s)	Result	Unit	Conclusion
I002	4.20 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 20 mg/L; Progressive Limit: 10 mg/L; Aspirational Limit: 5 mg/L



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pH Value

Test Method : Reference to EPA 150.2

-	Unit	Result
Test Item(s)	-	I002
Parameter	-	-
Temp. of sample	deg. C	21.6
pH value of sample	-	7.5 (Comply with ZDHC WWG requirements)
Conclusion	-	DATA

Note:

Temp. = Temperature
Limit: 6 - 9

deg. C = degree Celsius (°C)

Color [m⁻¹] (436nm; 525nm; 620nm)

Test Method : Reference to ISO 7887: 2011(E), B

Tested Item(s)	Result	Unit	Conclusion
I002	1.6; 0.7; 0.4 (Aspirational)	m ⁻¹	DATA

Note:

Foundational Limit: 7;5;3 m⁻¹; Progressive Limit: 5;3;2 m⁻¹; Aspirational Limit: 2;1;1 m⁻¹

Biochemical Oxygen Demand (BOD₅)

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

Tested Item(s)	Result	Unit	Conclusion
I002	8 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 30 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Ammonium Nitrogen

Test Method : Reference to APHA 4500-NH₃ – B & F 22nd Edition 2012

Tested Item(s)	Result	Unit	Conclusion
I002	0.31 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 10 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.5 mg/L



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Total Phosphorus (Total-P)

Test Method : Reference to APHA 22nd Edition -4500-P.E (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	0.32 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 3 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.1 mg/L

Adsorbable Organic Halogen (AOX)

Test Method : Reference to ISO 9562

Tested Item(s)	Result	Unit	Conclusion
I002	0.82 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.1 mg/L

Oil and Grease

Test Method : Reference to EPA 1664B, APHA-5520 B and F

Tested Item(s)	Result	Unit	Conclusion
I002	1.3 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 10 mg/L; Progressive Limit: 2 mg/L; Aspirational Limit: 0.5 mg/L

Phenol

Test Method : Reference to APHA 5530 C

Tested Item(s)	Result	Unit	Conclusion
I002	0.003 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 0.5 mg/L; Progressive Limit: 0.01 mg/L; Aspirational Limit: 0.001 mg/L

Coliform

Test Method : Reference to ISO 9308-1: 2014

Tested Item(s)	Result	Unit	Conclusion
I002	197 (Foundational)	Bacteria / 100 mL	DATA

Note:

bacteria/100 mL = bacteria per 100 milliliters

Foundational Limit: 400 / 100 ml; Progressive Limit: 100 / 100 ml; Aspirational Limit: 25 / 100 ml;



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Persistent Foam

Test Method : Visual

Tested Item(s)	Result	Unit	Conclusion
I002	No Foam (Comply with ZDHC WWG requirements)	-	DATA

ANIONS - Cyanide

Test Method : Reference to APHA 22nd Edition-4500-CN. C&E (2012), EPA 9010C, 9013 & 9014
(Wastewater & sludge)

Tested Item(s)	Result	Unit	Conclusion
I002	ND (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter ND = Not detected

Foundational Limit: 0.2 mg/L; Progressive Limit: 0.1 mg/L; Aspirational Limit: 0.05 mg/L

ANIONS - Sulfide

Test Method : Reference to APHA 4500-S²-D

Tested Item(s)	Result	Unit	Conclusion
I002	<0.1 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 0.5 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L

ANIONS - Sulfite

Test Method : Reference to EPA 377.1, APHA 4500-SO₃²⁻ (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	1.0 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 2 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.2 mg/L



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1B) Conventional Parameters – METALS

