SOFTLINES WASTEWATER TESTING
TEST REPORT
Number: HTJ2914510

Date of sampling	21 Sep, 2024
Reporting Date	26 Sep, 2024

Audit ID	182021	Audit firm	INTERTEK - CHINA NORTH
Company name	SHAOGUAN BEIJIANG SMART TEXTILE TECHNOLOGY CO,. LTD		
Contact person	SHUMIN HUANG		
Type of tax - tax ID no	91440200708089370H		
Address	D3 district, qujiang economic development zone		
Region state province	Guangdong		
Town city / village	Shaoguan		
Zip/Post code	512136		
Country	China		

Type of wastewater discharge				
Type of wastewater discharge:	Indirect discharge			
On-site effluent treatment plant (ETP):	YES			
Pre - treatment:	YES			
	Preliminary	Primary	Secondary/Biological	Tertiary
	☑ Screening/ Sieving/Grit Remover ☑ Homogenization tank ☑ pH correction ☐ Other ☐ None	☑ Coagulation/Flocculation ☑ Dissolved air flotation (DAF) ☑ Sedimentation tanks or Settler/Clarifier ☐ Other	☑ Activated sludge process. Aerobic ☑ Biological Biofilm reactor (MBBR, SAF, BSequencing batch reactor (SBR) ☐ Other	☐ Absorption with activated carbon ☑ High rate filtration ☑ Advanced oxidation techniques (Ozone, Fenton reaction, photo catalytic degradation...) ☐ Other
Description of discharge:	The water is discharged into the sewage system for further treatment on External ETP (receiving ETP name: 曲江白土污水处理厂)			
[If direct discharge] ambient temperature of receiving water body (ºC):	-			
Average total industrial wastewater generated (m3/day):	1600 m³/day			

Sludge Disposal Pathway	E	

Sampler accreditation certification number (ZDHC):		C74D106817368	
Sample description	**Simple**	**Composite**	**Comments**
(1) Untreated wastewater (BT)	-	Black, composite sample at 08:54, 09:54, 10:54, 11:54, 12:54, 13:54, 14:54 Sampling location: Latitude 24°40'N, Longitude 113°30'E	-
(2) Effluent (AT)	-	Yellow, composite sample at 08:58, 09:58, 10:58, 11:58, 12:58, 13:58, 14:58 Sampling location: Latitude 24°40'N, Longitude 113°30'E	-
(3) Sludge	-	Black, composite sample at 11:10 Sampling location: Latitude 24°40'N, Longitude 113°30'E	pH: 9.94

Local Legal Data	
Local Legal Standard name [a]	Discharge standards of water pollutants for dyeing and finishing of textile industry Discharge limits of water pollutants
Local legal standard no. [a]:	GB 4287-2012 DB 44/26-2001
Parameters (ZDHC WWSG V2.1, Table 2-3) exceeded local regulation:	No exceeded
Discharge permit provided:	Yes

Internal description – Intertek Lab Issuing Final Test Report	
Sampling laboratory	Intertek Testing Services Shenzhen Ltd.
Testing laboratory	Intertek Testing Services Shenzhen Ltd.
Date received sample	21 Sep, 2024
Date and time of the beginning of sampling	21 Sep, 2024 08:54
Date and time of the end of samplin	21 Sep, 2024 14:58
Testing period	23 Sep, 2024 to 26 Sep, 2024
Reporting date	26 Sep, 2024
Arrival Temperature at Lab	6.3°C
Internal codification number	HTJ2914510
Reference sample number	-
Comments	-

Summary of test results		
Wastewater/ MRSL - Test items	**Testing period**	**Sample 1 (untreated)**
Alkylphenols (APs) & Alkylphenol ethoxylates (APEOs)	From 23/09/2024 to 25/09/2024	ND
Anti - Microbials & Biocides	From 23/09/2024 to 24/09/2024	ND
Chlorinated parafins	From 23/09/2024 to 24/09/2024	ND
Chlorobenzenes and Chlorotoluenes	From 23/09/2024 to 24/09/2024	ND
Chlorophenols	From 23/09/2024 to 24/09/2024	ND
Dimethyl Formamide (DMFa) (*)	From 23/09/2024 to 24/09/2024	ND
Dyes – Carcinogenic or Equivalent Concern	From 23/09/2024 to 24/09/2024	ND
Dyes – Disperse (Allergenic)	From 23/09/2024 to 24/09/2024	ND
Dyes-Navy Blue Colourant	From 23/09/2024 to 24/09/2024	ND
Flame retardants	From 23/09/2024 to 24/09/2024	ND
Glycols	From 24/09/2024 to 25/09/2024	ND
Halogenated solvents	From 23/09/2024 to 24/09/2024	ND
Organotin compounds	From 23/09/2024 to 24/09/2024	ND
Other/Miscellaneous Chemicals (^)	From 23/09/2024 to 25/09/2024	ND
Perfluorinated chemicals (PFCs)	From 23/09/2024 to 25/09/2024	ND
Phthalates	From 23/09/2024 to 24/09/2024	ND
Polycyclic aromatic hydrocarbons (PAHs)	From 23/09/2024 to 24/09/2024	ND
Restricted Aromatic Amines (Cleavable from Azo- colourants) Azo dye	From 23/09/2024 to 25/09/2024	ND
UV Absorbers	From 23/09/2024 to 24/09/2024	ND
Volatile organic compounds (VOCs)	From 23/09/2024 to 24/09/2024	ND

Wastewater / Heavy metals - Test items	Testing period	Sample 2 (effluent)		
		Foundational	Progressive	Aspirational
Antimony	-			-
Chromium (VI)	From 23/09/2024 to 23/09/2024			Meet
Barium	-	Report only, refer data		
Selenium	-	Report only, refer data		
Tin	-	Report only, refer data		
Arsenic	From 23/09/2024 to 23/09/2024			Meet
Chromium (total)	-			-
Cobalt	-			-
Cadmium	From 23/09/2024 to 23/09/2024			Meet
Copper	-			-
Lead	From 23/09/2024 to 23/09/2024			Meet
Nickel	-			-
Silver	-			-
Zinc	-			-
Mercury	From 23/09/2024 to 23/09/2024			Meet

Wastewater / Conventional parameters - Test items	Testing period	Sample 2 (effluent)		
		Foundational	Progressive	Aspirational
pH[f]	-	-		
Temperature difference[f]	-	-		
E.coli	-	-		
Colour	-		-	
Persistent foam[f]	-	-		
Wastewater flowrate[f]	-	-		
Ammonium-Nitrogen	-	-		
AOX	-	-		
Biochemical Oxygen Demand (BOD_5)	-	-		
Chemical Oxygen Demand (COD)	-	-		
Dissolved Oxygen (DO) [f]	-	-		
Oil & Grease	-		-	
Total Phenols / Phenol Index	-	-		
Total Chlorine [f]	-	-		
Total Dissolved Solids (TDS)	-	-		
Total Nitrogen	-	-		
Total Phosphorus	-	-		
Total Suspended Solids (TSS)	-	-		

Wastewater / Anions - Test items	Testing period	Sample 2 (effluent)		
		Foundational	Progressive	Aspirational
Chloride	-	-		
Cyanide, total	-	-		
Sulfate	-	-		
Sulfide	-	-		
Sulfite	-	-		

Sludge / Heavy metals - Test items	Testing period	Sample 3: Sludge (Total)	Sample 3: Sludge (Leachate)
Antimony	From 23/09/2024 to 25/09/2024	Meet	-
Arsenic	From 23/09/2024 to 25/09/2024	Meet	-
Barium	From 23/09/2024 to 25/09/2024	Meet	-
Cadmium	From 23/09/2024 to 25/09/2024	Meet	-
Cobalt	From 23/09/2024 to 25/09/2024	Meet	-
Copper	From 23/09/2024 to 25/09/2024	Meet	-
Lead	From 23/09/2024 to 25/09/2024	Meet	-
Nickel	From 23/09/2024 to 25/09/2024	Meet	-
Selenium	From 23/09/2024 to 25/09/2024	Meet	-
Silver	From 23/09/2024 to 25/09/2024	Meet	-
Chromium (total)	From 23/09/2024 to 25/09/2024	Meet	-
Zinc	From 23/09/2024 to 25/09/2024	Meet	-
Chromium VI	From 23/09/2024 to 25/09/2024	Meet	-
Mercury	From 23/09/2024 to 25/09/2024	Meet	-

