



Test Report: (7224)023-0034

Report Date: March 22, 2024

Factory Company Name: ERSEN TEKSTIL SAN VE TIC LTD STI

Factory Address: BARAKFATIH OSB. MAH. 24. CAD. NO: 8 KESTEL / BURSA

|                                |                            |           |  |
|--------------------------------|----------------------------|-----------|--|
| Sampling Method & Description: | I001) Untreated wastewater | Composite | Brown, Navy Blue, Light Green, White<br>Light Brown, Blue Liquid |
|                                | I002) Effluent             | -         | Not tested   |
|                                | I003) Sludge               | -         | Not tested   |
|                                | I004) Leachate             | -         | Not tested   |
|                                | I005) Incoming water       | -         | Not tested   |

Discharge Type: **Indirect Discharge without Pretreatment**

On-site ETP / Pretreatment: No Homgenization Tank &amp; Holding Time: No

Discharge Destination: BARAKFATIH ORGANIZED INDUSTRIAL ZONE

Permit Validation Date: 19.01.2026

Conventional, Anions &amp; Heavy Metals Overall Category: Not applicable ZDHC MRSL Parameters: Not detected

Sludge Parameters: Not applicable

Sample Pick Up Date: February 1, 2024 Sampler Number: ZDHC-A-22-E-C001068-R2340-7ACE3

Test Period: February 05, 2024 to February 22, 2024

Parameter(s) exceeded maximum holding time: Not exceeded

**Remark 1**

Please refer to discharge criteria of the offsite ETP attached at the Appendix A.

**Remark**

The results of this report shall not be used for any regulatory compliance purposes.

|                          |                |  |                                    |
|--------------------------|----------------|--|------------------------------------|
| Type of Process:         | <b>Textile</b> | Average total industrial wastewater generated: | <b>Equal or more than 15m3/day</b> |
| Sludge Disposal Pathway: | Not applicable |  |                                    |
| Type of Sludge:          | Not applicable |  |                                    |

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Report reviewed by:

Hasan Altingul, Operation Manager - CS &amp; Support

Report approved by:

Firdevs Elikara, SCM Technical Lead

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Bureau Veritas Consumer Products Services, Inc.

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**Result Summary - ZDHC MRSL Wastewater Parameters**

| Test Items                                    | Untreated wastewater | Effluent | Incoming water |
|---|----------------------|----------|----------------|
| 1A) AP and APEOs                              | ND                   | NR       | NR             |
| 1B) Anti-Microbials & Biocides                | ND                   |          | NR             |
| 1C) Chlorinated Parafins                      | ND                   |          | NR             |
| 1D) Chlorobenzenes and Chlorotoluenes         | ND                   |          | NR             |
| 1E) Chlorophenols                             | ND                   |          | NR             |
| 1F) DMFa                                      | ND                   |          | NR             |
| 1G) Dyes - Carcinogenic or Equivalent Concern | ND                   |          | NR             |
| 1H) Dyes - Disperse (Sensitising)             | ND                   |          | NR             |
| 1I) Dyes - Navy Blue Colourant                | ND                   |          | NR             |
| 1J) Flame Retardants                          | ND                   |          | NR             |
| 1K) Glycols / Glycol Ethers                   | ND                   |          | NR             |
| 1L) Halogenated Solvents                      | ND                   |          | NR             |
| 1M) Organotin Compounds                       | ND                   |          | NR             |
| 1N) Other / Miscellaneous Chemicals           | ND                   |          | NR             |
| 1O) PFCs                                      | ND                   |          | NR             |
| 1P) Phthalates                                | ND                   |          | NR             |
| 1Q) PAHs                                      | ND                   |          | NR             |
| 1R) Restricted Aromatic Amines                | ND                   |          | NR             |
| 1S) UV Absorbers                              | ND                   |          | NR             |
| 1T) VOC                                       | ND                   |          | NR             |



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**Result Summary - ZDHC Heavy Metals, Conventional and Anions Wastewater Parameters**

| Test Items                   | Untreated wastewater | Effluent | Incoming water |    |
|------------------------------|----------------------|----------|----------------|----|
| Antimony                     | NR                   | NR       | NR             |    |
| Chromium (VI)                | Refer to result      |          | NR             |    |
| Barium                       | NR                   |          | NR             |    |
| Selenium                     | NR                   |          | NR             |    |
| Tin                          | NR                   |          | NR             |    |
| Arsenic                      | Refer to result      |          | NR             |    |
| Total Chromium               | NR                   |          | NR             |    |
| Cobalt                       | NR                   |          | NR             |    |
| Cadmium                      | Refer to result      |          | NR             |    |
| Copper                       | NR                   |          | NR             |    |
| Lead                         | Refer to result      |          | NR             |    |
| Nickel                       | NR                   |          | NR             |    |
| Silver                       | NR                   |          | NR             |    |
| Zinc                         | NR                   |          | NR             |    |
| Mercury                      | Refer to result      |          | NR             |    |
| pH                           | NR                   |          | NR             | NR |
| Temperature difference       |                      |          |                |    |
| E.coli                       |                      |          |                |    |
| Colour                       |                      |          |                |    |
| Persistent Foam              |                      |          |                |    |
| Wastewater Flowrate          |                      |          |                |    |
| Ammonium-Nitrogen            |                      |          |                |    |
| AOX                          |                      |          |                |    |
| BOD <sub>5</sub>             |                      |          |                |    |
| COD                          |                      |          |                |    |
| DO                           |                      |          |                |    |
| Oil & Grease                 |                      |          |                |    |
| Total Phenols / Phenol Index |                      |          |                |    |
| Total Chlorine               |                      |          |                |    |
| TDS                          |                      |          |                |    |
| Total Nitrogen               |                      |          |                |    |
| Total Phosphorus             |                      |          |                |    |
| TSS                          |                      |          |                |    |
| Chloride                     |                      |          |                |    |
| Cyanide, total               |                      |          |                |    |
| Sulfate                      |                      |          |                |    |
| Sulfide                      |                      |          |                |    |
| Sulfite                      |                      |          |                |    |



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**Result Summary - ZDHC Sludge Parameters**

| Test Items        | Sludge | Leachate |
|-------------------|--------|----------|
| Antimony          | NR     | NR       |
| Arsenic           |        | NR       |
| Barium            |        | NR       |
| Cadmium           |        | NR       |
| Cobalt            |        | NR       |
| Copper            |        | NR       |
| Lead              |        | NR       |
| Nickel            |        | NR       |
| Selenium          |        | NR       |
| Silver            |        | NR       |
| Total Chromium    |        | NR       |
| Zinc              |        | NR       |
| Chromium (VI)     |        | NR       |
| Mercury           |        | NR       |
| Cyanide           |        | NR       |
| pH                |        |          |
| % Solids          |        |          |
| Paint Filter Test |        |          |
| Fecal Coliform    |        |          |
| AP and APEOs      |        |          |
| PAHs              |        |          |
| Chlorotoluenes    |        |          |

## Note / Key:

|                 |   |  |
|-----------------|---|--|
| Meet            | = | Meet Foundational Limit / Meet Discharge Criteria  |
| <b>Not Meet</b> | = | Exceed Foundational Limit / Exceed Discharge Criteria                                    |
| NR              | = | Not requested / Not required   |
| NA              | = | Not applicable   |
| <b>D</b>        | = | Detected   |
| ND              | = | Not detected   |
| Refer to result | = | Legal parameter(s) and/or parameter(s) requested by factory, please refer to test result |



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**Test Result - ZDHC MRSL Parameters**

| Test Parameters   | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |
|---|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|
|   | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |
| <b>1A) AP and APEOs: including all isomers</b>                            |                       |                |                              |                             |                |                        |                                |                            |
| NPEO  | ND                    | NR             | NR                           | NR                          | NR             | 5                      | 0,4                            | -                          |
| NP, mixed isomers   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| OPEO  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| OP, mixed isomers   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1B) Anti-Microbials &amp; Biocides</b>                                 |                       |                |                              |                             |                |                        |                                |                            |
| o-Phenylphenol (+salts)   | ND                    | NR             | NR                           | NR                          | NR             | 100                    | -                              | -                          |
| Triclosan   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Permethrin  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1C) Chlorinated Parafins</b>   |                       |                |                              |                             |                |                        |                                |                            |
| MCCPs (C14-C17)   | ND                    | NR             | NR                           | NR                          | NR             | 500                    | -                              | -                          |
| SCCPs (C10-C13)   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1D) Chlorobenzenes and Chlorotoluenes</b>                              |                       |                |                              |                             |                |                        |                                |                            |
| 1,2-dichlorobenzene   | ND                    | NR             | NR                           | NR                          | NR             | 0,2                    | -                              | -                          |
| Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- chlorobenzene | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Other isomers of mono-, di-, tri-, tetra- and penta- chlorotoluene        | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1E) Chlorophenols</b>  |                       |                |                              |                             |                |                        |                                |                            |
| 2-chlorophenol  | ND                    | NR             | NR                           | NR                          | NR             | 0,5                    | -                              | -                          |
| 3-chlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 4-chlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,4-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,5-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,6-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 3,4-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 3,5-dichlorophenol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,4-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,5-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,6-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,4,5-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,4,6-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 3,4,5-trichlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,5,6-tetrachlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,4,6-tetrachlorophenol   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,3,4,5-tetrachlorophenol   | ND                    | NR             |                              |                             |                |                        |                                |                            |
| Pentachlorophenol (PCP)   | ND                    | NR             |                              |                             |                |                        |                                |                            |
| <b>1F) N,N-di-methylformamide (DMFa)</b>                                  |                       |                |                              |                             |                |                        |                                |                            |
| Dimethyl formamide;<br>N,N-dimethylformamide (DMFa) <sup>a</sup>          | ND                    | NR             | NR                           | NR                          | NR             | 1000                   | -                              | -                          |

