

Test Report No.: 326108339a 002

Client: DONG GUAN MING HOI DYEING&FINISHING FACTORY LIMITED

NO.1 NANGE ROAD, NANYA VILLAGE, DAOJIAO TOWN 523000
DONGGUAN CITY, GUANGDONG PROVINCE CHINA

Buyer's Name : -

Factory Details

Factory Name : DONG GUAN MING HOI DYEING&FINISHING FACTORY LIMITED
Factory Address (with geographical coordinates) : NO.1 NANGE ROAD, NANYA VILLAGE, DAOJIAO TOWN 523000 DONGGUAN CITY, GUANGDONG PROVINCE CHINA
On-site ETP : Yes
Discharge Type of Wastewater : Direct discharge
Destination of Wastewater : DONG GUAN MING HOI DYEING&FINISHING FACTORY LIMITED

For Indirect discharge

Name of public wastewater treatment plants(CETP) : DONG GUAN MING HOI DYEING&FINISHING FACTORY LIMITED
Address of public wastewater treatment plants(CETP) : NO.1 NANGE ROAD, NANYA VILLAGE, DAOJIAO TOWN 523000 DONGGUAN CITY, GUANGDONG PROVINCE CHINA

Sampling Details

Sampling Date : 2025-05-13
Sample Receiving Date : 2025-05-15
Testing Period : 2025-05-16 to 2025-06-13
Parameter(s) exceeded maximum holding time : Yes(pH value, E.Coli)
Sampling Method:

Sample Type	Total Volume	1	2	3	4	5	6	7
Discharged Wastewater	24L	09:00	10:00	11:00	12:00	13:00	14:00	15:00
Raw Wastewater	15.2L	09:30	10:30	11:30	12:30	13:30	14:30	15:30
Incoming Water	5L	08:40	-	-	-	-	-	-
Sludge	5.5L	10:10	-	-	-	-	-	-

Overall Rating	Discharged Wastewater	Raw Wastewater	Sludge
Conventional Parameters / Anion / Metals	Fulfill Progressive Limit	Not Tested	Report Only
MRSI Parameters	Not Tested	Comply	Report Only
Legal Compliance	Not Tested	Not Tested	Not Tested
Specifications	ZDHC Wastewater Guidelines Version 2.2 (September 2024)		

Remark: The report 326108339a 002 superseded report 326108339a 001

Revise reason: Add new test items

For and on behalf of
TÜV Rheinland (Shanghai) Co., Ltd.



2025-06-17

Carmen Yan / Department Manager

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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Result Summary :

Conventional Parameters	Incoming Water	Discharged Wastewater	Raw Wastewater	Sludge
pH Value	-	Aspirational	-	-
Temperature	-	Aspirational	-	-
E.Coli	-	Aspirational	-	-
Colour	-	Progressive	-	-
Persistent Foam	-	Aspirational	-	-
Wastewater Flowrate	-	Report Only	-	-
Ammonium Nitrogen	-	Aspirational	-	-
Adsorbable Organic Halogens (AOX)	-	Progressive	-	-
Biochemical Oxygen Demand (BOD5) - 5 Days	-	Aspirational	-	-
Chemical Oxygen Demand (COD)	-	Aspirational	-	-
Dissolved Oxygen (DO)	-	Aspirational	-	-
Oil and Grease	-	Aspirational	-	-
Phenol	-	Progressive	-	-
Total Chlorine	-	Aspirational	-	-
Total Dissolved Solids (TDS)	-	Report Only	-	-
Total Nitrogen	-	Aspirational	-	-
Total Phosphorous	-	Progressive	-	-
Total Suspended Solids (TSS)	-	Aspirational	-	-
Anion - Chloride	-	Report Only	-	-
Anion - Cyanide	-	Aspirational	-	-
Anion - Sulfate	-	Report Only	-	-
Anion - Sulfide	-	Progressive	-	-
Anion - Sulfite	-	Aspirational	-	-
Heavy Metals	-	Aspirational	-	-
%Solids	-	-	-	Report Only
Manufacturing Restricted Substances List (MRSL)	Incoming Water	Discharged Wastewater	Raw Wastewater	Sludge
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers	-	-	Comply	Report Only
Anti-Microbials & Biocides	-	-	Comply	-
Chlorinated Paraffins	-	-	Comply	-
Chlorobenzenes and Chlorotoluenes	-	-	Comply	Report Only
Chlorophenols	-	-	Comply	-
Dimethyl Formamide (DMFa)	-	-	Comply	-
Dyes - Carcinogenic or Equivalent Concern	-	-	Comply	-
Dyes - Disperse (Sensitizing)	-	-	Comply	-
Flame Retardants	-	-	Comply	-
Glycols / Glycol Ethers	-	-	Comply	-

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Halogenated Solvents	-	-	Comply	-
Organotin Compounds	-	-	Comply	-
Other / Miscellaneous Chemicals	-	-	Comply	-
Perfluorinated and Polyfluorinated Chemicals (PFCs)	-	-	Comply	-
Phthalates - Including all other esters of phthalic acid	-	-	Comply	-
Polycyclic Aromatic Hydrocarbons (PAHs)	-	-	Comply	Report Only
Restricted Aromatic Amines(Cleavable from Azo)	-	-	Comply	-
UV Absorbers	-	-	Comply	-
Volatile Organic Compounds (VOC)	-	-	Comply	-

Note:

Aspirational = Fulfill Aspirational Limit
 Foundational = Fulfill Foundational Limit
 Comply = Comply with ZDHC Limit
 - = Not Tested

Progressive = Fulfill Progressive Limit
 Exceed = Exceed Foundational Limit
 Not Comply = Not Comply with ZDHC Limit

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Material List:

Field ID	Sample Type	Sample Description
D001	Discharge	Discharge Wastewater (Indirect Wastewater)*
R001	Raw	Raw Wastewater*
S001	Sludge	Sludge (Type A)*

Notes:

- * Discharge Wastewater:** Wastewater that is released from a supplier, either directly to the environment (including but not limited to: water bodies, land application/irrigation), or to a wastewater treatment system beyond the supplier's property boundaries.
- * Direct Discharge:** A point source that discharges wastewater to stream, lakes, oceans, or other receiving bodies. Distribution of wastewater onto land is also considered a type of direct discharge. Municipal bodies and suppliers that introduce pollution through a defined conveyance or system such as outlet pipes are direct dischargers.
- * Indirect Discharge:** The discharge of wastewater through a sanitary or industrial wastewater sewer system to a central or common effluent treatment plant (CETP) not owned and/ or operated by the supplier discharging the pollutants.
- * Raw Wastewater: (Untreated Wastewater)** Wastewater that has not yet been treated prior to direct or indirect discharge, or recycling efforts. This wastewater therefore does not meet the quality standards for beneficial use.
- * Sludge:** The solid or semi-solid material separated during the wastewater treatment process, including septic and Zero Liquid Discharge (ZLD) systems.
- * Incoming Water:** Water that is supplied to a manufacturing process, usually withdrawn from surface water bodies, groundwater, collected from rainfall, supplied by municipalities, etc.
- Type A:** On-site or off-site incineration at > 1000°C.
- Type B:** Landfill with Significant Control Measures.
- Type C:** Building Products Processed at > 1000°C.
- Type D:** Landfill with Limited Control Measures.
- Type E:** Offsite Incineration and Building Products Processed at < 1000°C.
- Type F:** Landfill with No Control Measures.
- Type G:** Land application for a specific purpose in approved areas.

1.pH Value

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
pH Value	PH	HJ 1147	NONE	NA	7.95
Conclusion					Fulfill Aspirational Limit

Abbreviation: NA = Not Applicable

Remark:

The limits according to ZDHC limit (Table 3 & 4C of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Wastewater Limit		
	Foundational	Progressive	Aspirational
pH Value	6-9		

Parameter	ZDHC Sludge Limit						
Sludge Type	A	B	C	D	E	F	G
pH Value	NA			5-11	5-11	6.5-9	6.5-9

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2.Temperature

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Temperature of the receiving body of water	Temp-Receiving Water	GB/T 13195	°C	NA	27
Temperature of the water in the discharge pipe	Temp-Discharge Pipe	GB/T 13195	°C	NA	29.4
The difference between the discharge pipe temp and the receiving body of water	Temp-Difference	GB/T 13195	°C	NA	+2.4
Conclusion					Fulfill Aspirational Limit

Abbreviation: °C = Degrees Celsius
 NA = Not Applicable

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (°C)		
	Foundational	Progressive	Aspirational
Temperature	Δ +15	Δ +10	Δ +5

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

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3.E.Coli

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
E.Coli	E.Coli	SM 9221G	MPN/100ml	10	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < = less than
 RL = reporting limit
 MPN/100ml = Most Probable Number per 100 millilitre

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (MPN/100ml)		
	Foundational	Progressive	Aspirational
E.Coli	126		

4.Colour

Sample No.					D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Colour 436 NM	COLOUR-436	ISO 7887-B	m ⁻¹	NA	2.16
Colour 525 NM	COLOUR-525	ISO 7887-B	m ⁻¹	NA	1.13
Colour 620 NM	COLOUR-620	ISO 7887-B	m ⁻¹	NA	0.94
Conclusion					Fulfill Progressive Limit

Abbreviation: NM = nanometer
NA = Not Applicable

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (m ⁻¹)		
	Foundational	Progressive	Aspirational
Colour	7;5;3	5;3;2	2;1;1

5.Persistent Foam

Sample No.					D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Persistent Foam	FOAM	Visual	NONE	NA	Not Visible
Conclusion					Fulfill Aspirational Limit

Abbreviation: NA = Not Applicable

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit		
	Foundational	Progressive	Aspirational
Persistent Foam	The presence of foam is no thicker than 45 centimetres (by visual estimation), and is contained within the aeration basin.		

