Sustainability in Numbers Delta Electronics (Thailand) Public Company Limited

Updated: March 2020



| | | C | overa | ge | | 2011 | 2015 | 2010 | | 2012 | |
|-----------|---|----|-------|----|----------|------------|------------|------------|------------|------------|-----------|
| ndicators | Material Aspects | TH | SK | IN | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| GRI 302-1 | Energy consumption within the organizatio | n | | | | | | | | | ' |
| (1+2+3) | Total energy consumption within the | | | | GJ | 262,891.09 | 280,453.81 | 290,372.52 | 296,756.25 | 304,727.97 | 300,589.0 |
| | organization | | ľ | ľ | MWh | 73,025.30 | 77,903.84 | 80,659.03 | 82,432.29 | 84,646.66 | 83,496.9 |
| 1 | | | | | GJ | 9,101.66 | 9,542.80 | 10,355.01 | 12,117.07 | 11,537.13 | 11,258.9 |
| | Total fuel consumption within the organization | • | • | • | MWh | 2,528.24 | 2,650.78 | 2,876.39 | 3,365.85 | 3,204.76 | 3,127.4 |
| | - Gasoline | • | • | • | GJ | 97.44 | 129.26 | 67.98 | 200.63 | 170.94 | 142.3 |
| | - Diesel | • | • | • | GJ | 3,772.95 | 2,728.94 | 2,800.48 | 4,263.82 | 4,254.61 | 3,766.0 |
| | - LPG | • | • | • | GJ | 6.17 | 3.69 | 6.02 | 5.23 | - | 4.4 |
| 2 | - Natural Gas | • | • | • | GJ | 5,225.10 | 6,680.91 | 7,480.53 | 7,647.40 | 7,111.58 | 7,346.1 |
| | | | • | | GJ | 253,564.07 | 270,586.71 | 278,939.95 | 274,251.90 | 269,673.36 | 258,001.3 |
| | Electricity and stream purchased for consumption | | | • | MWh | 70,434.46 | 75,162.97 | 77,483.32 | 76,181.08 | 74,909.27 | 71,667.0 |
| | - Electricity consumption | • | • | • | GJ | 253,564.07 | 270,586.71 | 278,939.95 | 274,251.90 | 269,673.36 | 258,001.3 |
| 3 | Renewable Energy Self-Generation | | | | GJ | 225.36 | 324.30 | 1,077.57 | 10,387.28 | 23,517.49 | 31,328.8 |
| | Renewable Energy Sen-Generation | • | • | • | MWh | 62.60 | 90.08 | 299.32 | 2,885.36 | 6,532.64 | 8,702.4 |
| | - Solar energy | • | • | • | GJ | 225.36 | 324.30 | 1,077.57 | 10,387.28 | 23,517.49 | 31,328.8 |
| | Total Energy consumption intensity | • | • | • | MWh/MUSD | 62.40 | 65.29 | 66.59 | 63.32 | 57.94 | 60.8 |
| | Non-renewable consumption intensity | • | • | • | MWh/MUSD | 62.34 | 65.22 | 66.35 | 61.10 | 53.47 | 54.4 |
| | - Electricity intensity | • | • | • | MWh/MUSD | 60.18 | 63.00 | 63.97 | 58.52 | 51.28 | 52.2 |
| | - Total fuel consumption intensity | • | • | • | MWh/MUSD | 2.16 | 2.22 | 2.37 | 2.59 | 2.19 | 2.2 |
| | Renewable consumption intensity (Solar) | • | • | • | MWh/MUSD | 0.05 | 0.08 | 0.25 | 2.22 | 4.47 | 6.3 |
| RI 302-4 | Reduction of energy consumption | | | | | | | | | | |
| | Total Reduction of energy consumption within the organization | | | | GJ | 0 | 4.873.34 | 9.485.35 | 8,870.39 | 22,009.78 | 18,395.5 |