Parameter	I001 (mg/L)	I002 (mg/L)
Antimony (Sb) Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L	ND (Aspirational)	ND (Aspirational)
Chromium (Cr), total Direct Discharge Limit: Foundational 0.2 mg/L; Progressive 0.1 mg/L; Aspirational 0.05 mg/L	0.003 (Aspirational)	ND (Aspirational)
Cobalt (Co) Direct Discharge Limit: Foundational 0.05 mg/L; Progressive 0.02 mg/L; Aspirational 0.01 mg/L	ND (Aspirational)	ND (Aspirational)
Copper (Cu) Direct Discharge Limit: Foundational 1 mg/L; Progressive 0.5 mg/L; Aspirational 0.25 mg/L	0.025 (Aspirational)	ND (Aspirational)
Nickel (Ni) Direct Discharge Limit: Foundational 0.2 mg/L; Progressive 0.1 mg/L; Aspirational 0.05 mg/L	0.001 (Aspirational)	ND (Aspirational)
Silver (Ag) Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.005 mg/L	ND (Aspirational)	ND (Aspirational)
Zinc (Zn) Direct Discharge Limit: Foundational 5 mg/L; Progressive 1 mg/L; Aspirational 0.5 mg/L	0.05 (Aspirational)	ND (Aspirational)
Arsenic (As) Direct Discharge Limit: Foundational 0.05 mg/L; Progressive 0.01 mg/L; Aspirational 0.005 mg/L Sludge Limit: 2 mg/kg	ND (Aspirational)	0.001 (Aspirational)
Cadmium (Cd) Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L Sludge Limit: 2 mg/kg	ND (Aspirational)	ND (Aspirational)



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Parameter	I001 (mg/L)	I002 (mg/L)
Chromium VI (CrVI) Direct Discharge Limit: Foundational 0.05 mg/L; Progressive 0.005 mg/L; Aspirational 0.001 mg/L Sludge Limit: 2 mg/kg	ND (Aspirational)	ND (Aspirational)
Lead (Pb) Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L Sludge Limit: 2 mg/kg	ND (Aspirational)	ND (Aspirational)
Mercury (Hg) Direct Discharge Limit: Foundational 0.01 mg/L; Progressive 0.005 mg/L; Aspirational 0.001 mg/L Sludge Limit: 2 mg/kg	ND (Aspirational)	ND (Aspirational)



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Others Priority Chemical Groups

	1001 (µg/L)	1002 (µg/L)
2A) APs and APEOs	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	ND	ND
2C) Chlorophenols	ND	ND
2D) Azo Dyes	ND	ND
2E) Carcinogenic Dyes	ND	ND
2F) Disperse Dyes	ND	ND
2G) Flame Retardants	ND	ND
2H) Glycols	ND	ND
2I) Halogenated Solvents	ND	ND
2J) Organotin Compounds	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	ND	ND
2L) Phthalates	ND	ND
2M) Polycyclic Aromatic Hydrocarbons	ND	ND
2N) Volatile Organic Compounds	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in Appendix B.
- ND = Not detected (Please refer to reporting limit shown in Appendix B).

APPENDIX A - Photo of the Sample/ Sampling Location

I001) Sampling Point
(GPS Location: N 24° 22' 59.88"; E 91° 27' 29.879")



I001) Sampling Point Surrounding Environment
(GPS Location: N 24° 22' 59.88"; E 91° 27' 29.879")



I001) All sampled bottles with label



I001) pH value



I001) Sample for Phthalate Testing



I001) Packaging



APPENDIX A - Photo of the Sample/ Sampling Location

I002) Sampling Point
(GPS Location: N 24° 22' 59.88"; E 91° 27' 29.879")



I002) Sampling Point Surrounding Environment
(GPS Location: N 24° 22' 59.88"; E 91° 27' 29.879")



