

TEST REPORT

Report No.: 5033042
Date of Report 17/03/2026

CLIENT DETAILS

Client Name: Al-Karam Textile Mills (Pvt.) Ltd.
Client Contact: Hassan Farid
Telephone: +92 300 203 5275
E-mail: hassan.farid@alkaram.com
Address: HT-11, Landhi Industrial Area, Karachi

LABORATORY DETAILS

SGS Affiliate: SGS Pakistan (Private) Limited, C & P
SGS Contact: M. Rehan Ali
Telephone: +92 213 512 1388 – 97 Ext.: 899
E-mail: Rehan.Ali@sgs.com
Address: Plot No. 4, Sector 24, Korangi Industrial Area, Near Shan Chowrangi, Karachi-74900.

FACTORY DETAILS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
Factory Contact: Hassan Farid
Telephone: +92 300 203 5275
E-mail: hassan.farid@alkaram.com
Address: HT-11, Landhi Industrial Area, Karachi

Types of Mills:
 (1) Spinning (2) Yarn Dyeing, Bleaching (3) Fabric Dyeing, Finishing, Washing
 (4) Fabric Dyeing, Finishing, Printing (5) Vertical Knit (9) Washing
On-Site ETP: Yes
Discharge Destination: To the Environment
Name of Municipal/Centralized ETP: N/A
Address of Municipal/Centralized ETP: N/A

SAMPLE AND TESTING DETAILS

Sampling Country: SGS Pakistan (Private) Limited - C & P
ZDHC Approved Sampler & Cert. No.: C74D106818398
Sampling Date: 04/03/2026
Sample Received Date: 04/03/2026
Test Performing Period: 04/03/2026 - 16/03/2026
Sample Received Temperature: 7.8 °C
No. of Samples: Water (2); Sludge (1);
 1) Untreated Wastewater (6-hour Composite)
Sample Descriptions: 2) Effluent (6-hour Composite)
 3) Sludge (Grab)
Sample Volume 18L each water sample; 500g sludge sample in total
Testing Institute: SGS Pakistan (Private) Limited, Chemical & Environmental
Discharge Method: Direct Discharge

OVERALL RESULTS

	Untreated Wastewater	Effluent	Sludge	Leachate
Conventional Parameters / Anions / Metals:	-	Fulfill Foundational Limit	-	-
MRSL Parameters:	Not Detected	-	Sample and Report Only	-

REMARKS

1. This test document cannot be reproduced in any way, except in full content, without prior approval in writing by the laboratory.
2. The results shown in this test report refer only to the sampling and the sample(s) tested unless otherwise stated.

Signed for and on behalf of


M. Rehan Ali
Deputy Manager
Connectivity & Products



"This document is issued by the Company under its General Conditions of Services accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful, and offenders may be prosecuted to the fullest extent of the law."

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only. This document Cannot be reproduced except in full, without prior approval of the Company.

RESULT SUMMARY

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
Factory Address: HT-11, Landhi Industrial Area, Karachi

TEST ITEMS	Untreated Wastewater	Effluent	Sludge	Leachate
Conventional Parameters	-	Please refer to the information in TEST RESULTS	Please refer to the information in TEST RESULTS	-
Anions	-	O	N/A	-
Metals	-	O	N/A	-
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)	O	-	Sample and Report Only	-
Antimicrobials and Biocides	O	-	-	-
Chlorinated Paraffins	O	-	-	-
Chlorobenzenes and Chlorotoluenes	O	-	Sample and Report Only	-
Chlorophenols	O	-	-	-
N,N-di-methylformamide (DMFa)	O	-	-	-
Dyes - Carcinogenic or Equivalent Concern	O	-	-	-
Dyes - Disperse (Allergenic)	O	-	-	-
Flame Retardants	O	-	-	-
Glycols / Glycol Ethers	O	-	-	-
Halogenated Solvents	O	-	-	-
Organotin Compounds	O	-	-	-
Other / Miscellaneous Chemicals	O	-	-	-
Perfluorinated and Polyfluorinated Chemicals (PFCs)	O	-	-	-
Phthalates	O	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)	O	-	Sample and Report Only	-
Restricted Aromatic Amines	O	-	-	-
UV Absorbers	O	-	-	-
Volatile Organic Compounds (VOC)	O	-	-	-

Note:

X - Detected

O - Not Detected

N/A - Not Tested / Not Applicable

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID			KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances				Local Wastewater Discharge Requirement %
	Date of Sampling			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
	Sampling Location			ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-					
	Sampling Start Time			10:05	10:00	-	-	16:10	-	-	-					
	Sampling End Time			16:05	16:00	-	-	16:10	-	-	-					
	Date of Sample Received			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeØ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
Sample Colour Description	-	-	-	Dark Grey	Slightly Yellow	-	-	Dark Grey	-	-	-	-	-	-	-	-
Wastewater Flow Rate*	-	-	m³/day	-	4117	-	-	-	-	-	-	-	-	-	-	-
Sludge Disposal Pathway	-	-	-	-	-	-	-	Pathway A	-	-	-	-	-	-	-	-
Conventional Parameters																
pH	-	-	-	-	7.6	-	-	N/A	-	-	-	-	Fulfill Aspirational Limit	N/A	-	6.0 - 9.0
Temp-Difference	-	-	°C	-	N/A	-	-	-	-	-	-	-	N/A	-	-	≤ 3
Temp-Discharge Pipe	-	-	°C	-	31.6	-	-	-	-	-	-	-		-	-	< 40
Temp-Receiving Water	-	-	°C	-	N/A	-	-	-	-	-	-	-		-	-	N/A
E. Coli	-	126	MPN / 100mL	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Colour (436nm)	-	2	m⁻¹	-	2	-	-	-	-	-	-	-	Fulfill Progressive Limit	-	-	N/A
Colour (525nm)	-	1	m⁻¹	-	1	-	-	-	-	-	-	-		-	-	N/A
Colour (620nm)	-	1	m⁻¹	-	1	-	-	-	-	-	-	-		-	-	N/A
Persistent Foam	-	Absent / Present	-	-	Absent	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Ammonium-N	-	0.5	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	< 40
AOX	-	0.1	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Biochemical Oxygen Demand 5-days Concentration (BOD₅)	-	8	mg/L	-	16	-	-	-	-	-	-	-	Fulfill Foundational Limit	-	-	< 80
Chemical Oxygen Demand (COD)	-	40	mg/L	-	54	-	-	-	-	-	-	-	Fulfill Progressive Limit	-	-	< 400
Dissolved Oxygen (DO)	-	4	mg/L	-	4	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Oil & Grease	-	0.5	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	< 10
Total Phenols / Phenol Index	-	0.001	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	< 0.3
Total Chlorine	-	1	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	< 1
Total Dissolved Solids (TDS)	-	50	mg/L	-	1088	-	-	-	-	-	-	-	Sample and Report Only	-	-	< 3500
Total Nitrogen	-	5	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Total Phosphorus	-	0.1	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Total Suspended Solids (TSS)	-	5	mg/L	-	12	-	-	-	-	-	-	-	Fulfill Progressive Limit	-	-	< 200
Faecal Coliform	-	-	-	-	-	1000	MPN/g	N/A	-	-	-	-	-	N/A	-	N/A
Paint Filter Test	-	-	-	-	-	Pass	-	N/A	-	-	-	-	-	N/A	-	N/A
Anions																
Chloride	-	1	mg/L	-	289	-	-	-	-	-	-	-	Sample and Report Only	-	-	< 1000
Cyanide, Total	-	0.05	mg/L	-	n.d.	20	mg/kg	N/A	-	-	-	-	Fulfill Aspirational Limit	N/A	-	< 1
Sulfate	-	5	mg/L	-	126	-	-	-	-	-	-	-	Sample and Report Only	-	-	< 600
Sulfide	-	0.01	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	< 1