a = Report only for mock leather

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



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**Test Result - ZDHC MRSL Parameters (continued)**

| Test Parameters                                      | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |
|--|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|
|  | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |
| <b>1G) Dyes - Carcinogenic or Equivalent Concern</b> |                       |                |                              |                             |                |                        |                                |                            |
| Basic violet 3 with >0.1% of Michler's Ketone        | ND                    |                |                              |                             | NR             | 500                    | -                              | -                          |
| C.I. Acid Red 26                                     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Acid Violet 49                                  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Basic Blue 26 (with Michler's Ketone >0/1%)     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Basic Green 4 (Malachite Green Chloride)        | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Basic Green 4 (Malachite Green Oxalate)         | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Basic Green 4 (Malachite Green)                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Basic Red 9                                     | ND                    | NR             | NR                           | NR                          | NR             |                        |                                |                            |
| C.I. Basic Violet 14                                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Direct Black 38                                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Direct Blue 6                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Direct Red 28                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Disperse Blue 1                                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| C.I. Disperse Blue 3                                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Orange 11                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1H) Dyes - Disperse (Allergenic)</b>              |                       |                |                              |                             |                |                        |                                |                            |
| Disperse Blue 102                                    | ND                    |                |                              |                             | NR             | 50                     | -                              | -                          |
| Disperse Blue 106                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Blue 124                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Blue 26                                     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Blue 35 (CAS 12222-75-2)                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Blue 35 (CAS 56524-77-7)                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Blue 7                                      | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Brown 1                                     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Orange 1                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Orange 3                                    | ND                    | NR             | NR                           | NR                          | NR             |                        |                                |                            |
| Disperse Orange 37/59/76                             | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Red 1                                       | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Red 11                                      | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Red 17                                      | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Yellow 1                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Yellow 3                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Yellow 39                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Yellow 49                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disperse Yellow 9                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1I) Dyes - Navy Blue Colourant</b>                |                       |                |                              |                             |                |                        |                                |                            |
| Component 1: C39H23Cl-CrN7O12S 2Na                   | ND                    |                |                              |                             | NR             | 500                    | -                              | -                          |
| Component 2: C46H-30CrN10O20S2 3Na                   | ND                    | NR             | NR                           | NR                          | NR             |                        |                                |                            |

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



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**Test Result - ZDHC MRSL Parameters (continued)**

| Test Parameters                                      | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |
|--|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|
|  | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |
| <b>1J) Flame Retardants</b>                          |                       |                |                              |                             |                |                        |                                |                            |
| 2,2-bis(bromomethyl)-1,3-propanediol (BBMP)          | ND                    | NR             | NR                           | NR                          | NR             | 25                     |                                |                            |
| Dis(2,3-dibromopropyl) phosphate (BIS)               | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Decabromophenyl ether (DecaBDE)                      | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Hexabromocyclodecane (HBCDD)                         | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Octabromodiphenyl ether (OctaBDE)                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Pentabromodiphenyl ether (PentaBDE)                  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Polybromobiphenyls (PBB)                             | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tetrabromobisphenol A (TBBPA)                        | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tris-(2-chloro-1-methylethyl) phosphate (TCPP)       | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tris(1-aziridinyl)phosphone oxide (TEPA)             | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tris(1,3-dichloro-isopropyl) phosphate (TDCP)        | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tris(2-chloroethyl) phosphate (TCEP)                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tris(2,3-dibromopropyl) phosphate (TRIS)             | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Decabromobiphenyl (DecaBB)                           | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Dibromobiphenyls (DiBB)                              | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Octabromobiphenyls (OctaBB)                          | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Dibromopropylether                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Heptabromodiphenyl ether (HeptaBDE)                  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Hexabromodiphenyl ether (HexaBDE)                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Monobromobiphenyls (MonoBB)                          | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Monobromodiphenylethers (MonoBDEs)                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Nonabromobiphenyls (NonaBB)                          | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Nonabromodiphenyl ether (NonaBDE)                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tetrabromodiphenyl ether (TetraBDE)                  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tribromophenylethers (TriBDEs)                       | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Boric acid <sup>b</sup>                              | ND                    |                |                              |                             | NR             | 100                    |                                |                            |
| Diboron trioxide <sup>b</sup>                        | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disodium octaborate <sup>b</sup>                     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Disodium tetraborate anhydrous <sup>b</sup>          | ND                    | NR             |                              |                             |                |                        |                                |                            |
| Tetraboron disodium heptaoxide, hydrate <sup>b</sup> | ND                    | NR             | NR                           |                             |                |                        |                                |                            |
| <b>1K) Glycols / Glycol Ethers</b>                   |                       |                |                              |                             |                |                        |                                |                            |
| 2-ethoxyethanol                                      | ND                    | NR             | NR                           | NR                          | NR             | 50                     | -                              | -                          |
| 2-ethoxyethyl acetate                                | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2-methoxyethanol                                     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2-methoxyethylacetate                                | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2-methoxypropylacetate                               | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Bis(2-methoxyethyl)-ether                            | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Ethylene glycol dimethyl ether                       | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Triethylene glycol dimethyl ether                    | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1L) Halogenated Solvents</b>                      |                       |                |                              |                             |                |                        |                                |                            |
| 1,2-dichloroethane                                   | ND                    | NR             | NR                           | NR                          | NR             | 1                      | -                              | -                          |
| Methylene chloride                                   | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Tetrachloroethylene                                  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Trichloroethylene                                    | ND                    |                |                              |                             | NR             |                        |                                |                            |

b = Limit refers to elemental boron, not the salt.

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



Test Report: (7224)023-0034

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**Test Result - ZDHC MRSL Parameters (continued)**

| Test Parameters  | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |    |    |    |     |   |   |
|--|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|----|----|----|-----|---|---|
|  | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |    |    |    |     |   |   |
| <b>1M) Organotin Compounds</b>   |                       |                |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Dipropyltin compounds (DPT)  | ND                    | NR             | NR                           | NR                          | NR             | 0,01                   | -                              | -                          |    |    |    |     |   |   |
| Mono, di-, and tri-butyltin derivatives  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Mono, di-, and tri-methyltin derivatives   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Mono, di-, and tri-octyltin derivatives  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Mono, di-, and tri-phenyltin derivatives   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Tetrabutyltin compounds (TeBT)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Tripropyltin compounds (TPT)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Tetraoctyltin compounds (TeOT)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Tricyclohexyltin (TCyHT)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Tetraethyltin compounds (TeET)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| <b>1N) Other / Miscellaneous Chemicals</b>   |                       |                |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| AEEA [2-(2-aminoethylamino)ethanol]  | ND                    |                |                              |                             | NR             |                        |                                |                            | NR | NR | NR | 500 | - | - |
| Bisphenol A  | ND                    | NR             |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Thiourea   | ND                    | NR             |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Quinoline  | ND                    | NR             |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Borate, zinc salt <sup>c</sup>   | ND                    | NR             |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Silica (used in sand blasting) <sup>d</sup>  | NR                    | NR             |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| <b>1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)</b>                         |                       |                |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA) | ND                    | NR             | NR                           | NR                          | NR             | 0,01                   | -                              | -                          |    |    |    |     |   |   |
| Perfluorooctanoic acid (PFOA) related substances                                       | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| <b>1P) Phthalates - including all other esters of ortho-phthalic acid</b>              |                       |                |                              |                             |                |                        |                                |                            |    |    |    |     |   |   |
| 1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP) | ND                    | NR             | NR                           | NR                          | NR             | 10                     | -                              | -                          |    |    |    |     |   |   |
| 1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)        | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Bis(2-methoxyethyl)phthalate (DMEP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Butyl benzyl phthalate (BBP)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-cyclohexyl phthalate (DCHP)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-iso-decyl phthalate (DIDP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-iso-octyl phthalate (DIOP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-iso-butyl phthalate (DIBP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-iso-nonyl phthalate (DINP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-n-hexyl phthalate (DnHP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-n-octyl phthalate (DNOP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-n-pentylphthalates  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di-n-propyl phthalate (DPRP)   | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Di(ethylhexyl) phthalate (DEHP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Dibutyl phthalate (DBP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Diethyl phthalate (DEP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Diisopentylphthalates  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |
| Dinonyl phthalate (DNP)  | ND                    |                |                              |                             | NR             |                        |                                |                            |    |    |    |     |   |   |

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not a ZDHC wastewater parameter, and not required to test this parameter as this is related to sand blasting

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.