| Environ | mental Performance | | | | | | | | | | | | |
|------------|---|----|---------|----------------------|----------------------|--------|----------|----------|----------|-----------|-----------|--|--|
| In Parton | Market Assessed | Co | overa | ge | 1124 | 0044 | 0045 | 0040 | 0047 | 0040 | 0040 | | |
| Indicators | Material Aspects | TH | SK | IN | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | |
| | | | | | MWh | 0 | 1,353.71 | 2,634.82 | 2,464.00 | 6,113.83 | 5,109.86 | | |
| | - Reduction of electricity consumption | • | | | GJ | 0 | 4.873.34 | 9.485.35 | 8,870.39 | 22.009.78 | 18.395.50 | | |
| | - Reduction of electricity consumption intensity (Saving energy intensity) | • | | | MWh/MUSD | 0 | 1.36 | 2.52 | 2.21 | 4.91 | 4.24 | | |
| GRI303-1 | Water withdrawal by source | | | | | | | | | | | | |
| | Total volume of water withdrawn | • | • | • | Million cubic meters | 0.2968 | 0.3427 | 0.3407 | 0.3722 | 0.3805 | 0.3568 | | |
| | - Surface water | • | • | • | Million cubic meters | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | - Ground water | • | • | • | Million cubic meters | 0.0214 | 0.0189 | 0.0209 | 0.0221 | 0.0250 | 0.0246 | | |
| | - Rainwater | • | • | • | Million cubic meters | 0 | 0 | 0 | 0 | 0.0034 | 0.0060 | | |
| | - Municipal water | • | • | • | Million cubic meters | 0.2754 | 0.3238 | 0.3198 | 0.3501 | 0.3522 | 0.3262 | | |
| | Total Net fresh water consumption | • | Million | Million cubic meters | 0.2968 | 0.3427 | 0.3407 | 0.3722 | 0.3772 | 0.3508 | | | |
| | Total Water consumption Intensity | • | • | • | m³/MUSD | 253.56 | 287.24 | 281.28 | 285.87 | 260.49 | 259.92 | | |
| | - Water withdrawn intensity (Ground + Municipal water) | • | • | • | m³/MUSD | 253.56 | 287.24 | 281.28 | 285.87 | 258.17 | 255.54 | | |
| | - Rain water consumption intensity | • | • | • | m³/MUSD | 0 | 0 | 0 | 0 | 2.31 | 4.37 | | |
| GRI 303-3 | Water recycled and reused | | | | | | | | | | | | |
| | Total volume of water recycled and reused by the organization. | • | • | • | Million cubic meters | 0.0171 | 0.0160 | 0.0184 | 0.0289 | 0.0305 | 0.0915 | | |
| | - Water reused | • | • | • | Million cubic meters | 0.0000 | 0.0001 | 0.0036 | 0.0130 | 0.0138 | 0.0171 | | |
| | - Water recycled | • | • | • | Million cubic meters | 0.0171 | 0.0159 | 0.0148 | 0.0160 | 0.0166 | 0.0744 | | |
| | Total volume of water recycled and reused as a percentage of the total water withdrawal | • | • | • | % | 5.76% | 4.66% | 5.41% | 7.77% | 8.01% | 25.63% | | |
| | - Total volume of water reused as a percentage of the total water withdrawal | • | • | • | % | 0.00% | 0.02% | 1.06% | 3.48% | 3.64% | 4.79% | | |
| | - Total volume of water recycled as a percentage of the total water withdrawal | • | • | • | % | 5.76% | 4.64% | 4.35% | 4.29% | 4.37% | 20.84% | | |

