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TEST REPORT

Report No.: CPSGGZD2436011

Dated: 03 October 2024

Applicant : Shahi Exports Private Limited
Contact Person : Mr. Rohit Kumar
Address : Industrial Plot No: 1, Sector 28
Faridabad, Haryana - 121003
Sample : The Submitted sample is Wastewater and sludge
Date of Sampling : Start 16/09/2024 (13:00HR) End: 16/09/2024 (19:30HR)
Sampling Location : Near ETP
Sampling Person ID : ZDHC-A-24-E-C001068-R461D-3C71B
Sampling Protocol : In-house (SOP NO.: GC-SOP-ANA-037 based on ISO: 5667)
Sample Preservation Used : Yes
Sample Quantity : 20 liters each water and 1kg sludge.
Weather Condition : Cloudy
Factory Operating Condition : Normal (Full operational)
Factory Representative : Mr. Manish Dubey
Type of Industry : Textile.
Sample Received Date : 16/09/2024
Temperature (when received in Lab) : 3.8°
Type of Discharge : Direct Discharge.
Type of ETP : Continuous Process
Type of Sampling : Composite
Date of Analysis : 17 September 2024 to 01 October 2024
Sample Description : A: Untreated (Inlet) water B: Treated (Effluent) water C: Sludge

For and on behalf of
Cotecna Inspection India Pvt. Ltd.

Dr. Shobhit Shrivastav
Lab Manager

Test result is drawn according to the kind and extent tests performed.

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Cotecna Inspection India Pvt Ltd, Plot No. 306, Udyog Vihar, Phase-2 Gurgaon, Haryana - 122016. India.

Regd. Off.: Cotecna Inspection India Pvt Ltd., The Summit Business Bay, Office 213, 214 & 215, Behind Guru Nanak Petrol Pump, Opposite PVR Cinemas, Prakashwadi, Off Andheri (East) Mumbai – 400069. India. Website: www.cotecna.co.in

Result Summary (MRSL TEST)

Sl. No.	Test Item	Holding Time	A	C	Conclusion
1	Alkyphenol (AP) & Alkyphenol ethoxylates (APEOs)	2Day	ND	ND	Pass
2	Antimicrobial and Biocides	20HR	ND	-	Pass
3	Chlorinated paraffines	3Day	ND	-	Pass
4	Chlorobenzenes & Chlorotoluenes	4Day	ND	ND	Pass
5	Chlorophenols	3Day	ND	-	Pass
6	N, N-dimethylformamide	2Day	ND	-	Pass
7	Hazardous Dyes-Carcinogenic dyestuff	3Day	ND	-	Pass
8	Hazardous Dyes-Allergenic disperse dyestuff	3Day	ND	-	Pass
9	Dyes – Navy Blue colourant	4Day	ND	-	Pass
10	Flame retardants	2Day	ND	-	Pass
11	Glycols	4Day	ND	-	Pass
12	Halogenated Solvents	2Day	ND	-	Pass
13	Organotin compounds	18HR	ND	-	Pass
14	Other / Miscellaneous Chemicals	5Day	ND	-	Pass
15	PFCs (Perfluorocarbon / Polyfluorinated Compounds)	3Day	ND	-	Pass
16	Phthalates	4Day	ND	-	Pass
17	Polycyclic Aromatic Hydrocarbons (PAHs)	2Day	ND	ND	Pass
18	Restricted Aromatic Amines (Cleavable from Azo-colourants)	4Day	ND	-	Pass
19	UV Absorbers	3Day	ND	-	Pass
20	VOC	20HR	ND	-	Pass

Remark:

1. ND: Not Detected, D: Detected (values less than the reporting limit have been mentioned as ND)

Result Summary (Heavy Metal)

S. No.	Test Details	B	Holding Time	ZDHC Discharge Limit (Textile)
1	Antimony	ND	30 HR	√
2	Arsenic	ND	30 HR	√
3	Barium	ND	30 HR	-
4	Cadmium	ND	30 HR	√
5	Cobalt	ND	30 HR	√
6	Copper	ND	30 HR	√
7	Lead	ND	30 HR	√
8	Nickel	ND	30 HR	√
9	Selenium	ND	30 HR	-
10	Silver\$	ND	30 HR	√
11	T. Chromium	ND	30 HR	√
12	Tin	ND	30 HR	-
13	Zinc	ND	30 HR	√
14	Chromium (VI)	ND	26 HR	√
15	Mercury	ND	30 HR	√

√: Meets Requirements

X: Does not Meets requirements

NA: Not Applicable

NR: Not Required

Conventional Test

S.No.	Test Details	B	Holding Time	ZDHC Discharge Limit (water)
1	Temperature#	Refer Result	On Field	Refer Data
2	TSS \$	ND	24Hrs	A
3	TDS \$	D	24 Hrs	Not Specified
4	COD \$	ND	1 Days	A
5	Total N \$	D	2 Days	A
6	pH#	Refer Result	On Field	A
7	Colour [M ⁻¹]	Refer Result	2 Days	A
8	BOD \$	ND	16 Hrs	A
9	Dissolved Oxygen #	D	On Field	Not Specified
10	T. Chlorine #	ND	On Field	Not Specified
11	Chloride \$	D	3 Days	Not Specified
12	Ammonia N \$	ND	2 Days	A
13	Total P \$	ND	2 Days	A
14	O&G \$	ND	3 Days	A
15	Phenol \$	ND	3 Days	A
16	E. Coli \$	ND	15 Hrs	A
17	Persistent foam #	Refer Result	On Field	A
18	Cyanide \$	ND	3 Days	A
19	Sulphate \$	D	3 Days	Not Specified
20	Sulphite \$	ND	24 Hrs	A
21	Sulphide \$	ND	2 Days	A
22	AOX	ND	6 Days	A
23	Wastewater Flow #	Refer Result	On Field	-

Remark: 1. √: Meets Requirements X: Does not Meets requirements

1. ND: Not Detected, D: Detected, NA: Not Applicable (values less than the reporting limit have been mentioned as ND)
2. # : Result were recorded at the time of sampling
3. \$: Test was subcontracted to ISO: 17025 accredited laboratory.
4. F: Meets Foundational limit, P: Meets Progressive Limit, A: Meets Aspirational Limit

Result Summary (Sludge)

S. No.	Test Details	C	Holding Time	ZDHC Discharge Limit (Textile)	ZDHC Discharge Limit (Leather)
1	Antimony	ND	3 Days	√	-
2	Arsenic	ND	3 Days	√	NA
3	Barium	ND	3 Days	√	-
4	Cadmium	ND	3 Days	√	NA
5	Cobalt	ND	3 Days	√	-
6	Copper	D	3 Days	√	-
7	Lead	ND	3 Days	√	NA
8	Nickel	D	3 Days	√	-
9	Selenium	ND	3 Days	√	-
10	Silver §	ND	3 Days	√	-
11	T. Chromium	D	3 Days	√	-
12	Zinc	D	3 Days	√	-
13	Chromium (VI)	ND	3 Days	√	NA
14	Mercury	ND	3 Days	√	NA
15	Cyanide §	D	4 Days	√	-
16	pH	Refer Result	20-Hrs	-	-
17	% Solid	Refer Result	3 Days	-	-
18	Paint Filter Test	Refer Result	5 days	-	-
19	Fecal Coliform §	Refer Result	16 Hrs	-	-

√: Meets Requirements

X: Does not Meets requirements.

NA: Not Applicable

§: Test was subcontracted to ISO: 17025 accredited laboratory.