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**Test Result - ZDHC MRSL Parameters (continued)**

| Test Parameters  | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |
|--|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|
|  | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |
| <b>1Q) Polycyclic Aromatic Hydrocarbons (PAHs)</b>                     |                       |                |                              |                             |                |                        |                                |                            |
| Acenaphthene   | ND                    | NR             | NR                           | NR                          | NR             | 1                      | 0,2                            | -                          |
| Acenaphthylene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Anthracene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[a]anthracene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[a]pyrene (BaP)   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[b]fluoranthene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[e]pyrene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[ghi]perylene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[j]fluoranthene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzo[k]fluoranthene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Chrysene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Dibenz[a,h]anthracene  | ND                    |                |                              |                             |                |                        |                                |                            |
| Fluoranthene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Fluorene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Indeno[1,2,3-cd]pyrene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Naphthalene  | ND                    |                |                              |                             |                |                        |                                |                            |
| Phenanthrene   | ND                    |                |                              |                             |                |                        |                                |                            |
| Pyrene   | ND                    |                |                              |                             |                |                        |                                |                            |
| <b>1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)</b>  |                       |                |                              |                             |                |                        |                                |                            |
| 2-naphthylamine  | ND                    | NR             | NR                           | NR                          | NR             | 0,1                    | -                              | -                          |
| 2-naphthylammoniumacetate  | ND                    |                |                              |                             |                |                        |                                |                            |
| 2,4-xylidine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 2,4,5-trimethylaniline   | ND                    |                |                              |                             |                |                        |                                |                            |
| 2,4,5-trimethylaniline hydrochloride                                   | ND                    |                |                              |                             |                |                        |                                |                            |
| 2,6-xylidine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 3,3'-dichlorobenzidine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 3,3-dimethoxybenzidine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 3,3-dimethylbenzidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-aminoazobenzene  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-aminodiphenyl  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-chloro-o-toluidine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-chloro-o-toluidinium chloride  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-chloroaniline  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-methoxy-m-phenylenediamine   | ND                    |                |                              |                             |                |                        |                                |                            |
| 4-methyl-m-phenylenediamine  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4,4-methylene-bis-(2-chloro-aniline)                                   | ND                    |                |                              |                             |                |                        |                                |                            |
| 4,4-methylenedi-o-toluidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| 4,4-methylenedianiline   | ND                    |                |                              |                             |                |                        |                                |                            |
| 4,4-oxydianiline   | ND                    |                |                              |                             |                |                        |                                |                            |
| 4,4-thiodianiline  | ND                    |                |                              |                             |                |                        |                                |                            |
| 5-nitro-o-toluidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| 6-methoxy-m-toluidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| Benzidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| o-aminoazotoluene  | ND                    |                |                              |                             |                |                        |                                |                            |
| o-anisidine  | ND                    |                |                              |                             |                |                        |                                |                            |
| o-toluidine  | ND                    |                |                              |                             |                |                        |                                |                            |

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines. Bureau Veritas Consumer Products Services, Inc.

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**Test Result - ZDHC MRSL Parameters (continued)**

| Test Parameters   | Results of Test Items |                |                              |                             |                | Requirements [Textile] |                                |                            |
|---|-----------------------|----------------|------------------------------|-----------------------------|----------------|------------------------|--------------------------------|----------------------------|
|   | I001<br>(µg/L)        | I002<br>(µg/L) | I003 <sup>#</sup><br>(mg/kg) | I004 <sup>#</sup><br>(mg/L) | I005<br>(µg/L) | Wastewater<br>(µg/L)   | Sludge <sup>#</sup><br>(mg/kg) | Leachate <sup>#</sup><br>- |
| <b>1S) UV Absorbers</b>   |                       |                |                              |                             |                |                        |                                |                            |
| 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350) | ND                    | NR             | NR                           | NR                          | NR             | 100                    | -                              | -                          |
| 2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)             | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)                 | ND                    |                |                              |                             | NR             |                        |                                |                            |
| 2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV-327)     | ND                    |                |                              |                             | NR             |                        |                                |                            |
| <b>1T) Volatile Organic Compounds (VOC)</b>                           |                       |                |                              |                             |                |                        |                                |                            |
| Benzene   | ND                    | NR             | NR                           | NR                          | NR             | 1                      | -                              | -                          |
| m-cresol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| o-cresol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| p-cresol  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Xylene  | ND                    |                |                              |                             | NR             |                        |                                |                            |
| Toluene <sup>a</sup>  | ND                    |                |                              |                             | NR             |                        |                                |                            |

a = Report only for mock leather

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



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**Test Result - ZDHC Heavy Metals Parameters**

| Test Parameters          | Unit       |        |          | Results of Test Items |      |       |       |                 | Requirements [Textile] |             |              |                 |                         |
|--------------------------|------------|--------|----------|-----------------------|------|-------|-------|-----------------|------------------------|-------------|--------------|-----------------|-------------------------|
|                          | Wastewater | Sludge | Leachate | I001                  | I002 | I003# | I004# | I005            | Wastewater             |             |              | Sludge          |                         |
|                          |            |        |          |                       |      |       |       |                 | Foundational           | Progressive | Aspirational | Discharge Limit | Sludge Threshold Values |
| <b>ZDHC Heavy Metals</b> |            |        |          |                       |      |       |       |                 |                        |             |              |                 |                         |
| Antimony                 | mg/L       | mg/kg  | mg/L     | NR                    | NR   | NR    | NR    | NR              | 0,1                    | 0,05        | 0,01         | -               | 12                      |
| Chromium (VI)            | mg/L       | mg/kg  | mg/L     | ND                    |      |       |       | NR              | 0,05                   | 0,005       | 0,001        | Not Applicable  | 50                      |
| Barium                   | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | Sample & Report |                        |             | -            | 700             |                         |
| Selenium                 | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | -               | 10                     |             |              |                 |                         |
| Tin                      | mg/L       | -      | -        | NR                    |      |       |       | -               | -                      |             |              |                 |                         |
| Arsenic                  | mg/L       | mg/kg  | mg/L     | ND                    |      |       |       | NR              | 0,05                   | 0,01        | 0,005        | Not Applicable  | 10                      |
| Total Chromium           | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 0,2                    | 0,1         | 0,05         | -               | 100                     |
| Cobalt                   | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 0,05                   | 0,02        | 0,01         | -               | 1600                    |
| Cadmium                  | mg/L       | mg/kg  | mg/L     | ND                    |      |       |       | NR              | 0,1                    | 0,05        | 0,01         | Not Applicable  | 3                       |
| Copper                   | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 1                      | 0,5         | 0,25         | -               | 200                     |
| Lead                     | mg/L       | mg/kg  | mg/L     | ND                    |      |       |       | NR              | 0,1                    | 0,05        | 0,01         | Not Applicable  | 10                      |
| Nickel                   | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 0,2                    | 0,1         | 0,05         | -               | 70                      |
| Silver                   | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 0,1                    | 0,05        | 0,005        | -               | 100                     |
| Zinc                     | mg/L       | mg/kg  | mg/L     | NR                    |      |       |       | NR              | 5                      | 1           | 0,5          | -               | 1000                    |
| Mercury                  | mg/L       | mg/kg  | mg/L     | ND                    |      |       |       | NR              | 0,01                   | 0,005       | 0,001        | Not Applicable  | 1                       |

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



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**Test Result - ZDHC Conventional and Anions Parameters**

| Test Parameters              | Unit                |        |          | Results of Test Items |      |       |       |      | Requirements [Textile] |                                  |              |                 |                            |  |
|------------------------------|---------------------|--------|----------|-----------------------|------|-------|-------|------|------------------------|----------------------------------|--------------|-----------------|----------------------------|--|
|                              | Wastewater          | Sludge | Leachate | I001                  | I002 | I003# | I004# | I005 | Wastewater             |                                  |              | Discharge Limit | Sludge<br>Threshold Values |  |
|                              |                     |        |          |                       |      |       |       |      | Foundational           | Progressive                      | Aspirational |                 |                            |  |
| <b>ZDHC Conventional</b>     |                     |        |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| pH                           | pH                  |        |          |                       |      |       |       |      |                        | 6 - 9                            |              |                 |                            |  |
| Temparture difference        | Δ °C                |        |          |                       |      |       |       |      |                        | 15                               | 10           | 5               |                            |  |
| E.coli                       | MPN/100-ml          |        |          |                       |      |       |       |      |                        | 126                              |              |                 |                            |  |
| Colour (436 nm)              | m <sup>-1</sup>     |        |          |                       |      |       |       |      |                        | 7                                | 5            | 2               |                            |  |
| Colour (525 nm)              | m <sup>-1</sup>     |        |          |                       |      |       |       |      |                        | 5                                | 3            | 1               |                            |  |
| Colour (620 nm)              | m <sup>-1</sup>     |        |          |                       |      |       |       |      |                        | 3                                | 2            | 1               |                            |  |
| Persistent Foam              | -                   |        |          |                       |      |       |       |      |                        | No indication of Persistent Foam |              |                 |                            |  |
| Wastewater Flowrate          | m <sup>3</sup> /day |        |          |                       |      |       |       |      |                        | -                                |              |                 |                            |  |
| Ammonium-Nitrogen            | mg/L                |        |          |                       |      |       |       |      |                        | 10                               | 1            | 0,5             |                            |  |
| AOX                          | mg/L                |        |          |                       |      |       |       |      |                        | 3                                | 0,5          | 0,1             |                            |  |
| BOD <sub>5</sub>             | mg/L                | -      |          |                       |      |       |       |      |                        | 30                               | 15           | 8               |                            |  |
| COD                          | mg/L                |        |          | NR                    | NR   | NR    | NR    | NR   |                        | 150                              | 80           | 40              |                            |  |
| DO                           | mg/L                |        |          |                       |      |       |       |      |                        | Sample & Report                  |              |                 |                            |  |
| Oil & Grease                 | mg/L                |        |          |                       |      |       |       |      |                        | 10                               | 2            | 0,5             |                            |  |
| Total Phenols / Phenol Index | mg/L                |        |          |                       |      |       |       |      |                        | 0,5                              | 0,01         | 0,001           |                            |  |
| Total Chlorine               | mg/L                |        |          |                       |      |       |       |      |                        | Sample & Report                  |              |                 |                            |  |
| TDS                          | mg/L                |        |          |                       |      |       |       |      |                        | 20                               | 10           | 5               |                            |  |
| Total Nitrogen               | mg/L                |        |          |                       |      |       |       |      |                        | 3                                | 0,5          | 0,1             |                            |  |
| Total Phosphorus             | mg/L                |        |          |                       |      |       |       |      |                        | 50                               | 15           | 5               |                            |  |
| TSS                          | mg/L                |        |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| % Solids                     | -                   | %      |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| Paint Filter Test            | -                   | -      |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| Fecal Coliform               | -                   | MPN/g  |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| <b>ZDHC Anions</b>           |                     |        |          |                       |      |       |       |      |                        |                                  |              |                 |                            |  |
| Chloride                     | mg/L                | -      | -        |                       |      |       |       |      |                        | Sample & Report                  |              |                 |                            |  |
| Cyanide, total               | mg/L                | mg/kg  | -        |                       |      |       |       |      |                        | 0,2                              | 0,1          | 0,05            |                            |  |
| Sulfate                      | mg/L                |        |          | NR                    | NR   | NR    | NR    | NR   |                        | Sample & Report                  |              |                 |                            |  |
| Sulfide                      | mg/L                | -      | -        |                       |      |       |       |      |                        | 0,5                              | 0,5          | 0,01            |                            |  |
| Sulfite                      | mg/L                |        |          |                       |      |       |       |      |                        | 2                                | 0,5          | 0,2             |                            |  |

