

REVISION TABLE

The current revision cancels and replaces the original version of the report.

| Revision | Amendment and reason | Date |
|----------|--|------------|
| 0 | First creation | 18.12.2021 |
| 1 | To add the inlet before treatment, conventional parameters | 19.12.2021 |

Analytical report on the analysis of wastewater samples according to the ZDHC wastewater guidelines

| Sample Description | | | | |
|--------------------------------------|---|---|------------------------------|--|
| Order No.: | NA | Person in charge of sampling: | Tushar Roy | |
| Customer: | Paramount Textile Limited | Date of sampling: | 29 /11/2021 | |
| Contact person | Jiban Ahmmed Raju | On-site Effluent Treatment Plant (ETP): | Yes | |
| Wastewater | | | | |
| Sampling time: | <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m. 10.30 am to 3.30 pm | Cross check sample taken by customer | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Test sample Description: | | | | |
| State of sample / Odour at sampling: | | Colour impression: | Look: Purple | |
| Turbidity (visual impression): | Purple | Odour: | Slightly Sharp | |
| Discharge Mode | Direct discharge to Municipality Drain (Environment) | | | |
| Factory Type | Dyeing & Printing of Woven Fabrics | | | |

NA: not applicable

Analytical report on the analysis of sludge samples according to ZDHC (Version 1.1, July 2019)

| Sample Description | |
|--------------------------------------|---|
| | Sludge |
| Sampling time: | 3.00 PM - 3.30 PM |
| cross check sample taken by customer | <input type="checkbox"/> yes <input checked="" type="checkbox"/> no |
| State of sample / Odour at sampling: | |
| Turbidity (visual impression): | Grey |
| Colour impression: | Grey |
| Odour: | Musty |

Picture of sampling point



ETP plant



Sampling point Treated Wastewater

Picture of Samples:



Sample Treated Wastewater



Sampling point Sludge

Analytical test report

Conventional parameters: (wastewater)

| Conventional parameters | Method | Limit values according to ZDHC wastewater guideline (mg/L unless otherwise noted) | | | Sample Results [mg/L] | | |
|------------------------------|---|---|-----------------------|-------------------------|-----------------------|----------------------------|---------------------|
| | | Cat. I (Foundational) | Cat. II (Progressive) | Cat. III (Aspirational) | Inlet (fresh water) | 01) Inlet Before Treatment | 02) After Treatment |
| Temperature [°C] | DIN 38404-4 | Δ15/ max. 35 | Δ10 or 30 | Δ5 or 25 | -: | 37.3 | 32.2 |
| Total suspended solids (TSS) | ISO 11923 and DIN 38409-1 | 50 | 15 | 5 | -: | 85 | 11 |
| COD | LCK1014 COD Cuvette test; (ISO 6060) | 150 | 80 | 40 | -: | 1125 | 28 |
| Total-N | LCK138 LATON Cuvette test; (ISO 11905-1) | 20 | 10 | 5 | -: | 28.8 | 18.4 |
| pH value | ISO 10523 | 6-9 | | | -: | 8.9 | 7.8 |
| Colour (436 nm) | ISO 7887 | 7 | 5 | 2 | -: | 7.2 | 3.9 |
| Colour (525 nm) | | 5 | 3 | 1 | -: | 5.3 | 2.1 |
| Colour (620 nm) | | 3 | 2 | 1 | -: | 4.1 | 2.8 |
| BOD ₅ | LCK555 BOD ₅ /BOD[n] Cuvette test; (EN 1899-1) | 30 | 15 | 5 | -: | 112 | 3 |
| Ammonium-N | LCK303 Ammonium Cuvette test; (ISO 7150-1) | 10 | 1 | 0.5 | -: | 8 | n.d |
| Total-Phosphorus | Digestion and Determination by ICP-MS (DIN EN ISO 17294-2) | 3 | 0.5 | 0.1 | -: | 0.84 | 0.67 |
| AOX | LCK390 AOX Cuvette test; (DIN EN ISO 9562) | 5 | 1 | 0.1 | -: | 0.31 | 0.27 |
| HEM (Oil and grease) | Gravimetric determination of hexane extractable substances (EPA Method 1664 Revision B) | 10 | 2 | 0.5 | -: | 6.3 | 4.7 |
| Phenol | DIN EN 12673 (solvent extraction; GC-MS/MS) | 0.5 | 0.01 | 0.001 | -: | n.d | n.d |
| Persistent Foam | - | Not visible | | | -: | Not visible | Not visible |
| *Coliform [bacteria/100 mL] | According to DIN EN ISO 9308-1 | 400 | 100 | 25 | -: | -: | n.d |

-: test not conducted; n.d.: not determinable * Note: Test Subcontract at ISO 17025:2017 Accredited Lab.

| Anions | Method | Limit values according to ZDHC wastewater guideline (mg/L unless otherwise noted) | | | Sample Results [mg/L] | | |
|---------|--|---|-----------------------|-------------------------|-----------------------|----------------------|---------------------|
| | | Cat. I (Foundational) | Cat. II (Progressive) | Cat. III (Aspirational) | Inlet (fresh water) | 01) Before Treatment | 02) After Treatment |
| Cyanide | LCK315 Cyanide Cuvette test; (ISO 6703-2) | 0.2 | 0.1 | 0.05 | -: | n.d | n.d |
| Sulfide | LCK653 Sulfide Cuvette test; (ISO 10530) | 0.5 | 0.05 | 0.01 | -: | 0.178 | 0.16 |
| Sulfite | LCK654 Sulfite (SO ₃ ²⁻) Cuvette test | 2 | 0.5 | 0.2 | -: | 1.25 | 0.48 |

-: test not conducted; n.d.: not determinable

Conventional parameters: (sludge)

| Conventional parameters | Method | LOQ | Reporting Limit | Sample Results |
|-------------------------|--------------|------|-----------------|----------------|
| Dry Mass (total solids) | DIN EN 15934 | n.a. | n.a. | 32.0 |

| Anions | Method | LOQ | Reporting Limit | Sample Results |
|---------|--|-----------|-----------------|----------------|
| Cyanide | Micro Dist distillation/LCK 315 (equates to DIN ISO 11262) | 0.2 mg/kg | 1 mg/kg | n.d |