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6.Wastewater Flowrate

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Wastewater Flowrate	Flowrate	NA	m ³ / day	NONE	1500
Conclusion					Report Only

Abbreviation: m³ / day = cubic metre per day
NA = Not Applicable

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7. Ammonium Nitrogen

					Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result	
Ammonium Nitrogen	AMMONIUM-N	HJ 535	mg/L	0.5	< RL	
Conclusion					Fulfill Aspirational Limit	

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Ammonium Nitrogen	10	1	0.5

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8.Adsorbable Organic Halogens (AOX)

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Adsorbable Organic Halogens	AOX	ISO 9562	mg/L	0.1	0.29
Conclusion					Fulfill Progressive Limit

Abbreviation: < =less than
RL =reporting limit
mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Adsorbable Organic Halogens (AOX)	3	0.5	0.1

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9. Biochemical Oxygen Demand (BOD₅) - 5 Days

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Biochemical Oxygen Demand	BOD ₅	HJ 505	mg/L	5	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Biochemical Oxygen Demand (BOD ₅)	30	15	8

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10. Chemical Oxygen Demand (COD)

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Chemical Oxygen Demand	COD	HJ 828	mg/L	30	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Chemical Oxygen Demand (COD)	150	80	40

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11.Dissolved Oxygen (DO)

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Dissolved Oxygen	DO	HJ 506	mg/L	NA	6.61
Conclusion					Fulfill Aspirational Limit

Abbreviation: < = less than
 RL = reporting limit
 NA = Not Applicable
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Dissolved Oxygen (DO)	> 4		

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12.Oil and Grease

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Oil and Grease	OG	HJ 637	mg/L	0.5	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Oil and Grease	10	2	0.5

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13.Phenol

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Phenol	108-95-2	HJ 503	mg/L	0.001	0.007
Conclusion					Fulfill Progressive Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Phenol	0.5	0.01	0.001

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14.Total Chlorine

Sample No.					D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Total Chlorine	Total Chlorine	HJ 586	mg/L	0.1	0.2
Conclusion					Fulfill Aspirational Limit

Abbreviation: < = less than
 RL = reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Total Chlorine	1		

15.Total Dissolved Solids (TDS)

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Total Dissolved Solids	TDS	US EPA 160.1	mg/L	10	2020
Conclusion					Report Only

Abbreviation: < = less than
RL = reporting limit
mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Total Dissolved Solids	Sample and report only		

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16.Total Nitrogen

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Total Nitrogen	TOTAL-N	HJ 636	mg/L	2	5
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
RL =reporting limit
mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Total Nitrogen	20	10	5

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17.Total Phosphorous

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Total Phosphorous	TOTAL-P	GB/T 11893	mg/L	0.1	0.11
Conclusion					Fulfill Progressive Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Total Phosphorous	3	0.5	0.1

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18.Total Suspended Solids (TSS)

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Total Suspended Solids	TSS	GB/T 11901	mg/L	5	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Total Suspended Solids	50	15	5

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19. Anion - Chloride

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Anion - Chloride	Chloride	HJ 84-2016	mg/L	0.2	< RL
Conclusion					Report Only

Abbreviation: < = less than
RL = reporting limit
mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Anion - Chloride	Sample and report only		

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20. Anion - Cyanide

Sample No.					D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Anion - Cyanide	57-12-5	HJ 484	mg/L	0.05	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter
 mg/kg = milligram per kilogram

Remark:

The limits according to ZDHC limit (Table 3 & 4C of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit for Wastewater (mg/L)		
	Foundational	Progressive	Aspirational
Anion - Cyanide	0.2	0.1	0.05

Parameter	ZDHC Sludge Limit (mg/kg)						
Sludge Type	A	B	C	D	E	F	G
Anion - Cyanide	NA			85	70	70	70

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21. Anion - Sulfate

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Anion - Sulfate	Sulfate	HJ 84-2016	mg/L	0.1	103
Conclusion					Report Only

Abbreviation: < = less than
 RL = reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Anion - Sulfate	Sample and report only		

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22. Anion - Sulfide

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Anion - Sulfide	18496-25-8	GB/T 16489	mg/L	0.01	0.013
Conclusion					Fulfill Progressive Limit

Abbreviation: < =less than
RL =reporting limit
mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Anion - Sulfide	0.5	0.05	0.01

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23. Anion - Sulfite

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Anion - Sulfite	14265-45-3	HJ 84-2016	mg/L	0.2	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter

Remark:

The limits according to ZDHC limit (Table 3 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit (mg/L)		
	Foundational	Progressive	Aspirational
Anion - Sulfite	2	0.5	0.2

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24.Heavy Metals

				Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Antimony (Sb) *	Antimony	US EPA 6020a	mg/L	0.001	0.002
Chromium (Cr, total)	Chromium Total	US EPA 6020a	mg/L	0.001	< RL
Cobalt (Co)	Cobalt	US EPA 6020a	mg/L	0.001	< RL
Copper (Cu)	Copper	US EPA 6020a	mg/L	0.001	0.007
Nickel (Ni)	Nickel	US EPA 6020a	mg/L	0.001	0.003
Silver (Ag)	Silver	US EPA 6020a	mg/L	0.001	< RL
Zinc (Zn)	Zinc	US EPA 6020a	mg/L	0.001	< RL
Arsenic (As)	Arsenic	US EPA 6020a	mg/L	0.001	< RL
Cadmium (Cd)	Cadmium	US EPA 6020a	mg/L	0.001	< RL
Chromium (Cr VI)	Chromium VI	GB 7467	mg/L	0.001	< RL
Lead (Pb)	Lead	US EPA 6020a	mg/L	0.001	< RL
Mercury (Hg)	Mercury	ISO 17294-2	mg/L	0.001	< RL
Barium (Ba)	Barium	US EPA 6020a	mg/L	0.001	0.006
Selenium (Se)	Selenium	US EPA 6020a	mg/L	0.001	< RL
Tin (Sn)	Tin	US EPA 6020a	mg/L	0.001	< RL
Conclusion					Fulfill Aspirational Limit

Abbreviation: < =less than
 RL =reporting limit
 mg/L = milligram per liter
 mg/kg = milligram per kilogram

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Remark:

The limits according to ZDHC limit (Table 2 & 4B of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit for Wastewater (mg/L)			ZDHC Limit for Sludge (mg/kg)		
	Foundational	Progressive	Aspirational	Disposal pathway A-F	Disposal pathway G	Total Metals Threshold Values**
Antimony (Sb)	0.1	0.05	0.01	Report only	NA	12
Chromium (Cr, total)	0.2	0.1	0.05		1200	100
Cobalt (Co)	0.05	0.02	0.01		NA	1600
Copper (Cu)	1	0.5	0.25		1500	200
Nickel (Ni)	0.2	0.1	0.05		420	70
Silver (Ag)	0.1	0.05	0.005		NA	100
Zinc (Zn)	5.0	1.0	0.5		2800	1000
Arsenic (As)	0.05	0.01	0.005		41	10
Cadmium (Cd)	0.1	0.05	0.01		39	3
Chromium (Cr VI)	0.05	0.005	0.001		50	50
Lead (Pb)	0.1	0.05	0.01		400	10
Mercury (Hg)	0.01	0.005	0.001		17	1
Barium (Ba)	Sample and report only				500	700
Selenium (Se)	Sample and report only				36	10
Tin (Sn)	Sample and report only				NA	NA

* if the Total Metals for Sludge exceeded the Total Metals Threshold Values (mg/kg) given in this table, proceed with Leachate Heavy Metal.