| | | Co | overa | ge | | | | | | | | | |
|------------|---|-----|-------|----|----------------|---|---|-----------|-----------|-----------|---------|--|--|
| Indicators | Material Aspects | TH | SK | IN | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | |
| GRI 305-1 | Direct (Scope 1) GHG emissions | | | | | | ' | ' | | ' | | | |
| | Direct (Scope 1) GHG emissions | • | •1 | •1 | Tons CO2e | 824.00 | 488.00 | 935.09 | 971.45 | 932.98 | 897. | | |
| GRI 305-2 | Energy indirect (Scope 2) GHG emissions | | | | | | | | | | | | |
| | Energy indirect (Scope 2) GHG emissions | • | •1 | •1 | Tons CO2e | 37,662.00 | 39,858.00 | 42,098.00 | 43,206.00 | 42,120.44 | 40,126. | | |
| GRI 305-3 | Other indirect (Scope 3) GHG emissions | | | | | , | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | , | , | , | -, | | |
| | Other indirect (Scope 3) GHG emissions | • | •1 | •1 | Tons CO2e | - | - | 36,739.00 | 33,254.60 | 65,718.59 | 56,309 | | |
| GRI 305-4 | GHG emissions intensity | | | | | | | | | | | | |
| | GHG emissions (Scope 1 and Scope 2) intensity | • | •1 | •1 | Tons CO2e/MUSD | 39.03 | 40.40 | 38.43 | 33.93 | 29.47 | 29 | | |
| | Other indirect (Scope 3) GHG emissions intensity | • | •1 | •1 | Tons CO2e/MUSD | 0 | 0 | 32.81 | 25.54 | 44.99 | 41 | | |
| GRI 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions | | | | | | | | | | | | |
| | NO _X (Slovakia's data was firstly consolidated in 2019) | • | • 2 | • | Tons/year | | 0.0525 | 0 | 0.1289 | 0.0548 | 5.52 | | |
| | SO _X (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 0 | 0 | 0.0294 | 0.0142 | 0.05 | | |
| | CO (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 1.1201 | 0.5495 | 0.6723 | 3.6353 | 8.95 | | |
| | Tin (Sn) (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 0.5812 | 0.1982 | 1.2270 | 0.0528 | 0.30 | | |
| | Lead (Pb) (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 0.0451 | 0.0013 | 0.0015 | 0.0012 | 0.00 | | |
| | Xylene + Toluene intensity | • | •2 | • | Tons/MUSD | | 0.0010 | 0.0009 | 0.0012 | 0.0021 | 0.00 | | |
| | Xylene + Toluene | • | • 2 | • | Tons/year | | 0.9861 | 0.9414 | 1.4504 | 2.9066 | 1.19 | | |
| | Xylene (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 0.6955 | 0.5514 | 0.7142 | 1.1950 | 0.56 | | |
| | Toluene (Slovakia's data was firstly consolidated in 2019) | • | •2 | • | Tons/year | | 0.2906 | 0.3900 | 0.7361 | 1.7116 | 0.63 | | |
| | Total Volatile Organic Compounds intensity (t VOCs) | • | •2 | • | Tons/MUSD | | N/A | N/A | N/A | N/A | 0.06 | | |
| | Total Volatile Organic Compounds (t VOCs) | • | • 2 | • | Tons/year | | N/A | N/A | N/A | N/A | 82 | | |
| | Total suspended particulate (TSP) | • | •2 | • | Tons/year | | 26.96 | 20.46 | 22.79 | 18.81 | 27. | | |
| GRI 306-1 | Water discharge by quality and destinat | ion | | | | | | | | | | | |
| | Total volume of water discharges | • | | •3 | Million cubic | 0.2504 | 0.2591 | | | | | | |