Heavy Metals parameters: (wastewater)

| Metals | Method | Limit values according to ZDHC wastewater guideline (mg/L unless otherwise noted) | | | Sample Results [mg/L] | | |
|---------------|--|---|-----------------------|-------------------------|-----------------------|----------------------------|---------------------|
| | | Cat. I (Foundational) | Cat. II (Progressive) | Cat. III (Aspirational) | Inlet (fresh water) | 01) Inlet Before Treatment | 02) After Treatment |
| Antimony (Sb) | Digestion and Determination by ICP-MS (DIN EN ISO 17294-2) | 0.1 | 0.05 | 0.01 | -: | n.d | n.d |
| Chromium (Cr) | | 0.2 | 0.1 | 0.05 | -: | 0.10 | 0.05 |
| Cobalt (Co) | | 0.05 | 0.02 | 0.01 | -: | n.d | n.d |
| Copper (Cu) | | 1 | 0.5 | 0.25 | -: | n.d | n.d |
| Nickel (Ni) | | 0.2 | 0.1 | 0.05 | -: | n.d | 0.01 |
| Silver | | 0.1 | 0.05 | 0.005 | -: | n.d | n.d |
| Zinc (Zn) | | 5.0 | 1.0 | 0.5 | -: | n.d | 0.21 |
| Arsenic (As) | | 0.05 | 0.01 | 0.005 | -: | n.d | n.d |
| Cadmium (Cd) | | 0.1 | 0.05 | 0.01 | -: | n.d | n.d |
| Lead (Pb) | | 0.1 | 0.05 | 0.01 | -: | n.d | n.d |
| Mercury (Hg) | | 0.01 | 0.005 | 0.001 | -: | n.d | n.d |
| Chromium VI | Photometry (DIN EN ISO 18412 and DIN 38405-24) | 0.05 | 0.005 | 0.001 | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

Heavy Metals parameters: (Sludge)

| Metals | Method | LOQ (mg/kg) | Reporting Limit | Sample Results sludge |
|--------------|---------------------------------|--------------|-----------------|--------------------------|
| Arsenic (As) | DIN EN 13346/DIN EN ISO 17294-2 | 0.625 | 2 mg/kg | 0.69 mg/kg |
| Cadmium (Cd) | DIN EN 13346/DIN EN ISO 17294-2 | 0.625 | 2 mg/kg | n.d |
| Lead (Pb) | DIN EN 13346/DIN EN ISO 17294-2 | 0.625 | 2 mg/kg | 8.81 mg/Kg |
| Chromium VI | DIN EN 15192/HPLC-ICP/MS | 1.0 | 2 mg/kg | n.d |
| Mercury (Hg) | DIN EN 13346/DIN EN ISO 17294-2 | 0.125 | 0.2 mg/kg | n.d |

MRSL parameters:

| Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) (Wastewater) | | | | | |
|---|-------------|--|--------------------|----------------------|---------------------|
| Method: | | DIN EN ISO 18254-1/ DIN EN ISO 18857-2 (modified LC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet fresh water) | 01) Before Treatment | 02) After Treatment |
| Nonylphenol (NP), mixed isomers | 104-40-5 | 5 µg/L | -: | n.d | n.d |
| | 11066-49-2 | | -: | n.d | n.d |
| | 25154-52-3 | | -: | n.d | n.d |
| | 84852-15-3 | | -: | n.d | n.d |
| Octylphenol (OP), mixed isomers | 140-66-9 | | -: | n.d | n.d |
| | 1806-26-4 | | -: | n.d | n.d |
| | 27193-28-8 | | -: | n.d | n.d |
| Octylphenol ethoxylates (OPEO) | 9002-93-1 | | -: | n.d | n.d |
| | 9036-19-5 | | -: | n.d | n.d |
| | 68987-90-6 | | -: | n.d | n.d |
| Nonylphenol ethoxylates (NPEO) | 9016-45-9 | | -: | n.d | n.d |
| | 26027-38-3 | | -: | n.d | n.d |
| | 37205-87-1 | | -: | n.d | n.d |
| | 68412-54-4 | | -: | n.d | n.d |
| | 127087-87-0 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers (Sludge) | | | |
|--|-------------|--|-----------------------|
| Method: | | DIN EN ISO 18254-1/ DIN EN ISO 18857-2 | |
| LOQ: | | 0.4 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Nonylphenol (NP), mixed isomers | 104-40-5 | 0.4 mg/kg | n.d |
| | 11066-49-2 | | |
| | 25154-52-3 | | |
| | 84852-15-3 | | |
| Octylphenol (OP), mixed isomers | 140-66-9 | | n.d |
| | 1806-26-4 | | |
| | 27193-28-8 | | |
| Octylphenol ethoxylates (OPEO) | 9002-93-1 | | n.d |
| | 9036-19-5 | | |
| | 68987-90-6 | | |
| Nonylphenol ethoxylates (NPEO) | 9016-45-9 | | n.d |
| | 26027-38-3 | | |
| | 37205-87-1 | | |
| | 68412-54-4 | | |
| | 127087-87-0 | | |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Chlorobenzenes and Chlorotoluenes (Wastewater) | | | | | |
|--|------------|---|---------------------|----------------------|---------------------|
| Method: | | DIN EN ISO 6468 (modified solvent extraction, GC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01) Before Treatment | 02) After Treatment |
| Monochlorobenzene | 108-90-7 | 0.2 µg/L | - | n.d | n.d |
| 1,2-Dichlorobenzene | 95-50-1 | | - | n.d | n.d |
| 1,3-Dichlorobenzene | 541-73-1 | | - | n.d | n.d |
| 1,4-Dichlorobenzene | 106-46-7 | | - | n.d | n.d |
| 1,2,3-Trichlorobenzene | 87-61-6 | | - | n.d | n.d |
| 1,2,4-Trichlorobenzene | 120-82-1 | | - | n.d | n.d |
| 1,3,5-Trichlorobenzene | 108-70-3 | | - | n.d | n.d |
| 1,2,3,4-Tetrachlorobenzene | 634-66-2 | | - | n.d | n.d |
| 1,2,3,5-Tetrachlorobenzene | 634-90-2 | | - | n.d | n.d |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | | - | n.d | n.d |
| Pentachlorobenzene | 608-93-5 | | - | n.d | n.d |
| Hexachlorobenzene | 118-74-1 | | - | n.d | n.d |
| 2-Chlorotoluene | 95-49-8 | | - | n.d | n.d |
| 3-Chlorotoluene | 108-41-8 | | - | n.d | n.d |
| 4-Chlorotoluene | 106-43-4 | | - | n.d | n.d |
| 2,3-Dichlorotoluene | 32768-54-0 | | - | n.d | n.d |
| 2,4-Dichlorotoluene | 95-73-8 | | - | n.d | n.d |
| 2,5-Dichlorotoluene | 19398-61-9 | | - | n.d | n.d |
| 2,6-Dichlorotoluene | 118-69-4 | | - | n.d | n.d |
| 3,4-Dichlorotoluene | 95-75-0 | | - | n.d | n.d |
| 3,5-Dichlorotoluene | 25186-47-4 | | - | n.d | n.d |
| 2,3,4-Trichlorotoluene | 7359-72-0 | | - | n.d | n.d |
| 2,3,6-Trichlorotoluene | 2077-46-5 | | - | n.d | n.d |
| 2,4,5-Trichlorotoluene | 6639-30-1 | | - | n.d | n.d |
| 2,4,6-Trichlorotoluene | 23749-65-7 | | - | n.d | n.d |
| 3,4,5-Trichlorotoluene | 21472-86-6 | | - | n.d | n.d |
| 2,3,4,5-Tetrachlorotoluene | 76057-12-0 | | - | n.d | n.d |
| 2,3,5,6-Tetrachlorotoluene | 29733-70-8 | | - | n.d | n.d |
| 2,3,4,6-Tetrachlorotoluene | 875-40-1 | - | n.d | n.d | |
| Pentachlorotoluene | 877-11-2 | - | n.d | n.d | |