25.%Solids

				Sample No.	S001
Parameter	Parameter Code	Test Method	Unit	RL	Result
%Solids	%Solids	HJ 613 at 105°C	%	NA	45.1
Conclusion					Report Only

Abbreviation: % = percentage
NA = Not Applicable

Remark:

The limits according to ZDHC limit (Table 4C of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Sludge Limit						
Sludge Type	A	B	C	D	E	F	G
%Solids	Sample and Report Only						

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26. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Nonylphenol (NP), mixed isomers	Multiple Including 104-40-5 25154-52-3 11066-49-2 84852-15-3	ISO 18857-2	µg/L	5	5	< RL
Octylphenol (OP), mixed isomers	Multiple Including 140-66-9 1806-26-4 27193-28-8	ISO 18857-2	µg/L	5	5	< RL
Nonylphenol ethoxylates (NPEO)	Multiple Including 9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	ISO 18254-1, ASTM D7065	µg/L	5	5	< RL
Octylphenol ethoxylates (OPEO)	Multiple Including 9002-93-1 9036-19-5 68987-90-6	ISO 18254-1, ASTM D7065	µg/L	5	5	< RL
Conclusion						Comply

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				Sample No.	S001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Nonylphenol (NP), mixed isomers	Multiple Including 104-40-5 25154-52-3 11066-49-2 84852-15-3	ISO 18857-2	mg/kg	0.2	< RL
Octylphenol (OP), mixed isomers	Multiple Including 140-66-9 1806-26-4 27193-28-8	ISO 18857-2	mg/kg	0.2	< RL
Nonylphenol ethoxylates (NPEO)	Multiple Including 9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	ISO 18254-1, ASTM D7065	mg/kg	0.2	< RL
Octylphenol ethoxylates (OPEO)	Multiple Including 9002-93-1 9036-19-5 68987-90-6	ISO 18254-1, ASTM D7065	mg/kg	0.2	< RL
Conclusion					Report Only

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter
 mg/kg = milligram per kilogram

Remark:

The limits according to ZDHC limit (Table 4A of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Sludge Limit (mg/kg)						
Sludge Type	A	B	C	D	E	F	G
AP & APEOs	Sample and Report Only			0.4	0.4	0.4	0.4

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27. Anti-Microbials & Biocides

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
o-Phenylphenol (+Salts)	90-43-7	MS_0023187_en 2020-09 modified	µg/L	100	100	< RL
Triclosan	3380-34-5	US EPA 8270E	µg/L	100	100	< RL
Permethrin	Multiple including 52645-53-1	US EPA 8270E	µg/L	500	500	< RL
Conclusion						Comply

Abbreviation: < = less than
 RL =reporting limit
 µg/L = microgram per liter

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28.Chlorinated Paraffins

Sample No.						R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	US EPA 3510, ISO 18219-2	µg/L	5	500	< RL
Short-chain Chlorinated paraffins (SCCPs) (C10-C13)	85535-84-8	US EPA 3510, ISO 18219-1	µg/L	5	25	< RL
Conclusion						Comply

Abbreviation: < = less than
 RL =reporting limit
 µg/L = microgram per liter

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29. Chlorobenzenes and Chlorotoluenes

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
1,2-Dichlorobenzene	95-50-1	GB/T 20384-2006 modified	µg/L	0.2	0.2	< RL
Other isomers of mono, di-, tri-, tetra-, penta- and hexa- Chlorobenzene and mono, di- tri-, tetra- and penta-Chlorotoluene	Multiple including 108-90-7, 541-73-1, 106-46-7, 87-61-6, 120-82-1, 108-70-3, 634-66-2, 634-90-2, 95-94-3, 608-93-5, 118-74-1, 95-49-8, 108-41-8, 106-43-4, 32768-54-0, 95-73-8, 19398-61-9, 118-69-4, 95-75-0, 25186-47-4, 7359-72-0, 2077-46-5, 6639-30-1, 23749-65-7, 21472-86-6, 1006-32-2, 875-40-1, 1006-31-1, 877-11-2	GB/T 20384-2006 modified	µg/L	0.2	0.2	< RL
Conclusion						Comply

					Sample No.	S001
Parameter	Parameter Code	Test Method	Unit	RL		Result
mono, di- tri-, tetra- and penta-Chlorotoluene	Multiple	HJ 605	mg/kg	0.1		< RL
Conclusion						Report Only

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter
 mg/kg = milligram per kilogram

Remark:

The limits according to ZDHC limit (Table 4C of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Sludge Limit (mg/kg)						
Sludge Type	A	B	C	D	E	F	G
mono, di- tri-, tetra- and penta-Chlorotoluene	Sample and Report only			0.2	0.2	0.2	0.2

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30.Chlorophenols

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
2-Chlorophenol	95-57-8	US EPA 8270E	µg/L	0.5	0.5	< RL
3-chlorophenol	108-43-0	US EPA 8270E	µg/L	0.5	0.5	< RL
4-chlorophenol	106-48-9	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3-Dichlorophenol	576-24-9	US EPA 8270E	µg/L	0.5	0.5	< RL
2,4-Dichlorophenol	120-83-2	US EPA 8270E	µg/L	0.5	0.5	< RL
2,5-Dichlorophenol	583-78-8	US EPA 8270E	µg/L	0.5	0.5	< RL
2,6-Dichlorophenol	87-65-0	US EPA 8270E	µg/L	0.5	0.5	< RL
3,4-Dichlorophenol	95-77-2	US EPA 8270E	µg/L	0.5	0.5	< RL
3,5- Dichlorophenol	591-35-5	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,4-Trichlorophenol	15950-66-0	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,5-Trichlorophenol	933-78-8	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,6-Trichlorophenol	933-75-5	US EPA 8270E	µg/L	0.5	0.5	< RL
2,4,5-Trichlorophenol	95-95-4	US EPA 8270E	µg/L	0.5	0.5	< RL
2,4,6-Trichlorophenol	88-06-2	US EPA 8270E	µg/L	0.5	0.5	< RL
3,4,5-Trichlorophenol	609-19-8	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,4,5-Tetrachlorophenol	4901-51-3	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,4,6-Tetrachlorophenol	58-90-2	US EPA 8270E	µg/L	0.5	0.5	< RL
2,3,5,6-Tetrachlorophenol	935-95-5	US EPA 8270E	µg/L	0.5	0.5	< RL
Pentachlorophenol	87-86-5	US EPA 8270E	µg/L	0.5	0.5	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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31. Dimethyl Formamide (DMFa)

Sample No.						R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Dimethyl formamide (DMFa) *	68-12-2	US EPA 8215, 8270E	µg/L	1000	1000	< RL
Conclusion						Comply

Abbreviation: < = less than
RL = reporting limit
µg/L = microgram per liter

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32.Dyes - Carcinogenic or Equivalent Concern

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
C.I. Direct Black 38	1937-37-7	ISO 16373	µg/L	500	500	< RL
C.I. Direct Blue 6	2602-46-2	ISO 16373	µg/L	500	500	< RL
C.I. Acid Red 26	3761-53-3	ISO 16373	µg/L	500	500	< RL
C.I. Basic Red 9	569-61-9	ISO 16373	µg/L	500	500	< RL
C.I. Direct Red 28	573-58-0	ISO 16373	µg/L	500	500	< RL
C.I. Basic Violet 14	632-99-5	ISO 16373	µg/L	500	500	< RL
C.I. Disperse Blue 1	2475-45-8	ISO 16373	µg/L	500	500	< RL
C.I. Disperse Blue 3	2475-46-9	ISO 16373	µg/L	500	500	< RL
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	ISO 16373	µg/L	500	500	< RL
C.I Basic Green 4 (malachite green chloride)	569-64-2	ISO 16373	µg/L	500	500	< RL
C.I Basic Green 4 (malachite green oxalate)	2437-29-8	ISO 16373	µg/L	500	500	< RL
C.I Basic Green 4 (malachite green)	10309-95-2	ISO 16373	µg/L	500	500	< RL
Disperse Orange 11	82-28-0	ISO 16373	µg/L	500	500	< RL
Basic violet 3 with >0.1% of Michler's Ketone	548-62-9	ISO 16373	µg/L	500	500	< RL
C.I. Acid Violet 49	1694-09-3	ISO 16373	µg/L	500	500	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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33.Dyes - Disperse (Sensitizing)

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Disperse Yellow 1	119-15-3	ISO 16373	µg/L	50	50	< RL
Disperse Blue 102	12222-97-8	ISO 16373	µg/L	50	50	< RL
Disperse Blue 106	12223-01-7	ISO 16373	µg/L	50	50	< RL
Disperse Yellow 39	12236-29-2	ISO 16373	µg/L	50	50	< RL
Disperse Orange 37/59/76	13301-61-6	ISO 16373	µg/L	50	50	< RL
Disperse Brown 1	23355-64-8	ISO 16373	µg/L	50	50	< RL
Disperse Orange 1	2581-69-3	ISO 16373	µg/L	50	50	< RL
Disperse Yellow 3	2832-40-8	ISO 16373	µg/L	50	50	< RL
Disperse Red 11	2872-48-2	ISO 16373	µg/L	50	50	< RL
Disperse Red 1	2872-52-8	ISO 16373	µg/L	50	50	< RL
Disperse Red 17	3179-89-3	ISO 16373	µg/L	50	50	< RL
Disperse Blue 7	3179-90-6	ISO 16373	µg/L	50	50	< RL
Disperse Blue 26	3860-63-7	ISO 16373	µg/L	50	50	< RL
Disperse Yellow 49	54824-37-2	ISO 16373	µg/L	50	50	< RL
Disperse Blue 35	12222-75-2	ISO 16373	µg/L	50	50	< RL
Disperse Blue 124	61951-51-7	ISO 16373	µg/L	50	50	< RL
Disperse Yellow 9	6373-73-5	ISO 16373	µg/L	50	50	< RL
Disperse Orange 3	730-40-5	ISO 16373	µg/L	50	50	< RL
Disperse Blue 35	56524-77-7	ISO 16373	µg/L	50	50	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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34.Flame Retardants