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.



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**Appendix A - contract limit with CETP****ATIKSU BAĞLANTI İZİN BELGESİ**

|                              |   |
|------------------------------|---|
| TARİH                        | 19.01.2023  |
| BELGE NO                     | 2023 / 101  |
| FİRMA ADI                    | Ersen Tekstil San. Ve Tic. Ltd. Şti.              |
| FİRMA ADRESİ                 | Barakfakih OSB Mah. 24. Cad. No: 8 Kestel / BURSA |
| ADA/PARSEL                   | 0/605   |
| FAALİYET KONUSU              | Tekstil   |
| BELGE SÜRESİNİN BİTİŞ TARİHİ | 19.01.2026  |
| ATIK SU SINIFI               | Endüstriyel                                       |
| TESİS SORUMLUSU              | Hüseyin Şahin Er                                  |

**ÖNEMLİ UYARI**

Organize Sanayi Bölgeleri Uygulama Yönetmeliğinin 119. Maddesinde belirtilen zararlı atıklar hiçbir şekilde kanalizasyon sistemine verilemez.

**DENETİM DÜZENİ**

Organize Sanayi Bölgeleri Uygulama Yönetmeliği hükümleri gereği tesisleriniz BOSAB Elemanlarının denetimlerine açık bulundurulacaktır.

Yukarıdaki şartlara uyulmaması halinde ruhsatınız iptal edilerek faaliyetten men ve diğer cezai müeyyideler uygulanacaktır.

Bağlantı izin belgeleri üçer yıllık süreler için geçerlidir. Üretim miktar ve düzeninde veya faaliyet türünde değişiklik yapacak katılımcılar, OSB müdürlüğüne başvurarak belgeyi yenilemek zorundadır.

**KANALİZASYON ALT YAPISINA BAĞLANTI**

Bağlantı izni talebinde bulunan firmaların BOSAB'ın ana kanalizasyon hattına bağlantısı Barakfakih Organize Sanayi Bölge Müdürlüğü ekiplerinin kontrol ve gözetiminde Bağlantı İzin Belgesi almış olan firma tarafından gerçekleştirir.

BARAKFAKIH ORGANİZE SANAYİ  
BÖLGE MÜDÜRÜ

Semih İdi  
Makine Mühendisi  
Bölge Müdürü



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**Appendix B - Sample Photos**

**I001) Sampling point**

N/S 40° 12' 25.5636"; E/W 29° 17' 27.7152"



**I001) Sampling location surrounding**

N/S 40° 12' 25.5636"; E/W 29° 17' 27.7152"



**I001) Labelled sample bottles**



**I001) Sample for phthalate test**



**I001) Sample packaging**





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**Appendix C - On-site Field Data Record Sheet**

| FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE<br>(COMPOSITE / INDIVIDUAL SAMPLING) |  | CPSD-AH-00613-DATA 04   |               |             |       |             |          |                                |
|---|--|---|---------------|-------------|-------|-------------|----------|--------------------------------|
|   |  | Issue Date:   |               |             |       |             |          |                                |
|   |  | Version No.: 18   |               |             |       |             |          |                                |
|   |  | Business Line: Analytical   |               |             |       |             |          |                                |
| <b>General Data</b>   |  |   |               |             |       |             |          |                                |
| Laboratory Sample Number:   | 72240230034  |   |               |             |       |             |          |                                |
| Client Name:  | ERSEN TEKSTİL SAN VE TİC. LTD. ŞTİ.  |   |               |             |       |             |          |                                |
| Field Contact Person:   | ÖZGE ÇAĞLA SÖZKAN  | Phone No:   | +905439184935 |             |       |             |          |                                |
| Project (Facility Name and Address):  | BARAKFAKIH OSB MAH 24 CAD. NO 8 KESTEL / BURSA   |   |               |             |       |             |          |                                |
| Sample Identification:  | Zero discharge with sampling plan  |   |               |             |       |             |          |                                |
| Sample Type:  | <input checked="" type="checkbox"/> Composite Sample <input type="checkbox"/> Grab sample (Please delete as appropriate)   |   |               |             |       |             |          |                                |
| Discharge mode:   | Direct discharge to environment (Specify destination: River, Sea, Stream, ...) <input type="checkbox"/> <input checked="" type="checkbox"/> Direct discharge to sewage treatment plant |   |               |             |       |             |          |                                |
| Date of collection:   | 01.02.2024   |   |               |             |       |             |          |                                |
| Factory Type:   | Dyeing / Printing / Washing / Finishing / Others (please specify):   |   |               |             |       |             |          |                                |
| *Note: It would be selected more than one                                       |  |   |               |             |       |             |          |                                |
| <b>Sampling Collection Information</b>  |  |   |               |             |       |             |          |                                |
| Sampling Location / Description:  | BEFORE TREATMENT   |   |               |             |       |             |          |                                |
| Sampling Device Description/ Owner:   |  |   |               |             |       |             |          |                                |
| Sampling mode:  | <input checked="" type="checkbox"/> Autosampler <input type="checkbox"/> Manual  |   |               |             |       |             |          |                                |
| <b>Sampler Information</b>  |  |   |               |             |       |             |          |                                |
| Sampler Name/ Email:  | Ali Osman ALBAYRAK   |   |               |             |       |             |          |                                |
| Sampler ZDHC Accredited no.:  | ZDHC-A-22-E-001068-R2340-7ACE3   |   |               |             |       |             |          |                                |
| ZDHC Composite Sample Code:   |  |   |               |             |       |             |          |                                |
| <b>Field Data for Wastewater</b>  |  |   |               |             |       |             |          |                                |
| Arrival Time:   | Departure Time:  |   |               |             |       |             |          |                                |
| Field Parameters:   | pH: ---  | Temp: --- °C  | Color: ---    |             |       |             |          |                                |
| Control No. of field equipment:   | Flow rate: --- (volum/min)   |   |               |             |       |             |          |                                |
| Factory with effluent treatment plant:  | Yes  |   | No            |             |       |             |          |                                |
| Sample matrix:  | Incoming water (if required)   |   |               |             |       |             |          |                                |
|   | Wastewater before treatment  |   |               |             |       |             |          |                                |
|   | Wastewater after treatment - water at discharge point  |   |               |             |       |             |          |                                |
| Sampler container number:   |  |   |               |             |       |             |          |                                |
| <b>ZDHC Wastewater Flow Device Dimensions</b>                                   |  |   |               |             |       |             |          |                                |
| Measurement (cm)  | Meter  | Pipe (Ø)  | Fume (U)      |             |       |             |          |                                |
| Diameter  | NA   |   |               |             |       |             |          |                                |
| Depth   | NA   | NA  | NA            |             |       |             |          |                                |
| <b>ZDHC Wastewater Sampling Field Testing QA/QC</b>                             |  |   |               |             |       |             |          |                                |
| Parameter   | Laboratory control sample (LCS) Known  | LCS Measured  | Accuracy %    |             |       |             |          |                                |
| pH  |  |   |               |             |       |             |          |                                |
| Total Chlorine  |  |   |               |             |       |             |          |                                |
| <b>ZDHC Wastewater Sample Collection Field Test Measurements</b>                |  |   |               |             |       |             |          |                                |
| Sampling Time (Hours)   | 0  | 1   | 2             | 3           | 4     | 5           | 6        | Average (Report with lab data) |
| Recording time  | ID   |   |               |             |       |             |          |                                |
|   | Time   | 10:15   | 11:15         | 12:15       | 13:15 | 14:15       | 15:15    | 16:15                          |
| Temp (°C)   | Wastewater Discharge   | 22.2  | 28.0          | 22.4        | 27.8  | 26.7        | 18.8     | 25.7                           |
|   | Receiving Water  |   |               |             |       |             |          |                                |
| pH  |  | 8.99  | 7.03          | 10.43       | 4.96  | 10.47       | 10.14    | 9.61                           |
| Dissolved Oxygen (mg/L):  |  |   |               |             |       |             |          |                                |
| Total Chlorine (mg/L):  |  |   |               |             |       |             |          |                                |
| Persistent Foam (Yes/No):   |  |   |               |             |       |             |          |                                |
| Wastewater Flow meter (L/min) (m <sup>3</sup> /h)                               |  | 51.0  | 62.8          | 36.8        | 34.5  | 65.8        | 102.4    | 90.1                           |
| Alternate measured Flow   | Depth (cm)   |   |               |             |       |             |          |                                |
|   | Velocity (cm/sec)  |   |               |             |       |             |          |                                |
| Color (visual estimation)   |  | Brown   | Neasy Blue    | Light Green | White | Light Brown | L. Brown | Blue                           |
| Volume collected, mL  |  |   |               |             |       |             |          |                                |
| Total volume collected  |  | Remark: Total volume collected must be greater than total of sample size required |               |             |       |             |          |                                |