Sludge / Anion - Test items	Testing period	Sample 3: Sludge
Cyanide	From 24/09/2024 to 24/09/2024	Meet

Sludge / Conventional parameters - Test items	Testing period	Sample 3: Sludge
pH[f]	From 21/09/2024 to 21/09/2024	Meet
% Solids	From 23/09/2024 to 23/09/2024	Report only, refer data
Paint filter test	From 23/09/2024 to 23/09/2024	Meet
Faecal coliform	From 23/09/2024 to 24/09/2024	Report only, refer data

Sludge / MRSL - Test items	Testing period	Sample 3: Sludge
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	From 24/09/2024 to 25/09/2024	ND
Polycyclic Aromatic Hydrocarbons (PAHs)	From 24/09/2024 to 25/09/2024	ND
Chlorotoluenes	From 24/09/2024 to 25/09/2024	ND

Remark (Indicated in each parameter)
ND = Not detected (less than ZDHC reporting limit for MRSL parameters) / Not detected (less than lab reporting limit for other parameters)
D = Detected
N/A = Not applicable (Out of scope according to ZDHC WWSG v2.1)
NT = Not tested (Did not test according to applicant's request)
(S) = The samples were subcontracted to Intertek [xxxxx] for testing.
(T) = If sample temperature is greater than 8°C and less than 10°C when received from the laboratory.
(TT) = If sample temperature is exceeded 10°C when received from the laboratory.
@ = Maximum holding time exceeded.
(*) = Sample and report for mock leather.
(^) = Borate, zinc salt would report ND when total boron or total zinc less than 100 µg/L.
[f] = On-site test by sampler.
[a] = The local legal standard name and legal standard no. is referenced to discharge permit (or contractual agree by CETP) that provided by applicant.

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.

For and on behalf of
Intertek Testing Services Shenzhen Ltd.

Shunli Zhao
Asst Manager

Test results

1. Conventional parameters

Wastewater/ Conventional parameters - Test items	Test method	Limit			Lab Reporting Limit	Result sample 2 (effluent)	Unit
		Foundational	Progressive	Aspirational			
Temperature	GB/T 13195-1991	35°C	30°C	25°C	N/A	-	°C
Temperature difference [°C]	GB/T 13195-1991	Δ+15°C	Δ+10°C	Δ+5°C	N/A	-	[f] °C
TSS	GB/T 11901-1989	50 mg/L	15 mg/L	5 mg/L	5 mg/L	-	mg/L
Chemical Oxygen Demand (COD)	HJ 828-2017	150 mg/L	80 mg/L	40 mg/L	16 mg/L	-	mg/L
Total-N	HJ 636-2012	20 mg/L	10 mg/L	5 mg/L	0.2 mg/L	-	mg/L
pH	HJ 1147-2020	6-9			N/A	-	[f] pH
Colour (436 nm ; 525 nm ; 620nm)	ISO7887:2011 Method B	7;5;3	5;3;2	2;1;1	N/A	-	[m-1]
Biochemical Oxygen Demand (BOD5)	HJ 505-2009	30 mg/L	15 mg/L	8 mg/L	2 mg/L	-	mg/L
Ammonium-Nitrogen	HJ 535-2009	10 mg/L	1 mg/L	0.5 mg/L	0.1 mg/L	-	mg/L
Total-P	GB/T 11893-1989	3 mg/L	0.5 mg/L	0.1 mg/L	0.04 mg/L	-	mg/L
AOX	HJ/T 83-2001	3 mg/L	0.5 mg/L	0.1 mg/L	0.06 mg/L	-	mg/L
Oil and grease	HJ 637-2018	10 mg/L	2 mg/L	0.5 mg/L	0.24 mg/L	-	mg/L
Phenol	HJ 503-2009	0.5 mg/L	0.01 mg/L	0.001 mg/L	0.001 mg/L	-	mg/L
E. Coli	GB/T 5750.12-2006	126 [MPN/100-ml]			1.8 MPN/100-ml	-	[MPN/100-ml]
Foam	/	Not visible	Not visible	Not visible	N/A	-	[f]
Cyanide	HJ 484-2009	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.016 mg/L	-	mg/L
Sulfide	HJ 1226-2021	0.5 mg/L	0.05 mg/L	0.01 mg/L	0.01 mg/L	-	mg/L
Sulphite	HJ 84-2016	2 mg/L	0.5 mg/L	0.2 mg/L	0.184 mg/L	-	mg/L
Dissolved Oxygen (DO)	HJ 506-2009	Sample and report only	Sample and report only	Sample and report only	N/A	-	[f] mg/L
Total Chlorine	HJ 586-2010	Sample and report only	Sample and report only	Sample and report only	0.12 mg/L	-	[f] mg/L
Total Dissolved Solids (TDS)	GB/T 5750.4-2006 8	Sample and report only	Sample and report only	Sample and report only	10 mg/L	-	mg/L
Chloride	HJ 84-2016	Sample and report only	Sample and report only	Sample and report only	0.028 mg/L	-	mg/L
Sulfate	HJ 84-2016	Sample and report only	Sample and report only	Sample and report only	0.072 mg/L	-	mg/L
Wastewater Flowrate	/				N/A	-	[f] m3/day

△ is the degree above ambient temperature of receiving water body.

2. Heavy metals
Test method: modified from GB/T 7467-1987 and HJ 700-2014 (ICP-MS Analysis).

Heavy metals	CAS no.	Limit			Lab Reporting limit (mg/L)	Result sample 2 (effluent)	Unit
		Foundational	Progressive	Aspirational			
Arsenic (As)	Various	0.05 mg/L	0.01 mg/L	0.005 mg/L	0.001	ND	mg/L
Cadmium (Cd)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.0001	ND	mg/L
Mercury (Hg)	Various	0.01 mg/L	0.005 mg/L	0.001 mg/L	0.00005	ND	mg/L
Lead (Pb)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.001	ND	mg/L
Antimony (Sb)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.001	-	mg/L
Cobalt (Co)	Various	0.05 mg/L	0.02 mg/L	0.01 mg/L	0.001	-	mg/L
Nickel (Ni)	Various	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.001	-	mg/L
Silver (Ag)	Various	0.1 mg/L	0.05 mg/L	0.005 mg/L	0.001	-	mg/L
Copper (Cu)	Various	1 mg/L	0.5 mg/L	0.25 mg/L	0.001	-	mg/L
Zinc (Zn)	Various	5.0 mg/L	1.0 mg/L	0.5 mg/L	0.001	-	mg/L
Total Chromium (Cr)	Various	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.001	-	mg/L
Chromium VI (Cr VI)	Various	0.05 mg/L	0.005 mg/L	0.001 mg/L	0.001	ND	mg/L
Barium	Various	Sample and Report only	Sample and Report only	Sample and Report only	0.001	-	mg/L
Selenium	Various	Sample and Report only	Sample and Report only	Sample and Report only	0.001	-	mg/L
Tin	Various	Sample and Report only	Sample and Report only	Sample and Report only	0.001	-	mg/L

3.Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers.
Test method: modified from GB/T 31414-2015 (GC-MS and LC-MS-MS analysis).