-: test not conducted; n.d.: not determinable

| Chlorobenzenes and Chlorotoluenes (Sludge) | | | | |
|--|----------|--|----------------|--|
| Method: | | Liquid extraction, GC-MS determination | | |
| LOQ: | | 0.05 mg/kg | | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results | |
| | | | sludge | |
| Monochlorobenzene | 108-90-7 | 0.2 mg/kg | n.d | |
| 1,2-Dichlorobenzene | 95-50-1 | | n.d | |
| 1,3-Dichlorobenzene | 541-73-1 | | n.d | |
| 1,4-Dichlorobenzene | 106-46-7 | | n.d | |
| 1,2,3-Trichlorobenzene | 87-61-6 | | n.d | |
| 1,2,4-Trichlorobenzene | 120-82-1 | | n.d | |
| 1,3,5-Trichlorobenzene | 108-70-3 | | n.d | |
| 1,2,3,4-Tetrachlorobenzene | 634-66-2 | | n.d | |
| 1,2,3,5-Tetrachlorobenzene | 634-90-2 | | n.d | |

| | | |
|----------------------------|------------|-----|
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | n.d |
| Pentachlorobenzene | 608-93-5 | n.d |
| Hexachlorobenzene | 118-74-1 | n.d |
| 2-Chlorotoluene | 95-49-8 | n.d |
| 3-Chlorotoluene | 108-41-8 | n.d |
| 4-Chlorotoluene | 106-43-4 | n.d |
| 2,3-Dichlorotoluene | 32768-54-0 | n.d |
| 2,4-Dichlorotoluene | 95-73-8 | n.d |
| 2,5-Dichlorotoluene | 19398-61-9 | n.d |
| 2,6-Dichlorotoluene | 118-69-4 | n.d |
| 3,4-Dichlorotoluene | 95-75-0 | n.d |
| 3,5-Dichlorotoluene | 25186-47-4 | n.d |
| 2,3,4-Trichlorotoluene | 7359-72-0 | n.d |
| 2,3,6-Trichlorotoluene | 2077-46-5 | n.d |
| 2,4,5-Trichlorotoluene | 6639-30-1 | n.d |
| 2,4,6-Trichlorotoluene | 23749-65-7 | n.d |
| 3,4,5-Trichlorotoluene | 21472-86-6 | n.d |
| 2,3,4,5-Tetrachlorotoluene | 76057-12-0 | n.d |
| 2,3,5,6-Tetrachlorotoluene | 29733-70-8 | n.d |
| 2,3,4,6-Tetrachlorotoluene | 875-40-1 | n.d |
| Pentachlorotoluene | 877-11-2 | n.d |

LOQ: Limit of Quantitation; - : test not conducted; n.d.: not determinable (below LOQ)