I002) All sampled bottles with label



I002) pH value



I002) Sample for Phthalate Testing



I002) Packaging





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APPENDIX B

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
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 (incl. 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-Tetrachlorobenzene	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)	Sludge (mg/kg)	
	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- Carcinogenic 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 (malachite green chloride)	569-64-2	500	10	
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	10	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
2F. Dyes-disperse (sensitizing)	C.I. Basic Green 4(malachite green)	10309-95-2	500	10	Liquid Extraction LC/MS
	Disperse Orange 11	82-28-0	500	10	
	Disperse Yellow 1	119-15-3	50	2	
	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	
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/BDPBP)	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 Liquid Extraction LC/MS
	2-ethoxyethanol	110-80-5	50	10	
	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	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
2I. Halogenated Solvents	2-methoxypropylacetate	70657-70-4	50	10	USEPA 8260B Headspace GC/MS or Purgeand-Trap-GC/MS
	Triethylene glycol dimethyl ether	112-49-2	50	10	
	1,2-Dichloroethane	107-06-2	1	2	
	Methylene Chloride	75-09-2	1	2	
	Trichloroethylene	79-01-6	1	2	
2J. Organotin Compounds	Tetrachloroethylene	127-18-4	1	2	ISO 17353 Derivatisation with NaB(C ₂ H ₅) GC/MS
	Mono-, di- and tri-methyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-butyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-phenyltin derivatives	Multiple	0.01	0.2	
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Mono-, di- and tri-octyltin derivatives	Multiple	0.01	0.2	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
	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.01	0.10	
	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	
2L. Phthalates (including all other esters of phthalic acid)	6:2 FTOH	647-42-7	1	1	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	2	
	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 (DnHP)	84-75-3	10	2	
	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	71888-89-6	10	2	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
	(DIHP)				
2M. Polycyclic 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 (Foundational, Progressive, and Aspirational). Cyanide: With reference to APHA 4500 CN—B,C&E and followed by UV analysis
	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	
	Ammonium-N	—	N/A	N/A	
	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	
1B. Conventional Parameters - METALS	Antimony(Sb)	7440-36-0	0.001	N/A	Various Acid Digestion with ICP 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	Please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Foundational, Progressive, and Aspirational).
	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	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
	Mercury (Hg)	7439-97-6	0.00005	0.2	Cr(VI): Various Solvent extraction and derivatisation followed by UV analysis
3. Conventional Parameters	Dry mass (total solids)	—	N/A	N/A	US EPA 160.3 / 209A

Note / Key :

U. S. EPA = United States Environmental Protection Agency

APHA = American Public Health Association

Remark: The report [(6822)205-0170] was sub-contracted to India (Testtex India Laboratories Pvt. Ltd) for Coliform, Total-N & AOX Tests.



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APPENDIX C – Onsite Field Data Record Sheet

		FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)		CPSD-AN-00813-DATA 04 Issue Date: _____ Version No.: 17 Business Line: Analytical	
General Data					
Laboratory Sample Number: _____					
Client Name: _____					
Field Contact Person: <u>Md. Hafizul Islam</u> Phone No: <u>01321-171626</u>					
Project (Facility Name and Address): <u>Pioneer Denim Limited</u>					
Sampling Location / Description: <u>ET-P-Inlet</u>					
Sample Identification: _____					
Sample Type: <u>Zero discharge with sampling plan</u>					
Name of Sampler: <u>Md. Asad Hossain</u>					
Discharge mode: <u>Direct discharge to environment (Specify destination: River, Sea, Stream...) OR Indirect discharge to sewage treatment plant</u>					
Date of collection: <u>23-07-22</u>					
Factory Type: <u>Dyeing / Printing / Washing / Finishing / Others (please specify):</u>					

Field Data for Wastewater								
Arrival Time:	11:00			Departure Time:				
Field Parameters:	pH:	12	Temp:	29.0 °C	Color:	Blue	Flow rate:	(volume/min)
Control No. of field equipment:								
Factory with effluent treatment plant:	Yes							
Sample matrix:	Incoming water (if required)							
	Wastewater before treatment							
	Wastewater after treatment – water at discharge point							
Sampler container number	12	12	12	12	12	12		
Recording time	ID	1	2	3	4	5	6	7
	Time	11:15	12:15	13:15	14:15	15:15	16:15	
pH:	12	11.6	12.0	10.0	9.0	12.0		
Temp (°C):	29.0	29.9	30.0	30.9	30.2	30.8		
Color (visual estimation):	Blue	Blue	Blue	Blue	Blue	Blue		
Flow rate (volume/time)	220	180	180.9	159.8	259	230		
Volume collected, mL	12x162	12x162	12x162	12x162	12x162	12x162		
Total volume collected	12024	Remark: Total volume collected must be greater than total of sample size required						

Analysis Required and Preservation Method				
Tests (ZDHC WSL Parameters)	Test required (v)	Total of sample size	Type of container	Preservation method
Combined test or individual test (Remark 4)	1. Phthalate	✓	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. UV absorbers	✓	100		
16. BPA	✓	2		
17. Preservatives	✓	52		
18. VOC & Halogenated Solvents (Remark 8)	✓	10 mL		
19. PFCs (Remark 8)	✓	2 mL		