| | | Co | vera | ge | | | | | | | | |
|------------|--|----------|------|-----|----------------------|--------|--------|----------|----------|----------|--------|--|
| Indicators | Material Aspects | TH | SK | IN | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| | - Water Discharged from domestic consumption | • | • | •3 | Million cubic meters | 0.2504 | 0.2591 | 0.2670 | 0.2806 | 0.2808 | 0.257 | |
| | - Evaporation of water from Evaporative cooling systems (Calculate from Evaporative Cooling Systems) | • | | | Million cubic meters | N/A | N/A | N/A | N/A | N/A | 0.059 | |
| | Quality of the water discharge | , | | | | | | ' | | 1 | | |
| | - pH | • | • 4 | • | - | | | 7.81 | 7.82 | 7.82 | 7. | |
| | - BOD | • | • 4 | • | mg/l | | | 76.54 | 64.15 | 82.15 | 81. | |
| | - COD | • | • 4 | • | mg/l | | | 356.86 | 362.57 | 380.49 | 389. | |
| | - TDS | • | • 4 | • | mg/l | | | N/A | N/A | N/A | 1,260. | |
| | - TSS | • | • 4 | • | mg/l | | | N/A | N/A | N/A | 190. | |
| | - Oil and Grease | • | •4 | • | mg/l | | | N/A | N/A | N/A | 4. | |
| | Volumes of wastewater discharge by wastewater standard parameters | | | | | | | | | | | |
| | - pH | • | • | • 3 | - | | | 8.00 | 8.03 | 8.07 | 8. | |
| | - BOD loading | • | • | •3 | Tons/year | | | 27.87 | 27.66 | 32.66 | 32. | |
| | - COD loading | • | • | • 3 | Tons/year | | | 69.73 | 67.48 | 73.75 | 72. | |
| | - TDS loading | • | • | •3 | Tons/year | | | N/A | N/A | N/A | 161. | |
| | - TSS loading | • | • | • 3 | Tons/year | | | N/A | N/A | N/A | 12. | |
| | - Oil and Grease loading | • | • | • 3 | Tons/year | | | N/A | N/A | N/A | 1. | |
| GRI 306-2 | Waste by type and disposal method | | | | | | | | | | | |
| | Total weight of waste generated | • | • 5 | • 5 | Tons/year | | | 2,987.66 | 3,170.62 | 3,391.59 | 3,152. | |
| | Total waste Intensity | • | ● 5 | • 5 | Tons/MUSD | | | 2.47 | 2.44 | 2.32 | 2. | |
| | Production | | | | | | | | | | | |
| | Hazardous Waste | • | • 5 | • 5 | Tons/year | | | 18.70 | 19.23 | 35.45 | 32. | |
| | - Reuse | • | • 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0. | |
| | - Recycling | • | • 5 | • 5 | Tons/year | | | 18.70 | 19.23 | 35.45 | 27 | |

| | | Co | overage | | I I mit | 2014 | | | | | 2040 |
|-----------|---|----|------------|------------|-----------|------|------|----------|----------|----------|-------|
| ndicators | Material Aspects | TH | SK | IN | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| | - Composting | • | •5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 2.: |
| | - Incineration (mass burn) | • | • 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0. |
| | - Deep well injection | • | ● 5 | •5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0. |
| | - Landfill | • | • 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0. |
| | - Other (to be specified by the organization) 6 | • | ● 5 | •5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 2 |
| | Non-hazardous Waste | • | • 5 | • 5 | Tons/year | | | 2749.708 | 2,906.27 | 3,123.52 | 2,858 |
| | - Reuse | • | • 5 | • 5 | Tons/year | | | 156.70 | 174.20 | 187.50 | 183 |
| | - Recycling | • | • 5 | • 5 | Tons/year | | | 2480.00 | 2644.10 | 2820.25 | 2587 |
| | - Composting | • | ● 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0 |
| | - Incineration (mass burn) | • | ● 5 | • 5 | Tons/year | | | 3.61 | 3.61 | 4.47 | 7 |
| | - Deep well injection | • | •5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | - Landfill | • | •5 | • 5 | Tons/year | | | 109.40 | 84.36 | 111.30 | 79 |
| | - Other (to be specified by the organization) 6 | • | • 5 | •5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | Non-production | ' | | | | | | | | | |
| | Hazardous Waste | • | • 5 | • 5 | Tons/year | | | 0.12 | 0.16 | 0.18 | 9 |
| | - Reuse | • | • 5 | • 5 | Tons/year | | | 0.12 | 0.16 | 0.18 | C |
| | - Recycling | • | ● 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | - Composting | • | • 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | - Incineration (mass burn) | • | ● 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 9 |
| | - Deep well injection | • | • 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | - Landfill | • | •5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | C |
| | - Other (to be specified by the organization) 6 | • | ● 5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | (|
| | Non-hazardous Waste | • | • 5 | • 5 | Tons/year | | | 219.13 | 244.96 | 232.44 | 251 |
| | - Reuse | • | • 5 | • 5 | Tons/year | | | 98.56 | 112.30 | 131.42 | 159 |
| | - Recycling | • | • 5 | • 5 | Tons/year | | | 14.45 | 17.36 | 18.80 | 22 |
| | - Composting | • | • 5 | • 5 | Tons/year | | | 2.00 | 2.40 | 3.10 | 4 |
| | - Incineration (mass burn) | • | • 5 | • 5 | Tons/year | | | 2.12 | 0.90 | 1.12 | , |
| | - Deep well injection | • | •5 | • 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | (|