MRSL Test Result

1) Alkylphenol (AP) & Alkylphenol ethoxylates (APEOs) Test Method: IHTM with Reference to ISO 18857-2, ASTM D 7742, followed by LCMS analysis					
Substance name	CAS No.	Reporting limit	Result		ZDHC Discharge Limit (Max)
			A (µg/L)	B (mg/kg)	
Nonylphenol (n-nonyl and iso-nonyl)	11066-49-2, 25154-52-3, 104-40-5, 90481-04-2, 84852-15-3	1 µg/L	ND	ND	Water: Textile: 5 µg/L Leather: 5 µg/L Sludge: Textile: 0.4mg/kg Leather: 0.4mg/kg
Octylphenol (n-octyl and iso-octyl)	140-66-9 , 27193-28-8, 1806-26-4	1 µg/L	ND	ND	
Nonylphenoethoxylates (NPEO) (n-nonyl and iso-nonyl)	9016-45-9, 26027-38-3, 68412-54-4, 127087-87-0, 37205-87-1	1 µg/L	ND	ND	
Octylphenoethoxylates (OPEO) (n-octyl and iso-octyl)	9002-93-1, 9036-19-5, 68987-90-6	1 µg/L	ND	ND	

Remark: ND: Not Detected, Reporting Limit (Sludge): 0.2mg/kg

2) Anti- Microbials & Biocides				
Test Method: GC-SOP-ANA-052 (Based on BS EN 12673:1999 & ISO 14154:2005), followed by GCMS & LCMS analysis				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A (µg/L)	
o-Phenylphenol (+salts)	90-43-7	0.1 µg/L	ND	Textile: 100
Triclosan	3380-34-5	0.3 µg/L	ND	Textile: 100
Permethrin	Multiple	0.3 µg/L	ND	Textile: 500

Remark: ND: Not Detected,

3) Chlorinated Paraffins				
Test Method: GC-SOP-ANA-052 (Based on ISO 18219-1), followed by GCECD				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	5 µg/L	ND	Textile: 5
Short-chain Chlorinated paraffin (C10 – C13)	85535-84-8	5 µg/L	ND	

Remark: ND: Not Detected

4) Chlorobenzenes & ChloroToluene					
Test Method: With reference USEPA 8260B & 8270D, Solvent extraction with GCMS analysis					
Substance name	CAS No.	Reporting limit	Result		ZDHC Discharge Limit (Max)
			A (µg/L)	C (mg/kg)	
Monochlorobenzene	108-90-7	0.1µg/L	ND	NR	
Dichlorobenzenes	-	-	-	-	
1,2-Dichlorobenzene	95-50-1	0.1µg/L	ND	NR	
1,3-Dichlorobenzene	541-73-1	0.1µg/L	ND	NR	
1,4-Dichlorobenzene	106-46-7	0.1µg/L	ND	NR	
Trichlorobenzenes	-	-	-	-	
1,2,3-Trichlorobenzene	87-61-6	0.1µg/L	ND	NR	
1,2,4-Trichlorobenzene	120-82-1	0.1µg/L	ND	NR	
1,3,5-Trichlorobenzene	108-70-3	0.1µg/L	ND	NR	
Tetrachlorobenzene	-	-	-	-	
1,2,3,4-Tetrachlorobenzene	634-66-2	0.1µg/L	ND	NR	
1,2,3,5-Tetrachlorobenzene	634-90-2	0.1µg/L	ND	NR	
1,2,4,5-Tetrachlorobenzene	95-94-3	0.1µg/L	ND	NR	
Pentachlorobenzenes	608-93-5	0.1µg/L	ND	NR	
Hexachlorobenzene	118-74-1	0.1µg/L	ND	NR	
Chlorinated Toluenes (as solvents/biocides, from dyes production, Chemical intermediates, Antifeltung)					
Chlorotoluene	Various	0.1µg/L	-	-	Water:
2-Chlorotoluene	95-49-8	0.1µg/L	ND	ND	Textile: 0.2 µg/L
3-Chlorotoluene	108-41-8	0.1µg/L	ND	ND	Leather: 0.2 µg/L
4-Chlorotoluene	106-43-4	0.1µg/L	ND	ND	
Dichlorotoluene	Various	-	-	-	Sludge#:
2,3-Dichlorotoluene	32768-54-0	0.1µg/L	ND	ND	Textile: 0.2mg/kg
2,4-Dichlorotoluene	95-73-8	0.1µg/L	ND	ND	Leather: 0.2mg/kg
2,5-Dichlorotoluene	19398-61-9	0.1µg/L	ND	ND	
2,6-Dichlorotoluene	118-69-4	0.1µg/L	ND	ND	
3,4-Dichlorotoluene	95-75-0	0.1µg/L	ND	ND	
3,5-Dichlorotoluene	25186-47-4	0.1µg/L	ND	ND	
Trichlorotoluene	Various	-	-	-	
2,3,6-Trichlorotoluene	2077-46-5	0.1µg/L	ND	ND	
2,4,5-Trichlorotoluene	6639-30-1	0.1µg/L	ND	ND	
2,4,6-Trichlorotoluene	23749-65-7	0.1µg/L	ND	ND	
2,3,4-Trichlorotoluene	7359-72-0	0.1µg/L	ND	ND	
3,4,5-trichlorotoluene	2014-83-7	0.1µg/L	ND	ND	
Tetrachlorotoluene	Various	-	-	-	
2,3,4,5- Tetrachlorotoluene	76057-12-0	0.1µg/L	ND	ND	
2,3,5,6- Tetrachlorotoluene	29733-70-8	0.1µg/L	ND	ND	
2,3,4,6- Tetrachlorotoluene	875-40-1	0.1µg/L	ND	ND	
Pentachlorotoluene	877-11-2	0.1µg/L	ND	ND	

Remark: ND: Not Detected, NR: Not Required
#: Applicable for Chlorinated Toluene only.

Sludge Reporting Limit: 0.1mg/kg

5) Chlorophenols				
Test Method: IHTM with reference USEPA 8270D, Solvent extraction, followed by GCMS analysis				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
Monochlorophenols	-	-	-	Textile: 0.5 Leather: 0.5
2-Chlorophenol	95-57-8	0.5µg/L	ND	
3-Chlorophenol	108-43-0	0.5µg/L	ND	
4-Chlorophenol	106-48-9	0.5µg/L	ND	
Dichlorophenols (DiCP)	-	-	-	
2,3-dichlorophenol	576-24-9	0.5µg/L	ND	
2,4-dichlorophenol	120-83-2	0.5µg/L	ND	
2,5-Dichlorophenol	583-78-8	0.5µg/L	ND	
3,4-dichlorophenol	95-77-2	0.5µg/L	ND	
3,5-dichlorophenol	591-35-5	0.5µg/L	ND	
2,6-Dichlorophenol	87-65-0	0.5µg/L	ND	
Trichlorophenol	-	-	-	
2,3,4-Trichlorophenol	15950-66-0	0.5µg/L	ND	
2,3,5-Trichlorophenol	933-78-8	0.5µg/L	ND	
2,3,6-Trichlorophenol	933-75-5	0.5µg/L	ND	
2,4,5-Trichlorophenol	95-95-4	0.5µg/L	ND	
2,4,6-Trichlorophenol	88-06-2	0.5µg/L	ND	
3,4,5-Trichlorophenol	609-19-8	0.5µg/L	ND	
Tetrachlorophenol	-	-	-	
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5µg/L	ND	
2,3,4,6-Tetrachlorophenol	58-90-2	0.5µg/L	ND	
2,3,5,6-Tetrachlorophenol	935-95-5	0.5µg/L	ND	
Pentachlorophenol	87-86-5	0.5µg/L	ND	

6) N,N-di-methylformamide (DMFa)				
Test Method: GC-SOP-ANA-052 (Based on EPA-8015), followed by GCMS				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
Dimethyl formamide; N,N-dimethylformamide (DMFa)	68-12-2	30 µg/L	ND	Textile: 1000

Remark: ND: Not Detected,

7) Carcinogenic Dyes				
Test Method: : GC-SOP-ANA-021 (Based on Based on US EPA 8321 B/ DIN 54231), followed by LCMS				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
C.I. Acid Red 26 (C.I. 16150)	3761-53-3	0.1µg/L	ND	Textile: 500 Leather: 500
C.I. Basic Blue 26	2580-56-5	0.1µg/L	ND	
C.I. Basic Red 9 (C.I. 42500)	569-61-9	0.1µg/L	ND	
C.I. Basic Violet 14 (C.I. 42510)	632-99-5	0.1µg/L	ND	
C.I. Direct Black 38 (C.I. 30235)	1937-37-7	0.1µg/L	ND	
C.I. Direct Blue 6 (C.I. 22610)	2602-46-2	0.1µg/L	ND	
C.I. Basic Green 4	569-64-2	0.1µg/L	ND	
C.I. Basic Green 4	2437-29-8	0.1µg/L	ND	
C.I. Basic Green 4	10309-95-2	0.1µg/L	ND	
C.I. Direct Red 28 (C.I. 22120)	573-58-0	0.1µg/L	ND	
C.I. Disperse Blue 1 (C.I. 64500)	2475-45-8	0.1µg/L	ND	
C.I. Disperse Blue 3	2475-46-9	0.1µg/L	ND	
C.I. Disperse Orange 11 (C.I. 60700)	82-28-0	0.1µg/L	ND	
C.I. Disperse Yellow 3	2832-40-8	0.1µg/L	ND	