| Chlorophenols (Wastewater) | | | | | |
|----------------------------|------------|---|---------------------|----------------------|---------------------|
| Method: | | DIN EN 12673 (solvent extraction, GC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01) Before Treatment | 02) After Treatment |
| 2-Chlorophenol | 95-57-8 | 0.5 µg/L | -: | n.d | n.d |
| 3-Chlorophenol | 108-43-0 | | -: | n.d | n.d |
| 4-Chlorophenol | 106-48-9 | | -: | n.d | n.d |
| 2,3-Dichlorophenol | 576-24-9 | | -: | n.d | n.d |
| 2,4- Dichlorophenol | 120-83-2 | | -: | n.d | n.d |
| 2,5- Dichlorophenol | 583-78-8 | | -: | n.d | n.d |
| 2,6- Dichlorophenol | 87-65-0 | | -: | n.d | n.d |
| 3,4- Dichlorophenol | 95-77-2 | | -: | n.d | n.d |
| 3,5- Dichlorophenol | 591-35-5 | | -: | n.d | n.d |
| 2,3,4-Trichlorophenol | 15950-66-0 | | -: | n.d | n.d |
| 2,3,5- Trichlorophenol | 933-78-8 | | -: | n.d | n.d |
| 2,3,6- Trichlorophenol | 933-75-5 | | -: | n.d | n.d |
| 2,4,5- Trichlorophenol | 95-95-4 | | -: | n.d | n.d |
| 2,4,6- Trichlorophenol | 88-06-2 | | -: | n.d | n.d |
| 3,4,5- Trichlorophenol | 609-19-8 | | -: | n.d | n.d |
| 2,3,4,5-Tetrachlorophenol | 4901-51-3 | | -: | n.d | n.d |
| 2,3,4,6- Tetrachlorophenol | 58-90-2 | | -: | n.d | n.d |
| 2,3,5,6- Tetrachlorophenol | 935-95-5 | | -: | n.d | n.d |
| Pentachlorophenol | 87-86-5 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Chlorophenols (Sludge) | | | |
|----------------------------|------------|----------------------|--------------------------|
| Method: | | DIN ISO 14154 | |
| LOQ: | | 0.005 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| 2-Chlorophenol | 95-57-8 | 0.05 mg/kg | n.d |
| 3-Chlorophenol | 108-43-0 | | n.d |
| 4-Chlorophenol | 106-48-9 | | n.d |
| 2,3-Dichlorophenol | 576-24-9 | | n.d |
| 2,4- Dichlorophenol | 120-83-2 | | n.d |
| 2,5- Dichlorophenol | 583-78-8 | | n.d |
| 2,6- Dichlorophenol | 87-65-0 | | n.d |
| 3,4- Dichlorophenol | 95-77-2 | | n.d |
| 3,5- Dichlorophenol | 591-35-5 | | n.d |
| 2,3,4-Trichlorophenol | 15950-66-0 | | n.d |
| 2,3,5- Trichlorophenol | 933-78-8 | | n.d |
| 2,3,6- Trichlorophenol | 933-75-5 | | n.d |
| 2,4,5- Trichlorophenol | 95-95-4 | | n.d |
| 2,4,6- Trichlorophenol | 88-06-2 | | n.d |
| 3,4,5- Trichlorophenol | 609-19-8 | | n.d |
| 2,3,4,5-Tetrachlorophenol | 4901-51-3 | | n.d |
| 2,3,4,6- Tetrachlorophenol | 58-90-2 | | n.d |
| 2,3,5,6- Tetrachlorophenol | 935-95-5 | | n.d |
| Pentachlorophenol | 87-86-5 | | n.d |

LOQ: Limit of Quantitation; - : test not conducted; n.d.: not determinable (below LOQ)

| Arylamines (Azo) (Wastewater) | | | | | |
|---------------------------------------|----------|---|---------------------|---------------------|--------------------|
| Method: | | DIN EN ISO 14362-1 and DIN EN ISO 14362-3 (both modified; HPLC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| 4,4'-Methylene-bis-(2-chloro-aniline) | 101-14-4 | 0.1 µg/L | -: | n.d | n.d |
| 4,4'-Methylenedianiline | 101-77-9 | | -: | n.d | n.d |
| 4,4'-Oxydianiline | 101-80-4 | | -: | n.d | n.d |
| 4-Chloroaniline | 106-47-8 | | -: | n.d | n.d |
| 3,3'-Dimethoxybenzidine | 119-90-4 | | -: | n.d | n.d |
| 3,3'-Dimethylbenzidine | 119-93-7 | | -: | n.d | n.d |
| 6-Methoxy-m-toluidine | 120-71-8 | | -: | n.d | n.d |
| 2,4,5-Trimethylaniline | 137-17-7 | | -: | n.d | n.d |
| 4,4'-Thiodianiline | 139-65-1 | | -: | n.d | n.d |
| 4-Aminoazobenzene | 60-09-3 | | -: | n.d | n.d |
| 4-Methoxy-m-phenylenediamine | 615-05-4 | | -: | n.d | n.d |
| 4,4'-Methylenedi-o-toluidine | 838-88-0 | | -: | n.d | n.d |
| 2,6-Xylidine | 87-62-7 | | -: | n.d | n.d |
| o-Anisidine | 90-04-0 | | -: | n.d | n.d |