Parameter	Parameter Code	Test Method	Unit	RL	Sample No.	R001
					ZDHC Limit	Result
Tris-(2-chloro-ethyl)-phosphate (TCEP)	115-96-8	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Decabromodiphenyl ether (DecaBDE)	1163-19-5	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tri-(2,3-di-bromo-propyl)-phosphate (TRIS)	126-72-7	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Octabromodiphenyl ether (OctaBDE)	32536-52-0	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Bis-(2,3-di-bromo-propyl)-phosphate (BDBPP)	5412-25-9	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tris(1-aziridinyl)phosphine oxide (TEPA)	545-55-1	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Polybromobiphenyls (PBB)	59536-65-1	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tetra-bromo-bisphenol-A (TBBPA)	79-94-7	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Hexabromocyclododecane (HBCDD)	3194-55-6	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tris-(1,3-di-chloro-isopropyl)-phosphate (TDCP)	13674-87-8	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Decabromobiphenyl (DecaBB)	13654-09-6	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Dibromobiphenyls (DiBB)	Multiple	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Octabromobiphenyls (OctaBB)	Multiple	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tetrabromobisphenol A bis(dibromopropyl ether)	21850-44-2	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Hexabromodiphenyl ether (hexaBDE)	36483-60-0	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Monobromobiphenyls (MonoBB)	Multiple	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Monobromodiphenylethers Multiple (MonoBDEs)	Multiple	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Nonabromobiphenyls (NonaBB)	Multiple	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	US EPA 8270, ISO 22032, US EPA 527,US EPA 8321B	µg/L	5	25	< RL

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Tribromodiphenylethers (TriBDEs)	Multiple	US EPA 8270, ISO 22032, US EPA 527, US EPA 8321B	µg/L	5	25	< RL
Boric acid *	10043-35-3; 11113-50-1	EPA 6020a	µg/L	20	500	269
Diboron trioxide *	1303-86-2	EPA 6020a	µg/L	20	500	269
Disodium octaborate *	12008-41-2	EPA 6020a	µg/L	20	500	269
Disodium tetraborate anhydrous *	1303-96-4; 1330-43-4	EPA 6020a	µg/L	20	500	269
Tetraboron disodium heptaoxide, hydrate *	12267-73-1	EPA 6020a	µg/L	20	500	269
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

Remark:

* Borate salts are determined as total boron via ICP. Limit refers to boron, not the salt.

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35.Glycols / Glycol Ethers

Parameter	Parameter Code	Test Method	Unit	RL	Sample No.	R001
					ZDHC Limit	Result
Bis(2-methylethyl)ether	111-96-6	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
2-Ethoxyethanol	110-80-5	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
2-Ethoxyethyl acetate	111-15-9	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
Ethylene glycol dimethyl ether	110-71-4	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
2-Methoxyethanol	109-86-4	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
2-Methoxyethyl acetate	110-49-6	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
2-Methoxypropyl acetate	70657-70-4	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
Triethylene glycol dimethyl ether	112-49-2	EN 71-9:2005+A1:2007; EN 71-10 and -11:2005 modified	µg/L	50	50	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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36.Halogenated Solvents

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
1,2-dichloroethane	107-06-2	US EPA 8260D	µg/L	1	1	< RL
Methylene chloride	75-09-2	US EPA 8260D	µg/L	1	1	< RL
Trichloroethylene	79-01-6	US EPA 8260D	µg/L	1	1	< RL
Tetrachloroethylene	127-18-4	US EPA 8260D	µg/L	1	1	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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37.Organotin Compounds

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Mono-,di-and tri-methyltin derivatives	Multiple including 993-16-8 753-73-1 1066-45-1	ISO 17353	µg/L	0.01	0.01	< RL
Mono-,di-and tri-butyltin derivatives	Multiple including 1118-46-3 1461-22-9	ISO 17353	µg/L	0.01	0.01	< RL
Mono-,di-and tri-phenyltin derivatives	Multiple including 1124-19-2 1135-99-5 639-58-7	ISO 17353	µg/L	0.01	0.01	< RL
Mono-,di-and tri-octyltin derivatives	Multiple including 3091-25-6 3542-36-7 2587-76-0	ISO 17353	µg/L	0.01	0.01	< RL
Dipropyltin compounds (DPT)	Multiple including 867-36-7	ISO 17353	µg/L	0.01	0.01	< RL
Tetrabutyltin compounds (TeBT)	Multiple including 1461-25-2	ISO 17353	µg/L	0.01	0.01	< RL
Tripropyltin Compounds (TPT)	Multiple including 2279-76-7	ISO 17353	µg/L	0.01	0.01	< RL
Tetraoctyltin compounds (TeOT)	Multiple including 3590-84-9	ISO 17353	µg/L	0.01	0.01	< RL
Tricyclohexyltin (TCyHT)	Multiple including 3091-32-5	ISO 17353	µg/L	0.01	0.01	< RL
Tetraethyltin Compounds (TeET)	Multiple including 597-64-8	ISO 17353	µg/L	0.01	0.01	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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38.Other / Miscellaneous Chemicals

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
AEEA [2-(2-aminoethylamino) ethanol]	111-41-1	GB 31604.10-2016 modified	µg/L	500	500	< RL
Bisphenol A	80-05-7	GB 31604.10-2016 modified	µg/L	10	10	< RL
Thiourea	62-56-6	GB 31604.10-2016 modified	µg/L	50	50	< RL
Quinoline	91-22-5	GB 31604.10-2016 modified	µg/L	50	50	< RL
Borate, zinc salt *	12767-90-7	EPA 6020a	µg/L	50	100	B269;Zn< RL
Conclusion						Comply

Abbreviation: < = less than
 RL = reporting limit
 µg/L = microgram per liter

Remark:

- * Borate, zinc salt is determined as total boron and total zinc via ICP. Limit refers to boron and zinc individually, not the salt.

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39.Perfluorinated and Polyfluorinated Chemicals (PFCs)

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Perfluorooctane sulfonate (PFOS) and related substances	Multiple including 1763-23-1	EPA 8270, PFCs: LC-MS-MS FTOH: GC-MS	µg/L	0.01	0.01	< RL
Perfluorooctanoic acid (PFOA) and related substances	Multiple including 335-67-1	EPA 8270, PFCs: LC-MS-MS FTOH: GC-MS	µg/L	1	1	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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40. Phthalates - Including all other esters of phthalic acid

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Di(ethylhexyl) phthalate (DEHP)	117-81-7	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-iso-decyl phthalate (DIDP)	26761-40-0	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-Isononyl Phthalate (DINP)	28553-12-0	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-n-hexyl phthalate (DnHP)	84-75-3	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-n-butyl phthalate (DBP)	84-74-2	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Butyl benzyl phthalate (BBP)	85-68-7	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Dinonyl phthalate (DNP)	84-76-4	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Diethyl phthalate (DEP)	84-66-2	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-n-propyl phthalate (DPRP)	131-16-8	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-isobutyl phthalate (DIBP)	84-69-5	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-cyclohexyl phthalate (DCHP)	84-61-7	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-iso-octyl phthalate (DIOP)	27554-26-3	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4; 68515-50-4	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6; 84777-06-0	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Di-n-pentylphthalates	131-18-0	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Diisopentylphthalates	605-50-5	US EPA 8270E, ISO 18856	µg/L	10	10	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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41. Polycyclic Aromatic Hydrocarbons (PAHs)

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Benzo(a)pyrene	50-32-8	US EPA 8270E	µg/L	1	1	< RL
Anthracene	120-12-7	US EPA 8270E	µg/L	1	1	< RL
Pyrene	129-00-0	US EPA 8270E	µg/L	1	1	< RL
Benzo[ghi]perylene	191-24-2	US EPA 8270E	µg/L	1	1	< RL
Benzo(e)pyrene	192-97-2	US EPA 8270E	µg/L	1	1	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	US EPA 8270E	µg/L	1	1	< RL
Benzo(j)fluoranthene	205-82-3	US EPA 8270E	µg/L	1	1	< RL
Benzo[b]fluoranthene	205-99-2	US EPA 8270E	µg/L	1	1	< RL
Fluoranthene	206-44-0	US EPA 8270E	µg/L	1	1	< RL
Benzo[k]fluoranthene	207-08-9	US EPA 8270E	µg/L	1	1	< RL
Acenaphthylene	208-96-8	US EPA 8270E	µg/L	1	1	< RL
Chrysene	218-01-9	US EPA 8270E	µg/L	1	1	< RL
Dibenz(a,h)anthracene	53-70-3	US EPA 8270E	µg/L	1	1	< RL
Benzo[a]anthracene	56-55-3	US EPA 8270E	µg/L	1	1	< RL
Acenaphthene	83-32-9	US EPA 8270E	µg/L	1	1	< RL
Phenanthrene	85-01-8	US EPA 8270E	µg/L	1	1	< RL
Fluorene	86-73-7	US EPA 8270E	µg/L	1	1	< RL
Naphthalene	91-20-3	US EPA 8270E	µg/L	1	1	< RL
Conclusion						Comply