Alkylphenols (APs) & Alkylphenolethoxylates (APEOs)	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Octylphenol (OP), mixed isomers	140-66-9/ 1806-26-4/ 27193-28-8	5	ND	μg/L
Nonylphenol (NP), mixed isomers	104-40-5/ 11066-49-2/ 25154-52-3/84852-15-3	5	ND	μg/L
Octylphenolethoxylates (OPEOs)	9002-93-1; 9036-19-5; 68987-90-6	5	ND	μg/L
Nonylphenolethoxylates (NPEOs)	9016-45-9/26027-38-3/ 37205-87-1/68412-54-4/127087-87-0	5	ND	μg/L

4. Chlorobenzenes & Chlorotoluenes
Test method: modified from EN 17137:2018 (GC-MS Analysis).

Chlorobenzenes & Chlorotoluenes	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Chlorobenzene	108-90-7	0.2	ND	µg/L
1,2-Dichlorobenzene	95-50-1	0.2	ND	µg/L
1,3-Dichlorobenzene	541-73-1	0.2	ND	µg/L
1,4-Dichlorobezene	106-46-7	0.2	ND	µg/L
1,2,3-Trichlorobenzene	87-61-6	0.2	ND	µg/L
1,2,4-Trichlorobenzene	120-82-1	0.2	ND	µg/L
1,3,5-Trichlorobenzene	108-70-3	0.2	ND	µg/L
1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	ND	µg/L
1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	ND	µg/L
1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	ND	µg/L
Pentachlorobenzene	608-93-5	0.2	ND	µg/L
Hexachlorobenzene	118-74-1	0.2	ND	µg/L
2-Chlorotoluene	95-49-8	0.2	ND	µg/L
3-Chlorotoluene	108-41-8	0.2	ND	µg/L
4-Chlorotoluene	106-43-4	0.2	ND	µg/L
2,3-Dichlorotoluene	32768-54-0	0.2	ND	µg/L
2,4-Dichlorotoluene	95-73-8	0.2	ND	µg/L
2,5-Dichlorotoluene	19398-61-9	0.2	ND	µg/L
2,6-Dichlorotoluene	118-69-4	0.2	ND	µg/L
3,4-Dichlorotoluene	95-75-0	0.2	ND	µg/L
3,5-Dichlorotoluene	25186-47-4	0.2	ND	µg/L
2,3,4-Trichlorotoluene	7359-72-0	0.2	ND	µg/L
2,3,6-Trichlorotoluene	2077-46-5	0.2	ND	µg/L
2,4,5-Trichlorotoluene	6639-30-1	0.2	ND	µg/L
2,4,6-Trichlorotoluene	23749-65-7	0.2	ND	µg/L
3,4,5-Trichlorotoluene	21472-86-6	0.2	ND	µg/L
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	ND	µg/L
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	ND	µg/L
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	ND	µg/L
Pentachlorotoluene	877-11-2	0.2	ND	µg/L

5. Chlorophenols
Test method: modified from EN ISO 17070: 2015 (GC-MS Analysis).

Chlorophenols	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
2-Chlorophenol	95-57-8	0.5	ND	µg/L
3-Chlorophenol	108-43-0	0.5	ND	µg/L
4-Chlorophenol	106-48-9	0.5	ND	µg/L
2,3-Dichlorophenol	576-24-9	0.5	ND	µg/L
2,4-Dichlorophenol	120-83-2	0.5	ND	µg/L
2,5-Dichlorophenol	583-78-8	0.5	ND	µg/L
2,6-Dichlorophenol	87-65-0	0.5	ND	µg/L
3,4-Dichlorophenol	95-77-2	0.5	ND	µg/L
3,5-Dichlorophenol	591-35-5	0.5	ND	µg/L
2,3,4-Trichlorophenol	15950-66-0	0.5	ND	µg/L
2,3,5-Trichlorophenol	933-78-8	0.5	ND	µg/L
2,3,6-Trichlorophenol	933-75-5	0.5	ND	µg/L
2,4,5-Trichlorophenol	95-95-4	0.5	ND	µg/L
2,4,6-Trichlorophenol	88-06-2	0.5	ND	µg/L
3,4,5-Trichlorophenol	609-19-8	0.5	ND	µg/L
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	ND	µg/L
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	ND	µg/L
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	ND	µg/L
Pentachlorophenol (PCP)	87-86-5	0.5	ND	µg/L

6. Restricted Aromatic Amines (Cleavable from Azo- colourants)
Test method: modified from EN ISO 14362-1:2017 and EN ISO 14362-3:2017 (if needed) (GC-MS and LC-MS-MS Analysis).

Azo Dyes	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	0.1	ND	µg/L
4,4'-Diaminodiphenylmethane	101-77-9	0.1	ND	µg/L
4,4'-Oxydianiline	101-80-4	0.1	ND	µg/L
4-Chloroaniline	106-47-8	0.1	ND	µg/L
3,3'-Dimethoxybenzidine	119-90-4	0.1	ND	µg/L
3,3'-Dimethylbenzidine	119-93-7	0.1	ND	µg/L
p-Cresidine	120-71-8	0.1	ND	µg/L
2,4,5-Trimethylaniline	137-17-7	0.1	ND	µg/L
4,4'-Thiodianiline	139-65-1	0.1	ND	µg/L
4-Aminoazobenzene	60-09-3	0.1	ND	µg/L
4-methoxy-m-phenylenediamine	615-05-4	0.1	ND	µg/L
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	0.1	ND	µg/L
2,6-Xylidine	87-62-7	0.1	ND	µg/L
o-Anisidine	90-04-0	0.1	ND	µg/L
2-Naphthylamine	91-59-8	0.1	ND	µg/L
3,3'-Dichlorobenzidine	91-94-1	0.1	ND	µg/L
4-Aminobiphenyl	92-67-1	0.1	ND	µg/L
Benzidine	92-87-5	0.1	ND	µg/L
o-Toluidine	95-53-4	0.1	ND	µg/L
2,4-Xylidine	95-68-1	0.1	ND	µg/L
4-Chloro-o-toluidine	95-69-2	0.1	ND	µg/L
4-Methyl-m-phenylenediamine	95-80-7	0.1	ND	µg/L
o-Aminoazotoluene	97-56-3	0.1	ND	µg/L
5-Nitro-o-toluidine	99-55-8	0.1	ND	µg/L
2-Naphthylammoniumacetate	553-00-4	0.1	ND	µg/L
2,4,5-trimethylaniline hydrochloride	21436-97-5	0.1	ND	µg/L
4-chloro-o-toluidinium chloride	3165-93-3	0.1	ND	µg/L
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	0.1	ND	µg/L

7. Dyes – Carcinogenic or Equivalent Concern
Test method: modified from DIN 54231-2005 (LC-MS-MS Analysis).

Carcinogenic dyes	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
C.I. Direct Black 38	1937-37-7	500	ND	µg/L
C.I. Direct Blue 6	2602-46-2	500	ND	µg/L
C.I. Acid Red 26	3761-53-3	500	ND	µg/L
C.I. Basic Red 9	569-61-9	500	ND	µg/L
C.I. Direct Red 28	573-58-0	500	ND	µg/L
C.I. Basic Violet 14	632-99-5	500	ND	µg/L
C.I. Disperse Blue 1	2475-45-8	500	ND	µg/L
C.I. Disperse Blue 3	2475-46-9	500	ND	µg/L
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	500	ND	µg/L
C.I. Basic Green 4 (malachite green chloride)	569-64-2	500	ND	µg/L
C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	ND	µg/L
C.I. Basic Green 4 (malachite green)	10309-95-2	500	ND	µg/L
Disperse Orange 11	82-28-0	500	ND	µg/L
Basic violet 3 with >0.1% of Michler´ s Ketoneb	548-62-9	500	ND	µg/L
C.I. Acid Violet 49	1694-09-3	500	ND	µg/L

8. Dyes – Disperse (Allergenic)
Test method: modified from DIN 54231-2005 (LC-MS-MS Analysis).

Disperse dyes	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Disperse Yellow 1	119-15-3	50	ND	µg/L
Disperse Blue 102	12222-97-8	50	ND	µg/L
Disperse Blue 106	12223-01-7	50	ND	µg/L
Disperse Yellow 39	12236-29-2	50	ND	µg/L
Disperse Orange 37/59/76	13301-61-6	50	ND	µg/L
Disperse Brown 1	23355-64-8	50	ND	µg/L
Disperse Orange 1	2581-69-3	50	ND	µg/L
Disperse Yellow 3	2832-40-8	50	ND	µg/L
Disperse Red 11	2872-48-2	50	ND	µg/L
Disperse Red 1	2872-52-8	50	ND	µg/L
Disperse Red 17	3179-89-3	50	ND	µg/L
Disperse Blue 7	3179-90-6	50	ND	µg/L
Disperse Blue 26	3860-63-7	50	ND	µg/L
Disperse Yellow 49	54824-37-2	50	ND	µg/L
Disperse Blue 35	12222-75-2	50	ND	µg/L
Disperse Blue 124	61951-51-7	50	ND	µg/L
Disperse Yellow 9	6373-73-5	50	ND	µg/L
Disperse Orange 3	730-40-5	50	ND	µg/L
Disperse Blue 35	56524-77-7	50	ND	µg/L

9. Flame retardants
Test method:
Other flame retardant substances: **modified from EN 71-10:2005 (GC-MS Analysis).**
Borate salt: modified from HJ 700-2014, determined as total boron (ICP-MS analysis).