| | | | | | |
|-----------------------------|---------|--|----|-----|-----|
| 2-Naphthylamine | 91-59-8 | | -: | n.d | n.d |
| 3,3'-Dichlorobenzidine | 91-94-1 | | -: | n.d | n.d |
| 4-Aminodiphenyl | 92-67-1 | | -: | n.d | n.d |
| Benzidine | 92-87-5 | | -: | n.d | n.d |
| o-Toluidine | 95-53-4 | | -: | n.d | n.d |
| 2,4-Xylidine | 95-68-1 | | -: | n.d | n.d |
| 4-Chloro-o-toluidine | 95-69-2 | | -: | n.d | n.d |
| 4-Methyl-m-phenylenediamine | 95-80-7 | | -: | n.d | n.d |
| o-Aminoazotoluene | 97-56-3 | | -: | n.d | n.d |
| 5-Nitro-o-toluidine | 99-55-8 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Dyes – Azo (forming restricted amines) (Sludge) | | | |
|--|----------------|---------------------------------------|------------------------------|
| Method: | | DIN EN ISO 14362-1/DIN EN ISO 14362-3 | |
| LOQ: | | 0.1 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| 4,4'-Methylene-bis-(2-chloro-aniline) | 101-14-4 | 0.2 mg/kg | n.d |
| 4,4'-Methylenedianiline | 101-77-9 | | n.d |
| 4,4'-Oxydianiline | 101-80-4 | | n.d |
| 4-Chloroaniline | 106-47-8 | | n.d |
| 3,3'-Dimethoxybenzidine | 119-90-4 | | n.d |
| 3,3'-Dimethylbenzidine | 119-93-7 | | n.d |
| 6-Methoxy-m-toluidine | 120-71-8 | | n.d |
| 2,4,5-Trimethylaniline | 137-17-7 | | n.d |
| 4,4'-Thiodianiline | 139-65-1 | | n.d |
| 4-Aminoazobenzene | 60-09-3 | | n.d |
| 4-Methoxy-m-phenylenediamine | 615-05-4 | | n.d |
| 4,4'-Methylenedi-o-toluidine | 838-88-0 | | n.d |
| 2,6-Xylidine | 87-62-7 | | n.d |
| o-Anisidine | 90-04-0 | | n.d |
| 2-Naphthylamine | 91-59-8 | | n.d |
| 3,3'-Dichlorobenzidine | 91-94-1 | | n.d |
| 4-Aminodiphenyl | 92-67-1 | | n.d |
| Benzidine | 92-87-5 | | n.d |
| o-Toluidine | 95-53-4 | | n.d |
| 2,4-Xylidine | 95-68-1 | | n.d |
| 4-Chloro-o-toluidine | 95-69-2 | n.d | |
| 4-Methyl-m-phenylenediamine | 95-80-7 | n.d | |
| o-Aminoazotoluene | 97-56-3 | n.d | |
| 5-Nitro-o-toluidine | 99-55-8 | n.d | |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Carcinogenic Dyes (Wastewater) | | | | | |
|---|---|-----------------|---------------------|---------------------|--------------------|
| Method: | Liquid extraction, HPLC-MS/MS determination | | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| C.I. Direct Black 38 | 1937-37-7 | 500 µg/L | -: | n.d | n.d |
| C.I. Direct Blue 6 | 2602-46-2 | | -: | n.d | n.d |
| C.I. Acid Red 26 | 3761-53-3 | | -: | n.d | n.d |
| C.I. Basic Red 9 | 569-61-9 | | -: | n.d | n.d |
| C.I. Direct Red 28 | 573-58-0 | | -: | n.d | n.d |
| C.I. Basic Violet 14 | 632-99-5 | | -: | n.d | n.d |
| C.I. Disperse Blue 1 | 2475-45-8 | | -: | n.d | n.d |
| C.I. Disperse Blue 3 | 2475-46-9 | | -: | n.d | n.d |
| C.I. Basic Blue 26 (with Michler's Ketone > 0.1%) | 2580-56-5 | | -: | n.d | n.d |
| C.I. Basic Green 4 (malachite green chloride) | 569-64-2 | | -: | n.d | n.d |
| C.I. Basic Green 4 (malachite green oxalate) | 2437-29-8 | | -: | n.d | n.d |
| C.I. Basic Green 4 (malachite green) | 10309-95-2 | | -: | n.d | n.d |
| Disperse Orange 11 | 82-28-0 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Disperse Dyes (Wastewater) | | | | | |
|----------------------------|---|-----------------|----------------|---------------------|--------------------|
| Method: | Liquid extraction, HPLC-MS/MS determination | | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet | 01)Before Treatment | 02)After Treatment |
| Disperse Yellow 1 | 119-15-3 | 50 µg/L | -: | n.d | n.d |
| Disperse Blue 102 | 12222-97-8 | | -: | n.d | n.d |
| Disperse Blue 106 | 12223-01-7 | | -: | n.d | n.d |
| Disperse Yellow 39 | 12236-29-2 | | -: | n.d | n.d |
| Disperse Orange 37/59/76 | 13301-61-6 | | -: | n.d | n.d |
| Disperse Brown 1 | 23355-64-8 | | -: | n.d | n.d |
| Disperse Orange 1 | 2581-69-3 | | -: | n.d | n.d |
| Disperse Yellow 3 | 2832-40-8 | | -: | n.d | n.d |
| Disperse Red 11 | 2872-48-2 | | -: | n.d | n.d |
| Disperse Red 1 | 2872-52-8 | | -: | n.d | n.d |
| Disperse Red 17 | 3179-89-3 | | -: | n.d | n.d |
| Disperse Blue 7 | 3179-90-6 | | -: | n.d | n.d |
| Disperse Blue 26 | 3860-63-7 | | -: | n.d | n.d |
| Disperse Yellow 49 | 54824-37-2 | | -: | n.d | n.d |
| Disperse Blue 35 | 12222-75-2 | | -: | n.d | n.d |
| Disperse Blue 124 | 61951-51-7 | | -: | n.d | n.d |
| Disperse Yellow 9 | 6373-73-5 | | -: | n.d | n.d |
| Disperse Orange 3 | 730-40-5 | | -: | n.d | n.d |
| Disperse Blue 35 | 56524-77-7 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Dyes – Carcinogenic or equivalent concern (Sludge) | | | |
|--|------------|---|--------------------------|
| Method: | | Liquid extraction, HPLC-MS/MS determination | |
| LOQ: | | 0.5 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| C.I. Direct Black 38 | 1937-37-7 | 10 mg/kg | n.d |
| C.I. Direct Blue 6 | 2602-46-2 | | n.d |
| C.I. Acid Red 26 | 3761-53-3 | | n.d |
| C.I. Basic Red 9 | 569-61-9 | | n.d |
| C.I. Direct Red 28 | 573-58-0 | | n.d |
| C.I. Basic Violet 14 | 632-99-5 | | n.d |
| C.I. Disperse Blue 1 | 2475-45-8 | | n.d |
| C.I. Disperse Blue 3 | 2475-46-9 | | n.d |
| C.I. Basic Blue 26 (with Michler's Ketone > 0.1%) | 2580-56-5 | | n.d |
| C.I. Basic Green 4 (malachite green chloride) | 569-64-2 | | n.d |
| C.I. Basic Green 4 (malachite green oxalate) | 2437-29-8 | | n.d |
| C.I. Basic Green 4 (malachite green) | 10309-95-2 | | n.d |
| Disperse Orange 11 | 82-28-0 | | n.d |