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances	Local Wastewater Discharge Requirement %				
	Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
	Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-						
	Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-						
	Sampling End Time		16:05	16:00	-	-	16:10	-	-	-						
	Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
Sulfite	-	0.2	mg/L	-	n.d.	-	-	-	-	-	-	-	Fulfill Aspirational Limit	-	-	N/A
Metals																
Total Antimony (Sb)	-	0.01	mg/L	-	n.d.	5	mg/kg	N/A	0.01	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	N/A
Chromium (VI)	-	0.001	mg/L	-	n.d.	20	mg/kg	N/A	0.001	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Barium (Ba)	-	35	mg/L	-	n.d.	200	mg/kg	N/A	35	mg/L	N/A	-	Sample and Report Only	N/A	N/A	< 1.5
Total Selenium (Se)	-	0.5	mg/L	-	n.d.	5	mg/kg	N/A	0.5	mg/L	N/A	-	Sample and Report Only	N/A	N/A	< 0.5
Total Tin (Sn)	-	0.1	mg/L	-	n.d.	-	-	-	-	-	-	-	Sample and Report Only	-	-	N/A
Total Arsenic (As)	-	0.005	mg/L	-	n.d.	5	mg/kg	N/A	0.005	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Chromium (Cr)	-	0.05	mg/L	-	n.d.	50	mg/kg	N/A	0.05	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Cobalt (Co)	-	0.01	mg/L	-	n.d.	400	mg/kg	N/A	0.01	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	N/A
Total Cadmium (Cd)	-	0.01	mg/L	-	n.d.	1	mg/kg	N/A	0.01	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 0.1
Total Copper (Cu)	-	0.25	mg/L	-	n.d.	50	mg/kg	N/A	0.25	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Lead (Pb)	-	0.01	mg/L	-	n.d.	5	mg/kg	N/A	0.01	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 0.5
Total Nickel (Ni)	-	0.05	mg/L	-	n.d.	20	mg/kg	N/A	0.05	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Silver (Ag)	-	0.005	mg/L	-	n.d.	50	mg/kg	N/A	0.005	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 1
Total Zinc (Zn)	-	0.1	mg/L	n.d.	n.d.	400	mg/kg	N/A	0.1	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 5
Total Mercury (Hg)	-	0.001	mg/L	-	n.d.	1	mg/kg	N/A	0.001	mg/L	N/A	-	Fulfill Aspirational Limit	N/A	N/A	< 0.01
Total Boron (B)	-	0.1	mg/L	n.d.	-	-	-	-	-	-	-	-	-	-	-	N/A
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers																
Nonylphenol ethoxylates (NPEO)	Multiple including: 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	5	µg/L	n.d.	-	0.4	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
Nonylphenol (NP), mixed isomers	Multiple including: 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3	5	µg/L	n.d.	-	0.4	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
Octylphenol ethoxylates (OPEO)	Multiple including: 9002-93-1, 9036-19-5, 68987-90-6	5	µg/L	n.d.	-	0.4	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
Octylphenol (OP), mixed isomers	Multiple including: 140-66-9, 1806-26-4, 27193-28-8	5	µg/L	n.d.	-	0.4	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
Antimicrobials and Biocides																
o-Phenylphenol (+salts)	90-43-7	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Triclosan	3380-34-5	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Permethrin	Multiple including: 52645-53-1	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Chlorinated Paraffins																
Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	85535-85-9	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances		Local Wastewater Discharge Requirement %			
	Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
	Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-						
	Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-						
	Sampling End Time		16:05	16:00	-	-	16:10	-	-	-						
	Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
Chlorobenzenes and Chlorotoluenes																
1,2-Dichlorobenzene	95-50-1	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monochlorobenzene	108-90-7	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,3-Dichlorobenzene	541-73-1	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,4-Dichlorobenzene	106-46-7	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,2,3-Trichlorobenzene	87-61-6	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,3,5-Trichlorobenzene	108-70-3	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Pentachlorobenzene	608-93-5	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Hexachlorobenzene	118-74-1	0.2	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2-Chlorotoluene	95-49-8	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
3-Chlorotoluene	108-41-8	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
4-Chlorotoluene	106-43-4	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3-Dichlorotoluene	32768-54-0	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,4-Dichlorotoluene	95-73-8	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,5-Dichlorotoluene	19398-61-9	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,6-Dichlorotoluene	118-69-4	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
3,4-Dichlorotoluene	95-75-0	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
3,5-Dichlorotoluene	25186-47-4	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3,4-Trichlorotoluene	7359-72-0	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3,6-Trichlorotoluene	2077-46-5	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,4,5-Trichlorotoluene	6639-30-1	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,4,6-Trichlorotoluene	23749-65-7	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
3,4,5-Trichlorotoluene	21472-86-6	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3,4,5-Tetrachlorotoluene	1006-32-2	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
2,3,5,6-Tetrachlorotoluene	1006-31-1	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-
Pentachlorotoluene	877-11-2	0.2	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances	Local Wastewater Discharge Requirement %				
	Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
	Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-						
	Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-						
	Sampling End Time		16:05	16:00	-	-	16:10	-	-	-						
	Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
Chlorophenols																
2-Chlorophenol	95-57-8	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3-Dichlorophenol	576-24-9	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,4-Trichlorophenol	15950-66-0	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,5-Trichlorophenol	933-78-8	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,6-Trichlorophenol	933-75-5	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4-Dichlorophenol	120-83-2	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4,5-Trichlorophenol	95-95-4	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4,6-Trichlorophenol	88-06-2	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,5-Dichlorophenol	583-78-8	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,6-Dichlorophenol	87-65-0	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3-Chlorophenol	108-43-0	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,4-Dichlorophenol	95-77-2	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,4,5-Trichlorophenol	609-19-8	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,5-Dichlorophenol	591-35-5	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-Chlorophenol	106-48-9	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Pentachlorophenol (PCP)	87-86-5	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
N,N-Di-methylformamide (DMFa)																
Dimethyl formamide: N,N-Dimethylformamide (DMFa)	68-12-2	1000	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dyes - Carcinogenic or Equivalent Concern																
Basic Violet 3 with >0.1% of Michler's Ketoneb	548-62-9	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Acid Red 26	3761-53-3	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Acid Violet 49	1694-09-3	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Blue 26 (with Michler's Ketone >0.1%)	2580-56-5	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Green 4 (Malachite Green Chloride)^a	569-64-2	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Green 4 (Malachite Green Oxalate)^a	2437-29-8	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Green 4 (Malachite Green)	10309-95-2	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Red 9	569-61-9	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Basic Violet 14	632-99-5	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID			KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances				Local Wastewater Discharge Requirement %
	Date of Sampling			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
	Sampling Location			ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-					
	Sampling Start Time			10:05	10:00	-	-	16:10	-	-	-					
	Sampling End Time			16:05	16:00	-	-	16:10	-	-	-					
	Date of Sample Received			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
C.I. Direct Black 38	1937-37-7	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Direct Blue 6	2602-46-2	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Direct Red 28	573-58-0	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Disperse Blue 1	2475-45-8	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
C.I. Disperse Blue 3	2475-46-9	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Orange 11	82-28-0	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dyes - Disperse (Allergenic)																
Disperse Blue 102	12222-97-8	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 106	12223-01-7	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 124	61951-51-7	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 26	3860-63-7	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 35	12222-75-2	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 35	56524-77-7	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Blue 7	3179-90-6	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Brown 1	23355-64-8	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Orange 1	2581-69-3	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Orange 3	730-40-5	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Orange 37/59/76	13301-61-6	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Red 1	2872-52-8	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Red 11	2872-48-2	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Red 17	3179-89-3	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Yellow 1	119-15-3	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Yellow 3	2832-40-8	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Yellow 39	12236-29-2	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Yellow 49	54824-37-2	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disperse Yellow 9	6373-73-5	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Flame Retardants																
Boric acid	10043-35-3, 11113-50-1	500	µg/L	See Total Boron (B) Result	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Diboron trioxide	1303-86-2	500	µg/L	See Total Boron (B) Result	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disodium octaborate	12008-41-2	500	µg/L	See Total Boron (B) Result	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Disodium tetraborate, anhydrous	1303-96-4, 1330-43-4	500	µg/L	See Total Boron (B) Result	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances					Local Wastewater Discharge Requirement %
	Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
	Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-						
	Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-						
	Sampling End Time		16:05	16:00	-	-	16:10	-	-	-						
	Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
Tetraboron disodium heptaoxide, hydrate	12267-73-1	500	µg/L	See Total Boron (B) Result	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Hexabromocyclodecane (HBCDD)	3194-55-6	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Polybromobiphenyls (PBB)	59536-65-1	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monobromobiphenyls (MonoBB)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monobromodiphenylethers (MonoBDEs)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dibromobiphenyls (DIBB)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dibromopropylether	21850-44-2	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tribromodiphenylethers (TriBDEs)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Octabromobiphenyls (OctaBB)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Octabromodiphenyl ether (OctaBDE)	32536-52-0	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Nonabromobiphenyls (NonaBB)	Multiple	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Decabromobiphenyl (DecaBB)	13654-09-6	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Decabromodiphenyl ether (DecaBDE)	1163-19-5	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetrabromobisphenol A (TBBPA)	79-94-7	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Bis(2,3-dibromopropyl) phosphate (BDBPP)	5412-25-9	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tris(1-aziridinyl) phosphine oxide (TEPA)	545-55-1	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tris(2,3-,dbromopropyl)-phosphate (TRIS)	126-72-7	25	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Glycols / Glycol Ethers																
2-ethoxyethanol	110-80-5	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2-ethoxyethyl acetate	111-15-9	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2-methoxyethanol	109-86-4	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances	Local Wastewater Discharge Requirement %				
	Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
	Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-						
	Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-						
	Sampling End Time		16:05	16:00	-	-	16:10	-	-	-						
	Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-						
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
2-methoxyethylacetate	110-49-6	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2-methoxypropylacetate	70657-70-4	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Bis(2-methoxyethyl)-ether	111-96-6	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Ethylene glycol dimethylether	110-71-4	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Triethylene glycol dimethylether	112-49-2	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Halogenated Solvents																
1,2-Dichloroethane	107-06-2	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Methylene chloride	75-09-2	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetrachloroethylene	127-18-4	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Trichloroethylene	79-01-6	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Organotin Compounds																
Dipropyltin Compounds (DPT)	Multiple including: 867-36-7	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Mono-, di- and tri-butyltin derivatives		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monobutyltin (MBT)	Multiple including: 1118-46-3, 1461-22-9	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dibutyltin (DBT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tributyltin (TBT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Mono-, di- and tri-methyltin derivatives		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monomethyltin (MMT)	Multiple including: 993-16-8, 753-73-1, 1066-45-1	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Dimethyltin (DMT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Trimethyltin (TMT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Mono-, di- and tri-octyltin derivatives		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monooctyltin (MOT)	Multiple including: 3091-25-6, 3542-36-7, 2587-76-0	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Diocetyltn (DOT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Triocetyltn (TOT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Mono-, di- and tri-phenyltin derivatives		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Monophenyltin (MPHT)	Multiple including: 1124-19-2, 1135-99-5, 639-58-7	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Diphenyltin (DPHT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Triphenyltin (TPHT)		0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetrabutyltin Compounds (TeBT)	Multiple including: 1461-25-2	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetraethyltin Compounds (TeET)	Multiple including: 597-64-8	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Tetraoctyltin Compounds (TeOT)	Multiple including: 3590-84-9	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