Flame retardants	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	25	ND	µg/L
Decabromodiphenyl ether (DecaBDE)	1163-19-5	25	ND	µg/L
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	25	ND	µg/L
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	25	ND	µg/L
Octabromodiphenyl ether (OctaBDE)	32536-52-0	25	ND	µg/L
Bis(2,3-dibromopropyl) phosphate	5412-25-9	25	ND	µg/L
Tris(1-aziridinyl)phosphine oxide) (TEPA)	545-55-1	25	ND	µg/L
Polybromobiphenyls (PBBs)	59536-65-1	25	ND	µg/L
Tetrabromobisphenol A (TBBPA)	79-94-7	25	ND	µg/L
Hexabromocyclododecane (HBCDD)	3194-55-6	25	ND	µg/L
2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	25	ND	µg/L
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	25	ND	µg/L
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	ND	µg/L
Decabromobiphenyl (DecaBB)	13654-09-6	25	ND	µg/L
Dibromobiphenyls (DiBB)	Various	25	ND	µg/L
Octabromobiphenyls (OctaBB)	Various	25	ND	µg/L
Dibromopropylether	21850-44-2	25	ND	µg/L
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	25	ND	µg/L
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	25	ND	µg/L
Monobromobiphenyls (MonoBB)	Various	25	ND	µg/L
Monobromodiphenylethers (MonoBDEs)	Various	25	ND	µg/L
Nonabromobiphenyls (NonaBB)	Various	25	ND	µg/L
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	25	ND	µg/L
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	25	ND	µg/L
Tribromodiphenylethers (TriBDEs)	Various	25	ND	µg/L
Boric acid**	10043-35-3 / 11113-50-1	100 in Boron	ND	µg/L
Diboron trioxide**	1303-86-2	100 in Boron	ND	µg/L
Disodium octaborate**	12008-41-2	100 in Boron	ND	µg/L
Disodium tetraborate anhydrous**	1303-96-4 / 1330-43-4	100 in Boron	ND	µg/L
Tetraboron disodium heptaoxide, hydrate**	12267-73-1	100 in Boron	ND	µg/L

** Report total boron directly, no conversion from Boron salt.

10. Glycols
Test method: modified from EN 13130-7:2004 (GC-MS Analysis).

Glycols	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Bis(2-methoxyethyl)-ether	111-96-6	50	ND	µg/L
2-ethoxyethanol	110-80-5	50	ND	µg/L
2-ethoxyethyl acetate	111-15-9	50	ND	µg/L
Ethylene glycol dimethyl ether	110-71-4	50	ND	µg/L
2-methoxyethanol	109-86-4	50	ND	µg/L
2-methoxyethylacetate	110-49-6	50	ND	µg/L
2-methoxypropylacetate	70657-70-4	50	ND	µg/L
Triethylene glycol dimethyl ether	112-49-2	50	ND	µg/L

11.Halogenated solvents
Test method: modified from GB 18583-2008 (Headspace GC-MS Analysis).

Chlorinated solvents	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
1,2-Dichloroethane	107-06-2	1	ND	µg/L
Methylene chloride	75-09-2	1	ND	µg/L
Trichloroethene	79-01-6	1	ND	µg/L
Tetrachloroethene	127-18-4	1	ND	µg/L

12. Organotin compounds
Test method: modified from EN 71-3:2019 (GC-MS Analysis).

Organotin compounds	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Mono-, di-and tri-methyltin derivatives	Various	0.01	ND	µg/L
Mono-, di-and tri-butyltin derivatives	Various	0.01	ND	µg/L
Mono-, di-and tri-phenyltin derivatives	Various	0.01	ND	µg/L
Mono-, di-and tri-octyltin derivatives	Various	0.01	ND	µg/L
Triclyclohexyltin (TCyHT)	Various	0.01	ND	µg/L
Dipropyltin compounds (DPT)	Various	0.01	ND	µg/L
Tetrabutyltin compounds (TeBT)	Various	0.01	ND	µg/L
Tripropyltin Compounds (TPT)	Various	0.01	ND	µg/L
Tetraoctyltin compounds (TeOT)	Various	0.01	ND	µg/L
Tetraethyltin Compounds (TeET)	Various	0.01	ND	µg/L

13. Phthalates
Test method: modified from EN ISO 14389:2014 (GC-MS Analysis).

Phthalates	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	ND	µg/L
Dimethoxyethyl phthalate (DMEP)	117-82-8	10	ND	µg/L
Di-n-octyl phthalate (DNOP)	117-84-0	10	ND	µg/L
Di-iso-decyl phthalate (DIDP)	26761-40-0/68515-49-1	10	ND	µg/L
Di-iso-nonyl phthalate (DINP)	28553-12-0/68515-48-0	10	ND	µg/L
Di-n-hexyl phthalate (DnHP)	84-75-3	10	ND	µg/L
Dibutyl phthalate (DBP)	84-74-2	10	ND	µg/L
Butyl benzyl phthalate (BBP)	85-68-7	10	ND	µg/L
Diethyl phthalate (DEP)	84-66-2	10	ND	µg/L
Di-n-propyl phthalate (DPRP)	131-16-8	10	ND	µg/L
Di-iso-butyl phthalate (DIBP)	84-69-5	10	ND	µg/L
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	ND	µg/L
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C7-11-branched and linearakyl esters (DHNUP)	68515-42-4	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C6-11-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	ND	µg/L
Di-n-pentylphthalates	131-18-0	10	ND	µg/L
Diisopentylphthalates	605-50-5	10	ND	µg/L
Dinonyl phthalate (DNP)	84-76-4	10	ND	µg/L

14. Perfluorinated chemicals (PFCs)
Test method: modified from GB/T 31126-2014 (LC-MS-MS and GC-MS Analysis).

Perfluorinated chemicals (PFCs)	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Perfluoro-octanoic acid (PFOA)	335-67-1	0.01	ND	μg/L
Perfluoro-octane-sulfonic acid (L-PFOS)	1763-23-1	0.01	ND	μg/L
Perfluoro-octane-sulfon-amide (PFOSA)	754-91-6	0.01	ND	μg/L
N-Methyl-perfluoro-octane-sulfon-amide (N-Me-FOSA)	31506-32-8	0.01	ND	μg/L
N-Ethyl-perfluoro-octane-sulfon-amide (N-Et-FOSA)	4151-50-2	0.01	ND	μg/L
N-Methyl-perfluoro-octane-sulfon-amido-ethanol (N-Me-FOSE alcohol)	24448-09-7	0.01	ND	μg/L
N-Ethyl-Perfluoro-octane-sulfon-amido-ethanol (N-Et-FOSE alcohol)	1691-99-2	0.01	ND	μg/L
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	1	ND	μg/L
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7	1	ND	μg/L
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	1	ND	μg/L
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	1	ND	μg/L
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	1	ND	μg/L
Ethyl perfluorooctanoate Et-PFOA	3108-24-5	1	ND	μg/L