Remark: ND: Not Detected

8) Allergenic Disperse Dyes				
Test Method: GC-SOP-ANA-021 (Based on US EPA 8321 B / DIN 54231), followed by LCMS				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
C.I. Disperse Blue 1 (C.I. 64500)	2475-45-8	0.1µg/L	ND	Textile: 50
C.I. Disperse Blue 3 (C.I. 61505)	2475-46-9	0.1µg/L	ND	
C.I. Disperse Blue 7 (C.I. 62500)	3179-90-6	0.1µg/L	ND	
C.I. Disperse Blue 26 (C.I. 63305)	3860-63-7	0.1µg/L	ND	
C.I. Disperse Blue 35 (mixture)	12222-75-2	0.1µg/L	ND	
C.I. Disperse Blue 35	56524-77-7	0.1µg/L	ND	
C.I. Disperse Blue 102	12222-97-8	0.1µg/L	ND	
C.I. Disperse Blue 106	12223-01-7	0.1µg/L	ND	
C.I. Disperse Blue 124	61951-51-7	0.1µg/L	ND	
C.I. Disperse Brown 1	23355-64-8	0.1µg/L	ND	
C.I. Disperse Orange 1 (C.I. 11080)	2581-69-3	0.1µg/L	ND	
C.I. Disperse Orange 3 (C.I. 11005)	730-40-5	0.1µg/L	ND	
C.I. Disperse Orange 37 / 59 / 76 (C.I. 11132)	13301-61-6	0.1µg/L	ND	
C.I. Disperse Orange 149	85136-74-9	0.1µg/L	ND	
C.I. Disperse Red 1 (C.I. 11110)	2872-52-8	0.1µg/L	ND	
C.I. Disperse Red 11 (C.I. 62015)	2872-48-2	0.1µg/L	ND	
C.I. Disperse Red 17 (C.I. 11210)	3179-89-3	0.1µg/L	ND	
C.I. Disperse Yellow 1 (C.I. 10345)	119-15-3	0.1µg/L	ND	
C.I. Disperse Yellow 3 (C.I. 11855)	2832-40-8	0.1µg/L	ND	
C.I. Disperse Yellow 9 (C.I. 10375)	6373-73-5	0.1µg/L	ND	
C.I. Disperse Yellow 23 (C.I. 26070)	6250-23-3	0.1µg/L	ND	
C.I. Disperse Yellow 39	12236-29-2	0.1µg/L	ND	
C.I. Disperse Yellow 49	54824-37-2	0.1µg/L	ND	

Remark: ND: Not Detected

9) Dyes – Navy Blue Colourant				
Test Method: GC-SOP-ANA-021 & GC-SOP-ANA-052 (Based on DIN 54231), followed by LCMS				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
Component 1: C39H23Cl-CrN7O12S2Na	118685-33-9	0.1	ND	Textile: 500
Component 2: C46H-30CrN10O20S23Na	Not Allocated	0.1	ND	Leather: 500

Remark: ND: Not Detected

10)Flame retardants				
Test Method: With reference to USEPA 8270, USEPA 527, USEPA 8321B Solvent extraction followed by GC/MS & LCMS analysis				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	0.05 µg/L	ND	Textile: 25 Leather: 5.0
Bis(2,3-dibromopropyl) phosphate (BIS)	5412-25-9	0.05 µg/L	ND	
Decabromodiphenylether (DecaBDE)	1163-19-5	0.05 µg/L	ND	
Hexabromocyclododecane (HBCDD)	3194-55-6	0.05 µg/L	ND	
Octabromodiphenylethers (OctaBDEs)	32536-52-0	0.05 µg/L	ND	
Pentabromodiphenylethers (PentaBDEs)	32534-81-9	0.05 µg/L	ND	
Polybromobiphenyls (PBBs)	59536-65-1	0.05 µg/L	ND	
3,5,3',5'-Tetrabromo-bisphenol A (TBBPA)	79-94-7	0.5 µg/L	ND	
Tris (2-chloro-isopropyl) phosphate	13674-84-5	0.5 µg/L	ND	
Tris-(aziridinyl)-phosphin oxide (TEPA)	545-55-1	0.5 µg/L	ND	
Tris(1,3-dichlorisopropyl)phosphat (TDCPP)	13674-87-8	0.5 µg/L	ND	
Tris(2-chlorethyl)phosphate (TCEP)	115-96-8	0.05 µg/L	ND	
Tri-(2,3-dibromopropyl)phosphate (TRIS)	126-72-7	0.5 µg/L	ND	
Decabromobiphenyl (DecaBB)	13654-09-6	0.05 µg/L	ND	Textile: 25 Leather: 5.0
Dibromobiphenyls (DiBB)	Various	0.05 µg/L	ND	
Octabromobiphenyls (OctaBB)	Various	0.05 µg/L	ND	
Dibromopropylether	21850-44-2	0.05 µg/L	ND	
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	0.05 µg/L	ND	
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	0.05 µg/L	ND	
Monobromobiphenyls (MonoBB)	Multiple	0.05 µg/L	ND	
Monobromodiphenylethers (MonoBDEs)		0.05 µg/L	ND	
Nonabromobiphenyls (NonaBB)		0.05 µg/L	ND	
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	0.05 µg/L	ND	
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	0.05 µg/L	ND	
Tribromodiphenylethers (TriBDEs)	Multiple	0.05 µg/L	ND	
Boric acid	10043-35-3 11113-50-1	10 µg/L	ND	
Diboron trioxide	1303-86-2	10 µg/L	ND	
Disodium octaborate	12008-41-2	10µg/L	ND	
Disodium tetraborate anhydrous	1303-96-4 1330-43-4	10 µg/L	ND	
Tetraboron disodium heptaoxide, hydrate	12267-73-1	10 µg/L	ND	

Remark: ND: Not Detected

11) Glycols / Glycol Ethers				
Test Method: USEPA: 8270 followed by analysis in GC-MS & LC-MS				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A (µg/L)	
Bis(2-methoxyethyl)-ether	111-96-6	0.1µg/l	ND	Textile : 50 Leather: 50
2-ethoxyethanol	110-80-5	0.1µg/l	ND	
2-ethoxyethyl acetate	111-15-9	0.1µg/l	ND	
Ethylene glycol dimethyl ether	110-71-4	0.1µg/l	ND	
2-methoxyethanol	109-86-4	0.1µg/l	ND	
2-methoxyethylacetate	110-49-6	0.1µg/l	ND	
2-methoxypropyleacetate	70657-70-4	0.1µg/l	ND	
Triethylene glycol dimethyl ether	112-49-2	0.1µg/l	ND	

Remark: ND: Not Detected

12) Halogenated solvents				
Test Method: With reference USEPA 8260B, analysis by GCMS with Headspace				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A (µg/L)	
1,2-Dichloromethane	75-09-2	1µg/L	ND	Textile : 1.0 Leather: 1.0
Methylene Chloride	107-06-2	1µg/L	ND	
Trichloroethane	79-01-6	1µg/L	ND	
Tetrachloroethylene	127-18-4	1µg/L	ND	

Remark: ND: Not Detected

13) Organotin compounds				
Test Method: With reference to ISO 17353 and followed by GCMS analysis				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A (µg/L)	
Dipropyltin compounds (DPT)	Multiple	0.01µg/L	ND	Textile : 0.01 Leather: 0.01
Mono-, di- and tri-butyltin derivatives		0.01µg/L	ND	
Mono-, di- and tri-methyltin derivatives		0.01µg/L	ND	
Mono-, di- and tri-octyltin derivatives		0.01µg/L	ND	
Mono-, di- and tri-phenyltin Derivatives		0.01µg/L	ND	
Tetrabutyltin compounds (TeBT)		0.01µg/L	ND	
Tripropyltin Compounds (TPT)		0.01µg/L	ND	
Tetraoctyltin compounds (TeOT)		0.01µg/L	ND	
Tricyclohexyltin (TCyHT)		0.01µg/L	ND	
Tetraethyltin Compounds (TeET)		0.01µg/L	ND	

Remark: ND: Not Detected

14) Other/Miscellaneous Chemicals				
Test Method: GC-SOP-ANA-052-Rev01 Solvent extraction followed by LCMS analysis				
# - Determination of total Boron and Total Zinc (Acid Digestion followed by analysis in ICP-MS)				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A (µg/L)	
AEEA [2-(2-aminoethylamino)ethanol]	111-41-1	50 µg/L	ND	Textile: 500
Bisphenol A	80-05-7	3 µg/L	ND	Textile: 10
Thiourea	62-56-6	3 µg/L	ND	Textile: 50
Quinoline	91-22-5	3 µg/L	ND	Textile: 50
Borate, zinc salt#	12767-90-7	30 µg/L	ND	Textile: 100

Remark: ND: Not Detected,

Test is applicable to textile industry waste water.