| Environ | Environmental Performance | | | | | | | | | | | | | |
|------------------|--|----|------|------------|-------------------|------|------|----------|----------|----------|----------|--|--|--|
| Indicators | Material Aspects | Co | vera | ge | − Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | | |
| III all Gallerie | | TH | SK | IN | | | 20:0 | 20.0 | | 2010 | 20.0 | | | |
| | - Landfill | • | • 5 | • 5 | Tons/year | | | 102.00 | 112.00 | 78.00 | 64.41 | | | |
| | - Other (to be specified by the organization) ⁶ | • | • 5 | ● 5 | Tons/year | | | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| | Total Hazardous Waste Generated | • | ● 5 | • 5 | Tons/year | | | 18.82 | 19.39 | 35.63 | 42.41 | | | |
| | Total waste used/recycled/ sold | • | • 5 | • 5 | Tons/year | | | 2,768.53 | 2,967.35 | 3,193.60 | 2,980.95 | | | |
| | Total waste disposed (Total waste generated - Total waste used/recycled/ sold) | • | • 5 | • 5 | Tons/year | | | 219.13 | 203.27 | 197.99 | 171.83 | | | |

Note: From 2014-2019, the reporting of environmental performance was re-calculated to expand reporting scope covers DET's subsidiaries (India and Slovakia) for the full coverage of manufacturing (100 percentage coverage of manufacturing sites or 98 percentage of consolidated sales revenue). The scope of 2014-2019 reporting were re-stated as follows:

- The numerical data of Energy consumption within organization and subtopics were re-calculated covering Delta's subsidiaries data for the full coverage of manufacturing
- Reduction of energy consumption is covered on the sites in Thailand only.
- The numerical data of water withdrawal by source and water recycled and reused and subtopics were re-calculated covering Delta's subsidiaries data.
- 1The numerical data of Direct (Scope 1) GHG Emission: India and Slovakia's GHG inventory report 2017-2019 were publicly disclosed in 2018, the data of GHG emission scope 1 was added and recalculated for the full coverage of manufacturing sites.
- 1The numerical data of Energy indirect (Scope 2) GHG Emission: India and Slovakia's GHG inventory report 2017-2019 were publicly disclosed in 2018, the data of Energy indirect GHG emission scope 2 was added and recalculated for the full coverage of manufacturing sites.
- ¹The numerical data of other indirect (Scope 3) GHG Emission: India and Slovakia's GHG inventory report 2017-2019 were publicly disclosed in 2018, the data of other indirect GHG emission scope 3 was added and recalculated for the full coverage of manufacturing sites.
- The numerical data of Nitrogen oxides (NO_X), sulfur oxides (SO_X), and other significant air emissions were re-calculated covering Delta's subsidiaries data. ²Slovakia's data was firstly added in 2019.
- From 2015-2018, Delta had indicated VOCs emission as the aggregation of Xylene, Toluene and Isopropyl Alcohol using US. EPA Method 18. In 2019, Delta has measured total VOCs (t VOCs) to collect the actual total VOCs released from its operations.
- 3 India applies the zero water discharge process by installation their own Sewage Treatment Plants (STP) is to reduce wastewater economically. The discharge water is annually checked the water quality by Third-party (Eko Pro Engineers Pvt. Ltd. and Devansh Testing & Research Laboratory Pvt. Ltd.) according to EPA-1986 Schedule-VI Part-A, General Standards for Discharge of Effluents and recycled for domestic use (please see more detail in Delta Electronics (Thailand) Public Company Ltd.'s Sustainable Development Report 2020 page 67-70) and examine heavy metals concentration in water after treated. (The average results of water parameter for heavy metals from 2017- 2019 was demonstrated in Delta Thailand's Sustainability in numbers page 8)
- 4Slovakia's sewage water is transferred to the public sewerage system to be treated by third-party who provide wastewater treatment services for the local district. https://www.povs.sk/zakaznicka-zona/verejne-kanalizacie-a-kanalizacna-pripoika/. Thus the water quality indicators, Slovakia's site reports the highest permissible rate of wastewater discharged into public sewerage according to Slovakia's local water quality standard.
- Thailand sites, apart from water quality checking by Industrial Estate Authority of Thailand (IEAT), the discharged water is also examined heavy metals concentration annually by Third Party Specialist (Environmental Resource Development Co., Ltd.) to ensure and re-check the safety and quality of water before transfer to IEAT for treatment (The average results of water parameter for heavy metals from 2017- 2019 was demonstrated in Delta Thailand's Sustainability in numbers page 8)
- 5The numerical data of Waste by type and disposal method and subtopics were re-calculated 2016-2019 to cover Delta's subsidiaries (India and Slovakia).
- The previous reports in 2016 2018, the waste by type and disposal performance reports were not yet covered DET's subsidiaries (India and Slovakia) and its domestic waste. In 2019, DET reported waste by type and disposal method following reporting requirements of GRI 306-2 and covered DET's subsidiaries (India and Slovakia) therefore, the previous values of waste by type and disposal method from its subsidiaries were used for re-calculation from 2016-2018 and reported in 2019.
- Other (to be specified by the organization) defines accordingly to the National Council of the Slovak Republic has adopted the following Act no. 79/2015 Coll. in Waste Disposal, D9 Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination). (see also: https://tinyurl.com/y453ejr8)