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	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)		CPSD-AN-00613-DATA 04	
			Issue Date:	
			Version No.: 17	
			Business Line: Analytical	

Tests (Conventional Parameters)	Test required (V)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	20. Total suspended solids (TSS) 21. Total dissolved solids (TDS)	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C
22. 5-day Biochemical Oxygen Demand (BOD5)		1000 mL		
23. Colour		100 mL		
24. Heavy Metals except Cr(VI) & Total-P (Remark 5)	✓	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO ₃ and store at 2-8°C
25. Cyanide	✓	500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 mL of 10% Na ₂ S ₂ O ₃ and store sample at 2-8°C
26. Cr(VI)	✓	95 mL		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
27. Chemical oxygen demand (COD)		150 mL		
28. Phenols		500 mL	Amber Glass, washed with nitric acid	Acidify to pH 2 with H ₂ SO ₄ Store sample at 2-8°C
29. Oil and Grease & Total Hydrocarbon		1000 mL		
30. *Formaldehyde		25 mL		Fill to full container without air gap; acidify to pH 2 with H ₂ SO ₄ and store sample at 2-8°C
31. 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
32. E.coli (Remark 5)		125 mL	PE, clean, sterile, non-reactive	Add 0.1 mL of 10% Na ₂ SO ₃ keep in dark Store sample at 2-8°C
33. Persistent foam		N.A.	Foam higher than 45 cm (visual estimation): Yes / No	
34. Sulfite		100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA Store sample at 2-8°C
35. Total-N		100 mL		
36. Ammonium-N		500 mL		Acidify to pH 2 with H ₂ SO ₄ Store sample at 2-8°C
37. Adsorbable organically bound halogens (AOX)		100 mL		Acidify to pH 2 with HNO ₃ and store at 2-8°C
38. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphnia; Algae;		1000 mL	Amber Glass, washed with nitric acid;	
39. Sulphate		100 mL		
40. Chloride		100 mL		Without adding acid Store sample at 2-8°C
41. Conductivity		100 mL		
42. Dissolved oxygen (DO)		N.A.	measure in field	
43. Total Chlorine		N.A.		
44. Others:				

Remarks:

- Individual sampling can be performed upon request
- 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.
- Scopes of ZDHC guideline: Parameter 1-9, 12, 14-29, 31-37, 39-43.
Scope of synthetic leather industry: Parameter 1-9, 12, 14-24, 26-29, 31-33, 35, 36, 39, 40
Scope of MMCF: Parameter 5, 18, 20, 22-24, 26-29, 31, 35-38
Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-00019-STIP01, locations with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by:

Full name: Md. Asad Hossain

Date: 23.07.22

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 designated 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:

Md. Hafizul Islam
Full Name:

Date: 23/07/2022




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	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04 Issue Date: _____ Version No.: 17 Business Line: Analytical
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General Data

Laboratory Sample Number:

Client Name:

Field Contact Person:

Project (Facility Name and Address):

Sampling Location / Description:

Sample Identification:

Sample Type:

Name of Sampler:

Discharge mode:

Date of collection:

Factory Type:

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Md. Hafizul Islam, Phone No: 01321-171686

Pioneer Denim Limited (Morutola, Shahapur Bazar, Madhabpur Habiganj.

E.T.P = Outlet

Zero discharge with sampling plan

Composite Sample / Grab sample (Please delete as appropriate)

Md. Asad Hosain.