15) Perfluorinated compounds (PFCs)
Test Method: With reference DIN 38407-42 / USEPA 537, Solvent extraction followed by GCMS or LCMS analysis

Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (µg/L)
			A(µg/L)	
Perfluoropentanoic Acid (PFPeA) and salts	2706-90-3	0.01µg/L	ND	PFOS: Textile: 0.01 Leather: 0.01
Perfluorohexanoic Acid (PFHxA) and salts	307-24-4	0.01µg/L	ND	
Perfluoroheptanoic Acid (PFHpA) and salts	375-85-9	0.01µg/L	ND	
HPFHpA, and salts	1546-95-8	0.01µg/L	ND	
Perfluorooctanoic Acid (PFOA) and salts	335-67-1	0.01µg/L	ND	
PF-3,7-DMOA, and salts	172155-07-6	0.01µg/L	ND	
Perfluorononanoic Acid (PFNA) and salts	375-95-1	0.01µg/L	ND	
Perfluorodecanoic Acid (PFDA) and salts	335-76-2	0.01µg/L	ND	
Perfluoroundecanoic Acid (PFUnDA) and salts	2058-94-8	0.01µg/L	ND	
4HPFUnA, and salts	34598-33-9	0.01µg/L	ND	
Perfluorododecanoic Acid (PFDoA) and salts	307-55-1	0.01µg/L	ND	
Perfluorotetradecanoic Acid (PFTeDA) and salts	376-06-7	0.01µg/L	ND	
Perfluorobutansulfonate (PFBS) and salts	375-73-5, 59933-66-3	0.01µg/L	ND	
Perfluorohexansulfonate (PFHxS) and salts	355-46-4	0.01µg/L	ND	
Perfluoroheptansulfonate (PFHpS) and salts	375-92-8	0.01µg/L	ND	
Perfluorooctansulfonate (PFOS) and salts	1763-23-1	0.01µg/L	ND	
1H,1H,2H,2H-PFOS, and salts	27619-97-2	0.01µg/L	ND	
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	0.1µg/L	ND	
N-methylperfluoro-1-octanesulfonamide (N-eFOSA)	31506-32-8	0.1µg/L	ND	
N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)	4151-50-2	0.1µg/L	ND	
1H,1H,2H,2H-perfluoro-1-octanol (6:2 FTOH)	647-42-7	0.1µg/L	ND	
1H,1H,2H,2H-perfluoro-1-decanol (8:2 FTOH)	678-39-7	0.1µg/L	ND	

Remark: ND: Not Detected

16) Phthalates					
Test Method: With reference to ISO 18856 or USEPA 8270D, Solvent extraction followed by GC/MS analysis					
Substance name	CAS No.	Reporting limit	Result		ZDHC Discharge Limit (µg/L)
			A (µg/L)		
Dibutylphthalate (DBP)	84-74-2	1 µg/L	ND		Textile: 10 Leather: 10
Di-(2-ethylhexyl)phthalate (DEHP)	117-81-7	1 µg/L	ND		
Benzylbutylphthalate (BBP)	85-68-7	1 µg/L	ND		
Di-iso-nonylphthalate (DINP)	28553-12-0	1 µg/L	ND		
	68515-48-0	1 µg/L	ND		
Di-n-octylphthalate (DNOP)	117-84-0	1 µg/L	ND		
Di-iso-decyl phthalate (DIDP)	26761-40-0	1 µg/L	ND		
	68515-49-1	1 µg/L	ND		
Di-iso-butylphthalate (DIBP)	84-69-5	1 µg/L	ND		
Di-n-hexylphthalate (DnHP)	84-75-3	1 µg/L	ND		
Di-(2-methoxyethyl)phthalate (DMEP)	117-82-8	1 µg/L	ND		
Di-C7-11-branched alkylphthalates (DHNUF)	68515-42-4, 68515-50-4	1 µg/L	ND		
Di-C6-8-branched alkylphthalates (DIHP)	71888-89-6, 84777-06-0	1 µg/L	ND		
Di-n-propylphthalate (DPRP)	131-16-8	1 µg/L	ND		
Di-iso-octylphthalate (DIOP)	27554-26-3	1 µg/L	ND		
Dicyclohexylphthalate (DCHP)	84-61-7	1 µg/L	ND		
Di-n-pentylphthalates	131-18-0	1 µg/L	ND		
Diisopentylphthalates	605-50-5	1 µg/L	ND		
Diethylphthalate (DEP)	84-66-2	1 µg/L	ND		
Dinonylphthalate (DNP)	84-76-4	1 µg/L	ND		

Remark: ND: Not Detected

17) Polycyclic Aromatic Hydrocarbons (PAHs)					
Test Method: With reference USEPA 8260B and 8270, Solvent extraction with GCMS analysis					
Substance name	CAS No.	Reporting limit	Result		ZDHC Discharge Limit (Max)
			A (µg/L)	C (mg/kg)	
Acenaphthene	83-32-9	1µg/L	ND	ND	Water: Textile: 1.0 µg/L Leather: 1.0 µg/L Sludge: Textile: 0.2mg/kg
Acenaphthylene	208-96-8	1µg/L	ND	ND	
Anthracene	120-12-7	1µg/L	ND	ND	
Benza[a]anthracene	56-55-3	1µg/L	ND	ND	
Benzo[a]pyrene	50-32-8	1µg/L	ND	ND	
Benzo[b]fluoranthene	205-99-2	1µg/L	ND	ND	
Benzo[ghi]perylene	191-24-2	1µg/L	ND	ND	
Benzo[k]fluoranthene	207-08-9	1µg/L	ND	ND	
Chrysene	218-01-9	1µg/L	ND	ND	
Dibenzo[a,h]anthracene	53-70-3	1µg/L	ND	ND	
Fluoranthene	206-44-0	1µg/L	ND	ND	
Fluorene	86-73-7	1µg/L	ND	ND	
Indeno[1,2,3-cd]pyrene	193-39-5	1µg/L	ND	ND	
Naphthalene	91-20-3	1µg/L	ND	ND	
Phenanthrene	85-01-8	1µg/L	ND	ND	
Pyrene	129-00-0	1µg/L	ND	ND	
Benzo[e]pyrene	192-97-2	1µg/L	ND	ND	
Benzo[j]fluoranthene	205-82-3	1µg/L	ND	ND	

Remark: ND: Not Detected

Sludge Reporting Limit : 0.2mg/kg

18) Azo dyes / Amines				
Test Method: With reference to EN 14362-1&3 and followed by GCMS or LCMS Analysis				
Substance name	CAS No.	Reporting limit	Result	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
4-Aminodiphenyl	92-67-1	0.1µg/L	ND	Textile: 0.1 Leather: 0.1
Benzidine	92-87-5	0.1µg/L	ND	
4-Chloro-o-toluidine	95-69-2	0.1µg/L	ND	
2-Naphthylamine	91-59-8	0.1µg/L	ND	
o-Aminoazotoluene (C.I. Solvent Yellow 3, C.I. 11160)	97-56-3	0.1µg/L	ND	
2-Amino-4-nitrotoluene	99-55-8	0.1µg/L	ND	
p-Chloroaniline	106-47-8	0.1µg/L	ND	
2,4-Diaminoanisole	615-05-4	0.1µg/L	ND	
4,4'-Diaminodiphenylmethane	101-77-9	0.1µg/L	ND	
3,3'-Dichlorobenzidine	91-94-1	0.1µg/L	ND	
3,3'-Dimethoxybenzidine	119-90-4	0.1µg/L	ND	
3,3'-Dimethylbenzidine	119-93-7	0.1µg/L	ND	
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	0.1µg/L	ND	
p-Cresidine; 6-methoxy-m- toluidine	120-71-8	0.1µg/L	ND	
4,4'-Methylene-bis-(2- chloroaniline)	101-14-4	0.1µg/L	ND	
4,4'-Oxydianiline	101-80-4	0.1µg/L	ND	
4,4'-Thiodianiline	139-65-1	0.1µg/L	ND	
o-Toluidine	95-53-4	0.1µg/L	ND	
2,4-Toluyldiamine	95-80-7	0.1µg/L	ND	
2,4,5-Trimethylaniline	137-17-7	0.1µg/L	ND	
o-Anisidine (2-Methoxyaniline)	90-04-0	0.1µg/L	ND	
C.I. Solvent Yellow 1 (p-Aminoazobenzol (pure))	60-09-3	0.1µg/L	ND	
2,4-Xylidine	95-68-1	0.1µg/L	ND	
2,6-Xylidine	87-62-7	0.1µg/L	ND	
2-Naphthylammoinumacetate	553-00-4	0.1µg/L	ND	
2,4,5 –trimethylaniline hydrochloride	21436-97-5	0.1µg/L	ND	
4-chloro-o-toluidinium chloride	3165-93-3	0.1µg/L	ND	
4-methoxy-m-phenylenediammonium sulphate,2,4-diaminoanisole sulphate	39156-41-7	0.1µg/L	ND	