The average results of water parameter for heavy metals from 2017- 2019

Thailand

| | Average r | esults o | f water parameter in 2017- | 2019 (DE | T1,5,6) | | |
|-----|-------------------------------|----------|----------------------------|----------|---------|----------|--------|
| No. | PARAMETERS | Unit | Analysis Method | STD. | 2017 | 2018 | 2019 |
| 1 | pH | - | pH Meter | 5.5-9.0 | 7.63 | 7.80 | 6.90 |
| 2 | Temperature | ۰C | Thermometer | 45 | 31.10 | 29.37 | 32.00 |
| 3 | Color (Original)* | ADMI | ADMI Method | 600 | pass | 94.00 | 124.00 |
| 4 | Odor | - | - | Pass | pass | pass | pass |
| 5 | BOD | mg/l | Azide Modification | 500 | 36.67 | 121.67 | 85.33 |
| 6 | COD | mg/l | Closed Reflux | 750 | 79.82 | 248.33 | 150.33 |
| 7 | Suspended Solids (SS) | mg/l | Dried at 103-105 oC | 200 | 24.67 | 44.70 | 39.33 |
| 8 | Total Dissolved Solids (TDS) | mg/l | Dried at 180 oC | 3000 | 531.33 | 1,000.00 | 563.33 |
| 9 | Total Kjeldahl Nitrogen (TKN) | mg/l | Kjeldahl Method | 100 | 40.57 | 48.33 | 45.33 |
| 10 | Grease & Oil | mg/l | Partition & Gravimetric | 10 | 6.80 | 5.00 | 5.00 |
| 11 | Sulfide | mg/l | Iodometric Method | 1 | 0.46 | 0.46 | 0.36 |
| 12 | Free Chlorine* | mg/l | DPD Colorimetric | 1 | 0.19 | 0.10 | 0.10 |
| 13 | Cyanide as HCN * | mg/l | Pyridine-Barbituric Acid | 0.2 | 0.02 | 0.02 | 0.02 |
| 14 | Formaldehyde * | mg/l | Colorimetric | 1 | 0.00 | 0.00 | 0.00 |
| 15 | Phenois Compound * | mg/l | Colorimetric | 1 | 0.03 | 0.01 | 0.03 |
| 16 | Surfactant | mg/l | Colorimetric | 30 | 0.23 | 0.23 | 0.02 |
| 17 | Fluoride (F) * | mg/l | SPADNS | 5 | 0.27 | 0.56 | 0.88 |
| 18 | Arsenic (As)* | mg/l | Inductively coupled plasma | 0.25 | 0.00 | 0.00 | 0.00 |
| 19 | Barium (Ba)* | mg/l | Inductively coupled plasma | 1 | 0.05 | 0.06 | 0.33 |
| 20 | Cadmium (Cd)* | mg/l | Inductively coupled plasma | 0.03 | 0.00 | 0.00 | 0.01 |
| 21 | Chromium (Cr+3)* | mg/l | Inductively coupled plasma | 0.75 | 0.05 | 0.00 | 0.02 |
| 22 | Chromium (Cr+6)* | mg/l | Inductively coupled plasma | 0.25 | 0.01 | 0.01 | 0.00 |
| 23 | Copper (Cu)* | mg/l | Inductively coupled plasma | 2 | 0.02 | 0.11 | 0.12 |
| 24 | Iron (Fe)* | mg/l | Inductively coupled plasma | 10 | 0.90 | 0.37 | 0.82 |
| 25 | Lead (Pb)* | mg/l | Inductively coupled plasma | 0.2 | 0.00 | 0.01 | 0.01 |
| 26 | Manganease (Mn)* | mg/l | Inductively coupled plasma | 5 | 1.82 | 0.14 | 0.13 |
| 27 | Mercury (Hg)* | mg/l | Inductively coupled plasma | 0.005 | 0.00 | 0.00 | 0.00 |
| 28 | Nickel (Ni)* | mg/l | Inductively coupled plasma | 1 | 0.00 | 0.00 | 0.01 |
| 29 | Selenium (Se)* | mg/l | Inductively coupled plasma | 0.02 | 0.00 | 0.00 | 0.00 |
| 30 | Silver (Ag)* | mg/l | Inductively coupled plasma | 1 | 0.00 | 0.00 | 0.00 |
| 31 | Zinc (Zn)* | mg/l | Inductively coupled plasma | 5 | 0.03 | 0.19 | 0.55 |