15. Polycyclic aromatic hydrocarbons (PAHs)
Test method: modified HJ 478-2009 (GC-MS Analysis).

Polycyclic aromatic hydrocarbons (PAHs)	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Benzo(a)pyrene (BaP)	50-32-8	1	ND	μg/L
Anthracene	120-12-7	1	ND	μg/L
Pyrene	129-00-0	1	ND	μg/L
Benzo(ghi)perylene	191-24-2	1	ND	μg/L
Benzo(e)pyrene	192-97-2	1	ND	μg/L
Indeno (1,2,3-cd)pyrene	193-39-5	1	ND	μg/L
Benzo(j)fluoranthene	205-82-3	1	ND	μg/L
Benzo(b)fluoranthene	205-99-2	1	ND	μg/L
Fluoranthene	206-44-0	1	ND	μg/L
Benzo(k)fluoranthene	207-08-09	1	ND	μg/L
Acenaphthylene	208-96-8	1	ND	μg/L
Chrysene	218-01-9	1	ND	μg/L
Dibenz(a,h)anthracene	53-70-3	1	ND	μg/L
Benzo(a)anthracene	56-55-3	1	ND	μg/L
Acenaphthene	83-32-9	1	ND	μg/L
Phenanthrene	85-01-8	1	ND	μg/L
Fluorene	86-73-7	1	ND	μg/L
Naphthalene	91-20-3	1	ND	μg/L

16. Volatile organic compounds (VOCs)
Test method: modified from GB/T 34682-2017 (GC-MS Analysis).

Volatile organic compounds (VOCs)	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Benzene	71-43-2	1	ND	μg/L
Xylene	1330-20-7	1	ND	μg/L
o-cresol	95-48-7	1	ND	μg/L
p-cresol	106-44-5	1	ND	μg/L
m-cresol	108-39-4	1	ND	μg/L
Toluene*	108-88-3	1	ND	μg/L

(*) = Sample and report for mock leather.

17. Anti - Microbials & Biocides

Test method:
OPP: modified from GB/T 20386-2006 (GC-MS).
Triclosan: modified from GB/T 33273-2016 (GC-MS).
Permethrin: modified from EN 71-10:2005 (GC-MS).

Anti - Microbials & Biocides	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
o-Phenylphenol (+salts)	90-43-7	100	ND	μg/L
Triclosan	3380-34-5	100	ND	μg/L
Permethrin	Multiple	500	ND	μg/L

18. Chlorinated paraffins
Test method: modified from ISO 18219:2021 (GC-MS-NCI Analysis).

Chlorinated paraffins	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Short-chain Chlorinated paraffin (C10 – C13)	85535-84-8	25	ND	μg/L
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	500	ND	μg/L

19. Dimethyl Formamide (DMFa) (*)
Test method: modified from EN 17131:2019 (GC-MS Analysis).

N,N-di-methylformamide (DMFa)	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Dimethyl formamide; N,N-dimethylformamide (DMFa)*	68-12-2	1000	ND	μg/L

(*) = Sample and report for mock leather.

20. Dyes-Navy Blue Colourant
Test method: modified from DIN 54231-2005 (LC-MS-MS Analysis).

Dyes-Navy Blue Colourant	CAS no.	ZDHC Reporting limit (μg/L)	Result Sample 1 (Untreated wastewater)	Unit
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	500	ND	μg/L
Component 2: C46H-30CrN10O20S2 3Na	Not Allocated	500	ND	μg/L

21. Other/Miscellaneous Chemicals (^)
Test method:
Others: modified from DIN 54231-2005 (LC-MS-MS Analysis).
Borate salt: modified from HJ 700-2014, determined as total boron and total zinc (ICP-MS Analysis).

Other/Miscellaneous Chemicals	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
AEEA [2-(2-aminoethylamino)ethanol]	111-41-1	500	ND	µg/L
Bisphenol A	80-05-7	10	ND	µg/L
Thiourea	62-56-6	50	ND	µg/L
Quinoline	91-22-5	50	ND	µg/L
Borate, zinc salt (^^)	12767-90-7	100 in Boron & 100 in Zinc	Boron: ND Zinc: ND	µg/L

^^ = Report total boron & total zinc individually, and no conversion from boron / zinc salt.

22. UV Absorbers
Test method: modified from US EPA 8270E (GC-MS Analysis).

UV Absorbers	CAS no.	ZDHC Reporting limit (µg/L)	Result Sample 1 (Untreated wastewater)	Unit
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec- butyl) phenol(UV-350)	36437-37-3	100	ND	µg/L
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	100	ND	µg/L
2-benzotriazol-2-yl-4,6-di-tertbutylphenol (UV-320)	3846-71-7	100	ND	µg/L
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	100	ND	µg/L

23. Sludge Parameters – Step 1 - Metals
Test method: Other parameters: modified from CJ/T 221-2005, HJ 700-2014 (ICP-MS Analysis).
Chromium (VI) : modified from EPA 3060A:1996 or EPA 7196A:1992 (UV/VIS Analysis).

Sludge Parameters – Step 1 - Meta	ZDHC reporting limit (Dry weight) (mg/kg)	Lab reporting limit (Dry weight) (mg/kg) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
Antimony	5	2	2.25	mg/kg
Arsenic	5	2	4.27	mg/kg
Barium	200	2	45.9	mg/kg
Cadmium	1	1	ND	mg/kg
Cobalt	400	10	29.2	mg/kg
Copper	50	10	15.5	mg/kg
Lead	5	2	4.4	mg/kg
Nickel	20	10	41.3	mg/kg
Selenium	5	2	2.89	mg/kg
Silver	50	10	ND	mg/kg
Total Chromium	50	2	58.8	mg/kg
Zinc	400	10	166	mg/kg
Chromium (VI)	20	2	ND	mg/kg
Mercury	1	0.2	ND	mg/kg

24. Sludge Parameters – Step 1 - Anions
Test method: modified from HJ 484-2009 (UV-VIS Analysis).

Sludge Parameters – Step 1 - Anio	ZDHC reporting limit (Dry weight) (mg/kg)	Lab reporting limit (Dry weight) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
Cyanide	20	5	ND	mg/kg

25. Sludge Parameteres - Step 1 – Conventional

Sludge Parameters – Step 1 - Conv	Test method	Lab reporting limit (Dry weight) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
pH [f]	HJ962-2018	N/A	9.94	N/A
% Solids	HJ613-2011	N/A	56.6	%
Paint Filter Test	USEPA 9095B	N/A	Pass	N/A
Fecal Coliform	HJ 347.2-2018	10	ND	MPN/g

^ - Report “Pass” when Paint Filter Test does not contain free liquid; Report “Fail” when Paint Filter Test does contain free liquid.

26. Sludge Parameteres - Step 1 - MRSL - Alkylphenol (AP)and Alkylphenol Ethoxylates (APEOs): including all isomers.
Test method: modified from GB/T 31414-2015(GC-MS and LC-MS-MS Analysis).

Sludge Parameters - Step 1 - MRSL - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	CAS no.	ZDHC reporting limit (Dry weight) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
Nonylphenol ethoxylates (NPEO)	9016-45-9; 26027-38-3; 37205-87-1; 68412-54-4; 127087-87-0	0.4	ND	mg/kg
Nonylphenol (NP), mixed isomers	104-40-5; 11066-49-2; 25154-52-3; 84852-15-3	0.4	ND	mg/kg
Octylphenol ethoxylates (OPEO)	9002-93-1; 9036-19-5; 68987-90-6	0.4	ND	mg/kg
Octylphenol (OP), mixed isomers	140-66-9; 1806-26-4; 27193-28-8	0.4	ND	mg/kg

27. Sludge Parameteres - Step 1 - MRSL - PolycyclicAromatic Hydrocarbons (PAHs)
Test method: modified from HJ 478-2009 (GC-MS Analysis).