Remark: ND: Not Detected

19) UV Absorbers				
Test Method: : IHTM (GC-SOP-ANA-052) Based on ISO: 22032 and analysis by GCMS analysis				
Substance name	CAS No.	Reporting limit	Result (µg/L)	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	36437-37-3	10 µg/L	ND	Textile: 100
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	10 µg/L	ND	
2-benzotriazol-2-yl-4,6-di-tertbutylphenol (UV-320)	3846-71-7	10 µg/L	ND	
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	10 µg/L	ND	

Remark: ND: Not Detected

20) VOC				
Test Method: IHTM with reference ISO 11423-1 / USEPA 8260, analysis by GCMS with Headspace				
Substance name	CAS No.	Reporting limit	Result (µg/L)	ZDHC Discharge Limit (Max µg/L)
			A (µg/L)	
Benzene	71-43-2	1µg/L	ND	Textile: 1.0 Leather: 1.0
o-Cresol	95-48-8	1µg/L	ND	
m-Cresol	106-44-5	1µg/L	ND	
p-Cresol	108-39-4	1µg/L	ND	
Xylene	1330-20-7	1µg/L	ND	Textile: 1.0
Toluene	108-88-3	1µg/L	ND	

Remark: ND: Not Detected

RESULT - HEAVY METALS								
S. No.	Test Details	Test Method	Reporting Limit	Test Result	India Discharge Limit	ZDHC Discharge Limit(water) (mg/l)		
				B (mg/L)		F	P	A
1	Antimony	ISO 11885 / APHA/ SM 3030D, E Followed by analysis in ICP-MS	0.01mg/l	<0.01	Not specified	0.1	0.05	0.01
2	Total Chromium		0.01mg/l	<0.01	2.0 mg/l	0.2 / 1.5#	0.1 / 0.8#	0.05 / 0.3#
3	Cobalt		0.01mg/l	<0.01	Not specified	0.05	0.02	0.01
4	Copper		0.01mg/l	<0.01	Not specified	1.0	0.5	0.25
5	Nickel		0.01mg/l	<0.01	2.0 mg/l	0.2	0.1	0.05
6	Silver\$		0.001mg/l	<0.001	Not specified	0.1	0.05	0.005
7	Zinc		0.1mg/l	<0.1	Not specified	5.0	1.0	0.5
8	Arsenic		0.005mg/l	<0.005	Not specified	0.05	0.01	0.005
9	Cadmium		0.01mg/l	<0.01	Not specified	0.1	0.05	0.01
10	Barium		0.1mg/l	<0.1	Not specified	-	-	-
11	Selenium		0.01mg/l	<0.01	Not specified	-	-	-
12	Tin		0.01mg/l	<0.01	Not specified	-	-	-
13	Chromium (VI)	USEPA 218.6	0.001mg/l	<0.001	Not specified	0.05 / 0.15#	0.005 / 0.05#	0.001 / 0.02#
14	Lead	ISO 11885 / APHA/ SM 3030D, E Followed by analysis in ICP-MS	0.01mg/l	<0.01	Not specified	0.1mg/l	0.05	0.01
15	Mercury		0.001mg/l	<0.001	Not specified	0.01mg/l	0.005	0.001

F: Foundational, P: Progressive, A: aspirational, NR: Not Required

#: Limits for textile / Leather \$: Test was subcontracted to ISO: 17025 accredited laboratory.

RESULTS - CONVENTIONAL PARAMETERS

S. No.	Test Details	Test Method	Reporting Limit	Test Result B (mg/L)	ZDHC Discharge Limit(water) (mg/l)		
					F	P	A
1	Temperature	USEPA 170.1	1°C	31.1	Δ+15	Δ+10	Δ+5
2	TSS	APHA/SM 2540D	5mg/l	<5.0	50 / 70	15 / 50	5.0 / 20
3	TDS	IS 3025 (P-16)	5mg/l	242.0	-	-	-
4	COD	APHA/SM 5220D	10mg/l	<10.0	150 / 250	80 / 150	40 / 100
5	Total N	APHA 4500N-C	1mg/l	1.5	20 / 35	10 / 20	5.0 / 10
6	pH	USEPA 150.1	0 – 14	6.9	6.0 to 9.0	6.0 to 9.0	6.0 to 9.0
7	Colour [M ⁻¹] (436nm, 525, 620nm)	ISO 7887 Method B	0.01	436nm: 0.17 525nm: 0.02 620nm: 0.01	436nm: 7 525nm: 5 620nm: 3	436nm: 5 525nm: 3 620nm: 2	436nm: 2 525nm: 1 620nm: 1
8	BOD (5D/20°C)	APHA/SM 5210B	5.0mg/l	<5.0	30 / 50	15 / 30	8.0 / 20
9	Dissolved Oxygen	APHA 4500 O-C	0.5mg/l	7.1	-	-	-
10	T. Chlorine	IS 3025 (P-26)	1.0mg/l	<1.0	-	-	-
11	Chloride	IS 3025 (P-32)	0.5mg/l	132.0	-	-	-
12	Ammonia N	APHA/SM 4500 NH3-N	0.5mg/l	<0.5	10 / 15	1 / 10	0.5 / 1.0
13	Total P	APHA/SM 4500P-J	0.1mg/l	<0.1	3.0	0.5 / 1.0	0.1 / 0.5
14	O&G	ISO 9377-2 &4	0.01mg/l	<0.01	10 / 20	2.0 / 10	0.5 / 5.0
15	Phenol	APHA 5530 B, C & D	0.001mg/l	<0.001	0.5	0.01 / 0.3	0.001/ 0.1
16	E. Coli (per 100ml)	IS 1622: 1981	10cfu	<10.0	126cfu/100ml	126cfu/100ml	126cfu/100ml
17	Persistent foam	Visual	Not Applicable	Not Visible	No Indication	No Indication	No Indication
18	Cyanide@	APHA 4500-CN	0.01mg/l	<0.01	0.2	0.1	0.05
19	Sulphate	IS 3025 (P-26)	5.0mg/l	43.36	-	-	-
20	Sulphite@	USEPA 377.1	0.01mg/l	<0.01	2.0	0.5	0.2
21	Sulphide	APHA/SM 4500-S2-D	0.1mg/l	<0.1	0.5 / 1.0	0.05 / 0.5	0.01 / 0.2
22	AOX@	ISO 9562:2004 (E)	0.1mg/l	<0.1	3.0	0.5	0.1
23	Wastewater flow	By Bucket	-	24 M ³ /day	-	-	-

F: Foundational, P: Progressive, A: aspirational
#: Limits for textile / Leather, @: Test applicable to textile industry wastewater