		Sample ID		KH26-10147-01		KH26-10147-02				KH26-10147-03						Factory Performances				Local Wastewater Discharge Requirement %
		Date of Sampling		04/03/2026		04/03/2026				04/03/2026										
		Sampling Location		ETP Inlet		ETP Outlet				Sludge										
		Sampling Start Time		10:05		10:00				16:10										
		Sampling End Time		16:05		16:00				16:10										
		Date of Sample Received		04/03/2026		04/03/2026				04/03/2026										
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent				
Tricyclohexyitin (TCyHT)	Multiple including: 3091-32-5	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Tripropylin Compounds (TPT)	Multiple including: 2279-76-7	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Other / Miscellaneous Chemicals																				
AEEA [2-(2-aminoethylamino) ethanol]	111-41-1	500	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Bisphenol A	80-05-7	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Borate, zinc salt	12767-90-7	100	µg/L	See Total Zinc (Zn) & Total Boron (B) Results	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Quinoline	91-22-5	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Thiourea	62-56-6	50	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Perfluorinated and Polyfluorinated Chemicals (PFCs)																				
Perfluorooctane sulfonate (PFOS)**	1763-23-1	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSE)	1691-99-2	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (MeFOSE)	24448-09-7	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Perfluorooctane sulfonamide (PFOSA)	754-91-6	0.01	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Perfluorooctanoic acid (PFOA)***	335-67-1	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Methyl Perfluorooctanoate (Me-PFOA)	376-27-2	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Ethyl Perfluorooctanoate (Et-PFOA)	3108-24-5	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	27905-45-9	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
8:2 Fluorotelomer methacrylate (8:2 FTMA)	1996-88-9	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Phthalates - including all other esters of ortho-phthalic acid																				
1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters , C7-rich (DIHP)	71888-89-6, 84777-06-0	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)	68515-42-4, 68515-50-4	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Butyl benzyl phthalate (BBP)	85-68-7	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Di-iso-decyl phthalate (DIDP)	26761-40-0	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				
Di-isobutyl phthalate (DIBP)	84-69-5	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-				