Sludge Parameteres - Step 1 - MRSL - Polycyclic Aromatic Hydrocarbons (PAHs)	CAS no.	ZDHC reporting limit (Dry weight) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
Acenaphthene	83-32-9	0.2	ND	mg/kg
Acenaphthylene	208-96-8	0.2	ND	mg/kg
Anthracene	120-12-7	0.2	ND	mg/kg
Benzo[a]anthracene	56-55-3	0.2	ND	mg/kg
Benzo[a]pyrene (BaP)	50-32-8	0.2	ND	mg/kg
Benzo[b]fluoranthene	205-99-2	0.2	ND	mg/kg
Benzo[e]pyrene	192-97-2	0.2	ND	mg/kg
Benzo[ghi]perylene	191-24-2	0.2	ND	mg/kg
Benzo[j]fluoranthene	205-82-3	0.2	ND	mg/kg
Benzo[k]fluoranthene	207-08-9	0.2	ND	mg/kg
Chrysene	218-01-9	0.2	ND	mg/kg
Dibenz[a,h]anthracene	53-70-3	0.2	ND	mg/kg
Fluoranthene	206-44-0	0.2	ND	mg/kg
Fluorene	86-73-7	0.2	ND	mg/kg
Indeno[1,2,3-cd]pyrene	193-39-5	0.2	ND	mg/kg
Naphthalene	91-20-3	0.2	ND	mg/kg
Phenanthrene	85-01-8	0.2	ND	mg/kg
Pyrene	129-00-0	0.2	ND	mg/kg

28. Sludge Parameteres - Step 1 - MRSL – Chlorotoluenes
Test method: modified from EN 17137:2018(GC-MS Analysis).

Sludge Parameteres - Step 1 - MRSL – Chlorotoluenes	CAS no.	ZDHC reporting limit (Dry weight) (mg/kg)	Result Sample 3 (Sludge - Dry weight))	Unit
2-Chlorotoluene	95-49-8	0.2	ND	mg/kg
3-Chlorotoluene	108-41-8	0.2	ND	mg/kg
4-Chlorotoluene	106-43-4	0.2	ND	mg/kg
2,3-Dichlorotoluene	32768-54-0	0.2	ND	mg/kg
2,4-Dichlorotoluene	95-73-8	0.2	ND	mg/kg
2,5-Dichlorotoluene	19398-61-9	0.2	ND	mg/kg
2,6-Dichlorotoluene	118-69-4	0.2	ND	mg/kg
3,4-Dichlorotoluene	95-75-0	0.2	ND	mg/kg
3,5-Dichlorotoluene	25186-47-4	0.2	ND	mg/kg
2,3,4-Trichlorotoluene	7359-72-0	0.2	ND	mg/kg
2,3,6-Trichlorotoluene	2077-46-5	0.2	ND	mg/kg
2,4,5-Trichlorotoluene	6639-30-1	0.2	ND	mg/kg
2,4,6-Trichlorotoluene	23749-65-7	0.2	ND	mg/kg
3,4,5-Trichlorotoluene	21472-86-6	0.2	ND	mg/kg
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	ND	mg/kg
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	ND	mg/kg
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	ND	mg/kg
Pentachlorotoluene	877-11-2	0.2	ND	mg/kg

29. Sludge Parameteres - Step 2 – Metals
Test method:modified from HJ 700-2014 and GB/T 7467-1987 (ICP-MS and IC-ICP-MS Analysis).

Sludge Parameteres - Step 2 – Metals	Lab Reporting limit (mg/L)	Result Sample 3 (Sludge)	Unit
Antimony	0.6	-	mg/L
Arsenic	0.5	-	mg/L
Barium	35	-	mg/L
Cadmium	0.15	-	mg/L
Cobalt	80	-	mg/L
Copper	10	-	mg/L
Lead	0.5	-	mg/L
Nickel	3.5	-	mg/L
Selenium	0.5	-	mg/L
Silver	5	-	mg/L
Total Chromium	5	-	mg/L
Zinc	50	-	mg/L
Chromium (VI)	2.5	-	mg/L
Mercury	0.05	-	mg/L

Appendix 1: Reference to ZDHC WWSG v2.1 Table 4B

Parameters		Disposal pathways						
	Total metals and anions threshold values (mg/kg)	A and B (Leachate result in mg/L)	C (Leachate result in mg/L)	D (Leachate result in mg/L)	E (Leachate result in mg/L)	F (Leachate result in mg/L)	G (Leachate result in mg/L)	G (Total metals limit in mg/kg)
Arsenic	10	Report only if required to test	5	2.75	0.5	0.5	0.5	75
Cadmium	3		1	0.58	0.15	0.15	0.15	85
Total Chromium	100		15	10	5	5	5	3000
Lead	10		5	2.75	0.5	0.5	0.5	840
Antimony	12		15	7.8	0.6	0.6	0.6	Sample and report only
Barium	700		100	67.5	35	35	35	
Cobalt	1600		80	80	80	80	80	
Copper	200		25	17.5	10	10	10	4300
Nickel	70		20	11.75	3.5	3.5	3.5	420
Selenium	10		1	0.75	0.5	0.5	0.5	100
Silver	100		5	5	5	5	5	Sample and report only
Zinc	1000		250	150	50	50	50	7500
Chromium VI	50		5	3.75	2.5	2.5	2.5	50
Mercury	1		0.2	0.125	0.05	0.05	0.05	57

Appendix 2: reference to ZDHC WWSG v2.1 Table 4C

<table>
<tr><th rowspan="2">Parameters</th><th colspan="6">Disposal pathways</th></tr>
<tr><th>A and B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th></tr>
<tr><td>pH</td><td rowspan="8">Sample and report only</td><td>5 – 11 s.u.</td><td>5 – 11 s.u.</td><td>5 – 11 s.u.</td><td>6.5 – 9 s.u.</td><td>6.5 – 9 s.u.</td></tr>
<tr><td>% Solids</td><td rowspan="7">Sample and report only</td><td rowspan="2">Sample and report only</td><td rowspan="2">Sample and report only</td><td>Sample and report only</td><td>Sample and report only</td></tr>
<tr><td>Fecal Coliform</td><td colspan="2">< 1000 (MPN/g)</td></tr>
<tr><td>Paint Filter Test</td><td colspan="3">Pass Paint filter test</td><td>Sample and report only</td></tr>
<tr><td>Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers</td><td colspan="4">< 0.4 mg/kg</td></tr>
<tr><td>Polycyclic Aromatic Hydrocarbons (PAHs)</td><td colspan="4">< 0.2 mg/kg</td></tr>
<tr><td>Chlorotoluene</td></tr>
</table>

Appendix 2: reference to ZDHC WWSG v2.1 Table 4D

Parameters	Disposal pathways					
	A and B	C	D	E	F	G
Cyanide	Report only if required to test	100 mg/kg	85 mg/kg	70 mg/kg	70 mg/kg	70 mg/kg

Photo of sampling points:

Photo of wastewater before treatment (untreated)

Photo of effluent

Photo of sludge

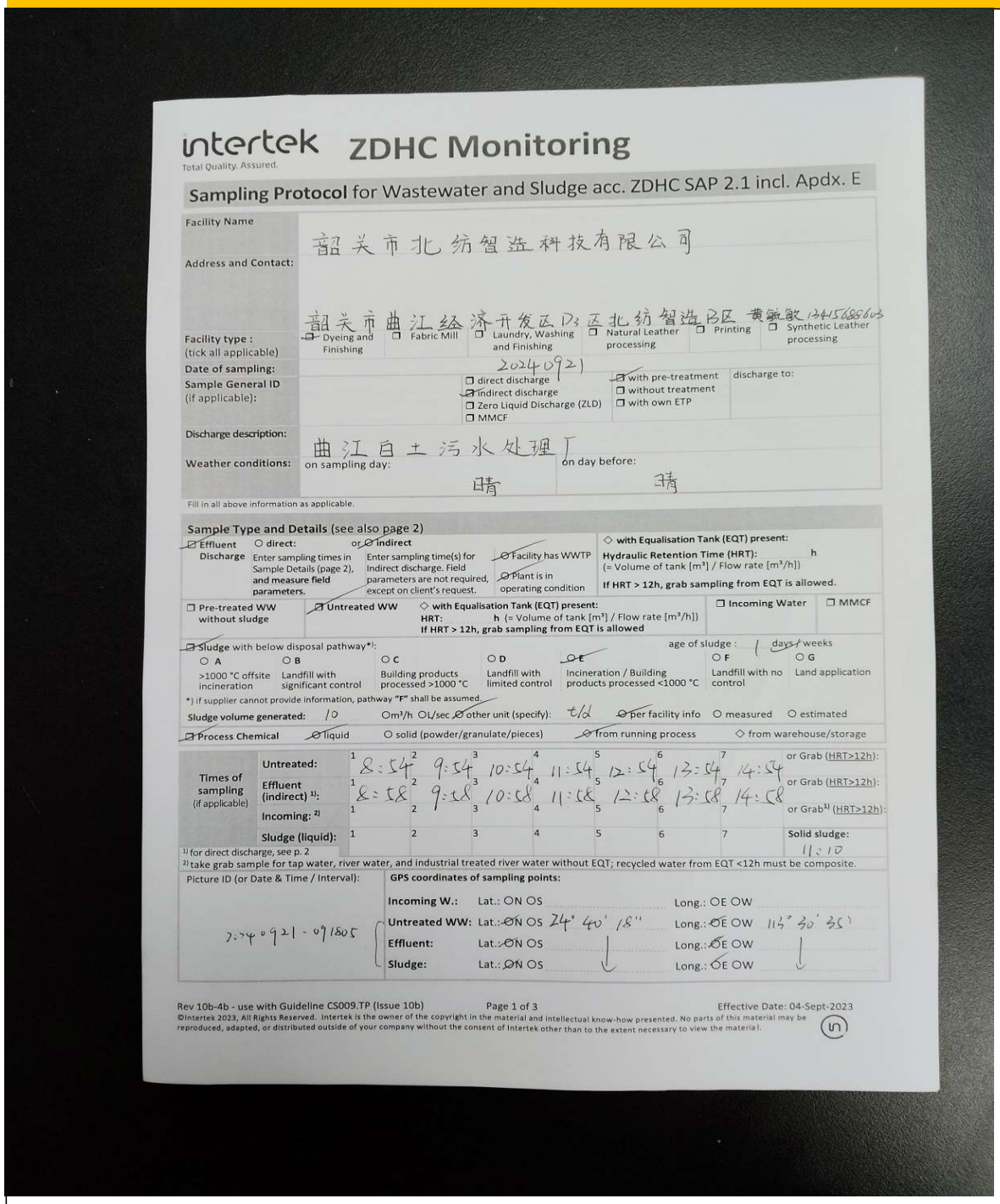
Photo of samples:

Photo of untreated wastewater

Photo of effluent

Photo of sludge

SAMPLING PROTOCOL (PAGE 1OF 3)



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ZDHC Monitoring

Sampling Protocol for Wastewater and Sludge acc. ZDHC SAP 2.1 incl. Apdx. E

Facility Name	韶关市北纺智造科技有限公司
Address and Contact:	韶关市曲江经济开发区白土北纺智造B区 黄敏敏 13415685603
Facility type : (tick all applicable)	☐ Dyeing and Finishing ☐ Fabric Mill ☐ Laundry, Washing and Finishing ☐ Natural Leather processing ☐ Printing ☐ Synthetic Leather processing
Date of sampling:	20240921
Sample General ID (if applicable):	☐ direct discharge ☑ indirect discharge ☐ Zero Liquid Discharge (ZLD) ☐ MMCF — ☑ with pre-treatment ☐ without treatment ☐ with own ETP — discharge to:
Discharge description:	曲江自土污水处理厂
Weather conditions:	on sampling day: 晴 — on day before: 晴

Fill in all above information as applicable.

Sample Type and Details (see also page 2)

☑ Effluent Discharge — ○ direct: Enter sampling times in Sample Details (page 2), and measure field parameters. — or ○ indirect: Enter sampling time(s) for Indirect discharge. Field parameters are not required, except on client's request. — ○ Facility has WWTP ○ Plant is in operating condition

◇ with Equalisation Tank (EQT) present: Hydraulic Retention Time (HRT): h (= Volume of tank [m³] / Flow rate [m³/h]) If HRT > 12h, grab sampling from EQT is allowed.

☐ Pre-treated WW without sludge — ☑ Untreated WW — ◇ with Equalisation Tank (EQT) present: HRT: h (= Volume of tank [m³] / Flow rate [m³/h]) If HRT > 12h, grab sampling from EQT is allowed — ☐ Incoming Water — ☐ MMCF

☑ Sludge with below disposal pathway*): age of sludge : 1 days/weeks

○ A >1000 °C offsite incineration — ○ B Landfill with significant control — ○ C Building products processed >1000 °C — ○ D Landfill with limited control — ○ E Incineration / Building products processed <1000 °C — ○ F Landfill with no control — ○ G Land application

*) If supplier cannot provide information, pathway "F" shall be assumed.

Sludge volume generated: 10 ○ m³/h ○ L/sec ○ other unit (specify): t/d ○ per facility info ○ measured ○ estimated

☑ Process Chemical — ○ liquid ○ solid (powder/granulate/pieces) — ○ from running process ◇ from warehouse/storage

Times of sampling (if applicable)	1	2	3	4	5	6	7	
Untreated:	8:54	9:54	10:54	11:54	12:54	13:54	14:54	or Grab (HRT>12h):
Effluent (indirect) 1):	8:58	9:58	10:58	11:58	12:58	13:58	14:58	or Grab (HRT>12h):
Incoming: 2)								or Grab1) (HRT>12h):
Sludge (liquid):								Solid sludge: 11:10

1) for direct discharge, see p. 2

2) take grab sample for tap water, river water, and industrial treated river water without EQT; recycled water from EQT <12h must be composite.

Picture ID (or Date & Time / Interval): 20240921 - 091805

GPS coordinates of sampling points:

Incoming W.:	Lat.: ON OS	Long.: OE OW
Untreated WW:	Lat.: ~~ON~~ OS 24° 40' 18''	Long.: ~~OE~~ OW 113° 30' 35''
Effluent:	Lat.: ~~ON~~ OS	Long.: ~~OE~~ OW
Sludge:	Lat.: ~~ON~~ OS	Long.: ~~OE~~ OW

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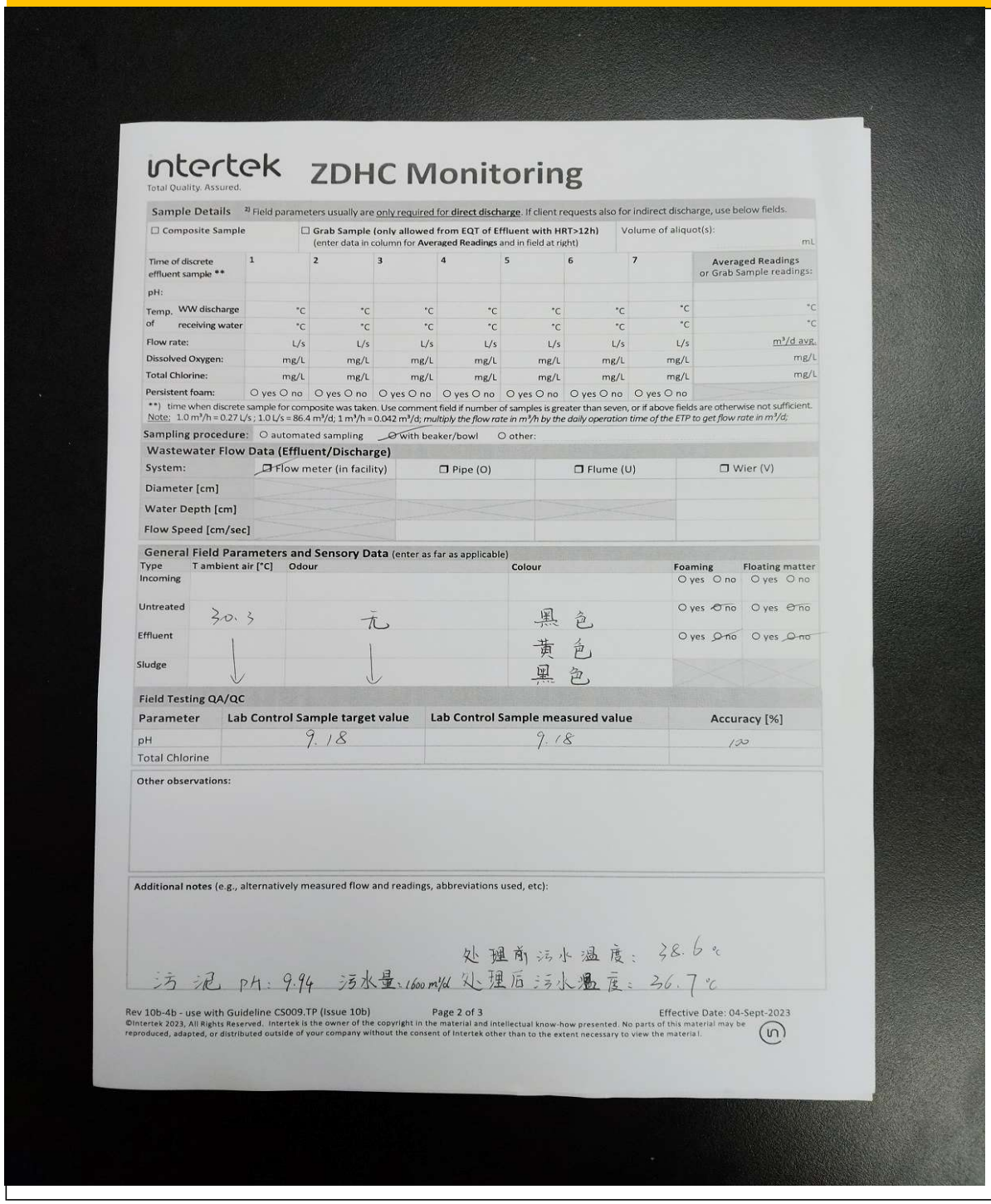
SAMPLING PROTOCOL (PAGE 2 OF 3)



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Sample Details [2] Field parameters usually are only required for **direct discharge**. If client requests also for indirect discharge, use below fields.