Sludge Parameter (Total Metal)						
S. No.	Test Details	Test Method	Reporting Limit	Test Result	ZDHC Discharge Limit (Textile)	ZDHC Discharge Limit(Leather)
				C (mg/kg)		
1	Antimony	ISO: 11885	0.5 mg/kg	ND	5mg/kg	-
2	Arsenic	ISO: 11885	0.5 mg/kg	ND	5mg/kg	2mg/kg
3	Barium	ISO: 11885	5.0mg/kg	ND	200mg/kg	-
4	Cadmium	ISO: 11885	0.1mg/kg	ND	1mg/kg	2mg/kg
5	Cobalt	ISO: 11885	5.0mg/kg	ND	400mg/kg	-
6	Copper	ISO: 11885	1.0mg/kg	12.0	50mg/kg	-
7	Lead	ISO: 11885	1.0mg/kg	ND	5mg/kg	2mg/kg
8	Nickel	ISO: 11885	1.0mg/kg	4.8	20mg/kg	-
9	Selenium	ISO: 11885	1.0mg/kg	ND	5mg/kg	-
10	Silver§	ISO: 11885	1.0mg/kg	ND	50mg/kg	-
11	T. Chromium	ISO: 11885	1.0mg/kg	9.8	50mg/kg	-
12	Zinc	ISO: 11885	5mg/kg	36.0	400mg/kg	-
13	Chromium (VI)	USEPA 218.6	0.05mg/kg	ND	20mg/kg	2mg/kg
14	Mercury	ISO: 11885	0.01mg/kg	ND	1mg/kg	0.2mg/kg
15	Cyanide	APHA 4500 CN - C & E	0.5mg/kg	<0.5	20mg/kg	-
16	pH	EPA SW 9045	0.1mg/l	7.7 (20% aqu Suspension)	-	-
17	% Solid	CPCB method based on SW 846	%	71.0	-	-
18	Paint Filter Test	EPA 9095	-	No liquid observed	-	-
19	Fecal Coliform	IS: 1622 / EPA 1681	10MPN/100gm	130.0	-	-

§: Test subcontracted to ISO 17025 accredited laboratory.


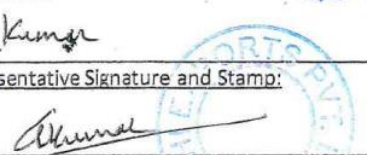


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ZDHC Wastewater Sampling - Facility Confirmation

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): SNU SHAM MAYUR	Facility Name: Shakti Exports Private Limited - Unit F1
Sampler's ZDHC accreditation no.: ZDHLA-24-E-C001068-R461D-3C71B	Facility's Representative name: Rohit Kumar
Sampler's Signature: 	Facility's Representative Signature and Stamp: 

Sampling Photo



***** END OF THE TEST REPORT*****



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Field log book:

Sampling Protocol for Wastewater and Sludge acc. ZDHC SAP 2.1 incl. Apdx. E	
Name of Factory	SHAHI EXPORTS PVT LTD
Address of Factory	Industrial Plot No. 1, Sector-28, Faridabad, Haryana
Sampling Requirement	For ZDHC / For Other (Non ZDHC)
Contact Person	Mr. ROHIT KUMAR
Date & time of sample	Start: 16/09/2024 (13:00) End: 16/09/2024 (19:00)
Factory Category	Textile / Leather / MMCF
Sample Preservation	Untreated Water: Yes / No Treated Water: Yes / No
Sample Identity	1: Untreated Wastewater Lat: 28.438861 Lon: 77.310404
Untreated water	2: Treated Wastewater Lat: 28.438878 Lon: 77.310416
Treated Water	3: Sludge Lat: 28.438888 Lon: 77.310446
Sludge	4: Lat: Lon:
Other (Describe)	
Effluent Discharge Type	1: Direct Discharge <input checked="" type="checkbox"/> 2: Indirect Discharge with pretreatment (Using CETP) 3: Indirect Discharge without pretreatment (Using CETP) 4: ZLD
Weather Condition	Sunny / Partial Sunny / Cloudy / Rainy
Factory Operation	Edfl Operational / Partial Operational / Non operational
Sludge Disposal	A. ZDHC Disposal Pathway A - Offsite Incineration at >1000oC B. ZDHC Disposal Pathway B - Landfill with Significant Control Measures C. ZDHC Disposal Pathway C - Building Products Processed at >1000oC D. ZDHC Disposal Pathway D - Landfill with Limited Control Measures E. ZDHC Disposal Pathway E - Offsite Incineration and Building Products Processed at <1000oC F. ZDHC Disposal Pathway F - Landfills with No Control Measures G. ZDHC Disposal Pathway F - Land Application

Type of Sampling	Composite Sample / Grabe Sample Aliquots Volume: 15L						
Sampling Technique	Automated / by Beaker-bucket / Other						
Sampling time	1	2	3	4	5	6	7
Untreated wastewater	13:00	14:00	15:00	16:00	17:00	18:00	19:10
Treated wastewater	13:00	14:00	15:00	16:00	17:00	18:00	19:00
Sludge							
pH of treated wastewater	6.7	6.9	6.8	7.0	7.1	6.8	6.9
DO (mg/l)	7.2	7.1	6.8	7.5	7.2	6.9	7.4
Total Chlorine (mg/l)	0	0	0	0	0	0	0
Persistent Foam	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Flow Rate m ³ /h	0.8	1.0	1.0	0.9	0.7	0.8	0.9
Temp of treated wastewater (°C)	34.1	33.8	35.7	33.8	34.1	33.9	34.0
Temp of Receiving Body (°C)#	-	-	-	-	-	-	-

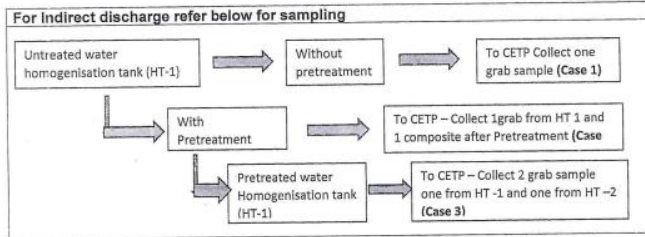
Applicable for Direct discharge type
Remark: Treated water is partially reuse and remaining used for flush plantation within factory.



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Temperature of treated water Receiving body not measured due to:

- : Treated water is discharged in Municipal drainage system
- : Treated water is discharged in barren land / agriculture land
- : Treated water is discharged in underground water
- : Measurement is not possible due to safety risk
- : Treated water receiving body (surface water) is very far away from factory



Flowrate Measurement Data				
Measuring Technique	1: Flow meter	2: Pipe	3: Flume	4: Wire
Dimeter (CM)				
Water Depth (CM)				
Flow Speed (cm/Sec)				

Field Observation Sheet					
Description	Ambient Temp (°C)	Odour	Colour	Foaming	Floating Matter
Incoming Water	32.8	No	No	No	No
Untreated Water	33.5	No	No	No	No
Treated Water	34.2	No	No	No	No

Field Test QC Data			
Test Parameter	Control Sample Value	Observed Value	Accuracy (%)
pH	7.0	6.8	6.1 = 7.4
Total Chlorine (mg/l)	0.2	0.19	0.16 = 0.2
DO (mg/l)	4.0	4.1	2.6 = 4.3
Other observation			
Additional Comments			

TERMS AND CONDITIONS

Cotecna Inspection India Pvt. Ltd. undertakes to provide services ("Works") to its Customer Subject to the terms and conditions ("Terms") contained herein. The term of limitation of liability contained herein has been conspicuously marked to draw to the attention of the customer. The customer is advised to take separate legal advice and is fully aware of the meaning and the legal significance of this term. The Customer agrees that this term is integral part of this Agreement.