India

| No. | PARAMETERS | Unit | Analysis Method | STD. | 2017 | 2018 | 2019 |
|-----|------------------------------|--------|-------------------------|---------|--------|--------|--------|
| 1 | pH | | IS: 3025 (P-11) | 5.5-9.0 | 7.40 | 7.33 | 7.35 |
| 2 | Temperature (°C) | °C | IS: 3025 (P-9) | .54 | 23.50 | 25.00 | 26.50 |
| 3 | Eff. TDS | (mg/l) | IS: 3025 (P-16) | | 683.00 | 586.50 | 660.00 |
| 4 | Avg. Eff. TSS/SS | (mg/l) | IS: 3025 (P-17) | 100 | 40.00 | 36.00 | 21.50 |
| 5 | Grease & Oil | (mg/l) | IS: 3025 (P-39) | 10 | 4.00 | 4.00 | 4.00 |
| 6 | Eff. COD | (mg/l) | IS: 3025 (P-58) | 250 | 60.25 | 53.70 | 53.10 |
| 7 | Eff. BOD | (mg/l) | IS: 3025 (P-44) | 30 | 22.00 | 20.50 | 15.00 |
| 8 | Total Nitrogen (as N) | (mg/l) | IS: 3025 (P-34) | 10 | 2.81 | 2.80 | 3.31 |
| 9 | Manganease (Mn) | (mg/l) | IS: 3025 (P-59) | 2 | 0.005 | 0.005 | 0.005 |
| 10 | Sulfide | (mg/l) | IS: 3025 (P-29) | 2 | 1.000 | 1.000 | 1.000 |
| 11 | Fluoride (F) | (mg/l) | APHA 4500-F D | 2 | 0.780 | 0.650 | 0.680 |
| 12 | Ammonical Nitrogen as NH3-N) | (mg/l) | APHA 4500 NH3 C | 50 | 6.230 | 4.935 | 2.735 |
| 13 | Copper (Cu) | (mg/l) | APHA 3125 B | 3 | 0.008 | 0.005 | 0.953 |
| 14 | Zinc (Zn) | (mg/l) | IS: 3025 (P-49) | 5 | 0.790 | 0.640 | 1.295 |
| 15 | Phenois Compound as C6H5OH | (mg/l) | IS: 3025 (P-43) | 1 | 0.001 | 0.001 | 0.001 |
| 16 | Total Residual Chlorine | (mg/l) | IS: 3025 (P-26) | 1 | 0.200 | 0.200 | 0.200 |
| 17 | Arsenic (As) | (mg/l) | APHA 3125 B | 0.2 | 0.005 | 0.005 | 0.005 |
| 18 | Cadmium (Cd) | (mg/l) | APHA 3125 B | 2 | 0.003 | 0.003 | 0.163 |
| 19 | Vanadium (as V) | (mg/l) | APHA 3125 B | 0.2 | 0.010 | 0.010 | 0.010 |
| 20 | Chromium (Cr+6) | (mg/l) | APHA 3125 B | 0.1 | 0.028 | 0.050 | 0.035 |
| 21 | Chromium (Cr+3) | (mg/l) | APHA 3125 B | 2 | 0.005 | 0.005 | 0.005 |
| 22 | Lead (Pb) | (mg/l) | APHA 3125 B | 0.1 | 0.028 | 0.028 | 0.005 |
| 23 | Selenium (Se) | (mg/l) | APHA 3125 B | 0.05 | 0.005 | 0.005 | 0.005 |
| 24 | Mercurry (Hg) | (mg/l) | EKO/CHEM/SOP-ICPMS/W-01 | 0.01 | 0.001 | 0.001 | 0.001 |
| 25 | Phosphate (as PO4) | (mg/l) | IS: 3025 (P-31) | 5 | 1.720 | 1.750 | 1.140 |
| 26 | TKN | (mg/l) | APHA 4500 N | 100 | 4.800 | 4.310 | 4.180 |
| 27 | Cyanide as HCN | (mg/l) | APHA 4500 CN-K | 0.2 | Absent | Absent | Absent |
| 28 | Nikel (Ni) | (mg/l) | APHA 3125 B | 3 | 0.008 | 0.005 | 0.513 |
| 29 | Iron (Fe) | (mg/l) | APHA 3125 B | 3 | 0.480 | 0.370 | 0.410 |

Sustainability development Office

Delta Electronics (Thailand) Public Company Limited

Headquarter: 909 Soi 9 Moo 4 Bangpoo Industrial Estate (EPZ.)
Pattana 1 Rd., T. Phraksa, A. Muang
Samutprakarn 10280

Website: www.deltathailand.com Tel: +66 2709 2800 ext 6395, 6397 e-mail: det.sd@deltathailand.com