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**Appendix C - On-site Field Data Record Sheet (continued)**

|   |  |                              |
|---|--|------------------------------|
| <b>FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE<br/>(COMPOSITE / INDIVIDUAL SAMPLING)</b> |  | <b>CPSD-AN-00613-DATA 04</b> |
|   |  | Issue Date: _____            |
|   |  | Version No.: 18              |
|   |  | Business Line: Analytical    |

| Tests (Conventional Parameters)                                       | Test required (Y) | Total of sample size | Type of container                                | Preservation method (Store sample at 4°C)  |
|---|-------------------|----------------------|--|--|
| Combined test or Individual test (Remark 4)                           |                   |                      |  |  |
| 20 Total suspended solids (TSS)                                       |                   | 2000 mL total or     | Amber Glass, washed with nitric acid.            | Without adding acid  |
| 21 Total dissolved solids (TDS)                                       |                   | 2000 mL each         |  |  |
| 22 5-day Biochemical Oxygen Demand (BOD5)                             |                   | 1000 mL              |  |  |
| 23 Colour   |                   | 100 mL               |  |  |
| 24 Heavy Metals except Cr(VI) & Total-P (Remark 6)                    | √                 | 9 mL                 | PE, washed with nitric acid                      | Acidify to pH 2 with HNO <sub>3</sub>  |
| 25 Cyanide  |                   | 500 mL               | Amber Glass, washed with pesticide grade acetone | Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>                           |
| 26 Cr(VI)   | √                 | 65 mL                | Amber Glass, washed with nitric acid             | Filter by 0.45µm filter in field, fill to full container without air gap; adjust pH to 9-9.5 by adding ammonium buffer |
| 27 Chemical oxygen demand (COD)                                       |                   | 150 mL               |  | Acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub>  |
| 28 Phenols  |                   | 500 mL               |  |  |
| 29 Oil and Grease & Total Hydrocarbon                                 |                   | 1000 mL              |  |  |
| 30 Formaldehyde   |                   | 25 mL                |  | Fill to full container without air gap; acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub>                            |
| 31 Sulfide (Remark 5)   |                   | 50 mL                | PE, washed with pesticide grade Acetone;         | Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 5M NaOH                    |
| 32 E coli (Remark 6)  |                   | 125 mL               | PE, clean, sterile, non-reactive                 | Add 0.1 ml of 10% Na <sub>2</sub> SO <sub>3</sub> keep in dark   |
| 33 Sulfite  |                   | 100 mL               | Amber Glass, washed with pesticide grade acetone | Add 1ml of 2.5% EDTA   |
| 34 Total-N  |                   | 100 mL               | Amber Glass, washed with nitric acid.            | Acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub>  |
| 35 Ammonium-N   |                   | 500 mL               |  | Acidify to pH 2 with HNO <sub>3</sub>  |
| 36 Adsorbable organically bound halogens (AOX)                        |                   | 100 mL               |  | Without adding acid  |
| 37 Acute aquatic toxicity: Lumines Bacteria, Fish Egg, Daphne, Algae. |                   | 1000 mL              |  |  |
| 38 Sulphate   |                   | 100 mL               |  |  |
| 39 Chloride   |                   | 100 mL               |  |  |
| 40 Others:  |                   |                      |  |  |

Observation/ Remark:

\*Remarks

- Individual sampling can be performed upon request
- The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
- Scope of ZDHC guideline: Parameter 1-9, 12, 14-29, 31-36, 38, 39  
Scope of synthetic leather industry: Parameter 1-9, 12, 14-24, 26-29, 31, 32, 34, 35, 38, 39  
Scope of MMCF: Parameter 5, 18, 20, 22-24, 26-29, 31, 34-37  
Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-G00019-STP01, locations with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by

Ali Osman ALBAYRAK

Full name

Date: 01.02.2024

Comment from factory

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) taken collected in designated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-4°C

Signature of Factory Representative:

Özge Çiğdem Başaran

Full Name

Date: 01/02/2024

**ersen**  
ERSEN TEKSTİL VE TİC. LTD. STİ.  
Barışköy Çayırbaşı Mah. No:8 Kestaneburnu  
Tel: (0 224) 250 00 00 Fax: (0 224) 354 11 18  
Gölcükler Mah. No: 003 7195 Tic. Sic. No: 26558  
Adres No: 0908 0037 1650 0013

CS CamScanner ile tarandı

72240230034 - Şişe Formu

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**Appendix D - Test methods, reporting limits and CAS numbers**

| Test Parameters   | Unit       |        | CAS No.  | LOQ        |        | Test methods  |
|---|------------|--------|--|------------|--------|---|
|   | Wastewater | Sludge |  | Wastewater | Sludge |   |
| <b>1A) AP and APEOs: including all isomers</b>                                |            |        |  |            |        |   |
| Nonylphenol ethoxylates (NPEO)  | µg/L       | mg/kg  | 9016-45-9, 26027-38-3,<br>37205-87-1, 68412-54-4,<br>127087-87-0 | 5          | 0,4    | NP/OP: ISO 18857-2 (modified<br>dichloromethane extraction) or ASTM D7065<br>(GC-MS or LC-MS(-MS), OPEO/NPEO (n>2):<br>ASTM D7742 ISO 18857-2   |
| Nonylphenol (NP), mixed isomers   |            |        | 104-40-5, 11066-49-2,<br>25154-52-3, 84852-15-3                  |            |        |   |
| Octylphenol ethoxylates (OPEO)  |            |        | 9002-93-1, 9036-19-5,<br>68987-90-6                              |            |        |   |
| Octylphenol (OP), mixed isomers   |            |        | 140-66-9, 1806-26-4,<br>27193-28-8                               |            |        |   |
| <b>1B) Anti-Microbials &amp; Biocides</b>                                     |            |        |  |            |        |   |
| o-Phenylphenol (+salts)   | µg/L       | -      | 90-43-7  | 100        | -      | USEPA 8270E Solvent extraction,<br>derivatisation with KOH, acetic anhydride<br>followed by GC-MS BS EN 12673-1999  |
| Triclosan   |            |        | 3380-34-5  |            |        |   |
| Permethrin  |            |        | Multiple   | 500        |        |   |
| <b>1C) Chlorinated Paraffins</b>  |            |        |  |            |        |   |
| Medium-chain chlorinated paraffins (MCCPs)<br>(C14-C17)                       | µg/L       | -      | 85535-85-9   | 500        | -      | EPA 3510 and analyzed by ISO18219-2:2021<br>Method for MCCP with GC-MS(NCI) or LC-<br>MS/MS   |
| Short-chain chlorinated paraffins (SCCPs)<br>(C10-C13)                        |            |        | 85535-84-8   | 25         |        |   |
| <b>1D) Chlorobenzenes and Chlorotoluenes</b>                                  |            |        |  |            |        |   |
| 1,2-dichlorobenzene   | µg/L       | -      | 95-50-1  | 0,2        | -      | USEPA 8260D, 8270E, Purge and Trap, Head<br>Space, Dichloromethane extraction followed<br>by GC-MS  |
| Other isomers of mono-, di-, tri-, tetra-, penta-,<br>and hexa- chlorobenzene |            |        | Multiple   |            |        |   |
| Other isomers of mono-, di-, tri-, tetra-, and<br>penta- chlorotoluene        |            |        | mg/kg  |            |        |   |
| <b>1E) Chlorophenols</b>  |            |        |  |            |        |   |
| 2-chlorophenol  | µg/L       | -      | 95-57-8  | 0,5        | -      | USEPA 8270E Solvent extraction,<br>derivatisation with KOH, acetic anhydride<br>followed by GC-MS, BS EN 12673-1999 the<br>procedure of solvent extraction and<br>derivatization are included |
| 3-chlorophenol  |            |        | 108-43-0   |            |        |   |
| 4-chlorophenol  |            |        | 106-48-9   |            |        |   |
| 2,3-dichlorophenol  |            |        | 576-24-9   |            |        |   |
| 2,4-dichlorophenol  |            |        | 120-83-2   |            |        |   |
| 2,5-dichlorophenol  |            |        | 583-78-8   |            |        |   |
| 2,6-dichlorophenol  |            |        | 87-65-0  |            |        |   |
| 3,4-dichlorophenol  |            |        | 95-77-2  |            |        |   |
| 3,5-dichlorophenol  |            |        | 591-35-5   |            |        |   |
| 2,3,4-trichlorophenol   |            |        | 15950-66-0   |            |        |   |
| 2,3,5-trichlorophenol   |            |        | 933-78-8   |            |        |   |
| 2,3,6-trichlorophenol   |            |        | 933-75-5   |            |        |   |
| 2,4,5-trichlorophenol   |            |        | 95-95-4  |            |        |   |
| 2,4,6-trichlorophenol   |            |        | 88-06-2  |            |        |   |
| 3,4,5-trichlorophenol   |            |        | 609-19-8   |            |        |   |
| 2,3,5,6-tetrachlorophenol   |            |        | 935-95-5   |            |        |   |
| 2,3,4,6-tetrachlorophenol   |            |        | 58-90-2  |            |        |   |
| 2,3,4,5-tetrachlorophenol   |            |        | 4901-51-3  |            |        |   |
| Pentachlorophenol (PCP)   |            |        | 87-86-5  |            |        |   |
| <b>1F) Dimethyl Formamide (DMFa)</b>  |            |        |  |            |        |   |
| Dimethyl formamide; N,N-dimethylformamide<br>(DMFa) <sup>a</sup>              | µg/L       | -      | 68-12-2  | 1000       | -      | EPA 8015, EPA 8270E   |