LOQ: Limit of Quantitation; - : test not conducted; n.d.: not determinable (below LOQ)

| Dyes – Disperse (sensitising) (Sludge) | | | |
|--|------------|---|--------------------------|
| Method: | | Liquid extraction, HPLC-MS/MS determination | |
| LOQ: | | 0.5 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Disperse Yellow 1 | 119-15-3 | 2 mg/kg | n.d |
| Disperse Blue 102 | 12222-97-8 | | n.d |
| Disperse Blue 106 | 12223-01-7 | | n.d |
| Disperse Yellow 39 | 12236-29-2 | | n.d |
| Disperse Orange 37/59/76 | 13301-61-6 | | n.d |
| Disperse Brown 1 | 23355-64-8 | | n.d |
| Disperse Orange 1 | 2581-69-3 | | n.d |
| Disperse Yellow 3 | 2832-40-8 | | n.d |
| Disperse Red 11 | 2872-48-2 | | n.d |

| | | |
|--------------------|------------|-----|
| Disperse Red 1 | 2872-52-8 | n.d |
| Disperse Red 17 | 3179-89-3 | n.d |
| Disperse Blue 7 | 3179-90-6 | n.d |
| Disperse Blue 26 | 3860-63-7 | n.d |
| Disperse Yellow 49 | 54824-37-2 | n.d |
| Disperse Blue 35 | 12222-75-2 | n.d |
| Disperse Blue 124 | 61951-51-7 | n.d |
| Disperse Yellow 9 | 6373-73-5 | n.d |
| Disperse Orange 3 | 730-40-5 | n.d |
| Disperse Blue 35 | 56524-77-7 | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Flame Retardants (Wastewater) | | | | | |
|---|---|-----------------|---------------------|---------------------|--------------------|
| Method: | DIN EN ISO 17881-1 (modified, solvent extraction, GC- MS/MS determination) and DIN EN ISO 17881-2 (modified, solvent extraction, HPLC-MS/MS determination) | | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| Tris(2-chloroethyl)phosphate (TCEP) | 115-96-8 | 5 µg/L | -: | n.d | n.d |
| Decabromodiphenyl ether (DecaBDE) | 1163-19-5 | | -: | n.d | n.d |
| Tris(2,3,-dibromopropyl)-phosphate (TRIS) | 126-72-7 | | -: | n.d | n.d |
| Pentabromodiphenyl ether (PentaBDE) | 32534-81-9 | | -: | n.d | n.d |
| Octabromodiphenyl ether (OctaBDE) | 32536-52-0 | | -: | n.d | n.d |
| Bis(2,3-dibromopropyl)phosphate (BIS) | 5412-25-9 | | -: | n.d | n.d |
| Tris(1-aziridinyl)phosphine oxide (TEPA) | 545-55-1 | | -: | n.d | n.d |
| Polybromobiphenyls (PBB) | 59536-65-1 | | -: | n.d | n.d |
| Tetrabromobisphenol A (TBBPA) | 79-94-7 | | -: | n.d | n.d |
| Hexabromocyclododecane (HBCDD) | 3194-55-6 | | -: | n.d | n.d |
| 2,2-bis(bromomethyl)-1,3-propanediol (BBMP) | 3296-90-0 | | -: | n.d | n.d |
| Tris(1,3-dichloro-isopropyl) phosphate (TDCP) | 13674-87-8 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Flame Retardants (Sludge) | | | |
|--|------------|---|-----------------------|
| Method: | | SOP-QM-11 0 02 A9 005: GC- MS/MS and DIN EN ISO 22032/DIN EN 16377: HPLC-MS/MS SCCP: DIN EN ISO 18635: CI-GC-MS | |
| LOQ: | | 0.5 mg/kg/ SCCP 1 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Tris(2-chloroethyl)phosphate (TCEP) | 115-96-8 | 1 mg/kg | n.d |
| Decabromodiphenyl ether (DecaBDE) | 1163-19-5 | | n.d |
| Tris(2,3,-dibromopropyl)-phosphate (TRIS) | 126-72-7 | | n.d |
| Pentabromodiphenyl ether (PentaBDE)) | 32534-81-9 | | n.d |
| Octabromodiphenyl ether (OctaBDE) | 32536-52-0 | | n.d |
| Bis(2,3-dibromopropyl)phosphate (BIS) | 5412-25-9 | | n.d |
| Tris(1-aziridinyl)phosphine oxide) (TEPA) | 545-55-1 | | n.d |
| Polybromobiphenyls (PBB) | 59536-65-1 | | n.d |
| Tetrabromobisphenol A (TBBPA) | 79-94-7 | | n.d |
| Hexabromocyclododecane (HBCDD) | 3194-55-6 | | n.d |
| 2,2-bis(bromomethyl)-1,3-propanediol (BBMP) | 3296-90-0 | | n.d |
| Tris(1,3-dichloro-isopropyl) phosphate (TDCP) | 13674-87-8 | | n.d |
| Short-chain chlorinated Paraffins (SCCP) (C10-C13) | 85535-84-8 | n.d | |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Chlorinated Paraffines (Wastewater) | | | | | |
|--|------------|---|----------------|---------------------|--------------------|
| Method: | | DIN EN ISO 12010 (solvent extraction, GC-NCI-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet | 01)Before Treatment | 02)After Treatment |
| Short-chain chlorinated Paraffins (SCCP) (C10-C13) | 85535-84-8 | 5 µg/L | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Glycols (Wastewater) | | | | | |
|-----------------------------------|------------|---|---------------------|---------------------|--------------------|
| Method: | | ISO 20595 (modified: SPE enrichment, GC-MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| Bis(2-methoxyethyl)-ether | 111-96-6 | 50 µg/L | -: | n.d | n.d |
| 2-Ethoxyethanol | 110-80-5 | | -: | n.d | n.d |
| 2-Ethoxyethyl acetate | 111-15-9 | | -: | n.d | n.d |
| Ethylene glycol dimethyl ether | 110-71-4 | | -: | n.d | n.d |
| 2-Methoxyethanol | 109-86-4 | | -: | n.d | n.d |
| 2-Methoxyethylacetate | 110-49-6 | | -: | n.d | n.d |
| 2-Methoxypropylacetate | 70657-70-4 | | -: | n.d | n.d |
| Triethylene glycol dimethyl ether | 112-49-2 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Glycols (Sludge) | | | |
|-----------------------------------|------------|--|--------------------------|
| Method: | | Liquid extraction, GC-MS determination | |
| LOQ: | | 4 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Bis(2-methoxyethyl)-ether | 111-96-6 | 10 mg/kg | n.d |
| 2-Ethoxyethanol | 110-80-5 | | n.d |
| 2-Ethoxyethyl acetate | 111-15-9 | | n.d |
| Ethylene glycol dimethyl ether | 110-71-4 | | n.d |
| 2-Methoxyethanol | 109-86-4 | | n.d |
| 2-Methoxyethylacetate | 110-49-6 | | n.d |
| 2-Methoxypropylacetate | 70657-70-4 | | n.d |
| Triethylene glycol dimethyl ether | 112-49-2 | | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Halogenated Solvents (Wastewater) | | | | | |
|-----------------------------------|----------|-----------------------------|---------------------|---------------------|--------------------|
| Method: | | ISO 20595 (Headspace GC-MS) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| 1,2-Dichloroethane | 107-06-2 | 1 µg/L | -: | n.d | n.d |
| Methylene chloride | 75-09-2 | | -: | n.d | n.d |
| Trichloroethylene | 79-01-6 | | -: | n.d | n.d |
| Tetrachloroethylene | 127-18-4 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Halogenated Solvents (Sludge) | | | |
|-------------------------------|----------|--|--------------------------|
| Method: | | Liquid extraction, GC-MS determination | |
| LOQ: | | 2 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| 1,2-Dichloroethane | 107-06-2 | 2 mg/kg | n.d |