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

		Sample ID		KH26-10147-01		KH26-10147-02		-		-		KH26-10147-03		-		-		-		Factory Performances					Local Wastewater Discharge Requirement %
		Date of Sampling		04/03/2026		04/03/2026		-		-		04/03/2026		-		-		-							
		Sampling Location		ETP Inlet		ETP Outlet		-		-		Sludge		-		-		-							
		Sampling Start Time		10:05		10:00		-		-		16:10		-		-		-							
		Sampling End Time		16:05		16:00		-		-		16:10		-		-		-							
		Date of Sample Received		04/03/2026		04/03/2026		-		-		04/03/2026		-		-		-							
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent									
Di-isononyl phthalate (DINP)	28553-12-0	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Di-n-hexyl phthalate (DnHP)	84-75-3	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Di-n-octyl phthalate (DNOP)	117-84-0	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Di-n-pentylphthalates	131-18-0	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Di-n-propyl phthalate (DPRP)	131-16-8	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
D(ethylhexyl) phthalate (DEHP)	117-81-7	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Dibutyl phthalate (DBP)	84-74-2	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Diethyl phthalate (DEP)	84-66-2	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Diisopentylphthalates	605-50-5	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Dinonyl phthalate (DNP)	84-76-4	10	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									
Polycyclic Aromatic Hydrocarbons (PAHs)																									
Acenaphthene	83-32-9	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Acenaphthylene	208-96-8	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Anthracene	120-12-7	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[a]anthracene	56-55-3	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[a]pyrene	50-32-8	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[b]fluoranthene	205-99-2	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[e]pyrene	192-97-2	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[ghi]perylene	191-24-2	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[j]fluoranthene	205-82-3	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Benzo[k]fluoranthene	207-08-9	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Chrysene	218-01-9	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Dibenz[a,h]anthracene	53-70-3	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Fluoranthene	206-44-0	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Fluorene	86-73-7	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Indeno[1,2,3-cd]pyrene	193-39-5	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Naphthalene	91-20-3	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Phenanthrene	85-01-8	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Pyrene	129-00-0	1	µg/L	n.d.	-	0.2	mg/kg	n.d.	-	-	-	Not Detected	-	Sample and Report Only	-	-									
Restricted Aromatic Amines (Cleavable from Azo-Colourants)																									
2-naphthylamine	91-59-8	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-									

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

	Sample ID			KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances				Local Wastewater Discharge Requirement %
	Date of Sampling			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
	Sampling Location			ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-					
	Sampling Start Time			10:05	10:00	-	-	16:10	-	-	-					
	Sampling End Time			16:05	16:00	-	-	16:10	-	-	-					
	Date of Sample Received			04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
2-Naphthylammoniumacetate^	553-00-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4-xylidine	95-68-1	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4,5-trimethylaniline	137-17-7	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4,5-trimethylaniline hydrochloride^	21436-97-5	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,6-xylidine	87-62-7	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,3'-dichlorobenzidine	91-94-1	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,3-dimethoxylbenzidine	119-90-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
3,3-dimethylbenzidine	119-93-7	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-aminoazobenzene	60-09-3	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-aminodiphenyl	92-67-1	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-chloro-o-toluidine	95-69-2	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-chloro-o-toluidinium chloride^	3165-93-3	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-chloroaniline	106-47-8	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate^	39156-41-7	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-methoxy-m-phenylenediamine	615-05-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4-methyl-m-phenylenediamine	95-80-7	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4,4-methylene-bis-(2-chloro-aniline)	101-14-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4,4-methylenedi-o-toluidine	838-88-0	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4,4-methylenedianiline	101-77-9	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4,4-oxydianiline	101-80-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
4,4-thiodianiline	139-65-1	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
5-nitro-o-toluidine	99-55-8	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
6-methoxy-m-toluidine	120-71-8	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Benzidine	92-87-5	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
o-aminoazotoluene	97-56-3	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
o-anisidine	90-04-0	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
o-toluidine	95-53-4	0.1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
UV Absorbers																
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	36437-37-3	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-

TEST RESULTS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

		Sample ID		KH26-10147-01	KH26-10147-02	-	-	KH26-10147-03	-	-	-	Factory Performances				Local Wastewater Discharge Requirement %
		Date of Sampling		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
		Sampling Location		ETP Inlet	ETP Outlet	-	-	Sludge	-	-	-					
		Sampling Start Time		10:05	10:00	-	-	16:10	-	-	-					
		Sampling End Time		16:05	16:00	-	-	16:10	-	-	-					
		Date of Sample Received		04/03/2026	04/03/2026	-	-	04/03/2026	-	-	-					
Items	CAS No.	Reporting Limit	Units	Untreated Wastewater	Effluent	Reporting Limit	Units	SludgeΦ	Reporting Limit	Units	Leachate	Untreated Wastewater	Effluent	Sludge	Leachate	Effluent
2-benzotriazol-2-yl-4,6-di-tertbutylphenol (UV-320)	3846-71-7	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	100	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Volatile Organic Compounds (VOC)																
Benzene	71-43-2	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
m-cresol	108-39-4	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
o-cresol	95-48-7	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
p-cresol	106-44-5	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Toluene	108-88-3	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Xylene	1330-20-7	1	µg/L	n.d.	-	-	-	-	-	-	-	Not Detected	-	-	-	-
Additional Parameters																
Dry Mass (Total Solids)	-	-	-	-	-	-	%	34.5	-	-	-	-	-	Sample and Report Only	-	-