a = Report only for mock leather



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters                                      | Unit       |        | CAS No.       | LOQ        |        | Test methods             |
|--|------------|--------|---------------|------------|--------|--------------------------|
|  | Wastewater | Sludge |               | Wastewater | Sludge |                          |
| <b>1G) Dyes - Carcinogenic or Equivalent Concern</b> |            |        |               |            |        |                          |
| Basic Violet 3 with >0.1% of Michler's Ketone        | µg/L       | -      | 548-62-9      | 500        | -      | Liquid extraction, LC-MS |
| C.I. Acid Red 26                                     |            |        | 3761-53-3     |            |        |                          |
| C.I. Acid Violet 49                                  |            |        | 1694-09-3     |            |        |                          |
| C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)    |            |        | 2580-56-5     |            |        |                          |
| C.I. Basic Green 4 (Malachite Green Chloride)        |            |        | 569-64-2      |            |        |                          |
| C.I. Basic Green 4 (Malachite Green Oxalate)         |            |        | 2437-29-8     |            |        |                          |
| C.I. Basic Green 4 (Malachite Green)                 |            |        | 10309-95-2    |            |        |                          |
| C.I. Basic Red 9                                     |            |        | 569-61-9      |            |        |                          |
| C.I. Basic Violet 14                                 |            |        | 632-99-5      |            |        |                          |
| C.I. Direct Black 38                                 |            |        | 1937-37-7     |            |        |                          |
| C.I. Direct Blue 6                                   |            |        | 2602-46-2     |            |        |                          |
| C.I. Direct Red 28                                   |            |        | 573-58-0      |            |        |                          |
| C.I. Disperse Blue 1                                 |            |        | 2475-45-8     |            |        |                          |
| C.I. Disperse Blue 3                                 |            |        | 2475-46-9     |            |        |                          |
| Disperse Orange 11                                   |            |        | 82-28-0       |            |        |                          |
| <b>1H) Dyes - Disperse (Allergenic)</b>              |            |        |               |            |        |                          |
| Disperse Blue 102                                    | µg/L       | -      | 12222-97-8    | 50         | -      | Liquid extraction, LC-MS |
| Disperse Blue 106                                    |            |        | 12223-01-7    |            |        |                          |
| Disperse Blue 124                                    |            |        | 61951-51-7    |            |        |                          |
| Disperse Blue 26                                     |            |        | 3860-63-7     |            |        |                          |
| Disperse Blue 35                                     |            |        | 12222-75-2    |            |        |                          |
|  |            |        | 56524-77-7    |            |        |                          |
| Disperse Blue 7                                      |            |        | 3179-90-6     |            |        |                          |
| Disperse Brown 1                                     |            |        | 23355-64-8    |            |        |                          |
| Disperse Orange 1                                    |            |        | 2581-69-3     |            |        |                          |
| Disperse Orange 3                                    |            |        | 730-40-5      |            |        |                          |
| Disperse Orange 37/59/76                             |            |        | 13301-61-6    |            |        |                          |
| Disperse Red 1                                       |            |        | 2872-52-8     |            |        |                          |
| Disperse Red 11                                      |            |        | 2872-48-2     |            |        |                          |
| Disperse Red 17                                      |            |        | 3179-89-3     |            |        |                          |
| Disperse Yellow 1                                    |            |        | 119-15-3      |            |        |                          |
| Disperse Yellow 3                                    |            |        | 2832-40-8     |            |        |                          |
| Disperse Yellow 39                                   |            |        | 12236-29-2    |            |        |                          |
| Disperse Yellow 49                                   |            |        | 54824-37-2    |            |        |                          |
| Disperse Yellow 9                                    | 6373-73-5  |        |               |            |        |                          |
| <b>1I) Dyes - Navy Blue Colourant</b>                |            |        |               |            |        |                          |
| Component 1: C39H23Cl-CrN7O12S 2Na                   | µg/L       | -      | 118685-33-9   | 500        | -      | Liquid extraction, LC-MS |
| Component 2: C46H-30CrN10O20S2 3Na                   |            |        | Not Allocated |            |        |                          |



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters                                      | Unit                   |        | CAS No.    | LOQ                               |        | Test methods   |
|--|------------------------|--------|------------|-----------------------------------|--------|--|
|  | Wastewater             | Sludge |            | Wastewater                        | Sludge |  |
| <b>1J) Flame Retardants</b>                          |                        |        |            |                                   |        |  |
| 2,2-bis(bromomethyl)- 1,3-propanediol (BBMP)         | µg/L                   | -      | 3296-90-0  | 25                                | -      | USEPA 8270E, ISO 22032, USEPA 527 and USEPA 8321B Dichloromethane extraction GC-MS or LC-MS(-MS) |
| Bis(2,3-dibromopropyl) phosphate (BIS)               |                        |        | 5412-25-9  |                                   |        |  |
| Decabromodiphenyl ether (DecaBDE)                    |                        |        | 1163-19-5  |                                   |        |  |
| Hexabromocyclodecane (HBCDD)                         |                        |        | 3194-55-6  |                                   |        |  |
| Octabromodiphenyl ether (OctaBDE)                    |                        |        | 32536-52-0 |                                   |        |  |
| Pentabromodiphenyl ether (PentaBDE)                  |                        |        | 32534-81-9 |                                   |        |  |
| Polybromobiphenyls (PBB)                             |                        |        | 59536-65-1 |                                   |        |  |
| Tetrabromobisphenol A (TBBPA)                        |                        |        | 79-94-7    |                                   |        |  |
| Tris-(2-chloro-1-methylethyl)phosphate (TCPP)        |                        |        | 13674-84-5 |                                   |        |  |
| Tris(1-aziridinyl)phosphine oxide (TEPA)             |                        |        | 545-55-1   |                                   |        |  |
| Tris(1,3-dichloro-isopropyl)phosphate (TDCP)         |                        |        | 13674-87-8 |                                   |        |  |
| Tris(2-chloroethyl)phosphate (TCEP)                  |                        |        | 115-96-8   |                                   |        |  |
| Tris(2,3-dibromopropyl)-phosphate (TRIS)             |                        |        | 126-72-7   |                                   |        |  |
| Decabromobiphenyl (DecaBB)                           |                        |        | 13654-09-6 |                                   |        |  |
| Dibromobiphenyls (DiBB)                              |                        |        | Multiple   |                                   |        |  |
| Octabromobiphenyls (OctaBB)                          |                        |        | Multiple   |                                   |        |  |
| Dibromopropylether                                   |                        |        | 21850-44-2 |                                   |        |  |
| Heptabromodiphenyl ether (HeptaBDE)                  |                        |        | 68928-80-3 |                                   |        |  |
| Hexabromodiphenyl ether (HexaBDE)                    |                        |        | 36483-60-0 |                                   |        |  |
| Monobromobiphenyls (MonoBB)                          |                        |        | Multiple   |                                   |        |  |
| Monobromodiphenylethers (MonoBDEs)                   |                        |        | Multiple   |                                   |        |  |
| Nonabromobiphenyls (NonaBB)                          |                        |        | 63936-56-1 |                                   |        |  |
| Nonabromodiphenyl ether (NonaBDE)                    |                        |        | 40088-47-9 |                                   |        |  |
| Tetrabromodiphenyl ether (TetraBDE)                  |                        |        | Multiple   |                                   |        |  |
| Tribromodiphenylethers (TriBDEs)                     |                        |        | Multiple   |                                   |        |  |
| Boric acid <sup>b</sup>                              | 10043-35-3, 11113-50-1 | 100    | -          | Determined as total boron via ICP |        |  |
| Diboron trioxide <sup>b</sup>                        | 1303-86-2              |        |            |                                   |        |  |
| Disodium octaborate <sup>b</sup>                     | 12008-41-2             |        |            |                                   |        |  |
| Disodium tetraborate anhydrous <sup>b</sup>          | 1303-96-4, 1330-43-4   |        |            |                                   |        |  |
| Tetraboron disodium heptaoxide, hydrate <sup>b</sup> | 12267-73-1             |        |            |                                   |        |  |
| <b>1K) Glycols / Glycol Ethers</b>                   |                        |        |            |                                   |        |  |
| 2-ethoxyethanol                                      | µg/L                   | -      | 110-80-5   | 50                                | -      | USEPA 8270E Liquid extraction, LC-MS GC-MS   |
| 2-ethoxyethyl acetate                                |                        |        | 111-15-9   |                                   |        |  |
| 2-methoxyethanol                                     |                        |        | 109-86-4   |                                   |        |  |
| 2-methoxyethylacetate                                |                        |        | 110-49-6   |                                   |        |  |
| 2-methoxypropylacetate                               |                        |        | 70657-70-4 |                                   |        |  |
| Bis(2-methoxyethyl)-ether                            |                        |        | 111-96-6   |                                   |        |  |
| Ethylene glycol dimethyl ether                       |                        |        | 110-71-4   |                                   |        |  |
| Triethylene glycol dimethyl ether                    |                        |        | 112-49-2   |                                   |        |  |
| <b>1L) Halogenated Solvents</b>                      |                        |        |            |                                   |        |  |
| 1,2-dichloroethane                                   | µg/L                   | -      | 107-06-2   | 1                                 | -      | USEPA 8260D Headspace GC-MS or Purge and trap GC-MS  |
| Methylene chloride                                   |                        |        | 75-09-2    |                                   |        |  |
| Tetrachloroethylene                                  |                        |        | 127-18-4   |                                   |        |  |
| Trichloroethylene                                    |                        |        | 79-01-6    |                                   |        |  |

b = Limit refer to elemental boron, not the salt.