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				Sample No.	S001
Parameter	Parameter Code	Test Method	Unit	RL	Result
Benzo(a)pyrene	50-32-8	HJ 805-2016	mg/kg	0.2	< RL
Anthracene	120-12-7	HJ 805-2016	mg/kg	0.2	< RL
Pyrene	129-00-0	HJ 805-2016	mg/kg	0.2	< RL
Benzo[ghi]perylene	191-24-2	HJ 805-2016	mg/kg	0.2	< RL
Benzo(e)pyrene	192-97-2	HJ 805-2016	mg/kg	0.2	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	HJ 805-2016	mg/kg	0.2	< RL
Benzo(j)fluoranthene	205-82-3	HJ 805-2016	mg/kg	0.2	< RL
Benzo[b]fluoranthene	205-99-2	HJ 805-2016	mg/kg	0.2	< RL
Fluoranthene	206-44-0	HJ 805-2016	mg/kg	0.2	< RL
Benzo[k]fluoranthene	207-08-9	HJ 805-2016	mg/kg	0.2	< RL
Acenaphthylene	208-96-8	HJ 805-2016	mg/kg	0.2	< RL
Chrysene	218-01-9	HJ 805-2016	mg/kg	0.2	< RL
Dibenz(a,h)anthracene	53-70-3	HJ 805-2016	mg/kg	0.2	< RL
Benzo[a]anthracene	56-55-3	HJ 805-2016	mg/kg	0.2	< RL
Acenaphthene	83-32-9	HJ 805-2016	mg/kg	0.2	< RL
Phenanthrene	85-01-8	HJ 805-2016	mg/kg	0.2	< RL
Fluorene	86-73-7	HJ 805-2016	mg/kg	0.2	< RL
Naphthalene	91-20-3	HJ 805-2016	mg/kg	0.2	< RL
Conclusion					Report Only

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter
 mg/kg = milligram per kilogram

Remark:

The limits according to ZDHC limit (Table 4C of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Sludge Limit (mg/kg)						
Sludge Type	A	B	C	D	E	F	G
PAHs	Sample and Report only			0.2	0.2	0.2	0.2

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42.Restricted Aromatic Amines(Cleavable from Azo)

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
4,4'-methylene-bis-(2-chloroaniline)	101-14-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4,4'-diaminodiphenylmethane	101-77-9	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4,4'-oxydianiline	101-80-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-chloroaniline	106-47-8	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
3,3'-Dimethoxybenzidine	119-90-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
3,3'-Dimethylbenzidine	119-93-7	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
6-Methoxy-m-toluidine	120-71-8	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2,4,5-trimethylaniline	137-17-7	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4,4'-Thiodianiline	139-65-1	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-aminoazobenzene	60-09-03	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL

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4-methoxy-m-phenylenediamine	615-05-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4,4'-Methylenedi-o-toluidine	838-88-0	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2,6-xylydine	87-62-7	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
o-anisidine	90-04-0	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2-naphthylamine	91-59-8	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
3,3'-Dichlorobenzidine	91-94-1	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-Aminobiphenyl	92-67-1	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
benzidine	92-87-5	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
o-toluidine	95-53-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2,4-xylydine	95-68-1	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-chloro-o-toluidine	95-69-2	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL

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4-methyl-m-phenylenediamine	95-80-7	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
o-Aminoazotoluene	97-56-3	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
5-nitro-o-toluidine	99-55-8	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-chloro-o-toluidinium chloride	3165-93-3	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2-Naphthylammonium acetate	553-00-4	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
4-methoxy-m-phenylene diammonium sulphate	39156-41-7	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
2,4,5-trimethylaniline hydrochloride	21436-97-5	Reduction, EPA 8270 and ISO 14362-1 and ISO 14362-3 (if needed) GC/MS and LC/ MS/MS	µg/L	0.1	0.1	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

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43.UV Absorbers

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	36437-37-3	US EPA 8270, ISO 22032, US EPA 527, US EPA 8321B	µg/L	100	100	< RL
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	US EPA 8270, ISO 22032, US EPA 527, US EPA 8321B	µg/L	100	100	< RL
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	US EPA 8270, ISO 22032, US EPA 527, US EPA 8321B	µg/L	100	100	< RL
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	US EPA 8270, ISO 22032, US EPA 527, US EPA 8321B	µg/L	100	100	< RL
Conclusion						Comply

Abbreviation: < = less than
 RL = reporting limit
 µg/L = microgram per liter

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44.Volatile Organic Compounds (VOC)

					Sample No.	R001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Benzene	71-43-2	ISO 11423-1	µg/L	1	1	< RL
Xylene	1330-20-7	ISO 11423-1	µg/L	1	1	< RL
o-cresol	95-48-7	ISO 11423-1	µg/L	1	1	< RL
p-cresol	106-44-5	ISO 11423-1	µg/L	1	1	< RL
m-cresol	108-39-4	ISO 11423-1	µg/L	1	1	< RL
Toluene*	108-88-3	ISO 11423-1	µg/L	1	1	< RL
Conclusion						Comply

Abbreviation: < =less than
 RL =reporting limit
 µg/L = microgram per liter

Order No. 项目编号: 326108339 (Sampling Report)

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Wastewater Sampling Report for ZDHC WWG**ZDHC WWG 废水采样报告****ZDHC Wastewater Guidelines Version 2.2 (Sep. 2024)****ZDHC Wastewater and Sludge SAP Version 2.1 (Nov. 2022)**

Client 客户:	DONGGUAN RONGBO TEXTILE TECHNOLOGY CO., LTD.
Buyer's Name 买家名称:	--
Test item(s) 测试项目:	ZDHC Wastewater
Factory Name 工厂名称:	东莞明海整染厂有限公司
Factory Address 工厂地址:	东莞市道滘镇南丫村南阁路 1 号
Discharge Type of Wastewater: 废水排放类型	Direct discharge 直接排放
On-site ETP 在线废水处理装置	Yes 是
Sampling Date 采样日期:	2025 年 5 月 13 日
Sampling Location 采样点:	Incoming water (进水) Discharged Wastewater (排放废水) Raw Wastewater (原废水) Sludge (污泥) (Ref to the location map attached 参考采样点地图)
Sampling Person 采样人员:	Carl Jiao
ZDHC Sampler Accreditation Certification Number 采样员证书编号:	ZDHC-A-24-E-C001068-R49FE-903C8
TUV Sales 莱茵销售支持:	Eva Chen 132 4751 9042
Sampling Field Contact: 采样现场联系方式	Name (联系人): 招生 Phone (电话): 13712737583

Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Preparation Checklist 采样准备检查表

Checked By 审核人: Carl Jiao Date 日期: 5/13/2025

Equipment list 设备列表	Check 核查	Equipment list 设备列表	Check 核查
Sampling equipment 采样设备		Buffer 缓冲液	N/A
Sampling rod 采样杆	OK	pH meter pH 计	OK
Depth sampler with temperature meter 带温度计取样器	OK	Temperature meter 温度计	N/A
Disposable gloves 一次性手套	OK	DO meter 溶氧仪	N/A
2L amber glass bottle 2L 棕色玻璃瓶	OK	Total Chloride meter 总氯测试仪	N/A
1L amber glass bottle 1L 棕色玻璃瓶	OK	Quality control samples 质控样	
100mL amber glass bottle 100mL 棕色玻璃瓶	OK	Field blanks 现场空白	N/A
500mL amber glass bottle 500mL 棕色玻璃瓶	OK	Transport/equipment blanks 运输/设备空白	N/A
250mL amber glass bottle 250mL 棕色玻璃瓶	OK	Sample storage and transport 样品储存和运输	
100ml PE bottle 100mL 聚乙烯瓶	OK	Blue Ice 蓝冰	OK
500mL PE bottle 500mL 聚乙烯瓶	OK	Packing material 包装材料	OK
40mL amber VOA vial 40mL 棕色 VOA 小瓶	OK	Container 样品存放容器	OK
Aseptic bag 无菌袋	N/A	Safety equipment 安全装备	
PE bag 聚乙烯袋	OK	First-aid kit 急救箱	OK
Labels for samples 样品标签	OK	Drinking water 饮用水	OK
Chemical and measurement equipment 化学试剂及测量设备		Mobile phone/communication equipment 手机/通信设备	OK
Nitric acid 硝酸	N/A	PPE-wide brimmed hat, wet weather gear, waders/rubber boots, disposable overalls 个人防护设备-高筒防水胶靴/一次性工装连体橡胶靴	N/A
Sulfuric acid 硫酸	N/A	Antiseptic hand wash 杀菌洗手液	OK
HCl 盐酸	N/A	Lifejackets/EPIRB 救生衣/应急无线电信号标	OK
Na ₂ S ₂ O ₃ 硫代硫酸钠	N/A	Others 其他	
2M zinc acetate 2M 乙酸锌	N/A	Tools-spanner/shifter.etc 工具-扳手/移动装置等	OK
1M NaOH 1M 氢氧化钠溶液	N/A	Digital camera and batteries/charger 数码相机和电池/充电器	OK

Order No. 项目编号 : 326108339 (Sampling Report)

Basic Information in Sampling Fields 采样基本信息

Production lines 生产线 (编号)	Operation state 运行状态	Note 说明
Line 1	Fully Operation	--

Wastewater treatment plant 污水处理设施 (编号)	Operation state 运行状态	Quantity of wastewater effluent 污水排放量 (m³)	Note 说明
--	Fully Operation	1500	--