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

23.07.2022 Govt canal

Dyeing / Printing / Washing / Finishing / Others (please specify):

*Note: It would be selected more than one

Field Data for Wastewater

Arrival Time:	11:00	Departure Time:							
Field Parameters	pH: 6.8	Temp: 34.2 °C	Color: Brownish.	Flow rate: (volume/min)					
Control No. of field equipment									
Factory with effluent treatment plant:	Yes								
Sample matrix:	Incoming water (If required)								
	Wastewater before treatment								
	Wastewater after treatment - water at discharge point								
Sampler container number	29	29	29	29	29	29	29	29	29
	1	2	3	4	5	6	7	8	
Recording time	ID								
	Time	11:15	12:15	13:15	14:15	15:15	16:15		
pH:		6.8	7.1	7.2	6.9	6.8			
Temp (°C):		34.2	34.8	34.9	35.0	35.0	34.8		
Color (visual estimation):		Brownish	Brownish	Brownish	Brownish	Brownish	Brownish		
Flow rate (volume/time)		80.2	78.0	85.9	90.0	96.1	92.8		
Volume collected, mL		29x167	29x167	29x167	29x167	29x167	29x167		
Total volume collected		29098	Remark: Total volume collected must be greater than total of sample size required						

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)	Test required (v)	Total of sample size	Type of container	Preservation method
Combined test or individual test (Remark 4)	1. Phthalate	✓	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	X	1000 mL		
11. *Nitrosamine	X	10 mL		
12. Banned Azodyes	✓	2000 mL		
13. *Free primary aromatic amines	X	500 mL		
14. Organotin Compounds	✓	500 mL		
15. UV absorbers	✓	100		
16. BPA	✓	2		
17. Preservatives	✓	52		
18. VOC & Halogenated Solvents (Remark 6)	✓	10 mL		
19. PFCs (Remark 8)	✓	2 mL	PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C



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	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
		Issue Date:
		Version No.: 17
		Business Line: Analytical

Tests (Conventional Parameters)		Test required (V)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4)	20. Total suspended solids (TSS)	✓	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid Store sample at 2-8°C
	21. Total dissolved solids (TDS)	X			
22. 5-day Biochemical Oxygen Demand (BOD5)	✓	1000 mL			
23. Colour	✓✓✓	100 mL			
24. Heavy Metals except Cr(VI) & Total-P (Remark 5)	✓	9 mL			
			PE, washed with nitric acid	Acidify to pH 2 with HNO ₃ and store at 2-8°C	
25. Cyanide	✓	500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 mL of 10% Na ₂ S ₂ O ₄ and store sample at 2-8°C	
26. 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	
27. Chemical oxygen demand (COD)	✓	150 mL		Acidify to pH 2 with H ₂ SO ₄ Store sample at 2-8°C	
28. Phenols	✓	500 mL			
29. Oil and Grease & Total Hydrocarbon	✓✓✓	1000 mL			
30. Formaldehyde	X	25 mL			
31. Sulfide (Remark 5)	✓	50 mL			
32. E.coli (Remark 6)	X	125 mL	PE, clean, sterile, non-reactive	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	
33. Persistent foam	✓	N.A.	Foam higher than 45 cm (visual estimation): Yes / No		
34. Sulfite	✓✓	100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA Store sample at 2-8°C	
35. Total-N	✓✓	100 mL	Amber Glass, washed with nitric acid,	Acidify to pH 2 with H ₂ SO ₄ Store sample at 2-8°C	
36. Ammonium-N	✓✓	500 mL			
37. Adsorbable organically bound halogens (AOX)	✓	100 mL			
38. Acute aquatic toxicity: Luminus Bacteria, Fish Egg, Daphne, Algae;		1000 mL			
39. Sulphate		100 mL			
40. Chloride		100 mL			
41. Conductivity		100 mL	measure in field		
42. Dissolved oxygen (DO)		N.A.			
43. Total Chlorine		N.A.			
44. Others:					
Observation/ Remark:					

***Remarks:**

- Individual sampling can be performed upon request
- 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.
- Scope of ZDHC guideline: Parameter 1-9, 12, 14-24, 31-37, 39-43
Scope of synthetic leather industry: Parameter 1-9, 12, 14-24, 26-29, 31-33, 35, 36, 39, 40
Scope of MMCF: Parameter 5, 18, 20, 22-24, 26-29, 31, 35-38
Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-G00019-STIP01, locations with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by:

Full name: Md. Asad Hosain

Date: 23.07.22

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 designated 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

Signature of Factory Representative:

Full Name: Md. Hafizul Islam

Date: 23/07/2022

APPENDIX D – Limitation Value of Legal Requirements

Not Applicable

END