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters  | Unit       |        | CAS No.                | LOQ        |        | Test methods  |
|--|------------|--------|------------------------|------------|--------|---|
|  | Wastewater | Sludge |                        | Wastewater | Sludge |   |
| <b>1M) Organotin Compounds</b>   |            |        |                        |            |        |   |
| Dipropyltin compounds (DPT)  | µg/L       | -      | Multiple               | 0,01       | -      | ISO 17353 Derivatisation with NaB (C2H5)4 GC-MS                         |
| Mono-, di- and tri-butyltin derivatives  |            |        |                        |            |        |   |
| Mono-, di- and tri-methyltin derivatives   |            |        |                        |            |        |   |
| Mono-, di- and tri-octyltin derivatives  |            |        |                        |            |        |   |
| Mono-, di- and tri-phenyltin derivatives   |            |        |                        |            |        |   |
| Tetrabutyltin compounds (TeBT)   |            |        |                        |            |        |   |
| Tripropyltin Compounds (TPT)   |            |        |                        |            |        |   |
| Tetraoctyltin compounds (TeOT)   |            |        |                        |            |        |   |
| Tricyclohexyltin (TCyHT)   |            |        |                        |            |        |   |
| Tetraethyltin Compounds (TeET)   |            |        |                        |            |        |   |
| <b>1N) Other/Miscellaneous Chemicals</b>   |            |        |                        |            |        |   |
| AEEA [2-(2-aminoethylamino)ethanol]  | µg/L       | -      | 111-41-1               | 500        | -      | Liquid extraction, LC-MSMS  |
| Bisphenol A  |            |        | 80-05-7                | 10         |        |   |
| Thiourea   |            |        | 62-56-6                | 50         |        | Liquid extraction, LC-MS  |
| Quinoline  |            |        | 91-22-5                | 50         |        |   |
| Borate, zinc salt <sup>c</sup>   |            |        | 12767-90-7             | 100        |        | Determine as total boron and total zinc via ICP                         |
| Silica (Used in sand blasting) <sup>d</sup>  |            |        | 14464-46-1             | NA         |        | Not a ZDHC Wastewater parameter   |
| <b>1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)</b>                         |            |        |                        |            |        |   |
| Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA) | µg/L       | -      | Multiple               | 0,01       | -      | PFCs: EPA 537:2020<br>FTOH: BS EN 12673-1999, EPA 8270<br>PFCs: LC-MSMS |
| Perfluorooctanoic acid (PFOA) related substances                                       |            |        |                        | 1          |        | FTOH: GC-MS Derivatisation with acetic anhydride followed by GC-MS      |
| <b>1P) Phthalates - including all other esters of ortho-phthalic acid</b>              |            |        |                        |            |        |   |
| 1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP)  | µg/L       | -      | 71888-89-6, 84777-06-0 | 10         | -      | USEPA 8270E, ISO 18856 Dichloromethane extraction GC-MS                 |
| 1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl esters (DHNUP)          |            |        | 68515-42-4, 68515-50-4 |            |        |   |
| Bis(2-methoxyethyl)phthalate (DMEP)  |            |        | 117-82-8               |            |        |   |
| Butyl benzyl phthalate (BBP)   |            |        | 85-68-7                |            |        |   |
| Di-cyclohexyl phthalate (DCHP)   |            |        | 84-61-7                |            |        |   |
| Di-iso-decyl phthalate (DIDP)  |            |        | 26761-40-0             |            |        |   |
| Di-iso-octyl phthalate (DIOP)  |            |        | 27554-26-3             |            |        |   |
| Di-iso-butyl phthalate (DIBP)  |            |        | 84-69-5                |            |        |   |
| Di-iso-nonyl phthalate (DINP)  |            |        | 28553-12-0             |            |        |   |
| Di-n-hexyl phthalate (DnHP)  |            |        | 84-75-3                |            |        |   |
| Di-n-octyl phthalate (DNOP)  |            |        | 117-84-0               |            |        |   |
| Di-n-pentylphthalates  |            |        | 131-18-0               |            |        |   |
| Di-n-propyl phthalate (DPRP)   |            |        | 131-16-8               |            |        |   |
| Di(ethylhexyl) phthalate (DEHP)  |            |        | 117-81-7               |            |        |   |
| Dibutyl phthalate (DBP)  |            |        | 84-74-2                |            |        |   |
| Diethyl phthalate (DEP)  |            |        | 84-66-2                |            |        |   |
| Diisopentylphthalates  |            |        | 605-50-5               |            |        |   |
| Dinonyl phthalate (DNP)  |            |        | 84-76-4                |            |        |   |

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not required to test this parameter as this is related to sand blasting



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters   | Unit       |        | CAS No.    | LOQ        |        | Test methods   |  |  |  |  |
|---|------------|--------|------------|------------|--------|--|--|--|--|--|
|   | Wastewater | Sludge |            | Wastewater | Sludge |  |  |  |  |  |
| <b>1Q) Polycyclic Aromatic Hydrocarbons (PAHs)</b>                    |            |        |            |            |        |  |  |  |  |  |
| Acenaphthene  | µg/L       | mg/kg  | 83-32-9    | 1          | 0,2    | USEPA 8270E DIN 38407-39 Solvent extraction GC-MS                  |  |  |  |  |
| Acenaphthylene  |            |        | 208-96-8   |            |        |  |  |  |  |  |
| Anthracene  |            |        | 120-12-7   |            |        |  |  |  |  |  |
| Benzo[a]anthracene  |            |        | 56-55-3    |            |        |  |  |  |  |  |
| Benzo[a]pyrene (BaP)  |            |        | 50-32-8    |            |        |  |  |  |  |  |
| Benzo[b]fluoranthene  |            |        | 205-99-2   |            |        |  |  |  |  |  |
| Benzo[e]pyrene  |            |        | 192-97-2   |            |        |  |  |  |  |  |
| Benzo[ghi]perylene  |            |        | 191-24-2   |            |        |  |  |  |  |  |
| Benzo[j]fluoranthene  |            |        | 205-82-3   |            |        |  |  |  |  |  |
| Benzo[k]fluoranthene  |            |        | 207-08-9   |            |        |  |  |  |  |  |
| Chrysene  |            |        | 218-01-9   |            |        |  |  |  |  |  |
| Dibenz[a,h]anthracene   |            |        | 53-70-3    |            |        |  |  |  |  |  |
| Fluoranthene  |            |        | 206-44-0   |            |        |  |  |  |  |  |
| Fluorene  |            |        | 86-73-7    |            |        |  |  |  |  |  |
| Indeno[1,2,3-cd]pyrene  |            |        | 193-39-5   |            |        |  |  |  |  |  |
| Naphthalene   |            |        | 91-20-3    |            |        |  |  |  |  |  |
| Phenanthrene  |            |        | 85-01-8    |            |        |  |  |  |  |  |
| Pyrene  | 129-00-0   |        |            |            |        |  |  |  |  |  |
| <b>1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)</b> |            |        |            |            |        |  |  |  |  |  |
| 2-naphthylamine   | µg/L       | -      | 91-59-8    | 0,1        | -      | Reduction step with sodium dithionite, solvent extraction EPA 8270 |  |  |  |  |
| 2-naphthylammoniumacetate   |            |        | 553-00-4   |            |        |  |  |  |  |  |
| 2,4-xylidine  |            |        | 95-68-1    |            |        |  |  |  |  |  |
| 2,4,5-trimethylaniline  |            |        | 137-17-7   |            |        |  |  |  |  |  |
| 2,4,5-trimethylaniline hydrochloride                                  |            |        | 21436-97-5 |            |        |  |  |  |  |  |
| 2,6-xylidine  |            |        | 87-62-7    |            |        |  |  |  |  |  |
| 3,3'-dichlorobenzidine  |            |        | 91-94-1    |            |        |  |  |  |  |  |
| 3,3-dimethoxybenzidine  |            |        | 119-90-4   |            |        |  |  |  |  |  |
| 4-aminoazobenzene   |            |        | 60-09-3    |            |        |  |  |  |  |  |
| 4-aminodiphenyl   |            |        | 92-67-1    |            |        |  |  |  |  |  |
| 4-chloro-o-toluidine  |            |        | 95-69-2    |            |        |  |  |  |  |  |
| 4-chloro-o-toluidinium chloride                                       |            |        | 3165-93-3  |            |        |  |  |  |  |  |
| 4-chloroaniline   |            |        | 106-47-8   |            |        |  |  |  |  |  |
| 4-methoxy-m-phenylene diammonium sulphate;                            |            |        | 39156-41-7 |            |        |  |  |  |  |  |
| 2,4-diaminoanisole sulphate   |            |        | 615-05-4   |            |        |  |  |  |  |  |
| 4-methoxy-m-phenylenediamine  |            |        | 95-80-7    |            |        |  |  |  |  |  |
| 4-methyl-m-phenylenediamine   |            |        | 101-14-4   |            |        |  |  |  |  |  |
| 4,4-methylene-bis-(2-chloro-aniline)                                  |            |        | 838-88-0   |            |        |  |  |  |  |  |
| 4,4-methylenedi-o-toluidine   |            |        | 101-77-9   |            |        |  |  |  |  |  |
| 4,4-methylenedianiline  |            |        | 101-80-4   |            |        |  |  |  |  |  |
| 4,4-thiodianiline   |            |        | 139-65-1   |            |        |  |  |  |  |  |
| 5-nitro-o-toluidine   |            |        | 99-55-8    |            |        |  |  |  |  |  |
| 6-methoxy-m-toluidine   |            |        | 120-71-8   |            |        |  |  |  |  |  |
| Benzidine   |            |        | 92-87-5    |            |        |  |  |  |  |  |
| o-aminoazotoluene   |            |        | 97-56-3    |            |        |  |  |  |  |  |
| o-anisidine   |            |        | 90-04-0    |            |        |  |  |  |  |  |
| o-toluidine   |            |        | 95-53-4    |            |        |  |  |  |  |  |
|   |            |        |            |            |        |  |  |  |  | Reduction step with sodium dithionite, solvent extraction EPA 8270E and ISO 14362-1 GC/MS and LC/MS/MS |