Flowrate and Type of Discharge 排放量及排放类型	Flowrate 排放量: ☒ Direct Discharge 直接排放 ☐ Indirect discharge with pretreatment (with sludge) 有预处理间接排放 (有污泥) ☐ Indirect discharge with pretreatment (without sludge) 有预处理间接排放 (无污泥) ☐ Indirect discharge without pretreatment 无预处理间接排放 ☐ Zero Liquid Discharge 零排放	Confirmed by Sampling team ☒ Yes ☐ No																														
Discharge standard of the factory 企业排放标准	DB44/26-2001 GB4287-2012	表1.4-9 项目废水排放标准 <table border="1"> <thead> <tr> <th>污染物</th><th>执行的标准</th><th>本项目标准</th></tr> <tr> <th></th><th>(GB4287-2012)</th><th>(DB44/26-2001)</th></tr> </thead> <tbody> <tr> <td>pH (无量纲)</td><td>6-9</td><td>6-9</td></tr> <tr> <td>SS (mg/L)</td><td>20</td><td>40</td></tr> <tr> <td>COD (mg/L)</td><td>60</td><td>100</td></tr> <tr> <td>BOD₅ (mg/L)</td><td>8</td><td>10</td></tr> <tr> <td>氨氮 (mg/L)</td><td>15</td><td>20</td></tr> <tr> <td>总氮 (mg/L)</td><td>30</td><td>40</td></tr> <tr> <td>总磷 (mg/L)</td><td>3.0</td><td>4.0</td></tr> <tr> <td>化学需氧量</td><td>1000mg/L</td><td>2.5mg/L (100mg/L)</td></tr> </tbody> </table>	污染物	执行的标准	本项目标准		(GB4287-2012)	(DB44/26-2001)	pH (无量纲)	6-9	6-9	SS (mg/L)	20	40	COD (mg/L)	60	100	BOD ₅ (mg/L)	8	10	氨氮 (mg/L)	15	20	总氮 (mg/L)	30	40	总磷 (mg/L)	3.0	4.0	化学需氧量	1000mg/L	2.5mg/L (100mg/L)
污染物	执行的标准	本项目标准																														
	(GB4287-2012)	(DB44/26-2001)																														
pH (无量纲)	6-9	6-9																														
SS (mg/L)	20	40																														
COD (mg/L)	60	100																														
BOD ₅ (mg/L)	8	10																														
氨氮 (mg/L)	15	20																														
总氮 (mg/L)	30	40																														
总磷 (mg/L)	3.0	4.0																														
化学需氧量	1000mg/L	2.5mg/L (100mg/L)																														
Facility Type 工厂类型	☐ Is the polyester wet processing facilities? 是涤纶湿法加工厂吗? ☐ Is the PU processing facilities? 是PU加工厂吗?	☐ Yes ☒ No ☐ Yes ☒ No																														
Suldge disposal pathway 污泥处理方式	☒ A - On-site or off-site Incineration at >1000°C 大于 1000°C 场内或场外焚烧 ☐ B - Landfill with Significant Control Measures 重大控制措施的垃圾填埋场 ☐ C - Building Products Processed at >1000 °C 大于 1000°C 下加工的建筑产品 ☐ D - Landfill with Limited Control Measures 采取有限控制措施的垃圾填埋场 ☐ E - Offsite Incineration and Building Products Processed at <1000°C 小于 1000°C 场外焚烧和加工的建筑产品 ☐ F - Landfills with No Control Measures 没有控制措施的垃圾填埋场 ☐ G - Land application for a specific purpose in approved areas. 在经批准的地区为特定目的进行土地应用	工厂声称交由有资质的第三方进行处理																														

Sampling day weather 采样天气状况:	☒ sunny 晴 ☐ rainy 雨 ☐ cloudy 多云 ☐ others 其他
Sampling mode 采样方式:	☐ discrete 瞬时 ☒ composite 混合 ☐ others 其他
Sampling day temperature 采样气温:	23~31°C
Distance from TUV to sampling place 采样点距离莱茵距离:	1454KM

Order No. 项目编号 : 326108339 (Sampling Report)
Sampling Location (采样点): Incoming water (进水)

Sampling Team (采样组)		Carl Jiao
Sampling time (采样时间)		10.30AM
Sample description in field (样品描述)	Colour (颜色)	透明
	Odor (气味)	No
	Turbidity (浑浊)	No
	Oil slick (浮油)	No

Test Item In Lab (实验室测试项目):

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
AP/APEO, Anti- Microbials & Biocides, Chlorinated Parafins, Chlorophenols, COC, DMFa, Dyes, Flame retardant, Glycols, Organotin, Phthalates, PAHs, AZO, UV Absorbers, Other chemicals 烷基酚/烷基酚聚氧乙烯醚, 抗菌剂, 氯化石蜡, 氯化苯酚, 氯苯和氯甲苯, N,N-二甲酰胺, 染料, 阻燃剂, 乙二醇, 有机锡, 邻苯, 多环芳烃, 偶氮染料, 紫外吸收剂, 其他化学物质	I001	2L amber glass bottle 2L 棕色玻璃瓶	-	N	
PFCs 全氟化物	I002	1L PE bottle 1L 聚乙烯瓶	Filling without air in bottle 满瓶不留空气	N	
Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物	I003	3*40mL amber VOA vial no head-space 3个40mL棕色VOA小瓶	Acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 加盐酸调节水样pH小于2, 满瓶不留空气	N	
Field blank of Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物现场空白	I103B	3*40mL amber VOA vial no head-space 40mL棕色VOA小瓶	Filling with Grade 1 water, acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 用一级水装满, 加盐酸调节水样pH小于2, 满瓶不留空气	-	Only open the cap when sampling on site, no sampling required 现场采样时打开瓶盖即可, 不需要采样
Heavy metals 重金属	I004	1L PE bottle 1L 聚乙烯瓶	Acidify to pH< 2 with nitric acid 加硝酸调节水样 pH 小于 2	N	

Order No. 项目编号 : 326108339 (Sampling Report)

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
Field blank of Mercury 汞现场空白	I104B	100mL PE bottle 100mL 聚乙烯瓶	Filling with Grade 1 water and Acidify to pH < 2 with nitric acid 装入一级水, 加硝酸调节水样pH小于2	-	Only open the cap when sampling on site, no sampling required 现场采样时打开瓶盖即可, 不需要采样
Cr VI 六价铬	I005	3*40mL amber brown glass VOA vial 3个40mL棕色玻璃VOA小瓶	0.45 um filter in field, add buffer* to pH 9.0-9.5 现场过 0.45um 微膜, 加缓冲液调节水样 pH 至 9.0-9.5	N	
Temperature indicator bottle 温度指示瓶	-	500mL amber glass bottle 500mL棕色玻璃瓶	-	-	

Remark: # Buffer = EPA Method 218.6. Dissolve 33 g of ammonium sulphate in 75 ml of ASTM D1103 Type 1 or ISO 3696 water, add 6.5 ml of ammonium hydroxide. Dilute to 100 ml with ASTM D1103 Type 1 or ISO 3696 water.

Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Location (采样点): Discharged Wastewater (排放废水)

Sampling Team (采样组)	Carl Jiao							
Sampling time (采样时间)	1	2	3	4	5	6	7	Ave
	11:20	12:20	13:20	14:20	15:20	16:20	17:20	--
Temperature of receiving water ^Δ (接收水体的温度)	26°C	26°C	27°C	27°C	28°C	28°C	27°C	27°C
Temperature of the water in discharge pipe Wastewater receiver body temperature (排放管中水体的温度)	29°C	29°C	29°C	30°C	30°C	30°C	29°C	29.4
COD online 化学需氧量在线监测 mg/L								
Wastewater Flowrate meter 污水流速仪 (L/min)	166	190	250	220	180	175	180	194.4
BOD ₅ online 五日生化需氧量在线监测 mg/L	--							
Sample description in field (样品描述)	Colour (颜色)	Slightly yellow						
	Odor (气味)	No						
	Turbidity (浑浊)	No						
	Oil slick (浮油)	No						

^Δ Use incoming water temperature as receiver body temperature if no receiver body can be found

Test Item In Lab (实验室测试项目):

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
AP/APEO, Anti-Microbials & Biocides, Chlorinated Parafins, Chlorophenols, COC, DMFa, Dyes, Flame retardant, Glycols, Organotin, Phthalates, PAHs, AZO, UV Absorbers, Other chemicals 烷基酚/烷基酚聚氧乙醚, 抗菌剂, 氯化石蜡, 氯化苯酚, 氯苯和氯甲苯, N,N-二甲酰胺, 染料, 阻燃剂, 乙二醇, 有机锡, 邻苯, 多环芳烃, 偶氮染料, 紫外吸收剂, 其他化学物质	D101	2L*7 amber glass bottle 2L*7 棕色玻璃瓶	-	Y	

Order No. 项目编号 : 326108339 (Sampling Report)

