

Life Cycle Impact Reduction Action Plan Report 4-Pair Copper Plenum Cable 103.1

Impact information and Reduction Summary

Manufacturer:	Superior Essex Communications
Manufacturer Contact Information:	Annie Bevan, Global Head of Sustainability, annie.bevan@spsx.com
Product Names:	PowerWise® 1G 4PPoE Indoor/Outdoor, Category 6A U/FTP (STP) with FEP Jacket
Product Type:	Commercial Building Product-Communication Cable
Location where the product was manufactured:	Hoisington, KS
Title of the Life Cycle Assessment / Environmental Product Declaration that the assessment is based upon:	Superior Essex 4786294213.103.1 4-Pair Copper Plenum Cable
Life Cycle Assessment/ Environmental Product Declaration Type:	Product specific Type III EPD
Link to publicly available LCA or EPD:	https://superioressexcommunications.com/wp-content/uploads/2020/04/103.1 EPD Superior-Essex Indoor-Outdoor-Riser-and- Plenum-Copper.pdf
LCA Framework/PCR:	References PCR for Electrical, Electronic and HVAC-R Products (2015) and PSR for Wires, Cables and Accessories (2015)
Date of LCA or EPD:	October 24, 2018
Scope:	Cradle to grave per PCR referenced above.

Describe how the scope of the product LCA or EPD aligns with actions identified in this Action Plan:	The actions listed in this plan were based on analysis of the raw material and manufacturing stages of the LCA data.																																																													
LCA Software, Version, and Dataset:	For life cycle modeling the SimaPro v8.02 Software System for Life Cycle Engineering, an internationally recognized LCA modeling software program, was used. All background data sets relevant for production and disposal were available in this software. Background and secondary datasets were modeled using the US LCI database, developed by the National Renewable Energy Laboratory, as well as the ecoinvent v3 database, which is developed by the Swiss Centre for Life Cycle Inventories																																																													
Action Plan Creation Date:	November 1, 2020																																																													
Action Plan Expiration Date:	November 1, 2024																																																													
Is this Action Plan applicable to all products listed in the analysis (must include GWP)	The Action Plan is applicable to all products listed in the corresponding EPD.																																																													
Table or Summary of Largest Life Cycle Impacts identified in the analysis (must include GWP):	<p>The highest impact area was found to be manufacturing, which includes raw material extraction and Manufacturing. Of all impact areas, Global Warming Potential was consistently the highest. The following table is provided as an example:</p> <table border="1"> <thead> <tr> <th rowspan="2">IMPACT CATEGORY</th> <th rowspan="2">UNIT</th> <th colspan="5">PowerWise 1G 4PPoE Indoor/Outdoor copper – CMR/CMX</th> </tr> <tr> <th>Manufacturing</th> <th>Distribution</th> <th>Installation</th> <th>Use</th> <th>EOL</th> </tr> </thead> <tbody> <tr> <td>Global warming</td> <td>kg CO₂-eq.</td> <td>4.71E-01</td> <td>1.22E-02</td> <td>2.51E-02</td> <td>6.89E-02</td> <td>3.60E-03</td> </tr> <tr> <td>Ozone layer depletion</td> <td>kg CFC-11-eq.</td> <td>9.66E-07</td> <td>1.34E-11</td> <td>5.46E-08</td> <td>5.09E-13</td> <td>3.38E-11</td> </tr> <tr> <td>Acidification</td> <td>kg SO₂-eq.</td> <td>1.83E-02</td> <td>5.42E-05</td> <td>9.54E-04</td> <td>6.41E-04</td> <td>4.24E-06</td> </tr> <tr> <td>Eutrophication</td> <td>kg PO₄³⁻-eq.</td> <td>3.02E-02</td> <td>1.14E-05</td> <td>1.57E-03</td> <td>2.09E-05</td> <td>1.58E-06</td> </tr> <tr> <td>Photochemical oxidation</td> <td>kg C₂H₄-eq.</td> <td>7.17E-04</td> <td>2.38E-06</td> <td>3.74E-05</td> <td>2.50E-05</td> <td>2.00E-07</td> </tr> <tr> <td>Abiotic depletion - elements</td> <td>kg Sb-eq.</td> <td>7.69E-05</td> <td>5.54E-10</td> <td>3.98E-06</td> <td>0.00E+00</td> <td>2.31E-09</td> </tr> <tr> <td>Abiotic depletion - fossil fuels</td> <td>MJ</td> <td>7.42E+00</td> <td>1.62E-01</td> <td>3.93E-01</td> <td>9.94E-01</td> <td>1.11E-02</td> </tr> </tbody> </table>	IMPACT CATEGORY	UNIT	PowerWise 1G 4PPoE Indoor/Outdoor copper – CMR/CMX					Manufacturing	Distribution	Installation	Use	EOL	Global warming	kg CO ₂ -eq.	4.71E-01	1.22E-02	2.51E-02	6.89E-02	3.60E-03	Ozone layer depletion	kg CFC-11-eq.	9.66E-07	1.34E-11	5.46E-08	5.09E-13	3.38E-11	Acidification	kg SO ₂ -eq.	1.83E-02	5.42E-05	9.54E-04	6.41E-04	4.24E-06	Eutrophication	kg PO ₄ ³⁻ -eq.	3.02E-02	1.14E-05	1.57E-03	2.09E-05	1.58E-06	Photochemical oxidation	kg C ₂ H ₄ -eq.	7.17E-04	2.38E-06	3.74E-05	2.50E-05	2.00E-07	Abiotic depletion - elements	kg Sb-eq.	7.69E-05	5.54E-10	3.98E-06	0.00E+00	2.31E-09	Abiotic depletion - fossil fuels	MJ	7.42E+00	1.62E-01	3.93E-01	9.94E-01	1.11E-02
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<p>Narrative Description of the Impact Areas Targeted for Reduction (must include specific steps, dates, and timeline for completion, and include why/why not GWP is targeted for reduction and include a numeric impact reduction target. Actions must correspond to impact modules analyzed in the LCA or EPD):</p>	<p>All of the following impact reduction measures correspond with the Global Warming Potential in manufacturing impact, Superior Essex plans to implement these practices within the coming 3 years to reduce our total life cycle impact.</p>
<p>Specific Steps:</p>	<p>Estimated Time to Complete:</p>
<p>LED Lighting retrofit</p>	<p>End of Q2 2022</p>
<p>HVAC efficiency adjustments</p>	<p>End of Q4 2020</p>
<p>Process water temperature isolation</p>	<p>End of Q3 2021</p>
<p>Air wipe and filler line efficiency adjustments</p>	<p>End of Q2 2021</p>
<p>Low-flow fixture installation</p>	<p>End of Q2 2021</p>
<p>This Action Plan was prepared by:</p>	<p>Annie Bevan, Global Head of Sustainability x <u><i>Annie Bevan</i></u></p>
<p>This Action Plan was confirmed by an executive of the manufacturer:</p>	<p>Brian Ensign, Vice President of Marketing x <u><i>Brian Ensign</i></u></p>