☐ Composite Sample ☐ **Grab Sample (only allowed from EQT of Effluent with HRT>12h)** (enter data in column for **Averaged Readings** and in field at right) Volume of aliquot(s): mL

Time of discrete effluent sample **	1	2	3	4	5	6	7	Averaged Readings or Grab Sample readings:
pH:								
Temp. of WW discharge	°C	°C	°C	°C	°C	°C	°C	°C
Temp. of receiving water	°C	°C	°C	°C	°C	°C	°C	°C
Flow rate:	L/s	L/s	L/s	L/s	L/s	L/s	L/s	m^3/d avg.
Dissolved Oxygen:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Total Chlorine:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Persistent foam:	○ yes ○ no	○ yes ○ no	○ yes ○ no	○ yes ○ no	○ yes ○ no	○ yes ○ no	○ yes ○ no	

**) time when discrete sample for composite was taken. Use comment field if number of samples is greater than seven, or if above fields are otherwise not sufficient.
Note: 1.0 m^3/h = 0.27 L/s ; 1.0 L/s = 86.4 m^3/d; 1 m^3/h = 0.042 m^3/d; *multiply the flow rate in m^3/h by the daily operation time of the ETP to get flow rate in m^3/d;*

Sampling procedure: ○ automated sampling ○ with beaker/bowl ○ other:

Wastewater Flow Data (Effluent/Discharge)

System:	❐ Flow meter (in facility)	❐ Pipe (O)	❐ Flume (U)	❐ Wier (V)
Diameter [cm]				
Water Depth [cm]				
Flow Speed [cm/sec]				

General Field Parameters and Sensory Data (enter as far as applicable)

Type	T ambient air [°C]	Odour	Colour	Foaming	Floating matter
Incoming				○ yes ○ no	○ yes ○ no
Untreated	30.3	无	黑色	○ yes ○ no	○ yes ○ no
Effluent	↓	↓	黄色	○ yes ○ no	○ yes ○ no
Sludge			黑色		

Field Testing QA/QC

Parameter	Lab Control Sample target value	Lab Control Sample measured value	Accuracy [%]
pH	9.18	9.18	100
Total Chlorine			

Other observations:

Additional notes (e.g., alternatively measured flow and readings, abbreviations used, etc):

处理前污水温度：38.6 ℃
污泥 pH：9.94 污水量：1600 m^3/d 处理后污水温度：36.7 ℃

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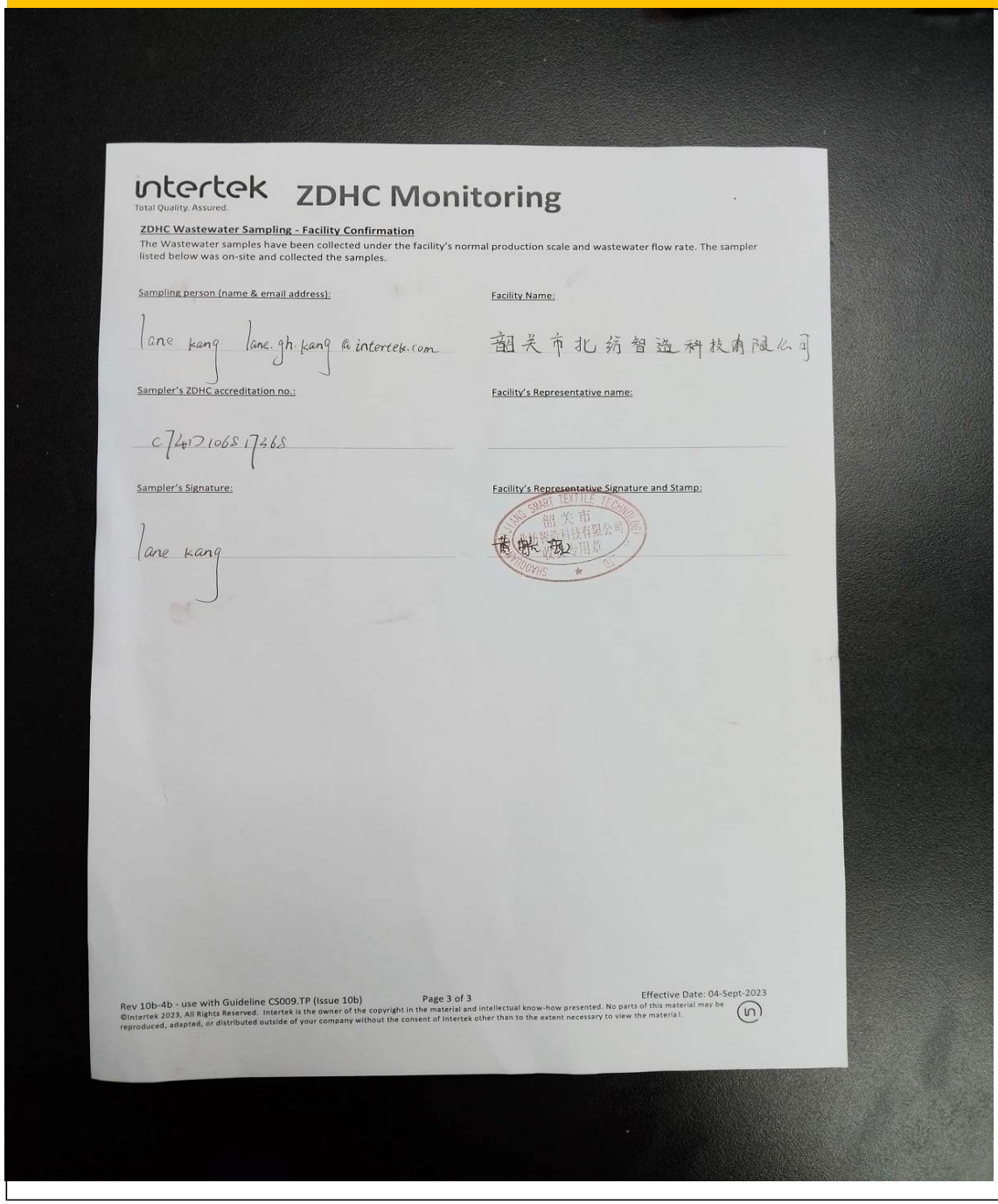
SAMPLING PROTOCOL (PAGE 3 OF 3)



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ZDHC Monitoring

ZDHC Wastewater Sampling - Facility Confirmation

The Wastewater samples have been collected under the facility's normal production scale and wastewater flow rate. The sampler listed below was on-site and collected the samples.

Sampling person (name & email address):

lane kang lane.gh.kang@intertek.com

Facility Name:

韶关市北纺智造科技有限公司

Sampler's ZDHC accreditation no.:

C7407106817368

Facility's Representative name:

Sampler's Signature:

lane kang

Facility's Representative Signature and Stamp:

韶关市北纺智造科技有限公司

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Document on sludge disposal or licensed third-party waste contractor for sludge disposal.
Not Provided

****
End of report