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
PFCs 全氟化物	D102	1L PE bottle 1L 聚乙烯瓶	Filling without air in bottle 满瓶不留空气	Y	
Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物	D103	3*40mL amber VOA vial no head-space 3个40mL棕色VOA小瓶	Acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 加盐酸调节水样pH小于2, 满瓶不留空气	Y	
Field blank of Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物现场空白	D103B	3*40mL amber VOA vial no head-space 40mL棕色VOA小瓶	Filling with Grade 1 water, Acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 填入一级水, 加盐酸调节水样pH小于2, 满瓶不留空气	-	Only open the cap when sampling on site, no sampling required 现场采样时打开瓶盖即可, 不需要采样
Heavy metals 重金属	D104	1L PE bottle 1L 聚乙烯瓶	Acidify to pH< 2 with nitric acid 加硝酸调节水样 pH 小于 2	Y	
Field blank of Mercury 汞现场空白	D104B	100mL PE bottle 100mL 聚乙烯瓶	Filling with Grade 1 Water, Acidify to pH < 2 with nitric acid 填入一级水, 加硝酸调节水样pH小于2	-	Only open the cap when sampling on site, no sampling required 现场采样时打开瓶盖即可, 不需要采样
Cr VI 六价铬	D105	3*40mL amber brown glass VOA vial 3个40mL棕色玻璃VOA小瓶	0.45 um filter in field, add buffer* to pH 9.0-9.5 现场过 0.45um 微膜, 加缓冲液调节水样 pH 至 9.0-9.5	Y	
Color, TSS, TDS, Chloride, Sulfate 色度, 总固体悬浮物, 总溶解固土, 氯离子, 硫酸盐	D106	1L amber glass bottle or plastic bottle 1L棕色玻璃瓶/塑料瓶	Filling without air in bottle 满瓶不留空气	Y	
AOX 可吸附有机卤素	D107	500mL amber glass bottle 500mL棕色玻璃瓶	Acidify to pH 1- 2 with nitric acid, filling without air in bottle. 加硝酸调节水样pH 1-2, 满瓶不留空气	Y	
Cyanide 氰化物	D108	1L PE bottle 1L 聚乙烯瓶	Adding NaOH to pH >12, adding 0.1mL 10% Na ₂ S ₂ O ₃ solution 用氢氧化钠调节水样pH大于12, 再加0.1mL10%硫代硫酸钠溶液	Y	
Sulfite 亚硫酸盐	D109	500mL PE bottle 500mL 聚乙烯瓶	1mL 2.5%EDTA, filling without air in bottle 加入 1mL 2.5%EDTA, 满瓶不留空气	Y	
Oil and Grease 油脂	D110	1L amber glass bottle 1L 棕色玻璃瓶	Acidify to pH< 2 with sulfuric acid or hydrochloric acid. 加硫酸/盐酸调节水样pH小于2	Y	

Order No. 项目编号 : 326108339 (Sampling Report)

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
COD, ammonia -N, Total N , Total P, Phenols 化学需氧量、氨氮、 总氮、总磷, 苯酚	D111	2L amber glass bottle 2L棕色玻璃瓶	Acidify to pH< 2 with sulfuric acid, filling without air in bottle 加硫酸调节水样pH小于2, 满瓶不留空气	Y	
Field blank of Total P 总磷现场空白	D111B	100mL amber glass bottle 100mL棕色玻璃瓶	Filling with Grade 1 water, Acidify to pH< 2 with sulfuric acid, filling without air in bottle 填入一级水, 加硫酸调节水 样pH小于2, 满瓶不留空气	-	Only open the cap when sampling on site, no sampling required 现场采样时打开 瓶盖即可, 不需 要采样
BOD ₅ 五日生化需氧量	D112	1L amber glass bottle 1L棕色玻璃瓶	Filling without air in bottle 满瓶不留空气	Y	
Sulfide 硫化物	D113	100mL PE bottle 100mL聚乙烯瓶	Adding 4 drops 2mol/L zinc acetate, adding NaOH to pH >12, filling without air in bottle 先加入4滴2mol/L乙酸锌, 再用氢氧化钠调节水样pH 大于12, 满瓶不留空气	Y	
E. Coli 大肠杆菌	D114	Aseptic Bags 无菌袋	Adding 0.1mL 10% Na ₂ S ₂ O ₃ solution, keep in the dark 加0.1mL 10%硫代硫酸钠溶 液, 避光保存	Y	
Field blank of E. Coli 大肠杆菌现场空白	D114B	Aseptic Bags 无菌袋	Filling with Grade 1 water, Adding 0.1mL 10% Na ₂ S ₂ O ₃ solution, keep in the dark 填入一级水, 加0.1mL 10% 硫代硫酸钠溶液, 避光保存	-	Only open the cap when sampling on site, no sampling required 现场采样时打开 瓶盖即可, 不需 要采样

Order No. 项目编号 : 326108339 (Sampling Report)
Sampling Location (采样点): Raw Wastewater (原废水)

Sampling Team (采样组)		Team1						
Sampling time (采样时间)		1	2	3	4	5	6	7
		10: 50	11:50	12:50	13:50	14:50	15:50	16:50
Sample description in field (样品描述)	Colour (颜色)	黑色						
	Odor (气味)	刺激						
	Turbidity (浑浊)	浑浊						
	Oil slick (浮油)	有						

Test Item In Lab (实验室测试项目):

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
AP/APEO, Anti-Microbials & Biocides, Chlorinated Paraffins, Chlorophenols, COC, DMFa, Dyes, Flame retardant, Glycols, Organotin, Phthalates, PAHs, AZO, UV Absorbers, Other chemicals 烷基酚/烷基酚聚氧乙烯醚, 抗菌剂, 氯化石蜡, 氯化苯酚, 氯苯和氯甲苯, N,N-二甲酰胺, 染料, 阻燃剂, 乙二醇, 有机锡, 邻苯, 多环芳烃, 偶氮染料, 紫外吸收剂, 其他化学物质	R201	2L*7 amber glass bottle 2L*7 棕色玻璃瓶	-	Y	
PFCs 全氟化物	R202	1L PE bottle 1L 聚乙烯瓶	Filling without air in bottle 满瓶不留空气	Y	
Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物	R203	3*40mL amber VOA vial no head-space 3个40mL棕色VOA小瓶	Acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 加盐酸调节水样pH小于2, 满瓶不留空气	Y	
Field blank of Halogenated Solvent/ VOCs 卤化溶剂、挥发性有机物现场空白	R203B	3*40mL amber VOA vial no head-space 40mL棕色VOA小瓶	Acidify to pH < 2 with hydrochloric acid, filling without air in bottle. 加盐酸调节水样pH小于2, 满瓶不留空气	-	Only open the cap when sampling on site, no sampling required 现场采样时打开瓶盖即可, 不需要采样

Order No. 项目编号 : 326108339 (Sampling Report)
Sampling Location (采样点): Sludge (污泥)

Sampling Team (采样组)		Carl Jiao
Sampling time (采样时间)		11:00AM
Sample description in field (样品描述)	Surroundings (周边环境)	正常
	Sludge colour (土壤颜色)	黑色
	Sludge type (土壤性状)	☒ solid (固体状) ☐ liquid (液体状)
	Sludge odor (土壤气味)	刺激
	Apparent source of pollution (明显污染源)	No

Test Item In Lab (实验室测试项目):

Test item 采样项目	Lab No. 标签号	Bottle type and size 样品瓶规格	Treatment 现场处理情况	Multiple sampling (Y/N)	Note 备注
%Solid, Paint Filter Test 固含量, 油漆过滤测试	S301	500ml PE bottle 500ml 聚乙烯瓶	-	N	
Cyanide 氰化物	S302	1L PE bottle 1L 聚乙烯瓶	Adding NaOH to pH >12, adding 0.1mL 10% Na ₂ S ₂ O ₃ solution 用氢氧化钠调节水样 pH 大于 12, 再加 0.1mL 10% 硫代硫酸 酸钠溶液	N	
Feacal Coliform 粪大肠菌群	S303	Aseptic Bags 无菌袋	Adding 0.1mL 10% Na ₂ S ₂ O ₃ solution, keep in the dark 加0.1mL 10% 硫代硫酸钠溶 液, 避光保存	N	
Heavy metals 重金属	S304	1L PE bag 1L PE袋	Acidify to pH < 2 with nitric acid 加硝酸调节水样 pH 小于 2	N	
AP/APEO, COC, PAHs 烷基酚/烷基酚聚氧乙烯 醚、氯甲苯、多环芳烃	S305	1L * 3 PE bag 1L * 3 PE 袋	0.008% Na ₂ S ₂ O ₃ V/W 加 0.008% (体积重量比) 硫 代硫酸钠溶液袋子	N	

Declaration for ZDHC Sludge Disposal Pathway A

(Sludge sent to onsite or offsite incineration operated at temperatures greater than or equal to 1000°C. The ash generated by the incineration process must be disposed of using one of the other ZDHC disposal pathways)

Reference: ZDHC Sludge Reference Document V1.0 and ZDHC Wastewater Guidelines V2.2

Facility name: DONG GUAN MING HOI DYEING & FINISHING FACTORY LIMITED 东莞明海整染厂有限公司

ZDHC Gateway ID: A909YZ69

Location: NO.1 NANGE ROAD, NANYA VILLAGE, DAOJIAO TOWN 523000 DONGGUAN CITY, GUANGDONG PROVINCE CHINA 东莞市道滘镇南丫村南阁路 1 号

On-site or off-site incineration (please specify): off-site incineration (场外焚烧)

The undersigned entity declares the following:

- Our sludge is disposed of to your incineration (or thermal treatment or waste-to-energy) facility, and that the incineration facility receives our sludge and processes it through the incineration facility.
- That the incineration facility holds the required legal licence / authorisation to operate / permit / other similar documentation that allows the facility to legally-to-operate and accept the reference sludge and process it through the incineration facility. (Provide copies of the documentation.)