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters   | Unit       |        | CAS No.    | LOQ        |        | Test methods  |
|---|------------|--------|------------|------------|--------|---|
|   | Wastewater | Sludge |            | Wastewater | Sludge |   |
| <b>1S) UV Absorbers</b>   |            |        |            |            |        |   |
| 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350) | µg/L       | -      | 36437-37-3 | 100        | -      | USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321B.<br>Dichloromethane extraction GC-MS or LC-MS(-MS)  |
| 2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)             |            |        | 25973-55-1 |            |        |   |
| 2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)                 |            |        | 3846-71-7  |            |        |   |
| 2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV-327)     |            |        | 3864-99-1  |            |        |   |
| <b>1T) Volatile Organic Compounds (VOC)</b>                           |            |        |            |            |        |   |
| Benzene   | µg/L       | -      | 71-43-2    | 1          | -      | ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D Add ISO 20595 Static headspace for determination of VOC in<br><br>ISO 11423-1 Headspace or Purge and trap GC-MS EPA 8270 BS EN 12673-1999<br><br>ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D<br>HJ 1067 or EPA 8260D or ISO 11423-1 |
| m-cresol  |            |        | 108-39-4   |            |        |   |
| o-cresol  |            |        | 95-48-7    |            |        |   |
| p-cresol  |            |        | 106-44-5   |            |        |   |
| Xylene  |            |        | 1330-20-7  |            |        |   |
| Toluene <sup>a</sup>  |            |        | 108-88-3   |            |        |   |

a = Report only for mock leather



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters  | Unit                  |               | CAS No.    | LOQ        |        | Test methods   |
|--|-----------------------|---------------|------------|------------|--------|--|
|  | Wastewater & Leachate | Sludge        |            | Wastewater | Sludge |  |
| <b>Heavy Metals</b>  |                       |               |            |            |        |  |
| Antimony   | mg/L                  | mg/kg         | 7440-36-0  | 0,01       | 5      | With reference to EPA 3015A, 6020A, 200.8, 6020B, 3051A and ISO 17294-2 and analyzed by ICP-MS<br>With reference to EPA 1311 and HJ/T 300 for leachate |
| Chromium (VI)  |                       |               | 18540-29-9 | 0,001      | 20     |  |
| Barium   |                       |               | 7440-39-3  | 1          | 200    |  |
| Selenium   |                       |               | 7782-49-2  | 1          | 5      |  |
| Tin  |                       |               | 7440-31-5  | 1          | -      |  |
| Arsenic  |                       |               | 7440-38-2  | 0,005      | 5      |  |
| Total Chromium   |                       |               | 7440-47-3  | 0,05       | 50     |  |
| Cobalt   |                       |               | 7440-48-4  | 0,01       | 400    |  |
| Cadmium  |                       |               | 7440-43-9  | 0,01       | 1      |  |
| Copper   |                       |               | 7440-50-8  | 0,25       | 50     |  |
| Lead   |                       |               | 7439-92-1  | 0,01       | 5      |  |
| Nickel   |                       |               | 7440-02-0  | 0,05       | 20     |  |
| Silver   |                       |               | 7440-22-4  | 0,005      | 50     |  |
| Zinc   |                       |               | 7440-66-6  | 0,5        | 400    |  |
| Mercury  |                       |               | 7439-97-6  | 0,001      | 1      |  |
| <b>Conventional</b>  |                       |               |            |            |        |  |
| pH   | pH                    | pH            |            | 6 - 9      |        | With reference to ISO 10523, EPA 150.2, APHA 4500-H+   |
| Temperature difference   | °C                    |               |            | -          |        | USEPA 170.1 or GB/T 13195  |
| E.coli   | MPN/100-ml            |               |            | 126        |        | -  |
| Colour   | m <sup>-1</sup>       |               |            | 2;1;1      |        | ISO 7887 (Method A and B)  |
| Persistent Foam  | -                     |               |            | -          |        | -  |
| Wastewater Flowrate  | m <sup>3</sup> /day   |               |            | -          |        | -  |
| Ammonium-Nitrogen  | mg/L                  |               |            | 0,5        |        | ISO 11732, ISO 7150, USEPA 350.1, APHA 4500 NH <sup>3</sup> -N, HJ 535 or HJ 536   |
| AOX  | mg/L                  |               |            | 0,1        |        | ISO 9562, EN ISO 9563, USEPA 1650, HJ.T 83-2001  |
| Biochemical Oxygen Demand 5-days concentration (BOD <sub>5</sub> ) | mg/L                  |               |            | 8          |        | ISO 5815-1 & -2, EN1899-1, USEPA 405.1, APHA 5210B or HJ 505   |
| Chemical Oxygen Demand (COD)                                       | mg/L                  |               |            | 40         |        | ISO 6060, USEPA 410.4, APHA 5220D or GB/T 11914  |
| Dissolved Oxygen (DO)  | mg/L                  |               |            | -          |        | ISO 5814, EPA 360.1 or HJ 506  |
| Oil & Grease   | mg/L                  |               |            | 0,5        |        | ISO 9377-2, USEPA 1664 or HJ 637   |
| Total Phenols / Phenol Index                                       | mg/L                  |               |            | 0,001      |        | ISO 14402, APHA 5530B, C, D or HJ 503  |
| Total Chlorine   | mg/L                  |               |            | 0,1        |        | ISO 7393-2, EPA 330.5 or HJ 586  |
| Total Dissolved Solids (TDS)                                       | mg/L                  |               |            | 5          |        | APHA 2540C, GB/T 5750.4  |
| Total Nitrogen   | mg/L                  |               |            | 5          |        | ISO 5663, ISO 29411, USEPA 351.2, APHA 4500P-J, APHA 4500N-C/ HJ 636 or GB 11891   |
| Total Phosphorus   | mg/L                  |               |            | 0,1        |        | ISO 11885, ISO 6878, USEPA 365.4, APHA 4500P-J or GB/T 11893   |
| Total Suspended Solids (TSS)                                       | mg/L                  |               |            | 5          |        | ISO 11923, USEPA 160.2, APHA 2540D or GB/T 11901   |
| % Solids   | -                     | %             |            |            |        | USEPA 160.3, HJ 613  |
| Paint Filter Test  | -                     | -             |            |            |        | EPA SW-846 or EPA 9095B  |
| Fecal Coliform   | -                     | bacteria/100m |            |            |        | EPA 1681   |



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**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

| Test Parameters | Unit                  |        | CAS No. | LOQ        |        | Test methods  |
|-----------------|-----------------------|--------|---------|------------|--------|---|
|                 | Wastewater & Leachate | Sludge |         | Wastewater | Sludge |   |
| <b>Anions</b>   |                       |        |         |            |        |   |
| Chloride        | mg/L                  | -      | -       | -          | -      | ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 32)                |
| Cyanide, total  |                       | mg/kg  |         | 0,05       | 20     | ISO 6703-1 & 2, ISO 14403-1 & 2, USEPA 335.2, APAH 4500-CN or HJ 484              |
| Sulfate         |                       | -      |         | -          | -      | ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 24)                |
| Sulfide         |                       | -      |         | 0,01       | -      | ISO 10530, SM 4500-S2-D, E, G or I, GB/T 16489 or IS 3025 (part 29), HJ 1226-2021 |
| Sulfite         |                       | -      |         | 0,2        | -      | ISO 10304-3, SM 4500-SO32-C or HJ 84-2016   |

END OF REPORT