Remarks:

n.d. = Not Detected

N/A = Not Tested / Not Applicable

*- = Not Required to be Tested

*The test result is based on the calculation of selected element(s) and to the worst-case scenario

*Test data is measured/provided by the client

**PFOS refer to its salts/derivative including PFOS-K (CAS No.: 2795-39-3), PFOS-Li (CAS No.: 29457-72-5), PFOS-NH₄ (CAS No.: 29081-56-9), PFOS-NH(OH)₂ (CAS No.: 70225-14-8), PFOS-N(C₂H₅)₂ (CAS No.: 56773-42-3) and POSF (CAS No.: 307-35-7)

***PFOA refer to its salts including PFOA-Na (CAS No.: 335-95-5), PFOA-K (CAS No.: 2395-00-8), PFOA-Ag (CAS No.: 335-93-3), PFOA-F (CAS No.: 335-66-0) and APFO (CAS No.: 3825-26-1)

@ = The amine was detected according to ISO 14362-1:2017 with the reducing agent. A similar result was obtained from the procedure carried out without the reducing agent. According to ISO 14362-1:2017 Annex C.2.1.2.2, the amine originated from a source other than azo colorants

= The amine was detected according to ISO 14362-1:2017 with the reducing agent. Confirmation procedure was carried out without reducing agent, according to ISO 14362-1:2017 Annex C.2.1.2.2, the amine originated from azo colorants

Φ Sludge results are reported based on dry mass

%Please refer to the details of the Local Wastewater Discharge Requirement in the Appendix Section

\$Maximum holding time exceeded

Due to inaccessible of the location of Receiving Water, the measurement of Temp-Receiving Water cannot be determined

°Sample received temperature is greater than 8°C and less than 10°C when received from the laboratory

Δ The analysis was performed by a subcontracted laboratory assessed as competent

TEST PARAMETERS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

ITEMS	CAS No.	METHODS	WASTEWATER			SLUDGE							LEACHATE									
			Foundational	Progressive	Aspirational	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G			
Conventional Parameters																						
pH	-	Wastewater: SM 4500 H+, Electrometric method only Sludge: USEPA 9045 D	6-9			N/A	N/A	N/A	5-11	5-11	6.5-9	6.5-9	-									
Temp-Difference	-	Wastewater: DIN 38 404-4, USEPA 170.1, SM 2550, GB/T 13195 or IS 3025 (Part 9)	Δ+15°C	Δ+10°C	Δ+5°C	-							-									
E. Coli	-	Wastewater: SM 9221 B presumptive, confirm positive with SM 9221 F or G	126MPN/100mL			-							-									
Colour (436nm; 525nm; 620nm)	-	Wastewater: ISO 7887 B	7;5;3m ⁻¹	5;3;2m ⁻¹	2;1;1m ⁻¹	-							-									
Persistent Foam	-	±	No indication of Persistent Foam in receiving water			-							-									
Wastewater Flow Rate	-	±	15m ³ per day			-							-									
Ammonium-N	-	Wastewater: SM 4500 NH3 D	10mg/L	1mg/L	0.5mg/L	-							-									
AOX	-	Wastewater: ISO 9562	3mg/L	0.5mg/L	0.1mg/L	-							-									
Biochemical Oxygen Demand 5-days Concentration (BOD ₅)	-	Wastewater: SM 5210 B	30mg/L	15mg/L	8mg/L	-							-									
Chemical Oxygen Demand (COD)	-	Wastewater: SM 5220 D	150mg/L	80mg/L	40mg/L	-							-									
Dissolved Oxygen (DO)	-	Wastewater: SM 4500 O G	≥4mg/L			-							-									
Oil & Grease	-	Wastewater: USEPA 1664	10mg/L	2mg/L	0.5mg/L	-							-									
Total Phenols / Phenol Index	-	Wastewater: SM 5530 B / C	0.5mg/L	0.01mg/L	0.001mg/L	-							-									
Total Chlorine	-	Wastewater: SM 4500 Cl- G	1mg/L			-							-									
Total Dissolved Solids (TDS)	-	Wastewater: SM 2540 C	Sample and Report Only			-							-									
Total Nitrogen	-	Wastewater: USEPA 351.2	20mg/L	10mg/L	5mg/L	-							-									
Total Phosphorus	-	Wastewater: USEPA 6010 C	3mg/L	0.5mg/L	0.1mg/L	-							-									
Total Suspended Solids (TSS)	-	Wastewater: SM 2540 D	50mg/L	15mg/L	5mg/L	-							-									
Faecal Coliform	-	Sludge: USEPA 1681	-			N/A	N/A	N/A	N/A	N/A	<1000 MPN/g	<1000 MPN/g	-									
% Solids	-	Sludge: USEPA 160.3	-			Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	-									
Paint Filter Test	-	Sludge: USEPA 9095 B	-			N/A	N/A	N/A	Pass	Pass	Pass	Pass	-									
Anions																						
Chloride	-	Wastewater: SM 4500 Cl D or E	Sample and Report Only			-							-									
Cyanide, Total	-	Wastewater: SM 4500 CN Sludge: Preparation: USEPA 9013, Analysis: EPA 9014 & 9213	0.2mg/L	0.1mg/L	0.05mg/L	N/A	N/A	N/A	85mg/kg	70mg/kg	70mg/kg	70mg/kg	-									
Sulfate	-	Wastewater: SM 4500 SO42- E	Sample and Report Only			-							-									
Sulfide	-	Wastewater: SM 4500 S2- D	0.5mg/L	0.05mg/L	0.01mg/L	-							-									
Sulfite	-	Wastewater: SM 4500 SO32- C	2mg/L	0.5mg/L	0.2mg/L	-							-									