We also declare the following information based on the inputs received from the incineration facility where our sludge is disposed and that this information is true and accurate to the best of our knowledge:

1. Incineration temperature: (degrees) 1080°C (1080 度)
2. Dwell time of sludge in the combustion zone: 30 min (30 分钟)
3. Percentage of total incinerator throughput represented by the supplier's sludge: 3/10000 (万分之三)
4. Flue gas treatment steps: Furnace desulfurization+low ammonia combustion+combined denitrification+activeadsorption+bag filter+limestone+gypsum desulfurization+wet electrostatic precipitator(炉内脱硫+低氨燃烧+联合脱硝+活性吸附+布袋除尘+石灰石+石膏法脱硫+湿电除尘)
5. Use of the heat generated by the incineration process: Generate high-temperature steam for heating in otherfactories(产生高温蒸汽, 其他工厂供热)
6. Disposal pathway (method) utilised for the ash from the incineration process: Landfill (填埋)

On behalf of the named entity below, the undersigned hereby declares that the information provided above is true and accurate.

(Signature)

Name and designation of authorised signatory from the entity: 胡美 Hu Mei, 经理 manager

Name and location of the incineration facility: Foshan Hoying Solid Waste Disposal Centre Ltd. 佛山浩盈固体废物处置中心有限公司 101-103, Ground Floor, Building 1, No. 30-1, Datang Park A, Sanshui Industrial Park, Foshan, China 佛山三水工业园大塘西 A 区 30-1 号 1 号楼一层 101-103

Date: 20250604

Note: In case of on-site incineration please get the required details from your incineration plant.
In case of off-site incineration please get the required details from the external incineration unit.

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Sampling Point Indication (Map)

采样点信息

GPS Data: Discharged Wastewater: 22.984494, 113.646498
Raw Wastewater: 22.984025, 113.645285
Incoming water: 22.985264, 113.646334
Sludge: 22.982552, 113.647059

实际采样工厂的 GPS 卫星定位地图:



Factory Layout
工厂排污平面图

Other Factory Photo
其它工厂图片

Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Photo

采样点照片

Sampling Location (Raw Wastewater) 采样点(原废水) - 采样环境 	Sampling Location (Raw Wastewater) 采样点(原废水) - 水样状态颜色 
Sampling Location (Raw Wastewater) 采样点(原废水) - 水样状态颜色 	Sampling Location (Raw Wastewater) 采样点(原废水) - 水样状态颜色 
Sampling Location (Raw Wastewater) 采样点(原废水) - 水样状态颜色 	Sampling Location (Raw Wastewater) 采样点(原废水) - 水样状态颜色 

Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Photo

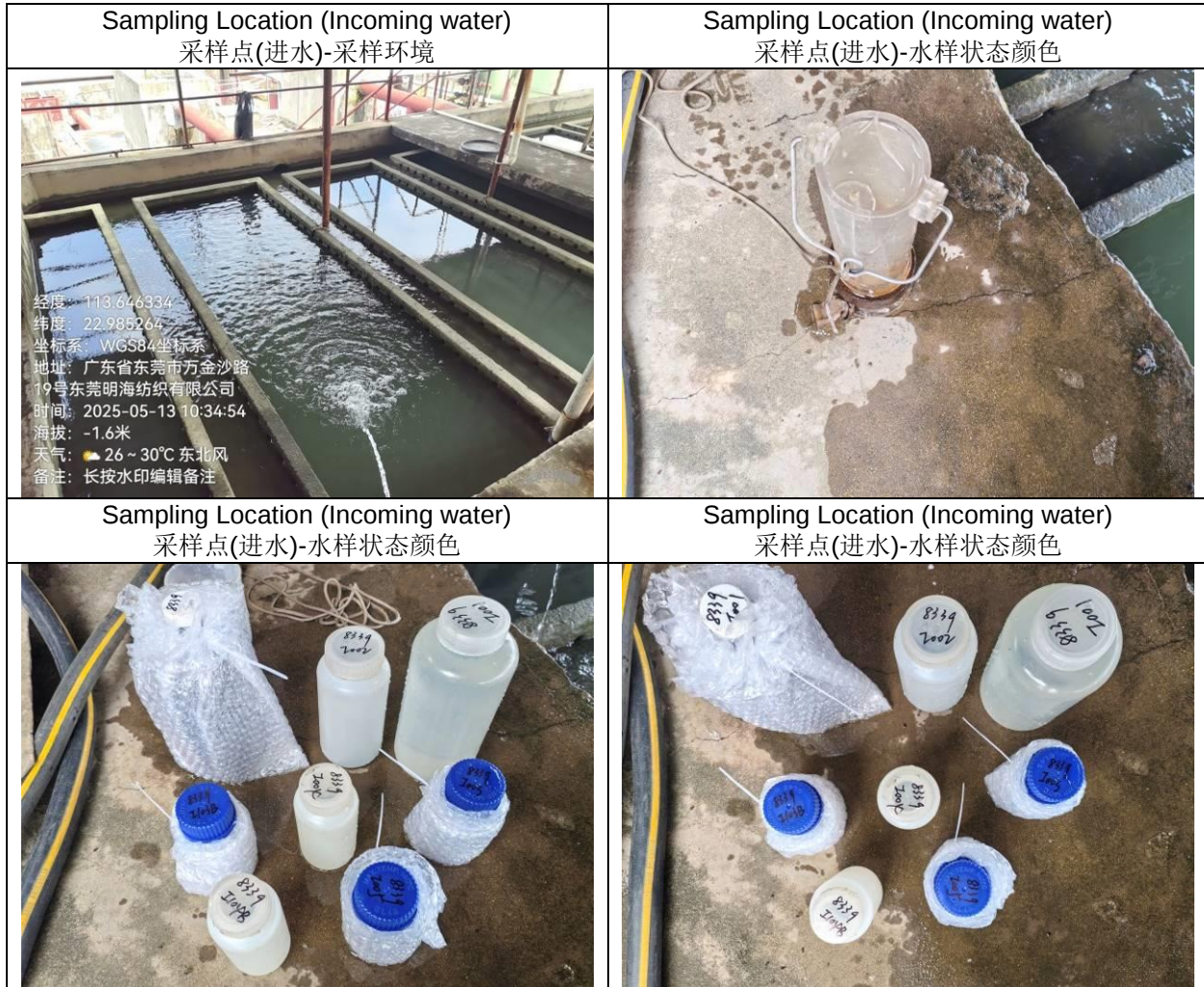
采样点照片

Sampling Location (Discharged Wastewater) 采样点(排放废水)-采样环境  经度: 113.646496 纬度: 22.984494 坐标系: WGS84坐标系 地址: 广东省东莞市万金沙路 19号东莞明海纺织有限公司 时间: 2025-05-19 11:24:12 海拔: 6.4米 天气: 26-38℃ 东北风 备注: 长按水印编辑备注	Sampling Location (Discharged Wastewater) 采样点(排放废水) - 水样状态颜色 
Sampling Location (Discharged Wastewater) 采样点(排放废水) - 水样状态颜色 	Sampling Location (Discharged Wastewater) 采样点(排放废水) - 水样状态颜色 
Sampling Location (Discharged Wastewater) 采样点(排放废水) - 水样状态颜色 	Sampling Location (Discharged Wastewater) 采样点(排放废水) - 水样状态颜色 

Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Photo

采样点照片



Order No. 项目编号 : 326108339 (Sampling Report)

Sampling Location (Sludge) 采样点(污泥) - 采样环境 	Sampling Location (Sludge) 采样点(污泥) - 污泥状态颜色 
Sampling Location (Sludge) 采样点(污泥) - 采样环境 	Sampling Location (Sludge) 采样点(污泥) - 污泥状态颜色 

Sampler and ZDHC Accredited no.
采样员及 ZDHC 认证编号:

Carl Jiao/ZDHC-A-24-E-
C001068-R49FE-903C8

Date 日期: 13 May 2025

Checked By 审核人:

Robin Hong

Date 日期: 14 May 2025

Signature and stamp by Factory
工厂人员签名及盖章:



Date 日期: 13 May 2025

Sample storage conditions 样品保存条件	☒ Refrigeration(0-4°C) ☐ Frozen 冷冻 ☐ RT 常温 ☐ Others 其他				
Sample send temperature/ status/ count 样品送出温度、状态、数量	1 箱 完整 3 度	Sent by 送样人	Carl Jiao	Date 日期	13 May 2025
Sample delivery temperature/ status/ count 样品接收温度、状态、数量	1 箱 完整 4 度	Received by 接收人	Eric Hu	Date 日期	16 May 2025

- END -
结束