- 1. INTERPRETATION**
 - 1.1 In this Agreement the following words and phrases shall have the following meanings unless the context otherwise requires:
 - (a) **Agreement** means this agreement entered into between Cotecna Inspection India Pvt. Ltd. and the Client;
 - (b) **Charges** shall have the meaning given in Clause 6.1;
 - (c) **Confidential Information** mean all information in what every form or manner presented which (a) is disclosed pursuant to or in the course of the provision of Services pursuant to, this Agreement; and (b) (i) is disclosed in writing, electronically, visually, or all other wise howsoever and is marked, stamped or identified by any means as confidential by the disclosing party at the time of such disclosure; and/or (ii) is information, howsoever disclosed, which would – reasonably be considered to be confidential by the receiving party.
 - (d) **Intellectual Property Right(s)** means copyrights, trademarks (registered or unregistered), patents, patent applications (including the right to apply for a patent), service marks, design rights (register end-run registered), trade secrets and other like rights howsoever existing.
 - (e) **Report(s)** shall have the meaning as set out in Clause 5.3 below;
 - (f) **Services** means these services out of any relevant Cotecna Inspection India Pvt. Ltd. Proposal, any relevant Client purchase order, or any relevant Cotecna Inspection India Pvt. Ltd. invoice, as applicable, and may comprise or include the provision by Cotecna Inspection India Pvt. Ltd. of a Report;
 - (g) **Proposal** means the proposal, estimate or fee quote, if applicable, provided to the Client by Cotecna Inspection India Pvt. Ltd. relating to the Services;
- 1.2 The headings in this Agreement do not affect its interpretation.
- 2. COPYRIGHT COMPLIANCE OR INTELLECTUAL PROPERTY RIGHTS AND DATA PROTECTION**
 - 2.1 All Intellectual Property Rights belonging to a party prior to entry into this Agreement shall remain vested in that party. Nothing in this Agreement is intended to transfer any Intellectual Property Rights from either party to the other.
 - 2.2 Any use by the Client (or the Client's affiliated companies or subsidiaries) of the name "Cotecna Inspection India Pvt. Ltd." or any of Cotecna Inspection India Pvt. Ltd.'s trademarks or brand names for any reason must be prior approved in writing by Cotecna Inspection India Pvt. Ltd.. Any other use of Cotecna Inspection India Pvt. Ltd.'s trademarks or brand names is strictly prohibited and Cotecna Inspection India Pvt. Ltd. reserves the right to terminate this Agreement immediately as a result of any such unauthorized use.
 - 2.3 In the event of provision of certification services, Client agrees and acknowledges that the use of certification marks may be subject to national and international laws and regulations.
 - 2.4 All Intellectual Property Rights in any Reports, document, graphs, charts, photographs or any other material (in whatever medium) produced by Cotecna Inspection India Pvt. Ltd. pursuant to this Agreement shall belong to Cotecna Inspection India Pvt. Ltd.
 - 2.5 The Client shall have the right to use any such Reports, document, graphs, charts, photographs or other material for the purposes of this Agreement.
 - 2.6 The Client agrees and acknowledges that Cotecna Inspection India Pvt. Ltd. retains any and all proprietary rights in concepts, ideas and inventions that may arise during the preparation or provision of any Report (including any deliverables provided by Cotecna Inspection India Pvt. Ltd. to the Client) and the provision of the Services to the Client.
 - 2.6 Cotecna Inspection India Pvt. Ltd. shall observe all statutory provisions with regard to data protection including but not limited to the provisions of the Data Protection Act 1998. To the extent that Cotecna Inspection India Pvt. Ltd. processes or gets access to personal data in connection with the Services or otherwise in connection with this Agreement, it shall take all necessary technical and organizational measures to ensure the security of such data (and to guard against unauthorized or unlawful processing, accidental loss, destruction or damage to such data).
- 3. OBLIGATION OF CUSTOMERS**
 - 3.1 If the customer instructs to make any change(s) to the Work(s) hereunder or assign any other work to Cotecna Inspection India Pvt. Ltd. QA prior to the completion of Work(s), such a change or new assignment shall only be effective in writing between both of the parties. If Cotecna Inspection India Pvt. Ltd. QA suffers from any loss or damage due to such a change or new assignment the Customer shall compensate the losses and damages.
 - 3.2 If the Work(s) undertaken by Cotecna Inspection India Pvt. Ltd. QA hereunder requires any assistance from the Customer. The Customer shall be obliged to provide all necessary and reasonable cooperation and assistance which Cotecna Inspection India Pvt. Ltd. QA may deem it. If the Work(s) undertaken by Cotecna Inspection India Pvt. Ltd. QA hereunder cannot be completed due to the Customer's failure or inadequacy in assistance or cooperation, Cotecna Inspection India Pvt. Ltd. QA reserves the right to require the Customer to perform its obligation within a specified period of time limit for Cotecna Inspection India Pvt. Ltd. QA to complete its work(s) shall be extended simultaneously. If upon the expiration of specified time period the Customer still fails to perform its obligation to assist Cotecna Inspection India Pvt. Ltd. QA reserves the right to terminate this Agreement without prejudice to any other rights of Cotecna Inspection India Pvt. Ltd. QA hereunder or under any applicable laws and regulations.
- 4. PATENT RIGHTS**
 - 4.1 Any invention made in the performance of Work(s) for the Customer by Cotecna Inspection India Pvt. Ltd. QA within the field of Work(s) undertaken for the Customer shall belong to the Customer.
 - 4.2 Cotecna Inspection India Pvt. Ltd. QA's use of the aforesaid inventions shall be free of any royalty fees or other charges provided that the uses of such inventions are confined to the performance of Work(s) for the Customer.
- 5. THE SERVICES**
 - 5.1 Cotecna Inspection India Pvt. Ltd. shall provide the Services to the Client in accordance with the terms of this Agreement which is expressly incorporated into any Proposal Cotecna Inspection India Pvt. Ltd. has made and submitted to the Client.
 - 5.2 In the event of any inconsistency between the terms of this Agreement and the Proposal, the terms of the Proposal shall take precedence.
 - 5.3 The Services provided by Cotecna Inspection India Pvt. Ltd. under this Agreement and any memoranda, laboratory data, calculations, measurements, estimates notes, certificates and other material prepared by Cotecna Inspection India Pvt. Ltd. in the course of providing the Services to the Client, together with status summaries or any other communication in any form describing the results of any work or services performed (Report(s)) shall be only for the Client's use and benefit.
 - 5.4 The Client acknowledges and agrees that in providing the Services Cotecna Inspection India Pvt. Ltd. is obliged to deliver a Report to a third party, Cotecna Inspection India Pvt. Ltd. shall be deemed irrevocably authorized to deliver such Report to the applicable third party. For the purposes of this clause an obligation shall arise on the instructions of the Client, or where, in the reasonable opinion of Cotecna Inspection India Pvt. Ltd., it is implicit from the circumstances, trade, custom, usage or practice.
 - 5.5 The Client acknowledges and agrees that any Services provided and/or Reports produced by Cotecna Inspection India Pvt. Ltd. are done so within the limits of the scope of work agreed with the Client in relation to the Proposal and pursuant to the Client's specific instructions or, in the absence of such instructions, in accordance with any relevant trade custom, usage or practice. The Client further agrees and acknowledges that the Services are not necessarily designed or intended to address all matters of quality, safety, performance or condition of any product, material, services, systems or processes tested, inspected or certified and the scope of work does not necessarily reflect all standards which may apply to product, material, services, systems or process tested, inspected or certified. The Client understands that reliance on any Reports issued by Cotecna Inspection India Pvt. Ltd. is limited to the facts and representations set out in the Reports which represent Cotecna Inspection India Pvt. Ltd.'s review and/or analysis of facts, information, documents, samples and/or other materials in existence at the time of the performance of the Services only.
 - 5.6 Client is responsible for acting as its self on the basis of such Report. Neither Cotecna Inspection India Pvt. Ltd. nor any of its officers, employees, agents or subcontractor shall be liable to Client nor any third party for any actions taken or not taken on the basis of such Report.
- 5.7. IN AGREEING TO PROVIDE THE SERVICES PURSUANT TO THIS AGREEMENT, COTECNA INSPECTION INDIA PVT. LTD. DOES NOT ABRIDGE, ABROGATE OR UNDERTAKE TO DISCHARGE ANY DUTY OR OBLIGATION OF THE CLIENT TO ANY OTHER PERSON OR ANY DUTY OR OBLIGATION OF ANY PERSON TO THE CLIENT.**
- 6. CHARGES, INVOICING AND PAYMENT**
 - 6.1 The Client shall pay Cotecna Inspection India Pvt. Ltd. the charges set out in the Proposal, if applicable, or as otherwise contemplated for provision of the Services (the Charges).
 - 6.2 The Charges are expressed exclusive of any applicable taxes. The Client shall pay any applicable taxes on the Charges at the rate and in the manner prescribed by law, on the issue by Cotecna Inspection India Pvt. Ltd. of a valid invoice.
 - 6.3 The Client agrees that it will reimburse Cotecna Inspection India Pvt. Ltd. for any expenses incurred by Cotecna Inspection India Pvt. Ltd. relating to the provision of the Services and is wholly responsible for any freight or customs clearance fees relating to any testing samples.
 - 6.4 The Charges represent the total fees to be paid by the Client for the Services pursuant to this Agreement. Any additional work performed by Cotecna Inspection India Pvt. Ltd. will be charged on a time and material basis.
 - 6.5 Cotecna Inspection India Pvt. Ltd. shall invoice the Client for the Charges and expenses, if any. The Client shall pay each invoice within thirty (30) days of receiving it.
 - 6.6 If any invoice is not paid on the due date for payment, Cotecna Inspection India Pvt. Ltd. shall have the right to charge, and the Client shall pay, interest on the unpaid amount, calculated from the due date of the invoice to the date of receipt of the amount in full at a rate equivalent to 3% per cent per annum above the base rate.
- 7. DATA AND DOCUMENT RETENTION**
 - 7.1 After the work(s) is completed, Cotecna Inspection India Pvt. Ltd. QA may retain a copy of all documents relating to the Work(s) ("the supporting documents") for as long as Cotecna Inspection India Pvt. Ltd. QA gets the sole discretion.
 - 7.2 Unless otherwise specified or required by the applicable law, the Supporting Documents over three years of age will be automatically destroyed by Cotecna Inspection India Pvt. Ltd. QA without prior notice to the customer. Should any or a supporting documents less than three years are scheduled to be destroyed Cotecna Inspection India Pvt. Ltd. QA shall give the Customer thirty days written notice to the Customer's last known address of the intention to destroy the Supporting Documents. Unless the Customer makes a written request to Cotecna Inspection India Pvt. Ltd. QA which is received by Cotecna Inspection India Pvt. Ltd. QA before the expiration of the said thirty days seeking delivery of those documents to the Customer at the Customer's expenses, those documents shall be destroyed.
 - 7.3 The Customer shall indemnify Cotecna Inspection India Pvt. Ltd. QA for any costs or expenses in responding to or opposing any claims or losses or for the production of any documents in Court seeking the disclosure of the said documents or any information contained therein.
- 8. INDEMNITY**
 - 8.1 The Client shall in dignity and hold harmless Cotecna Inspection India Pvt. Ltd., its officers, employees, agents, representatives, contractors and sub-contractors from and against any and all claims, results, liabilities (including costs of litigation and attorney's fees) arising, directly or indirectly, out of or in connection with:
 - (a) Any claims results by any government all authority or others for any actual or as serrated failure of the Client to comply with any law, ordinance, regulation, rule or order of any government all or judicial authority;
 - (b) Claims results for personal injuries, loss of or damage to property, economic loss, and loss of or damage to Intellectual Property rights incurred by or occurring to any person or entity and arising in connection with or related to the Services provided here under by Cotecna Inspection India Pvt. Ltd., its officers, employees, agents, representatives, contractors and sub-contractors;
 - (c) The breach or alleged breach by the Client of any of its obligations set out in Clause 4 above;
 - (d) Any claims made by any third party for loss, damage or expense of what so ever nature and howsoever arising relating to the performance, purported performance or non-performance of any Services to the extent that the aggregate of any such claims relating to any one Service exceeds the limit of liability set out in Clause 10 above;
 - (e) Any claims results arising as result of any misuse run authorized use of any Reports issued by Cotecna Inspection India Pvt. Ltd. or any Intellectual Property Rights belonging to Cotecna Inspection India Pvt. Ltd. (including trade marks) pursuant to this Agreement; and
 - (f) Any claims arising out of or relating to any third party's use of or reliance on any Reports or any reports, analyses, conclusions of the Client (or any third party to whom the Client has provided the Reports) based in whole or in part on the Reports, if applicable.
 - 8.2 The obligations set out in this Clause 11 shall survive termination of this Agreement.
- 9. TERMINATION**
 - 9.1 This Agreement shall commence upon the first day on which the Services are commenced and shall continue, unless terminated earlier in accordance with this Clause 13, until the Services have been provided.
 - 9.2 This Agreement may be terminated by:
 - (a) Either party if the other continues in material breach of any obligation imposed up on it here under for more than thirty (30) days after written notice has been dispatched by that Party by recorded delivery or courier requesting the other to remedy such breach; Cotecna Inspection India Pvt. Ltd. on written notice to the Client in the event that the Client fails to pay any invoice by its due date and/or fails to make payment after a further request for payment; or
 - (b) Either party on ten notice to the other in the event that the other makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of a solvent amalgamation or reconstruction) or an encumbrance takes possession, or a receiver is appointed, of any of the property or assets of the other or the other ceases, or threatens to cease, to carry on business.
 - 9.3 In the event of termination of the Agreement for any reason and without prejudice to any other rights or remedies the parties may have, the Client shall pay Cotecna Inspection India Pvt. Ltd. for all Services performed up to the date of termination. This obligation shall survive termination or expiration of this Agreement.
 - 9.4 Any termination or expiration of the Agreement shall not affect the accrued rights and obligations of the parties nor shall it affect any provision which is expressly or by implication intended to come in to force or continue in force on or after such termination or expiration.
- 10. ASSIGNMENT AND SUB-CONTRACTING**
 - 10.1 Cotecna Inspection India Pvt. Ltd. C h e m reserves the right to delegate the performance of its obligations here under and the provision of the Services to one or more of its affiliates and/or sub-contractors when necessary. Cotecna Inspection India Pvt. Ltd. C h e m may also assign this Agreement to any company within the Cotecna Inspection India Pvt. Ltd. on notice to the Client.
- 11. MISCELLANEOUS**
 - 11.1 **Severability**