TEST PARAMETERS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

ITEMS	CAS No.	METHODS	WASTEWATER			SLUDGE							LEACHATE						
			Foundational	Progressive	Aspirational	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G
Metals																			
Total Antimony (Sb)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.1mg/L	0.05mg/L	0.01mg/L	-	-	-	-	-	-	N/A	N/A	N/A	N/A	7.8mg/L	0.6mg/L	0.6mg/L	0.6mg/L
Chromium (VI)	-	Wastewater: ISO 18412 Sludge: USEPA 7196 Leachate: Extraction: USEPA 1311, Analysis: USEPA 7196	0.05mg/L	0.005mg/L	0.001mg/L	-	-	-	-	-	-	50mg/kg	N/A	N/A	N/A	3.75mg/L	2.5mg/L	2.5mg/L	2.5mg/L
Total Barium (Ba)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	Sample and Report Only			-	-	-	-	-	-	N/A	N/A	N/A	N/A	67.5mg/L	35mg/L	35mg/L	35mg/L
Total Selenium (Se)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	Sample and Report Only			-	-	-	-	-	-	36mg/kg	N/A	N/A	N/A	0.75mg/L	0.5mg/L	0.5mg/L	0.5mg/L
Total Tin (Sn)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A, Analysis: USEPA 6010 C	Sample and Report Only			-							-						
Total Arsenic (As)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.05mg/L	0.01mg/L	0.005mg/L	-	-	-	-	-	-	41mg/kg	N/A	N/A	N/A	2.75mg/L	0.5mg/L	0.5mg/L	0.5mg/L
Total Chromium (Cr)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.2mg/L	0.1mg/L	0.05mg/L	-	-	-	-	-	-	1200mg/kg	N/A	N/A	N/A	5mg/L	5mg/L	5mg/L	5mg/L
Total Cobalt (Co)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.05mg/L	0.02mg/L	0.01mg/L	-	-	-	-	-	-	N/A	N/A	N/A	N/A	80mg/L	80mg/L	80mg/L	80mg/L
Total Cadmium (Cd)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.1mg/L	0.05mg/L	0.01mg/L	-	-	-	-	-	-	39mg/kg	N/A	N/A	N/A	0.58mg/L	0.15mg/L	0.15mg/L	0.15mg/L
Total Copper (Cu)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	1mg/L	0.5mg/L	0.25mg/L	-	-	-	-	-	-	1500mg/kg	N/A	N/A	N/A	17.5mg/L	10mg/L	10mg/L	10mg/L
Total Lead (Pb)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.1mg/L	0.05mg/L	0.01mg/L	-	-	-	-	-	-	400mg/kg	N/A	N/A	N/A	2.75mg/L	0.5mg/L	0.5mg/L	0.5mg/L
Total Nickel (Ni)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.2mg/L	0.1mg/L	0.05mg/L	-	-	-	-	-	-	420mg/kg	N/A	N/A	N/A	11.75mg/L	3.5mg/L	3.5mg/L	3.5mg/L
Total Silver (Ag)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	0.1mg/L	0.05mg/L	0.005mg/L	-	-	-	-	-	-	N/A	N/A	N/A	N/A	5mg/L	5mg/L	5mg/L	5mg/L
Total Zinc (Zn)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C Sludge: Preparation: USEPA 3050, Analysis: EPA 6010 B&D Leachate: Extraction: USEPA 1311 or USEPA 3051 A Analysis: USEPA 6010 C	5mg/L	1mg/L	0.5mg/L	-	-	-	-	-	-	2800mg/kg	N/A	N/A	N/A	50mg/L	50mg/L	50mg/L	50mg/L
Total Mercury (Hg)	-	Wastewater: USEPA 245.1, USEPA 6020 A Sludge: USEPA 7471 B Leachate: Extraction: USEPA 1311 of USEPA 3051 A Analysis: USEPA 7471 B	0.01mg/L	0.005mg/L	0.001mg/L	-	-	-	-	-	-	17mg/kg	N/A	N/A	N/A	0.125mg/L	0.05mg/L	0.05mg/L	0.05mg/L
Total Boron (B)	-	Wastewater: MNTPI/SOP-MW/08 APHA 3120 B 23rd Edition /USEPA 6010 C	-			-							-						

TEST PARAMETERS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

ITEMS	CAS No.	METHODS	WASTEWATER			SLUDGE							LEACHATE							
			Foundational	Progressive	Aspirational	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)																				
NP / OP	-	Wastewater: ISO 21084:2019/HPLC-MS, GC-MS Sludge: ISO 21084:2019/HPLC-MS, GC-MS	5µg/L			Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4mg/kg	0.4mg/kg	0.4mg/kg	0.4mg/kg	-							
NPEO / OPEO	-	Wastewater:ISO/FDIS 18254:2016, HPLC-MS,GC-MS Sludge: ISO/FDIS 18254:2016, HPLC-MS, GC-MS	5µg/L			Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4mg/kg	0.4mg/kg	0.4mg/kg	0.4mg/kg	-							
Antimicrobials and Biocides																				
o-Phenylphenol (+salts)	90-43-7	Wastewater: In-house Method / GC-MS	100µg/L			-							-							
Triclosan	3380-34-5	Wastewater: USEPA 8270 E	100µg/L			-							-							
Permethrin	Multiple including: 52645-53-1	Wastewater: USEPA 8270 E USEPA 8270E Solvent extraction, followed by LCMS/LCMS/MS	500µg/L			-							-							
Chlorinated Paraffins																				
Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	85535-85-9	Wastewater: Preparation: With reference to ISO 18219:2015	500µg/L			-							-							
Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8	Wastewater: Preparation: With reference to ISO 18219:2015	25µg/L			-							-							
Chlorobenzenes and Chlorotoluenes		Wastewater: With reference to USEPA 8260 D Sludge: With reference to USEPA 8270 E	0.2µg/L			CTs: Sample and Report Only	CTs: Sample and Report Only	CTs: Sample and Report Only	CTs: 0.2mg/kg	CTs: 0.2mg/kg	CTs: 0.2mg/kg	CTs: 0.2mg/kg	-							
Chlorophenols		Wastewater: With reference to ISO 17070:2015	0.5µg/L			-							-							
N,N-di-methylformamide (DMFa)	68-12-2	Wastewater: Derived method based on EPA 8260C	1000µg/L			-							-							
Dyes - Carcinogenic or Equivalent Concern		Wastewater: DIN 54231:2005, HPLC-DAD,HPLC-MS	500µg/L			-							-							
Dyes - Disperse (Allergenic)		Wastewater: DIN 54231:2005 / HPLC-DAD,HPLC-MS	50µg/L			-							-							
Flame Retardants		Wastewater: Boric acid, Diboron trioxide, Disodium octaborate, Disodium tetraborate anhydrous, Tetraboron disodium heptaoxide, hydrate: RSTS-CHEM-221-1, ISO 17881-1:2016, Analysis by GCMS Others: RSTS-CHEM-221-1, ISO 17881-1:2016, Analysis by GCMS	Boric acid, Diboron trioxide, Disodium octaborate, Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate: 500µg/L Others: 25µg/L			-							-							
Glycols / Glycol Ethers		Wastewater: With reference to USEPA 8270 E GC-MS	50µg/L			-							-							
Halogenated Solvents		Wastewater: With reference to USEPA 8260 D, Purge and Trap or Headspace followed by GC-MS-MS	1µg/L			-							-							
Organotin Compounds		Wastewater: TeET: ISO 16179:2012 /GC-MS Others: ISO 16179:2012 /GC-MS	0.01µg/L			-							-							