| Methylene chloride | 75-09-2 | | n.d |
| Trichloroethylene | 79-01-6 | | n.d |
| Tetrachloroethylene | 127-18-4 | | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Organotin Compounds (Wastewater) | | | | | |
|--|---------|---|---------------------|---------------------|--------------------|
| Method: | | DIN EN ISO 17353 (solvent extraction, GC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| Mono-, di- and tri-methyltin derivatives | various | 0.01 µg/L | -: | n.d | n.d |
| Mono-, di- and tri-butyltin derivatives | various | | -: | n.d | n.d |
| Mono-, di- and tri-phenyltin derivatives | various | | -: | n.d | n.d |
| Mono-, di- and tri-octyltin derivatives | various | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Organotin (Sludge) | | | |
|---|---------|----------------------|----------------|
| Method: | | DIN EN ISO 23161 | |
| LOQ: | | 0.1 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results |
| | | | sludge |
| Mono-, Di- and Trimethyltin derivatives | various | 0.2 mg/kg | n.d |
| Mono-, Di- and Tributyltin derivatives | various | | n.d |
| Mono-, Di- and Triphenyltin derivatives | various | | n.d |
| Mono-, Di- and Trioctyltin derivatives | various | | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Perfluorinated and Polyfluorinated Chemicals (PFCs) (Wastewater) | | | | | |
|--|--------------------------|--|---------------------|---------------------|--------------------|
| Method: | | DIN 38414-14 (liquid extraction, HPLC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| PFOS | 355-46-4 432-50-7 | 0.01 µg/L | -: | n.d | n.d |
| PFOA | 335-67-1 | | -: | n.d | n.d |
| PFBS | 29420-49-3 29420-43-3 | | -: | n.d | n.d |
| PFHxA | 307-24-4 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| FTOH/ FTAc (Wastewater) | | | | | |
|-------------------------|----------|---|---------------------|---------------------|--------------------|
| Method: | | DIN 38414-14 (modified: solvent extraction, GC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| 8:2 FTOH | 678-39-7 | 1 µg/L | -: | n.d | n.d |
| 6:2 FTOH | 647-42-7 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Perfluorinated and Polyfluorinated Chemicals (PFCs) (Sludge) | | | |
|--|--------------------------|----------------------|-----------------------|
| Method: | | DIN 38414-14 | |
| LOQ: | | 0.005 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| PFOS | 355-46-4 432-50-7 | 0.1 mg/kg | n.d |
| PFOA | 335-67-1 | | n.d |
| PFBS | 29420-49-3 29420-43-3 | | n.d |
| PFHxA | 307-24-4 | | n.d |
| 8:2 FTOH | 678-39-7 | 1 mg/kg | n.d |
| 6:2 FTOH | 647-42-7 | | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Phthalates (Wastewater) | | | | | |
|---|------------|--|---------------------|---------------------|--------------------|
| Method: | | ISO 18856 (modified: solvent extraction, GC-MS/MS determination) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| Di(ethylhexyl) phthalate (DEHP) | 117-81-7 | 10 µg/L | -: | n.d | n.d |
| Bis(2-methoxyethyl) phthalate (DMEP) | 117-82-8 | | -: | n.d | n.d |
| Di-n-octyl phthalate (DNOP) | 117-84-0 | | -: | n.d | n.d |
| Di-iso-decyl phthalate (DIDP) | 26761-40-0 | | -: | n.d | n.d |
| Di-isononyl phthalate (DINP) | 28553-12-0 | | -: | n.d | n.d |
| Di-n-hexyl phthalate (DnHP) | 84-75-3 | | -: | n.d | n.d |
| Dibutyl phthalate (DBP) | 84-74-2 | | -: | n.d | n.d |
| Butyl benzyl phthalate (BBP) | 85-68-7 | | -: | n.d | n.d |
| Dinonyl phthalate (DNP) | 84-76-4 | | -: | n.d | n.d |
| Diethyl phthalate (DEP) | 84-66-2 | | -: | n.d | n.d |
| Di-n-propyl phthalate (DPRP) | 131-16-8 | | -: | n.d | n.d |
| Di-isobutyl phthalate (DIBP) | 84-69-5 | | -: | n.d | n.d |
| Di-cyclohexyl phthalate (DCHP) | 84-61-7 | | -: | n.d | n.d |
| Di-iso-octyl phthalate (DIOP) | 27554-26-3 | | -: | n.d | n.d |
| 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) | 68515-42-4 | | -: | n.d | n.d |
| 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | 71888-89-6 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Ortho Phthalates - including all ortho esters of phthalic acid (Sludge) | | | |
|---|------------|---|-----------------------|
| Method: | | Liquid extraction, GC-MS/MS determination | |
| LOQ: | | 2 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Di(ethylhexyl) phthalate (DEHP) | 117-81-7 | 2 mg/kg | n.d |
| Bis(2-methoxyethyl) phthalate (DMEP) | 117-82-8 | | n.d |
| Di-n-octyl phthalate (DNOP) | 117-84-0 | | n.d |
| Di-iso-decyl phthalate (DIDP) | 26761-40-0 | | n.d |
| Di-isononyl phthalate (DINP) | 28553-12-0 | | n.d |
| Di-n-hexyl phthalate (DnHP) | 84-75-3 | | n.d |
| Dibutyl phthalate (DBP) | 84-74-2 | | n.d |
| Butyl benzyl phthalate (BBP) | 85-68-7 | | n.d |
| Dinonyl phthalate (DNP) | 84-76-4 | | n.d |
| Diethyl phthalate (DEP) | 84-66-2 | | n.d |
| Di-n-propyl phthalate (DPRP) | 131-16-8 | | n.d |
| Di-isobutyl phthalate (DIBP) | 84-69-5 | | n.d |
| Di-cyclohexyl phthalate (DCHP) | 84-61-7 | | n.d |
| Di-iso-octyl phthalate (DIOP) | 27554-26-3 | | n.d |
| 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) | 68515-42-4 | | n.d |
| 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | 71888-89-6 | | n.d |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Polycyclic Aromatic Hydrocarbons (PAHs) (Wastewater) | | | | | |
|--|----------|--|---------------------|---------------------|--------------------|
| Method: | | DIN 38407-39 (F 39) (solvent extraction, GC-MS/MS) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01)Before Treatment | 02)After Treatment |
| Benzo[a]pyrene (BaP) | 50-32-8 | 1 µg/L | -: | n.d | n.d |
| Anthracene | 120-12-7 | | -: | n.d | n.d |
| Pyrene | 129-00-0 | | -: | n.d | n.d |
| Benzo[ghi]perylene | 191-24-2 | | -: | n.d | n.d |
| Benzo[e]pyrene | 192-97-2 | | -: | n.d | n.d |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | | -: | n.d | n.d |
| Benzo[j]fluoranthene | 205-82-3 | | -: | n.d | n.d |
| Benzo[b]fluoranthene | 205-99-2 | | -: | n.d | n.d |
| Fluoranthene | 206-44-0 | | -: | n.d | n.d |
| Benzo[k]fluoranthene | 207-08-9 | | -: | n.d | n.d |
| Acenaphthylene | 208-96-8 | | -: | n.d | n.d |
| Chrysene | 218-01-9 | | -: | n.d | n.d |
| Dibenz[a,h]anthracene | 53-70-3 | | -: | n.d | n.d |
| Benzo[a]anthracene | 56-55-3 | | -: | n.d | n.d |
| Acenaphthene | 83-32-9 | | -: | n.d | n.d |