If any provision of this Agreement is or becomes invalid, illegal or unenforceable, such provision shall be severed and the remainder of the provisions shall continue in full force and effect as if this Agreement had been executed without the invalid illegal or unenforceable provision. If the invalidity, illegality or unenforceability is so fundamental that it prevents the accomplishment of the purpose of this Agreement, Cotecna Inspection India Pvt. Ltd. and the Client shall immediately commence good faith negotiations to agree an alternative arrangement.
 - 11.2 **No partnership or agency**

Nothing in this Agreement and no action taken by the parties under this Agreement shall constitute a partnership, association, joint venture or other co-operative entity between the parties or constitute any party the partner, agent or legal representative of the other. **Waivers**

The failure of any party to insist upon strict performance of any provision of this Agreement, or to exercise any right or remedy to which it is entitled, shall not constitute a waiver and shall not cause a diminution of the obligations established by this Agreement. A waiver of any breach shall not constitute a waiver of any subsequent breach.
 - 11.4 No waiver of any right or remedy under this Agreement shall be effective unless it is expressly stated to be a waiver and communicated to the other party in writing.
 - 11.5 **Whole Agreement**

This Agreement and the Proposal contain the whole agreement between the parties relating to the transactions contemplated by this agreement and supersedes all previous agreements, arrangements and understandings between the parties relating to those transactions or that subject matter. No purchase order, statement or other similar document will add to or vary the terms of this Agreement.
 - 11.6 Each party acknowledges that in entering in to this Agreement it has not relied on any representation, warranty, collateral contract or other assurance (except those set out or refer red to in this Agreement) made by or on behalf of any other party before the acceptance or signature of this Agreement. Each party waives all rights and remedies that, but for this Clause, might otherwise be available to it in respect of any such representation, warranty, collateral contract or other assurance.
 - 11.7 Nothing in this Agreement limits or excludes any liability for fraudulent misrepresentation.
 - 11.8 **Third Party Rights**

A person who is not party to this Agreement has no right under the Contract (Rights of Third Parties) Act 1999 to enforce any of its terms.
 - 11.9 **Further Assurance**

Each party shall, at the cost and request of any other party, execute and deliver such instruments and documents and take such other actions in each cases may be reasonably requested from time to time in order to give full effect to its obligations under this Agreement.
- 12. AMENDMENT**
 - 12.1 No amendment to this Agreement shall be effective unless it is in writing, expressly stated to amend this Agreement and signed by an authorized signatory of each party.
- 13. GOVERNING LAW**
 - 13.1 The Agreement and the rights and obligation of the parties shall in all respects be governed, constructed, interpreted and operated with Indian Law. These General Conditions shall be governed and construed in accordance with the substantive laws of the place where the Company renders services and issues reports or certificates, exclusive of any rules with respect of conflicts of laws. All Disputes arising in connection with these General Conditions shall be finally settled by recourse to arbitration under the rules of conciliation and arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said rules. Unless otherwise agreed, the arbitration shall take place in the English language at the place where the Company renders services and issues reports or certificates.

Cotecna Inspection India Pvt Ltd, Plot No. 306, Udyog Vihar, Phase-2 Gurgaon, Haryana - 122016. India.

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