TEST PARAMETERS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

ITEMS	CAS No.	METHODS	WASTEWATER			SLUDGE							LEACHATE							
			Foundational	Progressive	Aspirational	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G	
Other / Miscellaneous Chemicals																				
AEEA [2-(2-aminoethylamino) ethanol]	111-41-1	Wastewater: With reference to Liquid extraction followed by LC-MS/MS	500µg/L			-							-							
Bisphenol A	80-05-7	Wastewater: With reference to Liquid extraction followed by LC-MS/MS	10µg/L			-							-							
Borate, zinc salt	12767-90-7	Wastewater: USEPA 6010 C	100µg/L			-							-							
Quinoline	91-22-5	Wastewater: In house method I AFPS GS 2014 LCMS/GCMS	50µg/L			-							-							
Thiourea	62-56-6	Wastewater: With reference to Liquid extraction followed by LC-MS/MS	50µg/L			-							-							
Perfluorinated and Polyfluorinated Chemicals (PFCs)		Wastewater: PFCs: With reference to FTOH: BS EN 12673-1999, EPA 8270 CEN/TS 15968:2010 PFCs: LC-MSMS, FTOH: GC-MS followed by GC-MS	PFOS and related substances: 0.01µg/L PFOA and related substances: 1µg/L			-							-							
Phthalates		Wastewater: With reference to USEPA 8270 E or Dichloromethane extraction followed by GC-MS	10µg/L			-							-							
Polycyclic Aromatic Hydrocarbons (PAHs)		Wastewater: With reference to USEPA 8270 E or Solvent extraction followed by GC-MS Sludge: With reference to USEPA 8270 E	1µg/L			Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2mg/kg	0.2mg/kg	0.2mg/kg	0.2mg/kg	-							
Restricted Aromatic Amines		Wastewater: ISO 14362-1:2017 & ISO 14362-3:2017/ GC-MS/HPLC-DAD	0.1µg/L			-							-							
UV Absorbers		Wastewater: USEPA 8270 E	100µg/L			-							-							
Volatile Organic Compounds (VOC)																				
Benzene	71-43-2	Wastewater: With reference to USEPA 8260 D, Purge and Trap or Static Headspace followed by GC-MS	1µg/L			-							-							
m-cresol	108-39-4	Wastewater: With reference to USEPA 8260 D, Purge and Trap or Static Headspace followed by GC-MS	1µg/L			-							-							
o-cresol	95-48-7	Wastewater: With reference to USEPA 8260 D, Purge and Trap or Static Headspace followed by GC-MS	1µg/L			-							-							
p-cresol	106-44-5	Wastewater: With reference to USEPA 8260 D, Purge and Trap or Static Headspace followed by GC-MS	1µg/L			-							-							
Toluene	108-88-3	Wastewater: With reference to USEPA 8260 D	1µg/L			-							-							
Xylene	1330-20-7	Wastewater: With reference to USEPA 8260 D, Purge and Trap or Static Headspace followed by GC-MS	1µg/L			-							-							

PIPING PLAN

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
Factory Address: HT-11, Landhi Industrial Area, Karachi



SAMPLING PHOTOS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi

PERSISTENT FOAM

Date & Time of Measurement: 04/03/2026 at 10:20

Sampling Location: Aeration Tank



UNTREATED WASTEWATER

Date & Time of Measurement: 04/03/2026 at 10:05
 GPS Data: 24°84'32" N, 67°20'91" E

SAMPLING LOCATION, CLOSE-UP VIEW

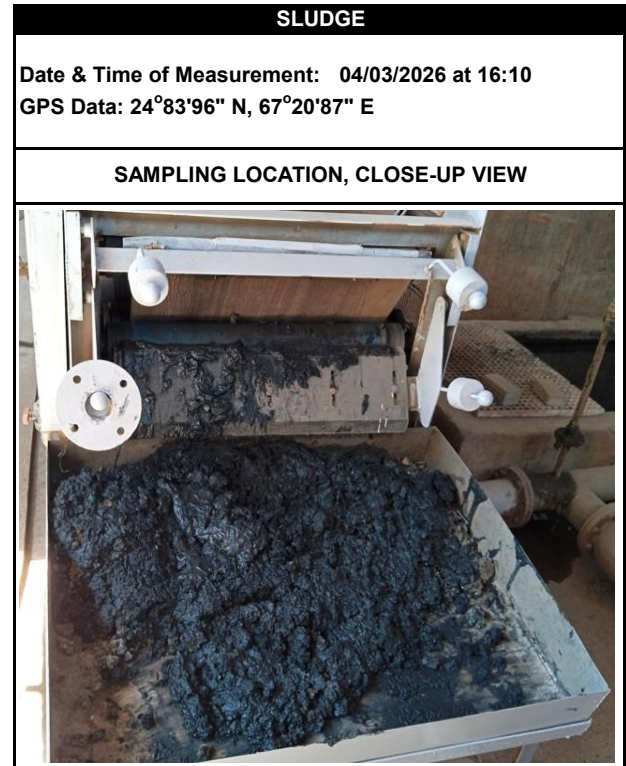
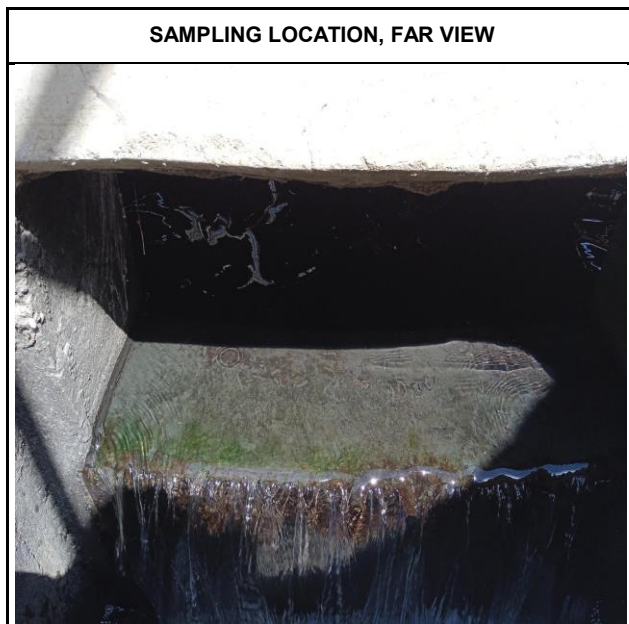
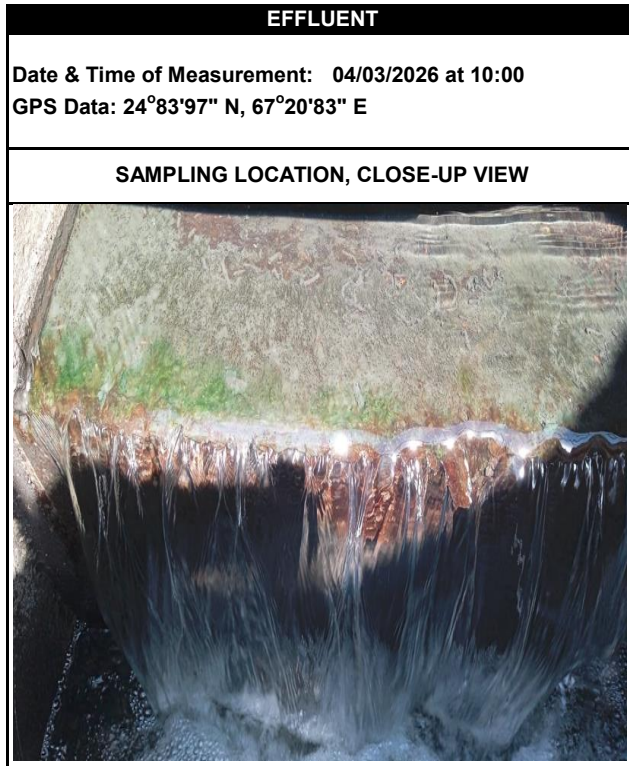