| | | | | | |
|--------------|---------|--|----|-----|-----|
| Phenanthrene | 85-01-8 | | -: | n.d | n.d |
| Fluorene | 86-73-7 | | -: | n.d | n.d |
| Naphthalene | 91-20-3 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Polycyclic Aromatic Hydrocarbons (PAHs) (Sludge) | | | |
|--|----------|---|-----------------------|
| Method: | | Liquid extraction, GC-MS/MS determination | |
| LOQ: | | 0.05 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Benzo[a]pyrene (BaP) | 50-32-8 | 0.2 mg/kg | n.d |
| Anthracene | 120-12-7 | | n.d |
| Pyrene | 129-00-0 | | n.d |
| Benzo[ghi]perylene | 191-24-2 | | n.d |
| Benzo[e]pyrene | 192-97-2 | | n.d |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | | n.d |
| Benzo[j]fluoranthene | 205-82-3 | | n.d |
| Benzo[b]fluoranthene | 205-99-2 | | n.d |
| Fluoranthene | 206-44-0 | | n.d |
| Benzo[k]fluoranthene | 207-08-9 | | n.d |
| Acenaphthylene | 208-96-8 | | n.d |
| Chrysene | 218-01-9 | | n.d |
| Dibenz[a,h]anthracene | 53-70-3 | | n.d |
| Benzo[a]anthracene | 56-55-3 | | n.d |
| Acenaphthene | 83-32-9 | | n.d |
| Phenanthrene | 85-01-8 | | n.d |
| Fluorene | 86-73-7 | | n.d |
| Naphthalene | 91-20-3 | n.d | |

LOQ: Limit of Quantitation; -: test not conducted; n.d.: not determinable (below LOQ)

| Volatile Organic Compounds (VOC) (Wastewater) | | | | | |
|---|-----------|-----------------------------|---------------------|----------------------|---------------------|
| Method: | | ISO 20595 (Headspace GC-MS) | | | |
| Substances | CAS-No. | Reporting Limit | Sample Results | | |
| | | | Inlet (fresh water) | 01) Before Treatment | 02) After Treatment |
| Benzene | 71-43-2 | 1 µg/L | -: | n.d | n.d |
| Xylene | 1330-20-7 | | -: | n.d | n.d |
| o-cresol | 95-48-7 | | -: | n.d | n.d |
| p-cresol | 106-44-5 | | -: | n.d | n.d |
| m-cresol | 108-39-4 | | -: | n.d | n.d |

-: test not conducted; n.d.: not determinable

| Volatile Organic Compounds (VOC) (Sludge) | | | |
|---|-----------|--|--------------------------|
| Method: | | Liquid extraction, GC-MS determination | |
| LOQ: | | 2 mg/kg | |
| Substances | CAS-No. | Reporting Limit ZDHC | Sample Results sludge |
| Benzene | 71-43-2 | 2 mg/kg | n.d |
| Xylene | 1330-20-7 | | n.d |
| o-Cresol | 95-48-7 | | n.d |
| p-Cresol | 106-44-5 | | n.d |
| m-Cresol | 108-39-4 | | n.d |

LOQ: Limit of Quantitation; - : test not conducted; n.d.: not determinable (below LOQ)

Bangladesh, 19.12.2021

Head of Textile & Chemical Testing



Johnny Yasmin Kanta



Expert for Customer Service



Faruk Ahmed

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