SAMPLING LOCATION, FAR VIEW



SAMPLING PHOTOS

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.
 Factory Address: HT-11, Landhi Industrial Area, Karachi



LOCAL WASTEWATER DISCHARGE REQUIREMENT

REGULATORY REQUIREMENTS BASED ON PAKISTAN: EPA/TECH/739/2014 SINDH ENVIRONMENTAL QUALITY STANDARDS (SEQS)

Factory Name: Al-Karam Textile Mills (Pvt.) Ltd.

Factory Address: HT-11, Landhi Industrial Area, Karachi

Paramters	Discharged Waste Water		
	Discharge into Sea		
		Value	Unit
Temperature Increase*	≤	3	°C
Temperature	<	40	°C
TSS	<	200	mg/L
COD	<	400	mg/L
pH Value (min.)	-	6.0	-
pH Value (max.)	-	9.0	-
BOD (5-day)	<	80	mg/L
Oil and Grease	<	10	mg/L
Phenol	<	0.3	mg/L
Cyanide	<	1	mg/L
Sulfide	<	1	mg/L
Ammonia (NH ₃)	<	40	mg/L
Total Chromium (Cr)	<	1	mg/L
Total Copper (Cu)	<	1	mg/L
Total Nickel (Ni)	<	1	mg/L
Total Silver (Ag)	<	1	mg/L
Total Zinc (Zn)	<	5	mg/L
Total Arsenic (As)	<	1	mg/L
Total Barium (Ba)	<	1.5	mg/L
Total Selenium (Se)	<	0.5	mg/L
Total Boron (B)	<	6	mg/L
Total Cadmium (Cd)	<	0.1	mg/L
Hexavalent Chromium (Cr-VI)	<	1	mg/L
Total Lead (Pb)	<	0.5	mg/L
Total Mercury (Hg)	<	0.01	mg/L
Total Chlorine	<	1	mg/L
Total Dissolved Solids (TDS)	<	3500	mg/L
Sulfate	<	600	mg/L
Chloride	<	1000	mg/L

*The effluent should not result in temperature increase of more than 3°C at the edge of the zone where initial mixing and dilution take place in the receiving body.
In case zone is not defined, use 100 meters from the point of discharge.

** The value for industry is 200 mg/L

***** END OF REPORT *****

SGS

ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration

ZDHC Wastewater Sampling Information:

Factory Name: M/S Al-Karom Textile
 Factory Address: Landhi Industrial Area
 Sampling Location: ☐ Untreated Wastewater ☒ Effluent ☐ Sludge
 GPS Data: Al-Karom Landhi
 Sampling Date: 24.03.2025
 Sampling Time: 6:20:30 PM
 Sample ID: ETP outlet (Effluent)

Sampler Information:

Sampler Name: Mohsin Umar
 Sampler E-mail: Mohsin.umar@sgs.com
 ZDHC Sampler Accreditation Cert. No.: C74D106818398

Sampling Method:

☐ Grab ☒ 6-hour Composite ☐ Others, please specify _____
☐ Autosampler ☐ Manual

Discharge Method:

☒ Direct ☐ Indirect (w/pretreatment) ☐ Indirect (w/o pretreatment) ☐ Zero Liquid Discharge (ZLD)

ZDHC Wastewater Sampling Field Testing QA/QC

ZDHC Wastewater Sampling Field Testing QA/QC				
Parameter	LCS Known		LCS Measured	Accuracy %
pH	4, 7, 10		4, 7, 10	100 %
Total Chlorine	1.2556, 2.7341		1.2556, 2.7341	100 %

ZDHC Wastewater Flow Device Dimensions

ZDHC Wastewater Flow Device Dimensions				
Measurement (cm)	Meter	Pipe (O)	Flume (U)	Wier (V)
Diameter	NA			
Depth	NA	NA	NA	

ZDHC Wastewater Sample Collection Field Test Measurements

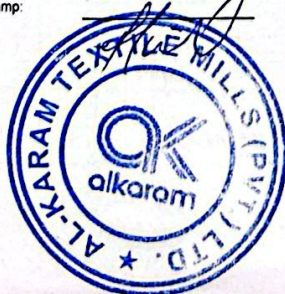
ZDHC Wastewater Sample Collection Field Test Measurements										
Sampling Time (Hours)	Temp (°C)		pH	Visible Colour	Persistent Foam (Yes/No)	Dissolved Oxygen (mg/L)	Total Chlorine (mg/L)	Wastewater Flow Meter (m³/hr)	Alternate Measured Flow	
	Wastewater Discharge	Receiving Water							Depth (cm)	Velocity (cm/s)
0	31.2	Not possible	7.5	Slightly yellow	NO	4.1	ND	170		
1	31.5	Not possible	7.8	Slightly yellow	NO	4.2	ND	131		
2	31.4	Not possible	7.7	Slightly yellow	NO	4.1	ND	172		
3	31.6	Not possible	7.6	Slightly yellow	NO	4.2	ND	171		
4	31.8	Not possible	7.7	Slightly yellow	NO	4.0	ND	177		
5	32.0	Not possible	7.6	Slightly yellow	NO	4.1	ND	171		
6	32.1	NP	7.7	Slightly yellow	NO	4.1	ND	173		
7	31.8	NP	7.6	Slightly yellow	NO	4.0	ND	171		
8	31.7	NP	7.5	Slightly yellow	NO	4.1	ND	173		
9				Review						
Average	31.6	ND	7.6	Slightly yellow	NO	4.1	ND	171.5		

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.

Factory Name: Al-Karom Textile
 Factory Representative Name: Hassan Farooq
 Factory Representative Signature and Stamp: _____

Sampler Name: Mohsin Umar
 ZDHC Sampler Accreditation Cert. No.: C74D106818398
 Sampler Signature: _____



Issue 1 / Dec 2023
 RSTS-WW-D-005